

**Inter-Professional Practice to Support Effective Language
Enrichment in Primary School Classrooms: An Action
Research Inquiry**

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Declaration

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Summary

Language ability entails our capacity to express ourselves and to understand what others are saying. Language difficulties can have a negative impact on children's academic achievement, social skills, emotional regulation, and behavioural skills (Myers & Botting, 2008; Paradice, Bailey-Wood, Davies, & Solomon, 2007). While approximately 10% of children may have some level of speech, language or communication need (Law et al., 2001), this may rise to over 50% for children from low socio-economic areas, increasing their risk of associated difficulties (Clegg et al., 2012; Locke, Ginsborg, & Peers, 2002). The potential of the educational environment to support language development, and in particular the effectiveness of language enrichment interventions implemented in the educational environment, contrasts with reported difficulties implementing a focus on language development in primary schools (Cirrin & Gillam, 2008; DES, 1999; Eivers, Shiel, & Shortt, 2004; Howe, 2008; Lewis & Archer, 2003; NCCA, 2005). An epistemological perspective can assist in exploring and articulating the apparent gap between theory and practice in supporting school-aged children's language development, a gap which frequently occurs in the context of evidence-based practice (Dollaghan, 2007; Eikeland, 2015; Heron & Reason, 2008) and inter-professional practice (Nancarrow et al., 2013).

I, a speech and language therapist, sought to work collaboratively with teachers over a school year to change the status quo in relation to supporting language development in mainstream classrooms. Action research is a research methodology that can be both robust for scholars and useful for practitioners, and has the implementation of change at its core (Coghlan, 2011). Therefore, action research was employed to answer the research question "*how can classroom practices be changed to support effective language enrichment?*". In all action research inquiries there are two action research projects running in tandem, the core action research project and the thesis action research project (Zuber-Skerritt & Fletcher, 2007). In this study, the core action research inquiry focused on planning, implementing, evaluating and revising classroom practices to support effective language enrichment. Five action research cycles emerged from the core action research inquiry. Occurring in parallel, the thesis action research inquiry was a form of meta-analysis, exploring the processes involved in supporting changes to classroom practices, concentrating and reflecting on the experiences of the core study. Within the thesis action research inquiry, thematic analysis was applied to the transcribed data over three phases: a thematic analysis of the processes that occurred; a thematic analysis of one of the key processes deduced from phase one, participation; and a thematic analysis of the second key process deduced from phase one, change. The core and thesis action research projects of this inquiry overlapped and are

essentially interwoven, supporting the achievement of numerous quality criteria of an action research inquiry.

Following a rigorous process of analysis through the core and thesis action research cycles, five key propositions were identified. The first proposition offers a contribution to practice - *Proposition 1: Collaboratively designed activities are central to changing classroom practices to support effective language enrichment*. The four other propositions that were abstracted stem from *Proposition 1* and provide theoretical contributions to the themes of participation, change, and epistemology (*Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers, Proposition 3: Degrees of participation may fluctuate, Proposition 4: Practical knowing is a critical element in models of change, and Proposition 5: Power plays a role in the interface between practical knowing and propositional knowing*).

While the limitations of the potential contribution of this inquiry are acknowledged, a number of important implications for practice and policy, theory, and research are discussed. Implications for practice and policy centre on evidence-based practice, inter-professional practice, and the role of facilitation. Implications for theory concentrate on conceptualisations of participation, facilitation, and change. Implications for research include suggestions for future research, the potential of thematic analysis to be an approach to support the appraisal of standards of quality within action research, and the possibility of action research becoming a more prevalent research methodology within the speech and language therapy profession.

“All good research is for *me*, for *us*, and for *them*”, and the integration of first, second, and third person voices is characteristic of an action research inquiry (Reason & Marshall, 1987, p. 112). This thesis concludes with a summary of the findings of this inquiry through these three voices, with an understanding that their amalgamation is essential for a complete representation of the possible contribution of this study.

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Abbreviations

ASC	Assessment of Student Competencies
ASHA	American Speech-Language-Hearing Association
AWMA	Automated Working Memory Assessment
BEE	Best Evidence Encyclopaedia
BPVS	British Picture Vocabulary Scale
CASL	Comprehensive Assessment of Spoken Language
CELF	Clinical Evaluation of Language Fundamentals
CSO	Central Statistics Office
CTOPP	Comprehensive Test of Phonological Processing
DCYA	Department of Children and Youth Affairs
DES	Department of Education and Skills
DEIS	Delivering Equality of Opportunity in Schools
DIBELS	Dynamic Indicators of Basic Early Literacy Skills
DLD	Developmental Language Disorder
DOH	Department of Health
DSS	Developmental Sentence Scoring
DTLA	Detroit Tests of Learning Aptitude
EAL	English as an Additional Language
EBP	Evidence-Based Practice
ELL	English Language Learners
ENNI	Edmonton Narrative Norms Instrument
EPPI	Evidence for Policy and Practice Information
FSF	First Sound Fluency
HSE	Health Service Executive
IASLT	Irish Association of Speech and Language Therapists
ICF	International Classification of Functioning
IPE	Inter-Professional Education
IPP	Inter-Professional Practice
IRF	Initiation-Response-Feedback
KT	Knowledge Translation
MISL	Monitoring Indicators of Scholarly Language
NARA	Neale Assessment of Reading Ability
NEALE	Neale Assessment of Reading Ability
NEPSY	A Developmental Neuropsychological Assessment
NESF	National Economic and Social Forum
NCCA	National Council for Curriculum and Assessment
NICE	National Institute of Clinical Excellence

NIRN	National Implementation Research Network
NR	Not Reported
PAT	Progressive Achievement Test
PCC	Percentage of Consonants Correct
POD	Primary Online Database
PPVT	Peabody Picture Vocabulary Test
RAPT	Renfrew Action Picture Test
RCT	Randomised Controlled Trial
SES	Socio-Economic Status
SETT	Self Evaluation of Teacher Talk
SIGN	Scottish Intercollegiate Guidelines Network
SLT	Speech and Language Therapist
STARLITE	Standards for Reporting Literature searches
STASS	South Tyneside Assessment of Syntactic Structures
TAPS	Test of Auditory Processing Skills
TELD	Test of Early Language Development
TOLD	Test of Language Development
TOPEL	Test of Preschool Early Literacy
TROG	Test for Reception of Grammar
TAWF	Test of Adolescent/Adult Word Finding
TD	Typically Developing
TWF	Test of Word Finding
UK	United Kingdom
US	United States
WHO	World Health Organisation
WPF	Words Part Fluency
YARC	York Assessment of Reading for Comprehension

Introduction

This short introduction aims to succinctly orientate the reader to the focus of this action research inquiry and provide a brief overview of how the thesis is organised.

The inquiry originated from professional and personal motivations to explore how the language abilities of school-aged children from areas of low socio-economic status could be improved. As a result of the growing number of evidence-based practices that demonstrate measurably improved linguistic outcomes for school-aged children, I was enthused about the enormous potential for change so that all children, regardless of their socio-economic status, could reach their potential linguistically, academically, socially and behaviourally, thus allowing them to fully achieve their life ambitions.

From the outset I was aware that, as an individual speech and language therapist, I could not achieve the objective of optimising school-aged children's language ability by myself. The fundamental role of a child's environment in supporting language development has been acknowledged repeatedly (Ambridge & Lieven, 2011; Howe, 2008; Tomasello, 2003). In particular, for school-aged children, the school environment and the classroom practices implemented by teachers within the school environment, have been recognised as key elements to consider when focusing on language enrichment (Glover, McCormack, & Smith Tamaray, 2015; Spencer, Clegg, Lowe, & Stackhouse, 2017; Squires, Gillam, & Reutzler, 2013). Therefore, this study is firmly rooted in inter-professional practice between a speech and language therapist and teachers, in addition to evidence-based practices that support effective language enrichment for school-aged children. Furthermore, this inquiry adopts an epistemological lens to explore the process of implementing changes to classroom practices targeting the development of pupils' language skills, drawing on evidence-based practice and inter-professional practice between SLTs and teachers. The research question is: *"How can classroom practices be changed to support effective language enrichment?"* The objective of achieving change as an integral part of the research process, coupled with the participation of others (i.e., three primary school teachers), signifies the appropriateness of employing action research as the methodology for this inquiry.

Each chapter of this thesis addresses a particular question of the investigation and informs the overall argument. Drawing on an example of how an argument of a thesis was depicted through a 'road map' (Jacob, 2003), the argument of this thesis is illustrated in Figure A. Each chapter will be outlined in brief below.

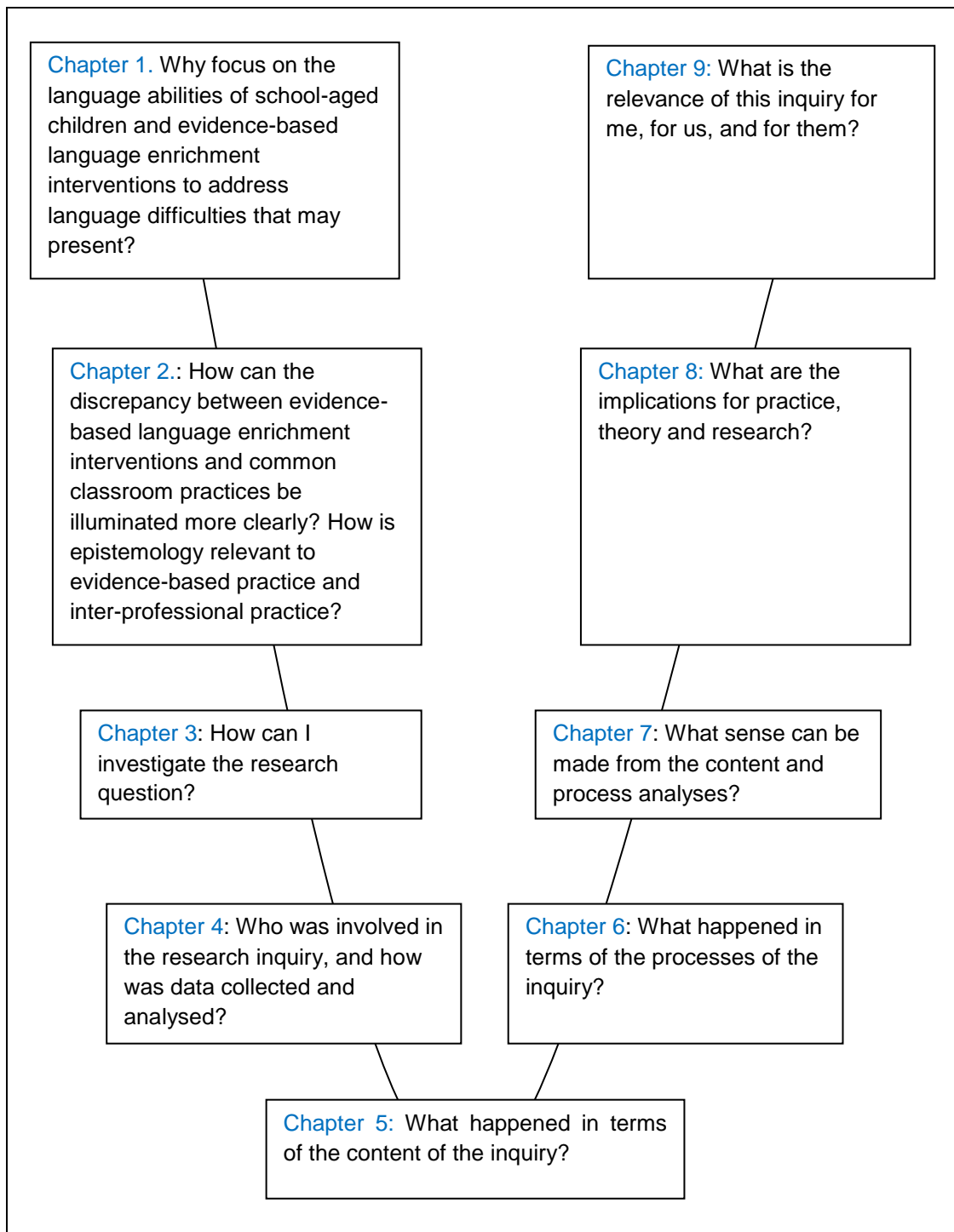


Figure A: Organisation of the thesis

Chapter 1. Research Area: Language Difficulties Amongst School-Aged Children and Evidence-Based Interventions to Address Them

Why focus on the language abilities of school-aged children and evidence-based language enrichment interventions to address language difficulties that may present? This chapter introduces the research area of this inquiry. It discusses the importance of children’s language ability and the potential wide-ranging impact of language difficulties for school-aged

children if left unaddressed. In addition, it highlights the elevated risk of children from low socio-economic areas presenting with language difficulties, and the associated debates surrounding this increased prevalence. Chapter 1 describes language enrichment interventions that may help to enhance school-aged children's language abilities, including the results of a systematic review I completed. Lastly, the lack of synergy between what the empirical evidence suggests is effective for addressing language difficulties amongst school-aged children and actual everyday classroom practices is examined. Possible explanations for this inconsistency indicate the importance of considering this phenomenon from an epistemological perspective.

Chapter 2. Research Focus: Epistemology

How can the discrepancy between evidence-based language enrichment interventions and common classroom practices be illuminated more clearly? How is epistemology relevant to evidence-based practice and inter-professional practice? This chapter describes a key research focus of this inquiry: epistemology. It outlines how epistemology may help to explain the possible discrepancy between what the evidence suggests is effective, what is emphasised in national curricula, and what is implemented in everyday classroom practice. It explains the multiple ways of knowing within epistemology and emphasises calls from epistemologists for different forms of knowing to interact and connect with each other for the most effective interpretations. Two key phenomena that have the interaction and connection of multiple ways of knowing at their core, and that are central to the focus of this research inquiry, are discussed from an epistemological perspective: evidence-based practice and inter-professional practice.

Chapter 3. Methodology: Action Research

How can I investigate the research question?

This chapter outlines the research methodology employed in this inquiry: action research. It discusses the rationale for selecting action research to address the research question: "*How can classroom practices be changed to support effective language enrichment?*", including its deliberate focus on change and participation of others. The epistemological stance of action research is explained as embracing multiple ways of knowing and democratically producing new knowledge through the direct participation of others in the research process. In addition, the history of action research, its core features, and potential limitations are described. Furthermore, hallmarks of quality in an action research inquiry are made explicit.

Chapter 4. Orientation to the Action Research Inquiry and Methods Employed *Who was involved in the research inquiry and how was data collected and analysed?*

This chapter provides an orientation to the research setting (i.e., a single sex primary school in an area of concentrated social disadvantage) and the profiles of the co-researchers (i.e., myself, a speech and language therapist, and three primary school teachers). It also describes the methods employed for data collection, including weekly after-school meetings with the co-researchers during the school year 2012-2013, journal notes, video-recordings of classroom lessons, photos, pupil assessment results, and classroom practices checklists/templates. It clarifies that in all action research studies there are two action research projects running in tandem, a core action research project and a thesis action research project. Subsequently, the two overarching analyses that were completed to enable the data to be interrogated, meanings to be surfaced, and interpretations to be gleaned are outlined: an analysis of the 'story' or content of the action research cycles (i.e., core action research analysis) and an analysis of the processes underpinning the content of the action research cycles (i.e., thesis action research analysis). I explain how I extrapolated meaning and implications from the core and thesis action research analyses through the deduction of five propositions.

Chapter 5. Findings of the Core Action Research Analysis

What happened in terms of the content of the inquiry?

The core action research in this inquiry focused on planning, implementing, evaluating and revising classroom practices to support effective language enrichment. This chapter describes five action research cycles that emerged during the time-span of the study (i.e., August 2012 to June 2016). How the cycles frequently overlapped, facilitating their ability to inform and be informed by each other, is demonstrated. Cycle One portrays the focus on evaluating current classroom practices. Cycle Two shares the changes implemented to classroom practices. Cycle Three illustrates how parental involvement was attended to. Cycle Four explains how the learning was shared with the school principal and other staff members. Cycle Five illustrates how changes extended beyond the school year 2012/2013 and were embedded within the school where the study was located, extended to other schools in the area and to a national context. A chronological, factual, narrative of the content of the inquiry is integrated with the voices of the co-researchers and my critical reflections and insights. Based primarily on the core action research analysis, I deduced the following proposition - *Proposition 1: Collaboratively designed activities are central to changing classroom practices to support effective language enrichment.*

Chapter 6. Findings of the Thesis Action Research Analyses

What happened in terms of the processes of the inquiry?

This chapter presents the thesis action research analyses, which focused on the processes involved in supporting changes to classroom practices and reflecting on the experiences of

the core study. I, independent of the co-researchers, completed the thesis action research analyses (i.e., meta-analysis). This chapter describes the application of thematic analysis to the transcribed data over three phases: (i) a thematic analysis of the processes that occurred; (ii) a thematic analysis of one of the key processes deduced from phase one, participation; and (iii) a thematic analysis of the second key process deduced from phase one, change. Four additional propositions that emerged from the analyses, that provide theoretical contributions to the themes of participation, change, and epistemology are put forward - *Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers; Proposition 3: Degrees of participation may fluctuate; Proposition 4: Practical knowing is a critical element in models of change; and Proposition 5: Power plays a role in the interface between practical knowing and propositional knowing.* Figure 6.15 demonstrates how *Proposition 1* is the base from which the former four propositions stem.

Chapter 7. Discussion

What sense can be made from the content and process analyses?

This chapter discusses in detail each of the five propositions extrapolated, including their limitations and implications for practice, theory, and research. In addition, the limitations of the potential contribution of this entire action research inquiry are described, including limitations related to the chosen methodology (i.e., action research), a central method of data analysis employed (i.e., thematic analysis), my positionality, and the focus of the inquiry.

Chapter 8. Implications

What are the implications for practice, theory and research?

Implications from this action research inquiry for practice and policy, theory, and research are described in this chapter. The implications for practice and policy centre on language enrichment interventions for school-aged children, inter-professional practice, and facilitation. The implications for theory focus on conceptualisations of participation, conceptualisations of facilitation, and conceptualisations of change. The implications for research relate to the possible application of thematic analysis to assist with process reflection and opportunities for wider use of action research within speech and language therapy. In addition, recommendations for future research are presented.

Chapter 9. Conclusion

What is the relevance of this inquiry for me, for us, and for them?

This chapter provides a summary of the action research inquiry and re-emphasises the importance of integrating three voices of action and inquiry within an action research inquiry: first-; second-; and third-persons. It highlights that “all good research is for me, for us, and for

them” (Reason & Marshall, 1987, p. 112). Therefore, this conclusion chapter revisits the findings of this inquiry through these three voices, and makes the presence of hallmarks of quality in this action research inquiry explicit.

1 Research Area: Language Difficulties Amongst School-Aged Children and Evidence-Based Interventions to Address Them

1.1 Introduction

This chapter sets out the research area of this thesis: language difficulties amongst school-aged children and language enrichment interventions to address presenting difficulties. Definitions of language ability and language disorder, prevalence of language difficulties amongst school-aged children, and the potential impact of language difficulties are outlined. Language difficulties amongst children from low socio-economic status areas and associated debates are described. Language enrichment interventions, which are fundamental to ameliorating language difficulties and supporting children to reach their potential, are also discussed. This includes the results of a systematic review I completed of language enrichment interventions for school-aged children. In addition, this chapter examines language enrichment interventions in educational curricula and educational practice.

1.2 Language Ability and Language Difficulties

Language ability comprises our capacity to understand what others are saying (i.e., receptive language skills) and our ability to express ourselves (i.e., expressive language skills). Bowen and Snow (2017, p. 175) consider our use of language to be “our most human characteristic” and describe language as:

a learned code that lets us think about our world; generate, remember, share and understand information; appreciate knowledge, ideas, literature, science and the arts; enjoy leisure pastimes; express political and religious convictions, humour and emotion; reveal our personalities and needs; and survive in today's society.

For school-aged children, language competence underpins the ability to contribute to class discussions, engage in verbal reasoning, and understand teacher talk, subject content, and complex academic vocabulary - all integral components of school curricula (Deary, Strand, Smith, & Fernandes, 2007; Dockrell & Lindsay, 2001; Nagy & Townsend, 2012).

Theories of how children acquire language ability typically make reference to two distinct forces at work: nature and nurture. On the nature end of the continuum, the nativist perspective, led by Chomsky, suggests that all children have an innate capacity for language acquisition, known as the universal grammar (Chomsky, 1965). As children are exposed to their native language and examples of its forms, a process of parameter setting begins, whereby rules specific to the child's language are set (Bohannon & Bonvillian, 2009). On the opposite end of the continuum, the empiricist perspective, advocated by prominent

researchers such as Skinner, suggests that children acquire language by imitating the adults around them (Foster, 1996). Empiricists propose that language develops and is shaped through classical conditioning, operant conditioning and imitation (Bohannon & Bonvillian, 2009). Bridging the nature-nurture divide, the social interactionist perspective and the emergentist perspective lie somewhat in the middle of the theoretical continuum. The social interactionist approach recognises the role of both the structure of language input and also the environment. It emphasises the social-communicative functions that language plays and the importance of explicitly mediated interactions with more knowledgeable conversational partners as essential development mechanisms (Justice & Kaderavek, 2002; Tomasello, 2003). An emergentist approach, described as a fusion of the social interactionist and nativist perspectives (Hollich, Hirsh-Pasek, & Golinkoff, 2000), views language as “a product of the interaction of the inside learning capabilities of the child and the outside language environment” (Poll, 2011, p. 581). Current prevailing theories of language acquisition recognise the need for both nature (e.g., human capacity to develop language skills, cognitive abilities, neurological competencies, perceptual and motor skills) and nurture (e.g., environmental experiences and exposures to adequate quantity and quality of communicative interactions) (Ambridge & Lieven, 2011; Tomasello, 2003).

Although learning to speak is considered a major life achievement, for many children the acquisition of language occurs effortlessly (Reilly, McKean, Morgan, & Wake, 2015). Other children may present with language difficulties when their language skills fall below age expectations. Language difficulties may be generalised across receptive and expressive domains, or rest in one aspect of language (e.g., poor vocabulary knowledge, confusing grammatical markers such as past tense, struggling to remember all the details of a spoken instruction, difficulty in telling a coherent story or understanding humour and jokes) (Bishop, 2016; Reilly et al., 2015). Terms such as speech, language and communication needs (SLCN), language delay, specific language impairment (SLI), and language disorder are used to describe language difficulties (Bishop, 2016). SLCN is the broad umbrella term adopted for a range of language difficulties, and it is estimated that up to one-in-ten children may have some level of SLCN (Law et al., 2001). For children “who are likely to have language problems enduring into middle childhood and beyond, with a significant impact on everyday social interactions or educational progress”, and with no known associated differentiating condition (e.g., autism, Down’s syndrome), the term ‘developmental language disorder’ (DLD) has been proposed and adopted by many countries (Bishop, Snowling, Thompson, & Greenhalgh, 2017, p. 3). In Ireland, the Irish Association of Speech and Language Therapists (IASLT) has also recently adopted the term DLD (IASLT, 2017). Seven percent of children may present with DLD (Law, Boyle, Harris, Harkness, & Nye, 2000). This equates to two children in a class of thirty pupils experiencing language difficulties severe

enough to impede academic progress or social interactions (Norbury et al., 2016). Aligned with the theories of language acquisition described above, biological or environmental factors have been recognised as the main risk factors for DLD (Bishop et al., 2017). A core feature that may influence environmental risk factors is socio-economic status (SES). For instance, the prevalence of language difficulties amongst children growing up in areas of low SES has been found to be as high as 55.6% (almost eight times higher than the prevalence reported in the total population) (Locke et al., 2002). In addition, recent research has demonstrated that children from low SES areas are more at risk of language disorders, which can result in more widespread and prevailing difficulties for children (Roy, Chiat, & Dodd, 2014).

The next sections describe the possible extensive and persistent impact of language difficulties and discuss language difficulties in the context of low SES.

1.3 Impact of Language Difficulties

When school-aged children present with language difficulties, the effects may be all encompassing, negatively impacting upon academic achievement and associated with social, emotional and behavioural problems that can have pervasive consequences (Lindsay et al., 2002; Myers & Botting, 2008; Paradice et al., 2007; Stothard, Snowling, Bishop, Chipchase, & Kaplan, 1998; Tomblin & Nippold, 2014). Stothard et al. (1998) completed a 10-year follow up of a cohort of children identified with DLD at 5:6 years of age, and 70% of participants continued to have difficulties at age 15 years. Likewise, children who scored -1.25 standard deviations below the mean on a language assessment (i.e., mild/moderate difficulties) in preschool continued to be at risk of poor long term outcomes when followed up at 16 years of age (Tomblin & Nippold, 2014). In relation to academic achievement, language mediates learning of curricular subjects and a pupil's ability to verbally contribute to all aspects of the curriculum, therefore reduced language ability can negatively affect educational outcomes (Alexander, 2008). The potential negative effect of poor verbal learning, auditory memory and language processing difficulties extends beyond English and other languages to other subject areas (Donlan, Cowan, Newton, & Lloyd, 2007; Kopenen, Mononen, Rasanen, & Ahonen, 2006; Matson & Cline, 2012).

Language difficulties are also associated with literacy difficulties, compounding the possible negative impact on academic achievement (Myers & Botting, 2008). The 'critical age hypothesis' has been supported by many which suggests that if children's language difficulties continue until the time that they are beginning to read, then reading difficulties are highly likely (Bishop & Adams, 1990; Nathan, Stackhouse, Goulandris, & Snowling, 2004). For instance, poor vocabulary skills have been correlated with poor reading comprehension skills, as pupils who struggle to understand the meanings of words in a text may also

struggle to understand the meaning of the text as a whole (Lyons et al., 2013; Ouellette, 2006; Snow, 2002). Consequently, language difficulties and possible associated literacy difficulties have been demonstrated to negatively impact educational attainment (McLeod, McAllister, McCormack, & Harrison, 2014; Spencer, Clegg, Stackhouse, & Rush, 2017).

From a personal and social perspective, language skills provide the means for children to establish and maintain relationships and regulate their emotions (Snow et al., 2014; Snow & Powell, 2011). As a result, children with language difficulties frequently score lower on measures of social competence and higher on measures of behavioural problems than their peers who have typical language development (Botting & Conti-Ramsden, 2000; Stanton-Chapman, Justice, Skibbe, & Grant, 2007). From a quality of life perspective, children with DLD have scored more than one standard deviation below the mean on indicators of 'mood and emotions' and 'social exclusion and bullying' (Ravens-Sieberer et al., 2005), and demonstrated higher levels of peer problems and greater pro-social difficulties (Lindsay, Dockrell, Law, & Roulstone, 2011). As children grow older, anxiety, social phobias, and social isolation have been documented (Brinton, Spackman, Fujiki, & Ricks, 2007; Conti-Ramsden & Botting, 2008; Voci, Beitchman, Brownlie, & Wilson, 2006). Moreover, longitudinal studies of individuals with a history of DLD have shown that, as adults, many may struggle with independent living, present with difficulties forming and sustaining relationships, have unsatisfactory employment histories, and may be more likely to experience mental health problems (Clegg et al., 2012; Clegg, Hollis, Mawhood, & Rutter, 2005; Clegg, Hollis, & Rutter, 1999; Whitehouse, Watt, Line, & Bishop, 2009).

Economically, the average cost of providing speech and language therapy to children with language impairment in the UK over one school year (30 weeks) was reported to range from £1022 - £2689 per child (Dickson et al., 2009). In 2000, the cost of supporting individuals with persistent communication difficulties was estimated to fall between \$154.3 and \$186 billion per year (Ruben, 2000). It may be assumed that this estimated cost has risen over the past 17 years. The economic costs may increase with time as a result of reduced educational achievement, and in turn decreased adult earnings (Marsh, Bertanou, Suominen, & Venkatachalam, 2010). While long-term follow-up of children with language disorders has suggested some children go on to achieve positive outcomes and social adjustment (Snowling, Bishop, Stothard, Chipchase, & Kaplan, 2006), it is imperative to enhance language abilities amongst school-aged children and address language difficulties that may be identified, to avert multiple possible negative trajectories. This is especially relevant for children growing up in areas of low SES, because a higher prevalence of language difficulties has been documented within this population, which may perpetuate their existing risk of failing to attain positive life outcomes.

1.4 Language Difficulties amongst School-Aged Children, including Children from Areas of Low SES

As outlined above, difficulties with language are common amongst children (Law, Boyle, et al., 2000; Norbury et al., 2016). However, numerous studies by sociologists, developmental psychologists, educationalists and speech and language therapists have found a much higher prevalence of language difficulties amongst children growing up in areas of low SES (Beitchman et al., 2008; Durham, Farkas, Hammer, Bruce Tomblin, & Catts, 2007; Hart & Risley, 1995; Hoff & Tian, 2003; Law, McBean, & Rush, 2011; Letts, Edwards, Sinka, Schaefer, & Gibbons, 2013; Locke et al., 2002; Pungello, Iruka, Dotterer, Mills-Koonce, & Reznick, 2009; Reilly et al., 2010; Roy et al., 2014; Stein, Malmberg, Sylva, Barnes, & Leach, 2008; Sugland et al., 1995). For example, a study of 223 English pre-school children from an area of low SES reported means on standardised language assessments that fell on the boundary between typical and delayed language (Locke et al., 2002). Even though children with known cognitive or language impairments were excluded, 55.6% of the sample was rated as having some degree of language difficulty. In Scotland too, mean scores on a standardised language assessment administered with 138 primary school pupils from an area of high concentration of social disadvantage were one standard deviation below the mean, with 39.9% showing some level of language difficulty (Law et al., 2011). In addition, the standardisation of the new Reynell Developmental Language Scales found 26.4% of children from areas of low SES in the UK had some form of language difficulty (Letts et al., 2013). The percentages in the previous three studies are much higher than would be expected in the normal distributed standardisation sample of a formal language test. Moreover, studies of older children demonstrated that double the numbers of adolescents from low SES areas met the criteria for severe language difficulty, compared to their socially advantaged peers (Spencer, Clegg, & Stackhouse, 2012). Nationally, in the Growing Up in Ireland longitudinal study of 8,570 nine-year-olds, the Vocabulary scores of the Drumcondra Reading Test were clearly differentiated by social background characteristics (Williams et al., 2009). Likewise, performance of children from low SES areas in the US on standardised measures of vocabulary were on average 1.5 standard deviations below the expected mean (Qi, Kaiser, Milan, & Hancock, 2006). Similarly, Hart and Risley's (1995) seminal study in the US found differences in the vocabulary sizes of children that were SES-related. Children in this study from lower SES areas acquired a smaller vocabulary and at a much slower rate than children from more socio-economic advantaged areas. Following a comprehensive literature search, I only found one study that did not report a relationship between low SES and poorer language abilities, but conclusions were based on a small sample of 76 children

aged between 4:8 years and 11:6 years using a test of receptive vocabulary only (Black, Peppé, & Gibbon, 2008).

Hence, it appears to be an international phenomenon that children from low SES backgrounds demonstrate a higher prevalence of language difficulties, and therefore are at greater risk of experiencing the associated educational, personal, social, emotional and behavioural problems described earlier. There are a number of possible reasons put forward as to why children from low SES areas have an increased likelihood of encountering language difficulties. However, much debate has ensued concerning the basis of the higher prevalence reported, and also the rationales posited.

1.4.1 Reasons that children from low SES areas demonstrate a higher prevalence of language difficulties and the ensuing debates

Some explain the increased prevalence of language difficulties amongst children from low SES from an investment perspective, that is, how parents decide to allocate a range of resources such as money, time, and energy (Foster, Lambert, Abbot-Shim, McCarty, & Franze, 2005). For example, it is implied that parents from low SES areas may spend less money on books or educational toys that may support language development or less time and energy on language stimulating activities. In addition, it is claimed that the multitude of stresses that families from low SES areas may experience may affect their interaction with their children (Pickstone, 2006). Reinforcing this investment perspective is the finding that language assessments encompassing measures of linguistic knowledge that may be learned through environmental exposure (e.g., vocabulary) are more likely to show a discrepancy across socio-economic categories than language assessments that measure inherent language processing skills, such as non-word repetition (Campbell, Dollaghan, Needleman, & Janosky, 1997; Spencer, Clegg, et al., 2012). Others contend that language differences of children from low SES areas are a result of lack of familiarity with dominant linguistic content and forms, and lack of proficiency in code-switching to socially and culturally expected norms that are founded on a middle class bias (MacRuairc, 2011). More frequently, the increased prevalence of language difficulties amongst children from lower SES backgrounds is explained as being the result of reduced *quantity* of verbal input provided by parents (e.g., Hart & Risley, 1995) or decreased *quality* of verbal interaction between parents and children (e.g., Pan, Rowe, Singer, & Snow, 2005). This may reportedly stem from reduced parental knowledge about child development, less listening/talking in the communicative environment, less child choices presented, or less facilitative child-directed speech (Bernstein, 1975; Durham et al., 2007; Hart & Risley, 1995; Hoff, 2003; Law & Harris, 2006; Pan et al., 2005; Raviv, Kessenich, & Morrison, 2004; Rowe, 2008).

However, the former conclusions must be considered in the context of debates about research studies of families from low SES areas in relation to assessments used, population samples and sizes employed, and individual differences. First, with regard to assessments administered, studies exploring language differences between children from low SES areas and other more affluent areas typically measure SES by gathering information on income and maternal education (Beitchman et al., 2008; Durham et al., 2007; Hartas, 2011; Pungello et al., 2009; Stein et al., 2008). Yet, income is often based on subjective self-reports and Beitchman et al. (2008) caution that maternal education is a multi-faceted construct that may be influenced by a range of factors such as cognitive capacities, upbringing, knowledge about child development, and sensitivity to children's language growth. Hence, these former variables may be more significant in explaining language differences between low SES and high SES children than simply implying differences are determined by parental income or education alone. Nevertheless, when studies employ more comprehensive constructs of SES that may be more robust, such as the Rank of Index of Multiple Deprivation Score in the UK (i.e., based on information from seven areas: income; employment; health and disability; education, skills and training; housing and services; crime; and living environment), higher incidences of language difficulties amongst children from low SES areas are still reported (e.g., S. Spencer et al., 2017a, Letts et al., 2013).

Furthermore, assessments of the child's home environment are commonly administered when investigating language differences across socio-economic groups. Concerns are raised about the possible bias, subjectivity, or reliability of home environment outcome measures reported. For example, the Home Observation for Measurement of the Environment [HOME] (Bradley & Caldwell, 1988) is a standardised assessment administered frequently (Duncan, Brooks-Gunn, & Klebanov, 1994; Farkas & Beron, 2004; Smith, Brooks-Gunn, & Klebanov, 1997; Stein et al., 2008). This is a US-based assessment tool, although one British study did suggest that it was a reliable and valid tool for use with a UK population (Burston, Puckering, & Kearney, 2005). Conversely, concerns about its possible cultural bias have been raised (Sugland et al., 1995). Moreover, the duration and repetition of observations for facilitating ratings varies considerably. Stein et al. (2008) made judgements on home environment based on two-hour observations, on only two occasions between 10 months and 36 months. Duncan et al. (1994) rated home environment based on a once-off observation of unspecified duration at 36 months of age. Pungello et al.'s (2009) observations of parenting behaviours were only made twice in 24 months, and each observation was a mere 10 minutes long and conducted during a semi-structured laboratory visit, not a natural home environment. In addition, some assessments of home environment are based on parental reports of how often they read to their child or teacher perceptions of parental interest in a child's education (Schoon et al., 2010), which may be unreliable or invalid.

Comparable concerns in relation to bias, subjectivity and reliability have been described in relation to language assessments employed when investigating correlations between SES and language competence. Some studies base their conclusions on non-standardised assessments of language. For example, Hoff (2003) drew conclusions about significant vocabulary differences between children from high SES areas and children from low SES areas based on analysis of spontaneous speech samples alone. Other studies generate deductions about language outcomes of children from low SES areas from subjective teacher observations (Lloyd, Li, & Hertzman, 2010). When standardised assessments results are reported in published studies, a commonly used instrument is a formal receptive vocabulary test such as the Peabody Picture Vocabulary Test (Duncan et al., 1994; Farkas & Beron, 2004; Qi et al., 2006; Smith et al., 1997), which only measures receptive vocabulary ability and is not considered a comprehensive assessment of overall language competence. Nevertheless, even when studies include the administration of a more wide-ranging standardised language assessment such as the Preschool Language Scales-4 (Pungello et al., 2009), Test of Oral Language Development-2 (Durham et al., 2007), Reynell Developmental Language Scales (Letts et al., 2013; Stein et al., 2008), Clinical Evaluation of Language Fundamentals (CELF)-Preschool 2 (Locke et al., 2002; Reilly et al., 2010) or CELF-4 (Law et al., 2011), correlations are still found between low socio-economic status and reduced language competence. However, the standardisation of these norm-referenced assessments may not always ensure representative samples from socio-economic groups. Frequently, standardised assessments may be culturally biased, standardised on the children of well-educated, middle-class parents, and children's use of non-standardised English may be discounted (Pungello et al., 2009; Stockman, 2000; Thompson, Craig, & Washington, 2004). Consequently, this may result in children from low SES backgrounds reaching lower language scores, suggesting they are presenting with greater difficulties than they really have (Dollaghan et al., 1999). Then again, when a study uses a comprehensive language assessment that looks beyond receptive vocabulary and is standardised on a diverse sample including children from low SES areas, such as the Preschool Language Scale-4 (Zimmerman, Steiner & Pond, 2002), large discrepancies are still found between the language abilities of children from low SES and high SES (Pungello et al., 2009).

The second main topic of debate in relation to higher prevalence of language difficulties amongst children from low SES areas is the fact that some conclusions about SES language differences are drawn from very small sample sizes, or samples that consist only of a minority ethnic group that may not be fully representative. For example, Hoff (2003) included only 63 mothers in her study, Black et al. (2008) only recruited 76 participants, and the repeatedly-cited Hart and Risley (1995) study had a sample size of a mere 42 parents. When

studies draw conclusions from much larger sample sizes, children of low SES who are presenting with lower language abilities are frequently more likely to be from a minority ethnic group (e.g., Duncan et al., 1994; Farkas & Beron, 2004; Pungello et al., 2009; Spencer, Clegg, Stackhouse, et al., 2017), which may negatively affect language outcomes. For instance, the Better Communication Research Programme in the UK reported that the chances of a child from one of the Black African or Caribbean groups being identified with speech, language or communication needs were almost double that of a White British pupil (Dockrell, Lindsay, Roulstone, & Law, 2014). Likewise, in Pungello et al.'s (2009) study of 146 families, 50% of whom were African American and 50% of whom were European American and matched by maternal education and family size, race was linked to language outcomes, but not completely unrelated to variables that can influence SES. They hypothesised racial differences were due to: cultural differences in parenting style; potential impact of racial discrimination and prejudice on the quality of mother-child interaction and relationship; less financial and other resources; marital status; and cultural aspects of the assessment used. Therefore, ethnicity and race may be an influential factor in higher prevalence of language difficulties, not just low SES. In other studies, ethnicity is not reported (e.g., Hartas, 2011; Law et al., 2011; Letts et al., 2013; Myers & Botting, 2008; Spencer, Clegg, et al., 2012) making it difficult to differentiate between influences of SES or race on language outcomes.

It is also possible that the higher prevalence of language difficulties amongst children from minority ethnic groups may be attributed to a greater proportion of children from these groups who are only starting to learn and become proficient in the English language, rather than attributing differences in language abilities to lower socio-economic status or factors related to cultural and racial differences. While it is recognised that when appropriate supports are provided to bilingual children they go on to achieve linguistic and academic success that may be akin to or in advance of their monolingual peers (Han, 2010), there are also studies that have concluded that dual language learners have demonstrated decreased language ability in English and their home language (Jackson, Schatschneider, & Leacox, 2014; Paez, Tabors, & Lopez, 2007). Kyong Kim, Curby, and Winsler (2014) cite the National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs' report (2010) that 10.7% of children enrolled in American schools are classified as having limited proficiency in the English language. In Ireland, this figure is higher. Nearly a fifth of children who were aged under 14 years and included in the 2016 Irish national census data released by the Central Statistics Office (CSO) were rated as not speaking English proficiently (i.e., 'not well' or 'not at all') (CSO, 2017). Of note, this category includes children younger than primary school-age and the English proficiency of these Irish residents was not independently assessed, but rather categorised based on the rating provided by the

respondent completing the census. Some argue that the decreased language ability reported in dual language learners is due to high proportions of such children growing up in poverty and/or receiving less exposure to optimal language learning environments in each language (Konishi, Kanero, Freeman, Golinkoff, & Hirsh-Pasek, 2014; Kyong Kim et al., 2014). It appears reasonable to suggest that a reduced proficiency in a second language, regardless of the cause, could have a marked impact on differences in language ability scores of minority ethnic groups if their language ability is only assessed using the less proficient language. For instance, it is recognised that if a child is exposed to a second language, such as English, after three years of age they will require more time for their English proficiency to match that of their monolingual peers, compared to children who receive equal exposure to both languages before three years of age (Abrahamsson & Hyltenstam, 2009). There have been repeated assertions that it can take between 3 to 7 years for academic language proficiency of sequential language learners to be comparable with monolingual peers (Genesee & Lindholm-Leary, 2012; Golberg, Paradis, & Crago, 2008; Saunders & O'Brien, 2006). Therefore, it may be argued that an alternative possible factor influencing higher prevalence of language difficulties amongst children from lower SES communities may be that some members of the community are English language learners, who have not yet reached the English proficiency of their peers, and therefore do not score as well as their peers on standardised tests administered through the English language.

In the Growing Up in Ireland national longitudinal study of almost 9,000 nine-year-olds that showed a differentiation of vocabulary abilities by social background characteristics, 95% of the children in the sample were Irish citizens and 89% were born in Ireland (Williams et al., 2009). On the surface, the former proportions could suggest that this large-scale governmental study of children living in Ireland consists of a sample of children who are largely racially and linguistically homogenous and hence, low SES is the main possible explanatory factor of difference in vocabulary abilities. However, the 2016 Irish national census data indicate that 30% of residents born in Ireland speak a language other than English at home (CSO, 2017). Furthermore, close to 70% of non-Irish nationals in the 2016 national census reported that they spoke a language other than English at home (CSO, 2017). The most common other languages spoken were Polish, Lithuanian, Romanian and Latvian. This may even be a under-representation of the Ireland's linguistic diversity, as it is suggested that national census data often only reflect legal residents or those who feel comfortable to share such information, and the elevated status of English may prevent some respondents from sharing other languages used in the home (Carson & Extra, 2010; Carson, McMonagle, & Murphy, 2015). In addition, the newly established Primary Online Database (POD), which replaces the Department of Education and Skills' (DES) National School Annual Census, reports that 35.9% of pupils enrolled in Irish national schools in 2016/2017

who were Irish citizens did not speak English or Irish as their first language (POD, 2017). Thus, the difference in vocabulary abilities of Irish 9 year olds by social background characteristics reported in the Growing Up in Ireland study (Williams et al. 2009) may in fact reflect other factors that influence vocabulary scores on a standardised English assessment, such as pupils' lack of proficiency with the English language. Unfortunately, this national study to describe the lives of Irish children does not capture or report languages spoken in the home, only citizenship, making it impossible to differentiate between the potential impact of language use, English language proficiency, and socio-economic status. However, the high incidence of other languages used by Irish nationals and non-Irish nationals reported in the census data reinforces the argument that higher prevalence of language difficulties reported amongst children from low SES areas may be impacted by limited English proficiency rather than limited financial resources.

Nonetheless, there are a small number of research studies available consisting of racially and linguistically homogenous samples. When the potential impact of a racial and English-learning influences are avoided (e.g., Beitchman et al.'s (2008) study of 244 English-speaking Canadian Caucasians, Durham et al.'s (2007) assessment of 502 White English-speaking US citizens from the Mid-West, and Locke et al.'s (2002) investigation of 240 children who all spoke English as their first language and attended schools that had little cultural diversity), the findings of the studies continued to show differences in language ability between children from low and high SES backgrounds. Hence, race, membership of an ethnic minority, or language learning cannot be deemed to be the only determinants of language differences of children from low SES areas.

The third area of debate concerning higher prevalence of language difficulties amongst children from low SES areas relates to the potential of individual and other differences providing alternative reasons for language differences. Following a meta-analysis of the research on the relationship between SES and child development, Letourneau, Duffer-Leger, Levac, Watson, and Young-Morris (2011) reported small but significant effects of SES on language measures. However, they concluded that many other individual factors (e.g., gender, temperament), familial factors (e.g., parental coping, family stress) and community factors (e.g., neighbourhood safety) may explain this relationship. As outlined earlier, it is argued that a combination of biological and environmental factors are important for language acquisition (Reilly et al., 2010). For instance, language development may be influenced by children's gender, intelligence, personality, upbringing and relationships with their parents (Ginsborg, 2006). Moreover, children possess personal differences in their language learning potential (e.g., phoneme perception, working memory capacity) which are often ignored in studies (Pungello et al., 2009). Likewise, parental characteristics such as income, education

and environments provided may be influenced by individual genetic factors (McLoyd, 1998). All of the above individual and familial factors could potentially be more accurate reasons for differences in language abilities found between children of different socio-economic backgrounds than social class alone, if the particular sample included children who were more vulnerable in these domains.

One important individual difference that emerges is the child's language enrichment environment. That is, the effects of individual home environment, irrespective of parents' SES status, has been deliberated. An ecological perspective on child development, as put forward by Bronfenbrenner, acknowledges the benefits of sociocultural systems within which human development occurs (Bronfenbrenner & Morris, 2006). The International Classification of Functioning, Disability, and Health – Child and Youth Version also recognises that environmental factors may effect functioning (WHO, 2007). Applying these renowned perspectives to language development, the focus is on the environment of the child, such as people in the child's life and the interactions between them, language models provided, and resources available (Pickstone et al., 2009). It also includes cognitive support in the home, language skills taught, and the sense of autonomy and entitlement fostered in children (Durham et al., 2007). Hence, individual home environments, not just socio-economic background, may be influential when it comes to children's language development (Duncan et al., 1994; Guo & Harris, 2000; Hoff, 2003; Tamis-LeMonda, Bornstein, & Baumwell, 2001). As Letts et al. (2013, p. 141) argue "it is the communicative experiences of the child that are important...in many cases it is those families with higher SES who can supply an optimum environment, but there is no direct link with SES per se".

However, while language ability differences amongst children may be explained by dissimilarities in home environment regardless of socio-economic status, this argument is counter-challenged by the numerous studies that report correlations between less facilitative language enrichment environments and low SES background. Landmark studies such as Bernstein (1975) and Hart and Risley (1995) highlighted vast differences in the quantity and quality of verbal interactions between working class and middle class parents and their respective children, and consequently striking differences in their children's language abilities. As stated previously, Hart and Risley's study was based on a very small sample size and the related verbal deprivation hypothesis (Bernstein, 1975) has been strongly criticised by others, who argue that children from lower SES backgrounds simply have a different language style, use language for different purposes, hold different beliefs about how adults and children should interact, and communicate differently when speaking to adults such as teachers or researchers (Heath, 1983; Tizard & Hughes, 1984). In spite of these criticisms, recent studies have echoed the findings of high correlations between low SES and

less facilitative home environments. Home environments accounted for one third of the effect of family income on age 5 IQ (Duncan et al., 1994) and one third to one half of the disadvantages in academic ability among persistently poor children (Korenman, Miller, & Sjaastad, 1995). Hoff's (2003) study of 33 families from high SES backgrounds and 30 families from mid-SES backgrounds reported that maternal speech was the mediating variable in the differences between children's vocabulary development. Hoff's (2003) analyses of equal length transcripts of conversations that occurred between mothers and children indicated that the mothers from high SES backgrounds produced more utterances, had higher MLUs; and produced more topic-continuing replies to their children than did the mothers from mid-SES backgrounds. However, Hoff (2003) did not include low SES groups and only examined maternal speech and ignored other possible variables (e.g., individual differences, child-rearing beliefs, time spent interacting with their children etc). Furthermore, only 5% of the variance was attributable to SES, and vocabulary ability was measured via a spontaneous speech sample not a standardised assessment. These small percentage variances could help explain why some studies have reported important similarities between the language enrichment environments of some families from low and high SES backgrounds (Tizard & Hughes, 1984), such as "frequency of conversations held between mothers and children, the length of conversations, the number of words uttered in each turn and the amount of time mothers and children spent playing together" (Ginsborg, 2006, p. 18). In spite of the inconsistent findings in relation to language enrichment home environments across social groups, many studies investigating the associations between low SES and poorer language outcomes have not measured home environments (e.g., Beitchman et al., 2008; Black et al., 2008; Durham et al., 2007; Reilly et al., 2010) or in the case of retrospective analyses have not been able to report on it (Lloyd et al., 2010; Schoon, Parsons, Rush, & Law, 2010). As a result, they assign poorer language outcomes to low SES as measured by family income and maternal education, ignoring this critical distinction.

In conclusion, in the light of the debates described above, critical analysis of studies exploring language differences between children from different socio-economic groups is required. At a minimum, careful attention should be given to assessments administered, participant characteristics, sample sizes, individual differences, and possible alternative explanations for discrepancies reported. Following the critical synthesis of the numerous studies referenced in this section reporting a higher prevalence of language difficulties amongst children from low SES areas, it seems appropriate to suggest that if a child is from a low SES area, that does not automatically imply that s/he will have language difficulties, but it creates a greater risk of presenting with language abilities below age expectations (Law & Harris, 2006). Consequently, children from low SES areas may be more likely to experience the negative impacts of language difficulties discussed previously. Therefore, it is crucial that

language enrichment interventions are available to address language difficulties that may present for this 'at risk' group.

1.5 Language Enrichment Interventions

Language enrichment interventions aim to enhance aspects of language that a child is struggling with. As a result, children may be supported to achieve their potential linguistically, academically, emotionally, and in their participation in society. In a survey of SLTs who work with children, 158 different types of interventions were identified, confirming the existence of a large diversity of practices (Lindsay, Dockrell, Law, Roulstone, & Vignoles, 2010). Language enrichment interventions may encompass working directly with the child to change language behaviours (i.e., child-focused approaches) or working to change the context in which the child's behaviour takes place (i.e., environment-focused approaches) (Pickstone et al., 2009). In addition, language enrichment interventions may take a broad focus on both receptive and expressive language abilities, or may place their attention on a more narrow and specific area of language competence. For example, language enrichment interventions may target one or more of the following:

conversation skills (discourse and narrative), forming sentences (syntax), learning grammatical rules (morphology), inferring information, understanding figurative language and other literary devices, using pragmatic language skills, developing vocabulary (semantics), word retrieval skills (Bowen & Snow, 2017, p. 177).

The discipline with primary responsibility for providing language enrichment interventions is speech and language therapists (SLTs), but children may also be supported by psychologists, paediatricians, general practitioners, and educators (Bishop, 2016). Inter-professional practice, whereby SLTs work collaboratively with member(s) of a different discipline, is also common when supporting children's language development (Hartas, 2004; Wilson, McNeill, & Gillon, 2015). For younger children, language enrichment interventions may need to address the family and home environment, but for school-aged children, broader environmental influences, including school and classroom contexts, need to be considered (McLeod et al., 2014). Teachers, in particular, are a key discipline for supporting school-aged children with language difficulties because of their regular contact with children, the strong relationships they build with children, their in-depth knowledge of their pupils and pupils' preferences, and the potential of integrating language enrichment interventions into curricular objectives (Glover et al., 2015; Squires et al., 2013). Child-focused approaches to language enrichment for school-aged children often emphasise active engagement of pupils in their own learning, supporting them to develop the linguistic knowledge, skills, and strategies needed to access curriculum content (Wallach, 2014). In parallel, and regularly implemented in tandem, environment-focused approaches to language enrichment for

school-aged children frequently emphasise changing the behaviours of parents, teachers and educational support staff, and the resources available to the child (Pickstone et al., 2009). For example, within the classroom environment, creating natural contexts for high-quality verbal input, enhancing adult responsiveness and feedback through expansions and recasts, and creating opportunities for pupils to produce language targets (Dickinson, Hofer, Barnes, & Grifenhagen, 2014; Dockrell, Stuart, & King, 2010; Ellis Weismer & Robertson, 2006; Huttenlocher, Waterfall, Vasilyeva, Vevea, & Hedges, 2010).

Furthermore, as language enrichment interventions are frequently designed by SLTs and originate from SLT services, models of SLT service delivery can influence the nature, objective, and person responsible for providing language enrichment interventions. It is commonplace for models of SLT service delivery to divide interventions into three tiers: specialist, targeted, and universal (Gascoigne, 2006). Specialist interventions aim to decrease the impact of a language impairment (Law, Reilly, & Snow, 2013). They typically involve individual intervention for a specific child provided by an SLT (Ebbels, McCartney, Slonims, Dockrell, & Norbury, 2017). An example of a specialist, time-bound language enrichment programme designed and delivered by a speech and language therapist to support children with specific language impairment to acquire the ability to understand and express a range of grammatical morphemes is described by Maul and Ambler (2014). Targeted interventions aim to provide interventions for vulnerable groups of children whose risk of developing language difficulties is greater than average, including children growing up in areas of low SES (Gascoigne, 2006; Law et al., 2013). Examples include the Hanen You Make the Difference programme for late-talkers (Manolson, Ward, & Dodington, 1995) or professional development for school staff who work in areas of low SES on strategies to facilitate and increase opportunities, activities and resources for developing language (Let's Talk programme) (Hutchinson & Clegg, 2011). Universal interventions generally involve maximising the probability of all children developing good language skills. The role of SLTs in universal interventions is frequently to raise awareness of the importance of language abilities, highlight the impact of language difficulties, and support relevant others to enrich language development (Ebbels et al., 2017). Examples include vocabulary intervention programmes for whole classes targeting cross-curriculum academic words (Lesaux, Kieffer, Faller, & Kelley, 2010; Snow, Lawrence, & White, 2009). Universal interventions are also relevant for children from low SES backgrounds because, according to the National Economic and Social Forum (NESF, 2009), many do not attend schools in areas of high concentrations of poverty that may be more likely to receive targeted interventions. The *End Child Poverty Coalition* (2011) reported that over half of the children (56%) from non-employed households in Ireland do not attend schools in areas of concentrated disadvantage

that are in receipt of additional investment and often include supports for language enrichment (i.e., Delivering Equality of Opportunity in Schools (DEIS) initiative).

Universal and targeted interventions regularly consider the educational environment as providing an ideal context for enriching children's language skills. This focus on environment aligns with theories of language acquisition (Ambridge & Lieven, 2011; Tomasello, 2003). Moreover, it supports the World Health Organisation's (WHO) International Classification of Functioning, Disability and Health (ICF) specification of environmental factors as key features of its classification, and WHO's recognition of the environment as having a potentially facilitative or impeding impact on development (Howe, 2008). A number of advantages of delivering universal and targeted language enrichment interventions in the educational environment include the ability to address the language skills of all the children in the classroom at the one time, embed interventions in the school curriculum, and avoid challenges related to selection criteria or timetabling for individual sessions (Spencer, Clegg, Lowe, et al., 2017). In addition, providing interventions to a whole class of pupils may avoid the stigma associated with a child receiving individualised specialist help, which may differentiate children from their peers and undermine their sense of belonging and well-being (Lyons & Roulstone, 2016). However, in Ireland, statutory Health Service Executive (HSE) Primary Care SLT Services for children 0-18 years offer mostly specialist interventions - providing assessment, diagnosis, treatment and management for children who are referred with suspected or identified speech, language or communication impairments in a clinic-based setting. The HSE's predominant focus on specialist interventions occurs in spite of continuous arguments, such as those from Law et al. (2013, p. 492), who state:

Metaphorically...SLT as a profession has traditionally been 'in the ambulance' [at the base of the cliff], but it needs to reposition its expertise to ensure that the top of the cliff is made safer for all [preventing people from falling off easily].

The recommendation for more targeted and universal interventions is especially relevant for children from low SES backgrounds in light of the discussions previously about the escalated risk of, and increased prevalence of, language difficulties reported amongst this population. Indeed, "the sheer number of children...makes a clinical 'referral' model of service delivery impractical" (Law et al., 2011, p. 663). Furthermore, it has been found that non-engagement with HSE Primary Care SLT services in Ireland may be influenced by low socio-economic status, and recommendations for more flexible service delivery have been put forward (Curran, Flynn, Antonijevic-Elliott, & Lyons, 2015). The school environment and the classroom practices that are implemented in the educational context are central to a more flexible, holistic approach to promoting children's language development and providing language enrichment interventions across universal and targeted tiers (Dockrell, Bakopoulou, Law, Spencer, & Lindsay, 2015).

In addition to the importance of providing language enrichment interventions across universal and targeted levels, it is imperative that the interventions are founded on principles that have demonstrated effectiveness (Law et al., 2012). If language enrichment interventions are evidence-based, the likelihood of their effectiveness is maximised (Bowen and Snow, 2017). Therefore, language enrichment interventions need to explicitly integrate “best available external evidence from systematic research, best available evidence internal to clinical practice, and best available evidence concerning the preferences of a fully informed patient” (Dollaghan, 2007, p. 2). One reliable way to explore and extract evidence-based language enrichment interventions for school aged children that are grounded in scientific evidence is through a systematic review of the available research.

1.5.1 Systematic review of language enrichment interventions

As defined by Hargrove et al. (2005, p. 226), systematic reviews are “formal reviews in which the authors have searched, analysed, and synthesised the literature on a topic using specified, predetermined methods to answer a question”. The rigorous process of completing a systematic review, with its explicit focus on quality, helps to sift out less trustworthy sources of evidence. Consequently, studies that are of high quality and have strong evidence of effectiveness are brought to the fore and can be more readily available and accessible to inform practice. In addition, systematic reviews facilitate the amalgamation of evidence from multiple sources, rather than simply relying on one source of evidence. Thus, the existing knowledge base in relation to a specific focus of intervention, along with an indication of current gaps in knowledge, is captured.

Researchers have previously applied systematic reviews to examine the efficacy and effectiveness of a range of language enrichment interventions provided to school-aged children (Cirrin & Gillam, 2008; Cirrin et al., 2010; Cleave, Becker, Curran, Owen Van Horne, & Fey, 2015; Fey et al., 2011; Kan & Windsor, 2010; Law, Garrett, & Nye, 2004; Marulis & Neuman, 2013; Marulis & Neuman, 2010; Murphy & Schochat, 2013; Petersen, 2011; Pickstone, Goldbart, Marshall, Rees, & Roulstone, 2009; Roberts & Kaiser, 2011; Strong, Torgerson, Torgerson, & Hulm, 2011). Only one of the former systematic reviews did not reach definitive conclusions about the effectiveness of language enrichment interventions. This review focused on interventions that used different types of auditory temporal training, such as musical training, use of software, and formal auditory training (Murphy & Schochat, 2013). Conversely, findings of the other reviews have indicated that language enrichment interventions can be effective for school-aged children. Confidence in the effectiveness of language enrichment interventions were reported across a number of domains of language targeted, including the development of syntax and morphology skills (Cirrin & Gillam, 2008;

Cleave et al., 2015), semantic skills (Cirrin & Gillam, 2008; Kan & Windsor, 2010; Law et al., 2004; Marulis & Neuman, 2010; Marulis & Neuman, 2013), narrative skills (Petersen, 2011) and phonological awareness skills (Cirrin & Gillam, 2008; Law et al., 2004). Many of the reviews included studies where language enrichment interventions were delivered directly by teachers and the reviews concluded that the outcomes were equally positive as when interventions were delivered by speech and language therapists (SLTs) (Cirrin & Gillam, 2008; Cirrin et al., 2010; Marulis & Neuman, 2010; Marulis & Neuman, 2013). Moreover, interventions delivered in large group settings, such as a classroom environment, were sometimes found to be more effective than interventions delivered in small groups or in one-to-one settings (Marulis & Neuman, 2010), while other reviews reported no significant differences between group sizes (Marulis & Neuman, 2013). In addition, when language enrichment interventions addressed children's environments, such as their school environments, through universal, targeted or specialist interventions, positive impacts were reported (Pickstone et al., 2009).

However, there were a number of limitations to the systematic reviews outlined above. Some of the interventions were focused on younger children under the age of 6 years and did not report on interventions for older primary school children (Law et al., 2004; Marulis & Neuman, 2010; Marulis & Neuman, 2013; Pickstone et al., 2009; Roberts & Kaiser, 2011). One of the systematic reviews excluded studies that were not randomised control trials by design (Law et al., 2004). Pupils 'at-risk' were excluded in Cirrin and Gillam's review (2008), while only pupils 'at-risk' were included in Marulis and Neuman's (2013) meta-analytic review. Two of the previous systematic reviews contained a majority of older studies, published before 2001 (Cirrin & Gillam, 2008; Cirrin et al., 2010). Moreover, many of the reviews adopted a narrow focus of language enrichment interventions by only reviewing one domain of language development (Cleaves et al., 2015; Fey et al., 2011; Strong et al., 2011; Peterson, 2011; Marulis & Neuman, 2010; Marulis & Neuman, 2013; Kan & Windsor, 2010). Also, several reviews did not directly compare language enrichment interventions delivered by SLTs to those delivered by teachers, or universal/targeted interventions to specialist interventions. Therefore, in order to address some of the above limitations, I conducted a systematic review to evaluate the effectiveness of language enrichment interventions for school-aged children.

1.5.2 Systematic review conducted

The purpose of the systematic review was to further evaluate the effectiveness of language enrichment interventions for school-aged children and to determine what evidence-based practices are currently available to support children to reach their linguistic potential. Also, I aimed to establish which, if any, of the language enrichment interventions deemed to be evidence-based practices were delivered by educational professionals (e.g., teachers,

teaching assistants). A comprehensive search was conducted using a clearly defined search strategy with a transparent audit trail. This led to the stringent selection of quality literature on which to base findings. A rigorous search strategy was developed using explicit STAndards for Reporting LITerature searches (STARLITE) (Booth, 2006), which informed the development of rating criteria to apply to Sampling, Type of study, Approaches, Range of years, Limits, Inclusions and exclusions, Terms used and Electronic sources. Table 1.1 outlines how STARLITE was applied in this systematic review.

Table 1.1: Application of STARLITE (Booth, 2006) in the systematic review

STARLITE category	Application of STARLITE in the systematic review
Sampling	- School-aged children ¹ - Aged 4 – 18 years
Type of study	- RCTs, nonrandomised studies, multiple baseline studies, studies of multiple cases and single case studies
Approaches	- All settings and all ethical intervention approaches
Range of years	- Last 15 years (2001-2016)
Limits	- English language only ²
Inclusions and exclusions	- Include school-aged children aged 4 – 18 years, exclude infants, toddlers or children less than 4 years - Include any ethical therapeutic/intervention approach - Include any setting - Include all valid measures of language used, exclude non-valid measures of language used - Include developmental language disorder, primary language impairment, specific language impairment, developmental language delay and at-risk populations - Exclude hearing loss, Otitis Media, blind, deaf, cochlear implant, stuttering, intellectual disability, cerebral palsy, autism, Asperger's, pragmatic language impairment, social communication disorder, augmentative and alternative communication, dysphonia, aphonia ³ , - Exclude interventions primarily addressing reading abilities ⁴
Terms used	- Search to use 'natural language' as well as index term searching (e.g. MESH, Emtree) - Paediatrics, child, children, school-aged, elementary, youth AND - Language, language development, language delay, language disorder, specific language impairment, developmental language disorder, communication AND - Therapy, therapeutic, intervention, programme, treatment, support,

¹ School-aged children within the age range of 4-18 years were chosen as the target sample, as this is the age range that children in Ireland typically attend mainstream education

² The search was limited to English language studies only as the author's aim was to apply findings to an Irish population whose first language is predominantly English

³ These limits were applied as the author's aim was to relate findings to the former populations outlined children without identified disabilities. This aligns with Bishop et al.'s (2017) distinction between DLD and language disorder associated with differentiating conditions

⁴ This limit was applied as the focus of this review was on interventions for verbal language, not written language

	language intervention, language enrichment, language therapy - NOT infant, toddler, preschool, intellectual disability, cleft, hearing loss, otitis media, cochlear implant, blind, stuttering, aphonia, autism, Aspergers, pragmatic language impairment, social communication disorder, cerebral palsy, augmentative and alternative communication
Electronic sources	PUBMED, Science Direct, Web of Science, Scopus, ERIC, PsychInfo, Embase, LLBA, CINAHL ⁵

The results yielded from the databases searched are outlined in Table 1.2, including the number of hits, the number of studies that were instantly excluded because they did not meet the criteria and the number of studies included for review.

Table 1.2: Results yielded from databases searched

Database	No. of hits	No. of studies excluded due to not meeting review criteria	No. of studies included and saved for review
Pubmed	1608	1487	121
Science Direct	3215	3169	46
Web of Science	5155	5015	140
Scopus	4728	4615	113
ERIC	911	838	73
PsychInfo	598	543	55
Embase	585	487	98
LLBA	239	200	39
CINAHL	464	412	52
TOTAL	17,503	16,766	737

Some of the records saved for review were systematic reviews or meta-analyses on relevant topics, and not independent studies, and so were excluded as the focus was on original research studies ($n=16$). In addition, many of the records saved for review were duplicates ($n=475$), so in reality the search yielded 246 original research studies. The abstract of each of these papers was reviewed and 134 were rejected because they did not meet all of the review criteria. The remaining papers were accepted ($n=112$) and their full text was reviewed against the stipulated inclusion/exclusion criteria.

Two independent researchers also reviewed 10% of these papers. This helped to minimise the potential bias of the author and strengthen the reliability of the selection process (Hargrove et al., 2005). Agreement reliability was calculated by applying the formula: number of agreements / (number of agreements and disagreements) x 100 (Sackett, 1978). An agreement of 71% was yielded. Disagreement was resolved by consensus at each stage through discussion and review of the inclusion criteria. Subsequently, 55 studies were eliminated, as they did not fully meet the criteria. The studies were excluded for a variety of reasons, such as: absence of reliable assessment of outcomes ($n=14$); samples that

⁵ These databases were utilised because they were judged most likely to contain articles related to the focus.

included children with disorders in the exclusion criteria ($n=13$); studies that did not address the focus of this systematic review ($n=12$); studies completed in languages other than English ($n=8$); samples consisting of children younger than four years old ($n=5$); a paper that provided only a synthesis of previous study findings and was not an original study ($n=1$); a paper that reported only preliminary indications of potential therapy outcomes ($n=1$); and a paper focused only on teacher changes post-professional development and not child outcomes ($n=1$). This left a total of fifty-seven original research studies that met all the inclusion criteria of the systematic review. This process is summarised in Figure 1.1.

1.5.2.1 Measuring Level of Evidence and Quality Appraisal

Each of the fifty-seven studies were classified in terms of 'level of evidence', using the levels of evidence from the Oxford Centre for Evidence Based Medicine (2001) as outlined in Table 1.3. Levels of evidence are ranked from randomised controlled trials (RCTs) and systematic reviews (level 1), to nonrandomised studies (level 2), to studies of multiple cases who receive the same treatment (level 3), to single case studies (level 4), to expert opinion (level 5).

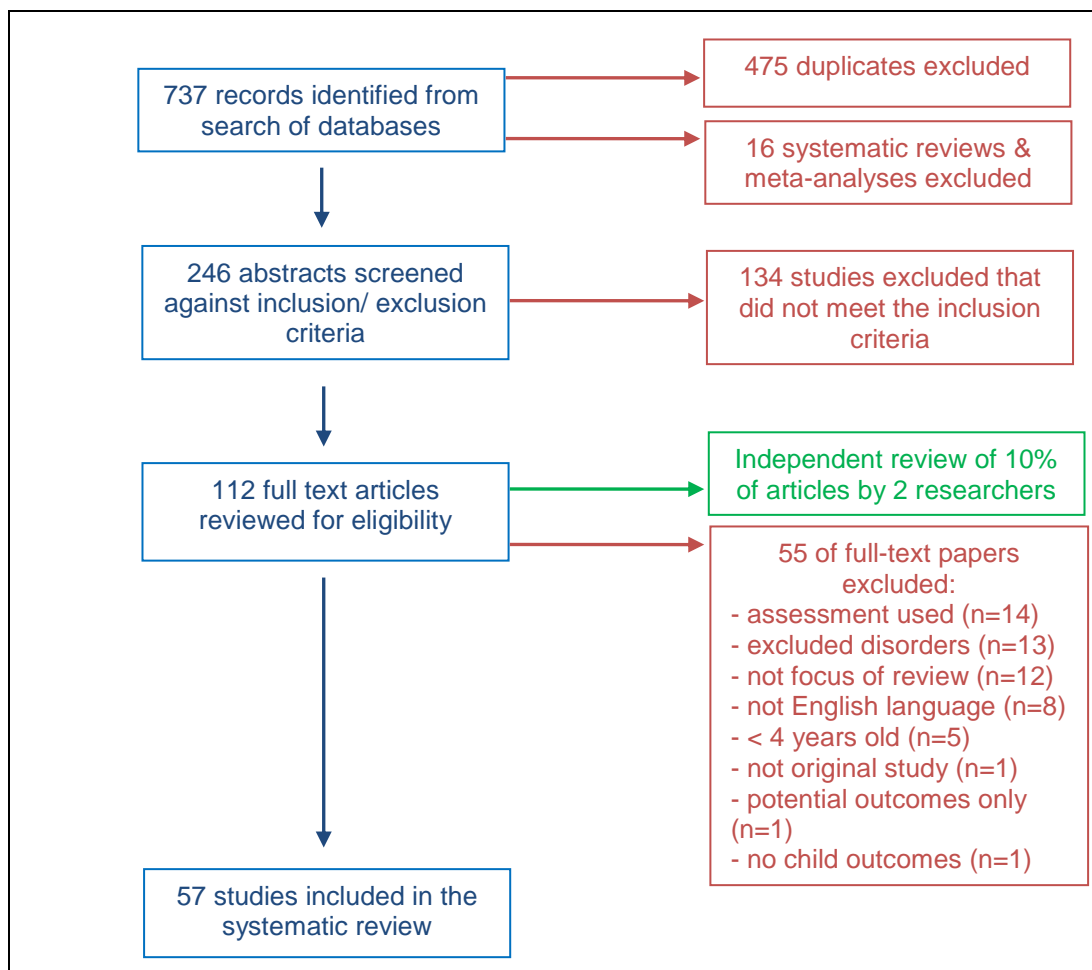


Figure 1.1: Process of obtaining the 57 articles that met the inclusion criteria

Table 1.3: Levels of evidence used to classify studies

Levels of Evidence (Oxford Centre for Evidence Based Medicine, 2001)	
Level 1	Randomised controlled trials and systematic reviews
Level 2	Nonrandomised studies, multiple-baseline designs and SRs
Level 3	Studies of multiple cases who receive the same treatment
Level 4	Single case studies
Level 5	Expert opinion

Thirteen of the included studies were categorised as level 1 evidence (23%), thirty-two studies were categorised as level 2 evidence (56%), eleven studies were categorised as level 3 evidence (19%), and one study was categorised as level 4 evidence (2%). Although only 23% of studies were level 1 evidence, it has been argued that we cannot dismiss evidence just because it is at a lower level (Brackenbury, Burroughs, & Hewitt, 2008). For instance, in many disciplines outside of medicine, there are minimal RCTs available from which to glean evidence, and if one is available, it can be frequently unhelpful or inappropriate (Johnson, 2005; Pring, 2004). Many language enrichment interventions do not fit with the principles of RCTs. For example, often it is not possible to include a placebo intervention or to blind clients or practitioners to their group allocation. Furthermore, the assumed basis of comparison (i.e., that groups are to all intents and purposes homogenous) cannot regularly be applied, and therefore alternative non-RCT research designs are necessary (Bernstein Ratner, 2006; Hedge, 2007; Pring, 2004; Ratner, 2011; Thompson, 2002).

1.5.2.1 Data Extraction

Next, a summary of the characteristics of each of the fifty-seven studies was produced under the following headings: country, sample size, age of child participants, sample characteristics, primary focus of intervention, person delivering intervention, instructional methods specified, dosage (duration, frequency, intensity), assessments used to measure outcomes, and intervention outcomes. Table A in Appendix A provides a detailed summary of the characteristics of the studies that met the inclusion criteria, including level of evidence, and highlights how the studies vary considerably across all variables.

Included studies had sample sizes ranging from 2 to 614 participants. The average sample size was 66 participants. Participating children were aged between 4:0 years to 15:11 years. Two-fifths of the studies included children diagnosed with Specific Language Impairment

(SLI) in their samples (23 studies, 40%)⁶, over a third of studies included only children from low SES backgrounds (21 studies, 37%), and the remaining studies included children with non-specific language difficulties. The countries of origin of the studies were primarily the United States (US) (26 studies, 45%) and the United Kingdom (UK) (20 studies, 35%). There were almost twice as many participating children living in the US than there were living in the UK (1970 participants compared to 1131 participants). A smaller number of studies originated outside these areas, namely Australia (6 studies), New Zealand (2 studies) and Canada (3 studies).

Although many of the language enrichment interventions focused on more than one linguistic element, the majority of studies' primary focus could be categorised under the following three themes: (i) semantics, (ii) syntax/morphology/narrative; or (iii) language processing. Almost half of the included studies intended to target the development of semantic ability, vocabulary skills or word-finding abilities as their primary focus of language enrichment intervention (i.e., 44%). Vocabulary development and word-finding abilities were targeted by employing: combined semantic and phonological methods (Coyne, McCoach, & Kapp, 2007; Duff et al., 2008; Harris, Schumaker, & Deshler, 2011; Parsons, Law, & Gascoigne, 2005; Zens, Gillon, & Moran, 2009); semantic only approaches such as categorisation, discussion of attributes and connecting (Ebbels et al., 2012; Wener & Archibald, 2011); feedback, scaffolding and cueing (Stiegler & Hoffman, 2001); a computer programme or multimedia (Best, 2005; Neuman & Dwyer, 2011; Silverman & Hines, 2009); explicit teaching of definitions (Coyne et al., 2007; Gillam, Olszewski, Fargo, & Gillam, 2014; Nash & Snowling, 2006); teaching of vocabulary in the context of stories (Buysse, Peisner-Feinberg, Soukakou, Fetting, & Schaaf, 2016; Duff et al., 2014; Justice, Kaderavek, Bowles, & Grimm, 2005; Nash & Snowling, 2006; Pollard-Durodola et al., 2011; Puhalla, 2011; Spencer-Kelley, Goldstein, Spencer, & Sherman, 2015; Zipoli, Coyne, & McCoach, 2011; Zucker, Solari, Landry, & Swank, 2013); or a manualised programme often comprising a collection of activities and resources (Fricke, Bowyer-Crane, Haley, Hulma, & Snowling, 2012; Hutchinson & Clegg, 2011; Wake et al., 2015; Wake et al., 2013).

Over two-thirds of the studies' primary focus of language enrichment intervention addressed the linguistic areas of syntax, morphology or narrative abilities (70%). Syntax, morphology and narrative abilities were targeted for intervention by utilising: commercially available resources and programmes, such as Black Sheep, Let's Talk programme, Rhodes to Language, Time to Talk, Reading and Language Intervention, Story Friends, Language for

⁶ As this systematic review included studies published between 2001 and 2016 before the widespread international adoption of the term 'developmental language disorder' (Bishop et al., 2017), the vast majority of included studies employed the term 'specific language impairment' (SLI) when describing participant characteristics. Therefore, I have also used the term SLI in this section to maintain consistency with the studies' terminology.

Learning, and Talk Boost (Bowyer-Crane et al., 2008; Duff et al., 2014; Hutchinson & Clegg, 2011; Lee & Pring, 2016; Mecrow, Beckwith, & Klee, 2010; Spencer-Kelley et al., 2015; Wake et al., 2015; Wake et al., 2013); previously researched methods such as ‘colourful semantics’ or ‘visual coding’ (Bolderson, Dosanjh, Milligan, Pring, & Chiat, 2011; Given, Wasserman, Chari, Beattie, & Eden, 2008); use of questioning strategies (Colmar, 2014); sentence segmenting and reassembling tasks (Spooner, 2002); focused stimulation, recasting and imitation (Smith-Lock, Leitao, Lambert, & Nickels, 2013); cueing and recasting (Smith-Lock, Leitao, Prior, & Nickels, 2015); modelling, connecting and coding stimuli verbally (Wener & Archibald, 2011); narratives and storybooks (Bellon-Harn, Byers, & Lappi, 2014; Brown, Garzarek, & Donegan, 2014; Davies, Shanks, & Davies, 2004; Gillam, Gillam, & Reece, 2012; Gillam et al., 2014; Green & Klecan-Aker, 2012; Lever & Sénéchal, 2010; Maul & Ambler, 2014; Munro, Lee, & Baker, 2008; Popescu, Fey, Lewine, Finestack, & Popescu, 2009; Ramirez, Walton, & Roberts, 2013; Swanson, Fey, Mills, & Hood, 2005; Westerveld & Gillon, 2008); computer-based programmes (Bishop, Adams, & Rosen, 2006; Hsu & Bishop, 2014); morphological awareness intervention (Apel, Brimo, Diehm, & Apel, 2013; Apel & Diehm, 2013; McLeod & Apel, 2015); and parent-child interaction therapy (Allen & Marshall, 2011).

Three studies focused primarily on interventions to address aspects of language processing (5% of included studies). Language processing abilities were targeted by employing the commercially available ‘Fast ForWord’ computer-based intervention that uses acoustically enhanced speech stimuli (Fey, Finestack, Gajewski, Popescu, & Lewine, 2010), rehearsal strategy training (Gill, Klecan-Aker, Roberts, & Fredenburg, 2003), or visualisation strategy training (Gill et al., 2003; Joffe, Cain, & Maric, 2007). The approaches and methods employed to target each linguistic domain are summarised in Table 1.4.

Table 1.4: Summary of approaches and methods employed to target each linguistic domain

Semantics	Syntax/ Morphology/ Narrative	Language Processing
<ul style="list-style-type: none"> • combined semantic and phonological methods • semantic only approaches • feedback, scaffolding and cueing • computer programme or multimedia • explicit teaching of definitions • teaching of vocabulary in the context of stories • manualised programme 	<ul style="list-style-type: none"> • commercially available resources & programmes • ‘colourful semantics’ or ‘visual coding’ • use of questioning strategies • sentence segmenting and reassembling tasks • focused stimulation, recasting and imitation • cueing and recasting • modelling, connecting & coding stimuli verbally • narratives & storybooks • computer-based programmes • morphological awareness intervention • parent-child interaction therapy 	<ul style="list-style-type: none"> • ‘Fast ForWord’ programme • rehearsal strategy training • visualisation strategy training

Intervention for study participants was delivered in numerous different ways. The studies varied in terms of: individuals delivering the intervention (e.g., SLT, teacher, teaching assistant, parent); group size (e.g., individual, small group, large group); tier of intervention (e.g., universal, targeted, specialist); instructional method (e.g. parent-child interaction therapy, visualisation strategies, morphological awareness training); and dosage (i.e., varying durations, frequencies and intensities). Intervention was equally distributed between intervention delivered directly by SLTs or SLT students, and intervention delivered directly by teachers, student teachers or teaching assistants (i.e., 22 studies of each). Similarly, computer-based intervention was the method of delivery of two studies, one supervised by an SLT and one supervised by an educationalist. Intervention in four studies was delivered through inter-professional practice between SLTs and educational professionals (7%). The intervention in the remaining studies was delivered by doctoral students in human development or psychology and sociology graduates (3.5%). Five studies did not specify who delivered the intervention (9%). Interventions in almost four-fifths of the included studies were equally balanced between delivery on an individual basis (22 studies) and delivery in small groups (23 studies). In addition, eight studies provided the intervention through a combination of individual, small groups and whole class approaches (14%), and four studies employed large groups/whole class approach (7%). Dosage varied widely. For instance, durations of intervention ranged from one week to thirty weeks, frequencies ranged from one to seven sessions per week, and intensities ranged from five minutes to one hundred minutes.

There was similar diversity in the assessments administered to measure outcomes. The Clinical Evaluation of Language Fundamentals (CELF) was the most commonly used standardised assessment tool, administered in the measurement of outcomes in almost one quarter of studies (13 studies, 23%), followed by the Renfrew Action Picture Test (RAPT) (7 studies, 12%), the Peabody Picture Vocabulary Test (PPVT) (7 studies, 12%), and The Bus Story Test (6 studies: 11%). Other standardised assessments used less frequently included South Tyneside Assessment of Syntactic Structures (STASS), British Picture Vocabulary Scale (BPVS), Progressive Achievement Test (PAT), Children's Communication Checklist, Early Word Recognition Test, Neale Analysis of Reading Ability (NARA/NEALE), Test of Word Finding (TWF), Test of Adolescent/Adult Word Finding (TAWF), Token Test for Children, Test of Phonological Awareness, Expressive Vocabulary Test, Detroit Test of Learning Aptitude (DTLA) 2, Test of Narrative Language, Automated Working Memory Assessment (AWMA), Comprehensive Test of Phonological Processing (CTOPP), York Assessment of Reading for Comprehension (YARC), Test for Reception of Grammar (TROG), Test of Preschool Early Literacy (TOPEL), Test of Early Language Development (TELD), Test of Reading Efficiency, Dynamic Indicators of Basic Early Literacy Skills

(DIBELS), Test of Narrative Retell, and Edmonton Narrative Norms Instrument (ENNI). Almost half of the studies administered an informal measure in addition to standardised assessments to determine outcomes of language enrichment interventions (26 studies, 46%). Over a quarter of the studies relied solely on experimenter-designed tasks to evaluate outcomes of their intervention (17 studies, 30%). Informal assessments and experimenter-designed tasks were typically a probe test of specific language targets.

Almost two-thirds of the included studies reported effect sizes (63% of studies). Effect sizes quantify the effectiveness of an intervention relative to a comparison intervention, and can provide information about the size of the difference and whether it is meaningful (Schuele & Justice, 2006). An effect size of 0.2 is considered to be small, an effect size of 0.5 is considered to be medium, and an effect size of 0.8 or more is considered to be large (Cohen, 1988). Reported effect sizes ranged from a negative effect of $d=-0.24$ (Gillam et al., 2012) to very large effect size ($d=8.259$) on an experimenter-designed probe (Harris et al., 2011). In addition, when available, the statistical significance reported (i.e., p value) was extracted, which helps determine the probability of the difference arising by chance (Dollaghan, 2007). No significant gains in children's language abilities were reported in almost a quarter of the studies (23% of studies). Seven studies did not report significant gains in syntactic, morphological or narrative ability. They included language enrichment interventions that were delivered: indirectly by psychology and sociology graduates using a manualised language programme (Wake et al., 2015; Wake et al., 2013); through a computerised training programme (Hsu & Bishop, 2014); by utilising storybooks and picture icons to teach grammar components by SLTs and SLT students (Brown et al., 2014); by implementing morphological awareness intervention by SLT students (McLeod & Apel, 2015); by employing questioning and sentence segmentation and reassembling by SLTs (Spooner, 2002); or by targeting oral narrative production in small groups and employing narrative based intervention delivered by a SLT (Westerveld & Gillon, 2008). Likewise, no significant gains were reported in six studies that targeted semantic development. They included interventions in which vocabulary definitions only were targeted (Duff et al., 2014; Gillam et al., 2014; Nash & Snowling, 2006), vocabulary was targeted as part of a manualised programme delivered by psychology and sociology graduates (Wake et al., 2015; Wake et al., 2013), and an intervention for word-finding difficulties that provided feedback, scaffolding and cueing (Stiegler & Hoffman, 2001). All studies providing intervention to address language processing reported significant gains.

1.5.2.2 Quality Appraisal

Fey (2006) proposes that the quality of studies should be assessed on indicators additional to study design. Hence, the appraisal of the quality, rigour and strength of each study was

completed by applying the evaluative method described by Reichow et al. (2008). This method demonstrated and reported good to excellent reliability and validity. Although it was created with the intention of appraising scientific research of interventions for children with autism, it is claimed that the quality indicators are broad enough to be relevant to other client groups such as those that are the focus of this systematic review (i.e., children with primary language impairment, specific language impairment, developmental language disorder, language delay, language difficulties, or at-risk populations).

The evaluative method includes three instruments: (i) rubric for evaluating research report rigour; (ii) guidelines for evaluating research report strength; and (iii) criteria for determining evidence-based practice (Reichow et al., 2008). The first instrument, the rubric for evaluating research report rigour, facilitates an appraisal of methodological elements through an assessment of primary quality indicators (i.e., characteristics considered critical for exhibiting validity) and secondary quality indicators (i.e., characteristics deemed important, but not critical), as outlined in Table 1.5 overleaf.

There are some differences in the quality indicators proposed for group research studies and single subject research studies due to the differences in methodologies employed. The primary quality indicators for single subject studies also include participant characteristics, independent variable, and dependent variable. However, there are added indicators to appraise for single subject research - baseline condition, visual analysis, and experimental control - instead of comparison condition, link between research question and data analysis, and use of statistical tests associated with group research studies. The secondary quality indicators for single subject research also overlap with that of group research studies through the inclusion of inter-observer agreement, fidelity, blind raters, generalisation and social validity. One extra secondary quality indicator unique to single subject research is kappa. Kappa aims to measure the magnitude of agreement between two or more observers (Viera & Garrett, 2005).

Reichow et al.'s (2008) second instrument provides guidelines for the evaluation of the research report strength. It enables the ratings from the rubrics to be amalgamated into a rating of the strength of the research study, ranging from strong to adequate to weak. Strong research reports receive high quality ratings on all primary quality indicators and display evidence of at least four secondary quality indicators (three for single subject research); adequate research reports receive high quality ratings on a minimum of four primary quality indicators and display evidence of at least two secondary quality indicators; while weak research reports receive less than four high quality ratings on primary quality indicators and demonstrate less than two secondary quality indicators. Reichow et al.'s (2008) third

instrument allows the strength ratings across studies to be synthesised to determine whether a practice has accumulated sufficient empirical support to be deemed evidence-based practice (EBP). Practices can be categorised as being either 'established EBP' or 'promising EBP'.

Table 1.5: Rubric for evaluating research rigour of group research (Reichow et al., 2008)

Quality Indicator	Definition
Primary Quality Indicators	
Participant characteristics	Age and gender were provided for all participants, specific diagnostic information was provided for all participants, if applicable standardised test scores were provided and information on the characteristics of the interventionist
Independent variable	Information about the treatment was provided with replicable precision
Comparison condition	The conditions for the comparison group were defined with replicable precision, including, at a minimum, a description of any other interventions participants received
Dependent variable	Dependent measures were described with operational and replicable precision, showed a clear link to the treatment outcome, and were collected at appropriate times
Link between research questions and data analysis	Data analyses were strongly linked to the research question(s) and the data analysis used correct units of measure on all variables
Use of statistical tests	Proper statistical analyses were conducted for each statistical measure with an adequate power and sample size of $n > 10$
Secondary Quality Indicators	
Random assignment	Participants were assigned to groups using a random assignment procedure
Inter observer agreement	Inter observer agreement was collected across all conditions, raters, and participants with inter-rater agreement at or above .80, and a minimum of Good reliability ($k \leq .60$). Psychometric properties of standardised tests were reported and were \geq than .70 agreement with a $k \geq .40$
Blind raters	Raters were blind to the treatment condition of the participants
Fidelity	Procedural fidelity or treatment fidelity was continuously assessed across participants, conditions, and implementers, and if applicable, had measurement statistics at or greater than .80
Attrition	Attrition was comparable across conditions and less than 30% at the final outcome measure
Generalisation and/or maintenance	Outcome measures were collected after the final data collection to assess generalisation and/or maintenance
Effect size	Effect sizes were reported for at least 75% of the outcome measures and were equal or greater than .40
Social validity	The study contained at least 4 of the following: (a) DVs were socially important, (b) intervention was time and cost effective, (c) comparisons were made between individuals with and without disabilities, (d) the behavioural change was large enough for practical value, (e) consumers were satisfied with the results, (f) people who typically come in contact with the participant manipulated the IVs, (g) the study occurred in natural contexts

Each of the fifty-seven included studies in this systematic review was rated on the rubrics described by Reichow et al (2008). Three-fifths of the studies were group research (35 studies, 61%) and the remainder were single subject designs (22 studies, 39%). The results of the rubrics ratings were used to determine the research report strength (Table 1.6 and 1.7). Four studies were deemed to be strong (7%), sixteen studies were deemed to be adequate (28%) and thirty-seven studies were deemed to be weak (65%). Two other reviewers also independently evaluated the quality of 20% of the studies. Once again, agreement reliability was calculated by applying the formula: number of agreements / (number of agreements and disagreements) x 100 (G. Sackett, 1978). An agreement of 92.2% was yielded indicating high levels of agreement between the independent reviewers. Coding disagreements were resolved through consensus.

Following this appraisal of research report strength, Reichow et al.'s (2008) third instrument was applied to determine whether any of the practices implemented in the studies could be described as 'established EBP' or 'promising EBP'. Based on this instrument, one practice met the criteria for 'established EBP' and one practice was eligible to be considered a 'promising EBP'.

Table 1.6: Ratings on the rubric for evaluating research report rigour and research report strength⁷ (group designs)

Study	Primary Quality Indicators						Secondary Quality Indicators								Research report strength
	Participant characteristics	Independent variable	Comparison Condition	Dependent Variable	Link between research question and data analysis	Use of statistical tests	Random Assignment	Inter observer Agreement	Fidelity	Blind raters	Attrition	Generalisation and/or maintenance	Effect Size	Social validity	
Bowyer-Crane et al., 2008	H	H	H	H	H	H	E	NE	NE	E	NE	E	E	E	Strong
Fricke et al., 2012	H	H	H	H	H	H	E	NE	NE	NE	E	E	E	E	Strong
Gillam et al., 2012	H	H	H	H	H	H	NE	E	E	E	N/A	NE	E	E	Strong
Silverman & Hines, 2009	H	H	H	H	H	H	E	NE	E	NE	NE	NE	E	E	Strong
Allen & Marshall, 2011	H	H	A	H	H	A	E	NE	NE	NE	N/A	E	NE	E	Adequate
Bishop et al., 2006	A	H	H	H	H	A	E	NE	NE	E	NE	NE	NE	NE	Adequate
Buysse et al., 2016	H	A	A	H	H	H	NE	NE	NE	E	E	NE	NE	E	Adequate
Coyne et al., 2007	A	H	H	H	H	H	E	E	E	NE	N/A	E	E	E	Adequate
Duff et al., 2014	H	H	A	H	H	A	E	E	NE	NE	E	NE	NE	E	Adequate
Fey et al., 2010	A	H	H	H	H	H	E	E	E	E	E	E	E	NE	Adequate
Gill et al., 2003	H	H	A	H	H	H	NE	NE	NE	E	N/A	E	NE	NE	Adequate
Pollard-Durodola et al., 2011	H	H	A	H	H	A	E	E	NE	E	N/A	NE	NE	E	Adequate
Wake et al., 2015	H	H	A	H	H	H	E	NE	NE	E	E	E	NE	E	Adequate
Wake et al., 2013	H	H	A	H	H	H	E	NE	NE	E	E	NE	NE	E	Adequate
Westerveld & Gillon, 2008	H	H	U	H	H	H	NE	E	E	NE	N/A	NE	E	E	Adequate

⁷ Table Key: H=High quality; A=Acceptable quality; U=Unacceptable quality; E=Evidence; NE= No evidence; N/A=Not applicable

Study	Primary Quality Indicators						Secondary Quality Indicators								Research report strength
	Participant characteristics	Independent variable	Comparison Condition	Dependent Variable	Link between research question and data analysis	Use of statistical tests	Random Assignment	Inter Observer Agreement	Fidelity	Blind raters	Attrition	Generalisation and/or maintenance	Effect Size	Social validity	
Zens et al., 2009	A	H	H	H	H	H	E	E	E	E	N/A	NE	E	E	Adequate
Zipoli et al., 2011	H	H	H	H	H	H	NE	E	E	NE	N/A	NE	NE	E	Adequate
Zucker et al., 2013	H	H	H	H	H	H	NE	NE	NE	E	NE	NE	NE	E	Adequate
Apel & Diehm, 2013	A	H	U	H	H	H	E	E	E	NE	E	NE	E	E	Weak
Boyle et al., 2009	H	H	U	H	H	H	E	NE	NE	E	E	E	NE	E	Weak
Colmar, 2014	A	H	A	A	A	A	NE	NE	NE	NE	N/A	E	E	E	Weak
Ebbels, et al., 2012	H	H	U	H	H	U	E	NE	NE	NE	E	NE	NE	E	Weak
Gillam et al., 2014	H	H	A	H	H	U	NE	E	E	E	N/A	NE	E	E	Weak
Harris et al., 2011	U	H	H	H	H	H	NE	E	E	NE	N/A	NE	E	E	Weak
Hsu & Bishop, 2014	A	A	U	H	H	H	E	NE	NE	NE	N/A	NE	NE	NE	Weak
Hutchinson & Clegg, 2011	H	H	U	A	H	U	NE	NE	NE	NE	N/A	NE	NE	E	Weak
Joffe et al., 2007	H	H	U	H	H	U	NE	E	NE	E	N/A	NE	E	E	Weak
Justice, et al., 2005	H	H	U	A	H	H	E	NE	NE	NE	N/A	NE	E	E	Weak
Lee & Pring, 2016	H	H	U	H	H	H	NE	NE	NE	E	E	NE	NE	E	Weak
Lever & Senechal, 2011	U	H	H	H	H	H	NE	E	NE	NE	N/A	NE	NE	E	Weak
McCartney et al., 2011	A	H	U	H	H	H	NE	NE	NE	NE	N/A	NE	NE	E	Weak
Neuman & Dwyer, 2011	H	H	H	H	A	H	NE	NE	NE	NE	NE	NE	NE	E	Weak
Popescu et al., 2009	U	A	U	H	H	U	E	NE	NE	NE	N/A	NE	NE	NE	Weak
Puhalla, 2011	H	H	A	U	H	H	E	E	NE	NE	N/A	NE	E	E	Weak
Spencer et al., 2015	H	H	U	H	H	H	E	E	E	NE	N/A	NE	NE	E	Weak

Table 1.7. Ratings on the rubric for evaluating research report rigour and research report strength (single subject design)⁸

Study	Primary Quality Indicators						Secondary Quality Indicators						Research report strength
	Participant characteristics	Independent variable	Baseline Condition	Dependent Variable	Visual analysis	Experimental control	Inter Observer Agreement	Kappa	Fidelity	Blind raters	Generalisation and/or maintenance	Social validity	
Brown et al., 2014	H	H	A	H	H	H	E	NE	E	NE	E	E	Adequate
Mecrow et al., 2010	H	H	H	H	H	H	NE	NE	NE	NE	E	E	Adequate
Apel, et al., 2013	A	H	H	U	H	A	E	NE	E	NE	NE	E	Weak
Ramirez et al., 2013	A	A	U	H	A	U	NE	NE	NE	NE	NE	E	Weak
McLeod & Apel, 2015	H	H	U	H	A	U	E	NE	E	NE	NE	E	Weak
Wener & Archibald, 2011	H	A	U	A	U	A	NE	NE	NE	E	E	E	Weak
Bolderson et al., 2011	H	H	H	U	U	U	NE	NE	NE	NE	NE	E	Weak
Green et al., 2012	A	H	H	U	U	U	NE	NE	NE	NE	NE	NE	Weak
Smith-Lock et al., 2015	H	H	U	H	U	U	NE	NE	NE	E	E	E	Weak
Bellon-Harn, et al., 2014	H	A	U	H	U	U	NE	NE	NE	NE	NE	NE	Weak
Maul & Ambler, 2014	H	A	U	A	U	H	NE	NE	NE	NE	NE	NE	Weak
Smith-Lock, 2015	U	H	U	H	U	U	NE	NE	NE	E	NE	E	Weak
Smith-Lock et al., 2013	H	H	U	H	U	H	NE	NE	NE	NE	NE	E	Weak
Best, 2005	H	A	H	H	U	U	NE	NE	NE	E	E	E	Weak
Spooner, 2002	H	H	U	H	U	U	NE	NE	NE	NE	NE	E	Weak
Stiegler & Hoffman, 2001	H	H	H	A	A	U	NE	NE	NE	NE	NE	NE	Weak
Nash & Snowling, 2006	H	H	H	U	U	U	NE	NE	NE	E	E	E	Weak
Munro et al., 2008	H	H	U	H	U	U	E	NE	E	NE	NE	E	Weak

⁸ Table Key: H=High quality; A=Acceptable quality; U=Unacceptable quality; E=Evidence; NE= No evidence; N/A=Not applicable

Study	Primary Quality Indicators						Secondary Quality Indicators						Research report strength
	Participant characteristics	Independent variable	Baseline Condition	Dependent Variable	Visual analysis	Experimental control	Inter Observer Agreement	Kappa	Fidelity	Blind raters	Generalisation and/or maintenance	Social validity	
Parsons et al., 2005	H	H	U	H	U	U	NE	NE	NE	E	NE	E	Weak
Duff et al., 2008	A	H	U	H	U	U	NE	NE	NE	NE	E	E	Weak
Davies et al., 2004	A	H	U	H	U	U	NE	NE	NE	NE	E	E	Weak
Swanson et al., 2005	H	H	U	H	H	U	E	NE	NE	NE	NE	E	Weak

The first practice that can be considered 'established EBP' is extended instruction within the context of story reading to teach vocabulary. This practice met the criteria because there were over four group experimental designs of adequate research report strength conducted using this practice, conducted in separate locations and by different research teams (Coyne et al., 2007; Duff et al., 2014; Pollard-Durodola et al., 2011; Zipoli et al., 2011; Zucker et al., 2013). Extended instruction is designed to expand children's comprehension of target vocabulary through explicitly providing opportunities to discuss and meaningfully engage with the meaning of a word (Beck, McKeown, & Kucan, 2002). In the former studies it typically involved increasing exposure to the target vocabulary, highlighting semantic relationships with other known words, demonstrating the wider application of the target vocabulary in a variety of different contexts outside of the story book, discrimination and generalisation tasks, and scaffolding opportunities to practise using the target vocabulary. Participating children were aged between four and six years, and in four of the five studies the children were from low SES backgrounds (Coyne et al., 2007; Pollard-Durodola et al., 2011; Zipoli et al., 2011; Zucker et al., 2013). Extended vocabulary instruction within the context of story reading was always delivered in an educational setting and teachers/teaching assistants were the interventionists in four of the studies (Zipoli et al., 2011, Pollard-Durodola et al., 2011, Duff et al., 2014, Zucker et al., 2013). Coyne et al. (2007) did not report who implemented extended instruction. This practice was delivered in variety of formats, such as individually (Duff et al., 2014), small groups (Coyne et al., 2007, Zucker et al., 2013), whole classes (Zipoli et al., 2011), and a combination of individual and small groups (Duff et al., 2014). All treatment sessions lasted between 15-30 minutes, but a diverse range of intensities were employed ranging from: three times per week for one week (Coyne et al., 2007); to five times per week for nine weeks (Duff et al., 2014) or 12 weeks (Pollard-Durodola et al., 2011); to two times per week for 18 weeks (Zipoli et al., 2011); and to four times per week for 20 weeks (Zucker et al., 2013).

It is important to highlight that four of the five studies reported significant gains in vocabulary development based on an analysis of results gleaned from informal, researcher-designed vocabulary tests of targeted words (Coyne et al., 2007, Duff et al., 2014, Zipoli et al., 2011, Zucker et al., 2013). However, repeated support for such proximal measures of vocabulary stems from arguments that they assess the specific words aimed to be acquired instead of general vocabulary, can demonstrate changes over time, and may avoid potential bias of standardised assessments (Stockman, 2000; Townsend, Filippini, Collins, & Biancarosa, 2012). Two studies administered both formal, distal assessments of vocabulary alongside informal, proximal measures of vocabulary targets to evaluate outcomes (Pollard-Durodola et al., 2011, Zipoli et al., 2011). In the former study, Pollard-Durodola et al. (2011) reported no significant differences between the intervention group and the non-intervention group on

either the researcher-developed test or the standardised assessment following a total dosage of 1200 minutes by teachers to whole classes of children. On the contrary, in the latter study Zipoli et al. (2011) reported significant gains on a standardised, vocabulary assessment from pre-test to post-test when extended instruction was provided in small groups/whole class groups by teachers of children from low SES background for a total dosage of 720 minutes.

Furthermore, according to Reichow et al.'s (2008) criteria, one practice emerged from this systematic review as 'promising EBP'. This promising EBP is explicit instruction in the structural elements of a story to improve children's oral narrative skills. Two group experimental design studies of adequate research report strength (Duff et al., 2014; Westerveld & Gillon, 2008), and one group research study categorised as strong (Gillam et al., 2012), included a focus on this type of intervention. It is posited that increased understanding of the structural elements of stories may lead to improved comprehension and production of spoken and written narratives (Westerveld and Gillon, 2008). The studies drew on storybooks to provide the structure and content of interventions, including a direct focus on story elements such as characters, settings, problems, resolution of problems, and conclusions. In addition, opportunities were created for the participants to retell stories through incorporating the structural elements that were taught.

The participants of the studies included children with existing difficulties in the domain of oral narrative skills, as a result of a diagnosis of SLI (Duff et al., 2014, Gillam et al., 2012) or reading disability (Westerveld & Gillon, 2008). The interventions were not targeted at children from low SES backgrounds, but there is nothing to indicate that children from low SES backgrounds who are at increased risk of language difficulties would not benefit from this focus of intervention. All practices were delivered in small groups to children aged between six and nine years. Dosages ranged from 30 minutes, twice per week over 9 weeks (total of 540 minutes) (Duff et al., 2014), to 60 minutes, twice per week over 6 weeks (total of 720 minutes) (Westerveld & Gillon, 2008), to 50 minutes, three times per week over 6 weeks (total of 900 minutes) (Gillam et al., 2012). The practice of explicitly teaching the structural elements of a story was delivered by teaching assistants as part of broader focused intervention in one study (Duff et al., 2014) and was delivered exclusively by SLTs in the other two studies (Westerveld & Gillon, 2008, Gillam et al., 2012). Duff et al. (2014) did not include an assessment of oral narrative skills in their battery of outcome measures so it is not possible to be conclusive about impact. However, small and medium effect sizes were evident on some other linguistic measures and so potential improvements in oral narrative skills cannot be ignored. Westerveld and Gillon (2008) reported significant gains and large effect sizes on informal tests of narrative comprehension and on verbal fluency aspects of

narrative production. No significant gains were found on other elements of narrative production informally tested (i.e., number of utterances, number of different words and grammatical competence). Gillam et al. (2012) reported significant differences between the intervention group and control group on a standardised assessment of narrative ability. A small effect size was calculated on the narrative production subscale and a large effect size was produced on the narrative comprehension subscale. However, when considering such results, it is worth noting the findings of Law et al.'s (2004) meta-analysis that indicated that intervention for expressive language is more effective when children do not have co-existing receptive language difficulties. Gillam et al. (2012) reported that the children in the treatment group had significantly higher mean scores on a receptive language subtest of a standardised assessment than the children in the control group. Hence, based on Law et al.'s (2004) findings, the effectiveness of the intervention in this study may have been positively influenced by better receptive language abilities amongst the participants in the intervention group.

1.5.2.3 Conclusions of Systematic Review Conducted

The objectives of the fifty-seven language enrichment intervention studies included in this systematic review were diverse. Some were broad and general targeting many aspects of language simultaneously; others were narrow and specific targeting only one linguistic element (e.g., syntax, morphology, narrative, semantics, or language processing). In addition, participant characteristics varied: from children diagnosed with SLI, to children with non-specific language difficulties, to children with low SES backgrounds. However, over two-fifths of the studies (44%) did not report the SES of participants, so it is possible that there were much higher numbers of participating children from low SES backgrounds than the 37% of studies that reported this characteristic. The experimental designs employed in the studies were not uniform either. Reichow et al.'s (2008) evaluative method facilitated the combination of findings from single subject research with the findings from group research. Moreover, of fundamental importance, Reichow et al.'s (2008) three distinct instruments provided useful guidelines for keeping the focus on quality when confronted with multiple studies with different objectives, assorted participant characteristics, and dissimilar experimental designs. Thereby, the instruments help to ensure the conclusions of this systematic review draw most heavily on high quality evidence, which in turn, is more likely to lead to effective language enrichment interventions for school-aged children.

The following are a number of conclusions that can be drawn from this systematic review. First, this review echoes previous conclusions that language enrichment interventions *can* measurably improve the language abilities of school-aged children. The finding of the

effectiveness of language enrichment interventions that focus on auditory processing skills, vocabulary development, and narrative abilities concur with previous reviews (Cirrin & Gillam, 2008; Marulis & Neuman, 2013; Marulis & Neuman, 2010; Petersen, 2011). The rigorous appraisal of the quality of the included studies based on the evaluative method described by Reichow et al. (2008) led to identification of an established EBP - extended instruction within the context of story reading to teach vocabulary. Four of the five studies that constituted this established EBP delivered their interventions to children from low SES backgrounds. One promising EBP was also recognised - explicit instruction in the structural elements of a story to improve oral narrative skills. Strengths and limitations in relation to the studies from which these practices emerged have been presented above.

Second, this systematic review highlights the issue of dosage. Dosage refers to duration, frequency and intensity of intervention (Marulis & Neuman, 2010). Language enrichment interventions determined as an established EBP or promising EBP varied greatly in terms of dosage. Durations of the interventions ranged from one week (Coyne et al., 2007) to 18 weeks (Zipoli et al., 2011). Frequencies ranged from two sessions per week (Westerveld & Gillon, 2008; Zipoli et al., 2011) to 20 per week (Zucker et al., 2013), and intensities ranged from 15 minutes (Bishop et al., 2006; Zucker et al., 2013) to one hundred minutes (Fey et al., 2010). Previous reviews have attempted to quantify the duration and frequency of dosage necessary to effect change. It has been proposed that interventions of brief durations (less than 42 days and less than 18 sessions) had no lesser effect than those longer in length (Marulis & Neuman, 2010). Others suggest that a median of 20 hours intervention is associated with an overall effect size of +0.97 (Law et al., 1998 in Boyle et al., 2009), and interventions longer than eight weeks (Law et al., 2004) or those that entail three sessions per week (Boyle, McCartney, O'Hare, & Forbes, 2009; Law et al., 2004) have been deemed to be more effective. Some influence of dosage on effectiveness was apparent in this systematic review. For instance, the minimum dosage reported in interventions deemed to be established EBP was 90 minutes (Coyne et al., 2007) and the largest dosage was 1200 minutes (Zucker et al., 2013); while the minimum dosage reported in interventions deemed to be promising EBP was 900 minutes (Gillam et al., 2012) and the largest dosage was 2160 minutes (Duff et al., 2014). However, these studies were not specifically measuring the impact of dosage so perhaps lesser amounts would have been just as effective. Furthermore, due to the heterogeneity of studies and varying targets included in this review, it is not possible to be definite about what may constitute effective dosage for language enrichment interventions. Nonetheless, the dosages outlined bode well for the potential of universal or targeted interventions delivered in the educational environment to support effective language enrichments. The length of the school day and school year can provide

ample opportunities for implementing what this systematic review and previous reports have suggested are effective durations, frequencies and intensities.

Third, similar to diversity in dosage, the studies that combined to determine an established EBP and a promising EBP were not uniform in the size of the intervention group. Interventions were delivered most frequently in small groups (5 studies) (Coyne et al., 2007; Duff et al., 2014; Gillam et al., 2012; Westerveld & Gillon, 2008; Zucker et al., 2013). Interventions were delivered in large whole-class groups in one study (Pollard-Durodola et al., 2011), and through a combination of individual/large/small groups in one study (Zipoli et al., 2011). None of the interventions that met the criteria for established EBP or promising EBP were delivered on an individual basis. Studies did not set out to compare the size of intervention groups, as participants weren't grouped between those that received intervention in a small or large group setting. Instead all participants in such studies received intervention in either a small or large group, or a combination of group sizes. Cirrin and Gillam (2008) and Cirrin et al. (2010) were also unable to come to definite conclusions about the impact of group size in their reviews. While Marulis and Neuman (2010) suggested that group intervention for vocabulary instruction may be more appropriate and efficacious, their more recent review concluded that there was no significant differences between interventions provided to large groups, small groups, or individually to 'at-risk' children (Marulis & Neuman, 2013).

Fourth, the systematic review helps to shed light on the lack of distinction in the potential effectiveness of interventions delivered by SLTs or educational professionals. The studies that were united to form an established EBP and a promising EBP demonstrate that language enrichment interventions can be effectively delivered by SLTs or educationalists; in small groups; or in large groups; and still deliver positive outcomes. Amongst the studies that constructed the established and promising EBP, twice as many of the interventions were delivered directly by teachers/teaching assistants (four studies, 50%) as were delivered by SLTs (two studies, 25%). One study did not report the person delivering the intervention (Coyne et al., 2007). No apparent differences in effectiveness were found whether an intervention was delivered by a SLT or an educational professional. However, once again, none of the studies set out to explicitly compare SLT-delivered interventions with teacher-delivered interventions. Nevertheless, a lack of apparent distinction between SLT-implemented practices and teacher-implemented practices concurs with previous systematic reviews (Cirrin et al., 2010) and in reviews of comparisons between parent-administered and SLT-administered interventions with younger children (Law et al., 2004; Pickstone et al., 2009; Roberts & Kaiser, 2011) and comparisons of interventions delivered by experimenters, parents or teachers (Marulis & Neuman, 2013). These findings highlight the potential of the

school environment, including classroom practices and language enrichment interventions implemented by teaching staff, to have similarly positive effects as when interventions are delivered by SLTs. Although none of the studies that were amalgamated to deduce the established EBP and the promising EBP were delivered through inter-professional practice between SLTs and teachers, the findings above bode well for those promoting collaboration with other professionals to deliver universal and targeted interventions for children at risk of language difficulties, such as children from low SES areas.

Finally, this systematic review pinpoints two other interventions that led to measurably improved outcomes on standardised assessments, and were implemented in studies that had strong or adequate research report strength. Although they did not meet the criteria for established EBP or promising EBP, further investigations and experimental studies using these practices could help to establish their potential value and effectiveness. They included the use of commercially available programmes such as Black Sheep, Rhodes to Language, and Time to Talk to enhance oral language skills (Bowyer-Crane et al., 2008; Fricke et al., 2012), and the application of multi-media clips to develop vocabulary knowledge (Silverman & Hines, 2009).

In conclusion, a robust and systematic review of the literature published over the past 15 years clearly outlines that language enrichment interventions can measurably improve the language abilities of school-aged children. In addition, studies indicate the potential of language enrichment interventions implemented by educational professionals across specialist, targeted and universal tiers of intervention to play a fundamental role in enhancing children's language development, including children from low SES areas. It is also suggested that the school environment could offer an ideal context for effective duration, frequency and intensity of interventions. This is particularly true for two distinct practices that were deemed to be an established EBP or promising EBP: extended instruction within the context of story reading to teach vocabulary; and explicit instruction in the structural elements of a story to improve oral narrative skills.

1.5.2.4 Limitations of the Systematic Review Conducted

Despite much persuasive evidence from the studies included in this review, it is important to consider associated limitations.

- This review only included studies published in the 15 years between 2001-2016, thus automatically excluded a number of potentially informative and reliable studies published earlier than 2001.

- The aim was to summarise the evidence relating to language enrichment interventions for school-aged children aged 4-18 years. In total, only three of the 57 included studies' samples comprised children over the age of 12 years in their sample (Bishop et al., 2006; Ebbels et al., 2012; Given et al., 2008); none of which were studies that united to achieve an established EBP or a promising EBP. Therefore, transferability of findings to this older age group is questionable.
- As highlighted by others, the volume of high-quality, relevant, and available information that could reliably inform clinical decisions is not ideal (Ratner, 2011). Therefore, generalisations can only be made from the characteristics of existing studies. Some of the studies included in this review lacked details of methods of intervention, exact materials used, person delivering intervention, generalisation and maintenance. Moreover, there was an obvious lack of information and exploration of the voices of the children receiving the interventions on their preferences and opinions of language enrichment interventions. While Best (2005) asked their two participants to rate their enjoyment of taking part in the intervention on a Likert scale, Swanson et al. (2005) are the only investigators to make reference to the fact that the children who participated in their study preferred story generation activities over story retell tasks, and story retell tasks were favoured over sentence imitation drills. Likewise, the preferences and judgements of the adults delivering the interventions or the parents of the children who received them were not reported.
- This review provides insights on whether language enrichment interventions are effective or not, and which ones are most likely to lead to improved outcomes. However, a further limitation is the notion that it does not provide the same depth of information on *why* the intervention works, nor does it consistently report on long-term maintenance of gains made, as they are not always documented.
- In an effort to ensure sensitivity in the search, bias may have been introduced through the application of limits and exclusion of terms. It is possible that some bias can be found in the review by excluding studies not published in the English language and studies of children younger than four years old. For instance, perhaps many language enrichment interventions that have proved effective in facilitating improvements in language skills of younger children may be just as effective when applied to older children, but simply have not been trialled as yet. Nonetheless, important lessons learned may also be applicable. Similarly, by not including studies if their sample only included children presenting with Autism Spectrum Disorder, intellectual disability, pragmatic language impairment, deafness, or aphasia, bias may have been introduced. Moreover, the review did not include proceedings, personal contacts with experts, or grey literature. It is possible that some evidence from such publications may be useful for clinical practice decision-making, but their potential inclusion was out-weighed by the need for rigour. The net

result of these exclusions is that this review may not have completely captured the extensive research on language enrichment interventions currently available.

- This systematic review did not include any qualitative studies that may have provided additional valuable insights. The exclusion of qualitative studies is a commonly noted disadvantage of systematic reviews (Pickstone et al., 2009), despite the documented benefits of combining quantitative and qualitative methods (Brinton & Fujiki, 2003).
- Just over three-fifths of the included studies reported effect sizes (36 studies), ranging from a negative effect of $d = -0.24$ to very large effect size on an experimenter-designed probe. In previous systematic reviews, effect sizes (Cohen's d) and adjusted effect sizes (Hedge's g) were calculated by the authors when studies did not specify them (Petersen, 2011; Roberts & Kaiser, 2011; Cirrin et al., 2010; Kan & Windsor, 2010; Murphy & Schochat, 2013; Marulis & Neuman, 2013, Cleaves et al., 2015). This quantifies the effectiveness of an intervention relative to a comparison intervention. Calculating effect sizes for studies that did not specify them was not completed. Instead, when the effect size was not specified, the statistical significance (p value) reported was appraised, which helps determine the probability of the difference arising by chance. However, statistical significance, unlike effect size, does not provide information about the size of the difference or whether it is meaningful (Schuele & Justice, 2006).
- The studies reported findings on short-term and medium-term interventions with specific goals. However, schools and teachers are tasked with the responsibility of teaching a broad curriculum of diverse subjects, with many competing demands. Therefore, in a typical school year, it would not be feasible for every teacher, in every school to be involved in similar studies outlined above to enrich the language abilities of their pupils. None of the studies included in the systematic review examined the potential for the interventions to be sustained routinely and systemically into educational policy and practice in the long term. Also, none of the studies included in the systematic review evaluated every day teacher practices in a busy classroom environment. Change at this level is required to impact widely and systemically, and to be sustained into the future. This is particularly relevant for children from low SES areas attending mainstream education who are at greater risk of presenting with language difficulties and experiencing the negative impacts associated with them. Therefore, the next section discusses language enrichment in educational curricula and practice.

1.6 Language Enrichment in Educational Curricula and Practice

As described earlier, language is central to learning (Fisher & Larkin, 2008) and it is the medium through which pupils develop an understanding of the curriculum, express their thoughts, and share the knowledge that they have acquired (Haneda, 2009; Peets, 2009).

Teachers provide instruction, explain classroom procedures, and convey curricular content via language, while pupils are expected to attend consistently to the verbally presented information, answer and ask questions, and contribute to discussions (Nelson, 1989).

Classroom environments that support language development are:

organized so that they afford high quality language learning experiences, where children have regular and structured opportunities to develop their language through their interactions with both peers and adults, and adults talk with children in ways that enhance receptive and expressive language skills (Dockrell et al., 2015, p. 273)

According to Love (2009, p. 558), “all teachers are directly and intimately involved with language”, a perspective that is supported by national curricula. In Ireland, the Primary School English Curriculum (Department of Education and Skills (DES), 1999), places an explicit focus on the importance of language development within primary school educational practice. Moreover, the curriculum highlights the need to address language development not only in the English curriculum, but also across other subject areas, and in explicit lessons that target language development (i.e., discrete oral language). The DES use the term “oral language” to distinguish objectives regarding receptive and expressive verbal language skills from objectives in relation to written language abilities inherent in reading and writing. In the English curriculum framework, each of its four strands is framed in terms of language: receptiveness to language; competence and confidence in using language; developing cognitive abilities through language; and emotional and imaginative development through language (DES, 1999). Each strand includes oral language as a strand unit, as outlined in Table 1.8.

Table 1.8: Primary school English curriculum strands & strand units (DES, 1999)

Strand	Strand Unit
Receptiveness to Language	Oral Language Reading Writing
Competence and Confidence in using Language	Oral Language Reading Writing
Developing Cognitive Abilities through Language	Oral Language Reading Writing
Emotional and Imaginative Development through Language	Oral Language Reading Writing

More recently, the National Council for Curriculum and Assessment (NCCA) has published a new Primary Language Curriculum for teachers of pupils who are in junior infant class up to 2nd class (NCCA, 2015). Its objectives are presented in three groups: children and their lives; children’s communications and connections with others; and children’s language learning

and development. It explicitly aims to support teachers to encourage, nurture and enable children to reach their linguistic and communicative potential. It also has three strands: oral language is one; reading and writing are the other two. The structure of the new Primary Language Curriculum (NCCA, 2015) differs somewhat to the 1999 Primary School English Curriculum (DES, 1999). Instead of strand units, the new Primary Language Curriculum describes three elements that outline the essential language learning to take place within the strands – developing communicative relationships through language, understanding the content and structure of language, and exploring and using language (NCCA, 2015). Table 1.9 provides a summary of the strands and elements of the Primary Language Curriculum. A companion Primary Language Toolkit has also been developed with the aim of practically supporting teachers to implement the primary language curriculum (NCCA, 2015).

Table 1.9: New primary language curriculum strands & elements (NCCA, 2015)

Elements	Strands
Developing communicative relationships through language	<ul style="list-style-type: none"> • Oral Language • Reading • Writing
Understanding the content and structure of language	<ul style="list-style-type: none"> • Oral Language • Reading • Writing
Exploring and using language	<ul style="list-style-type: none"> • Oral Language • Reading • Writing

Clearly, both the Primary School English curriculum (DES, 1999) and the more recently published Primary Language Curriculum (NCCA, 2015) strongly promote the “key role” and “central place” of oral language development in the classroom. The curricula support a universal level of intervention described earlier, which aims to maximise the probability of all children developing good language abilities. Furthermore, targeted levels of intervention are provided through the DEIS programme (Delivering Equality of Opportunities in Schools), that focuses on addressing the educational needs of children from low SES communities through the provision of additional supports, such as lower pupil-teacher ratios, school completion programmes, professional development for teachers, and literacy and numeracy programmes (DES, 2005a, 2017a). Many of the professional development supports and literacy programmes made available through the DEIS programme place an emphasis on language development (e.g., provision of First Steps Speaking and Listening training and resources developed by Department of Education, Western Australia (DEWA, 2013)).

In spite of the strong emphasis on oral language development in educational curricula and educational policy, evaluations have highlighted difficulties for teachers in successfully

implementing the focus on language development in the classroom, especially in schools situated in communities of low SES (i.e., DEIS schools) (Cregan, 2010; Eivers et al., 2004; Lewis & Archer, 2003; Weir, Milis, & Richard, 2002). Lack of teacher confidence was one of the issues identified in published evaluations. For example, only 30% of Irish teachers rated teaching of oral language as their greatest success in implementing the Primary School English Curriculum, suggesting a lack of confidence with this curricular area (NCCA, 2005). In addition, there are challenges documented with the curricular time allocated to oral language. In the DES' (2005b) review of the Primary School English Curriculum, it was reported that in a quarter of classrooms, the allocation of discrete time for the development of oral language objectives was not written into teacher plans. Furthermore, challenges are described with the actual implementation of the prescribed contexts and instructional activities to promote language development in the classroom setting. Based on focused inspections of the teaching of English in 59 classrooms in 26 schools, as well as focus group interviews with teachers, the DES (2005b) reported that a consistent figure of 25% of Irish pupils are in classrooms where oral language is not being taught effectively, where receptiveness to language is not emphasised, and where teachers are making ineffective use of a variety of approaches for oral language development. Similar findings have been reported in other countries. The feasibility testing of the *Communication Supporting Classroom Observation Tool* in over 100 classrooms in the UK found the structured language learning environments were evident in many classrooms (e.g., learning areas, classroom displays, educational resources), but opportunities for language learning to scaffold and advance children's language abilities were less common (e.g., interactive book reading, structured conversations) (Dockrell et al., 2015). No explorations have been conducted on reasons behind this obvious inconsistency in Irish and UK classrooms. However, it seems clear that teachers face difficulties in achieving the curricular objectives of language development and implementing effective language enrichment practices routinely in their classrooms. There are a number of possible explanations for this phenomenon, which are discussed in the next section.

1.6.1 Possible explanations for difficulties implementing effective language enrichment in the educational context

One possible explanation is that the classroom language environment is distinctly different to a home or clinical language environment (McCartney, Ellis, & Boyle, 2009; Peets, 2009; Wells, 1986). In classrooms, the focus is often primarily on language as a medium for instruction (Nassaji & Wells, 2000; Nystrand, 2006), and so language as a focus for enrichment can be neglected. Pupils frequently have fewer opportunities to talk, as teachers hold the floor for a much greater proportion of time than their pupils (Fisher, 2011; Hayes & Matusov, 2005). For example, the findings of a seminal study in the 1970's that two-thirds of

classroom talk is spoken by teachers (Flanders, 1970) were echoed in investigations over 30 years later (Galton, Hargreaves, Comber, Wall, & Pell, 1999). More recently, P. Thompson (2008) recorded and transcribed eight lessons in UK key stage 1 classrooms, and reported that the average length of the teacher contribution was eighteen words, whereas the average length of pupil contribution was only 2.8 words. This concurs with a finding that the average pupil utterance in the literacy hour in the UK was three words (English, Hargreaves, & Hissam, 2002). Similarly, Reinsvold and Cochran (2011) recorded two science lessons in a third grade classroom in the US. Although their analysis is based on one teacher's discourse in one classroom, they reported that more than two thirds of the utterances recorded were teacher utterances, and 93% of questions asked were teacher questions. Of note, only 17% of these teacher questions were open-ended. Both of these examples are based on classroom lessons that were observed over a short time period, but their conclusions have been supported by others (Fisher, 2011; Hayes & Matusov, 2005).

Furthermore, a vast amount of data from an abundance of studies indicates that an overwhelming majority of teachers adhere to initiation-response-feedback (IRF) recitation scripts in the communicative exchanges within their classrooms (Fisher & Larkin, 2008; Hargreaves et al., 2003; Mroz, Smith, & Hardman, 2000; Myhill, 2006; Reinsvold & Cochran, 2011; Sharpe, 2008; Smith, Hardman, Wall, & Mroz, 2004; Wells, 1986). The IRF is a three-part structure that features an initiation (e.g., teacher question), a response (e.g., pupil answer) and a follow-up (e.g., teacher evaluative feedback). Some educationalists support the extensive use of IRF patterns as they help the teacher to control the flow of the topic, quickly gauge the level of students' engagement, and direct the students in a certain planned direction (Sharpe, 2008; Wells & Arauz, 2006). However, more often, such IRF exchanges have been criticised. Luke (1992, p. 120) describes them as "training of the mouth" to simply comply with the script. Others suggest that IRF patterns lack meaningful cognitive engagement of students, limit pupils' participation and impose an imbalance of control, as the control rests primarily with the teacher (Fisher, 2011; Fisher & Larkin, 2008; Mroz et al., 2000; Sharpe, 2008; Thompson, 2008; Wells & Arauz, 2006). Consequently, children conform with the expected routine (Howarth, 2001). Such exchanges have also been accused of simply testing the pupil to see if they know an answer and hence, they are not authentic language enrichment opportunities, but challenging, teasing and potentially aggressive interactions (Hayes & Matusov, 2005). The impact of the above communicative patterns on children's language development has not been explicitly investigated to date, but the implications seem clear. If language acquisition is facilitated by a supportive, responsive environmental system (Bohannon & Bonvillian, 2009; Dockrell et al., 2015; Westby, 2007), then a restricted communicative pattern such as limited talking time and predominance of IRF scripts may limit such opportunities. For example, it may preclude the use of features of

adult talk that have been shown to be effective for supporting language development, such as imitation, repetition, recasts, extensions, modelling, and meaningful contingent responses (Dockrell et al., 2015; Girolametto, Weitzman, Wiigs, & Pearce, 1999; Hoff, 2006; Roberts & Kaiser, 2011; Steele & Mills, 2011).

Additional challenges of implementing effective language enrichment in classrooms may be explained by the fact that many teachers may be simply unaware of the impact of their predominant monologic discourse on their pupils (Fisher & Larkin, 2008). Studies have shown that the topic of typical language acquisition is often not included in initial teacher education training programmes (Dockrell & Lindsay, 2001), and therefore it is possible that some teachers are not conscious of how limiting such one-sided conversations may be when trying to enrich children's language skills. Relatedly, reviews of international research suggest that many teachers believe they are inadequately prepared for educating children with language difficulties (Vance, 2011). It has been suggested that well-meaning attempts to scaffold a pupil's language development regularly shift from genuinely supporting a pupil, into an exchange that simply enables the student to successfully complete a task and get the 'right answer', without necessarily having extended their learning in any way (Myhill & Warren, 2005). Therefore, there may be a lack of knowledge about the need to explicitly mediate interactions within the classroom environment, whereby a teacher adjusts verbal input to scaffold pupils' language abilities and simultaneously extends their language skills by consciously exposing them to other diverse linguistic forms (Dockrell et al., 2015).

Time pressure and curriculum demands may lead to further challenges in providing effective language enrichment in the classroom. Myhill and Warren (2005) suggested that teachers failed to adequately respond to pupils' responses because of a perception that they should not divert from their planned objectives for their lesson. An Irish report, *The Primary Classroom: Insights from the Growing Up in Ireland Study* (McCoy, Smyth, & Banks, 2012), suggests that approximately 60% of Irish 2nd - 4th class pupils receive a balanced curriculum, where classes spend equal time on a range of subjects, and approximately 30% of pupils receive a core curriculum where more time is spent on English, Irish and Mathematics. 10% of pupils receive a broad curriculum, where more time is spent on a variety of subject areas. Of note, pupils from low SES areas attending DEIS schools are most likely to receive a broad curriculum. This may result in less time for explicit language enrichment, if teaching time is spread thinly to address a wide range of diverse curricular content and language enrichment practices are not integrated into other curricular objectives and subjects.

It is also possible that difficulties implementing effective language enrichment in the educational context may be explained by a belief that teachers may simply be repeating

patterns of talk that they experienced in their own education (Moguel, 2004). A. Fisher (2011) analysed prompted literacy biographies completed by 75 pre-service student teachers aged between 21 and 50 years. Although her findings only synthesise retrospective perceptions and not observable data, from a small sample across a wide age span, the key concepts provide interesting information on their memories and beliefs. For instance, many of the participants believed that as pupils themselves, they had been afforded limited opportunities for debate and collaboration, the teacher dominated the talk, and questioning was misused to manage behaviour and evaluate. A. Fisher (2011) suggests that these experiences impact on the teachers' perceptions and employment of meaningful dialogue that could enrich language skills in their own classrooms. In Ireland, it has been reported that newly qualified teachers are more likely to use more active learning methods, (which are more likely to be conducive to language enrichment (Dickinson et al., 2014; Dockrell et al., 2010; Ellis Weismer & Robertson, 2006; Huttenlocher et al., 2010)), than teachers with more than twenty years' experience (McCoy et al., 2012). For example, almost three-quarters of nine-year-old children in the Growing Up in Ireland study worked in pairs frequently if taught by a newly qualified teacher, compared to one-third if taught by a teacher of more than 30 years' experience (McCoy et al., 2012). This may reflect a situation where more senior teachers are mirroring their own experiences of education, in which more traditional direct instructional approaches were dominant.

Another explanation for the challenges in implementing effective language enrichment in the educational context may be teachers' attitudes. Some teachers working in DEIS schools may continue to subscribe to Bernstein's (1975) controversial theory of elaborated and restricted codes. That is, a belief that children from low SES areas use a simpler, restricted code (i.e., use of informal, common words and shorter, less complex sentence structures that are context-bound) which can be distinguished from middle-classes' use of an elaborated code (Bernstein, 1990). In spite of numerous suggestions that the theory is flawed and has insufficient evidence to support its claims (Jones, 2013), the insinuation is that if teachers consider pupils from low SES areas to have inferior language codes than their middle class counterparts, that they simplify their language input and expectations for improvement accordingly, providing minimal opportunities for language enrichment as a result. Likewise, in a small qualitative study of five teachers who worked in areas of low SES in the US, Hamel (2003) reported a common negative pattern that the teachers held towards students' language capabilities. She reported that the teachers tended to describe the types of language experiences that were *not* occurring in their students' homes, as opposed to the types of language experiences that were happening, even though none of the teachers had ever been on a home visit to confirm their beliefs. Similarly, R. Fisher and Larkin (2008) proposed that teachers' and pupils' perceptions of their roles impact on the nature of

classroom discourse. Their study, although on a small scale (i.e., 8 teachers), provides interesting insights into these teachers' conflicting views about language. For instance, some teachers believed that students should be made feel comfortable and confident to talk in class. At the same time, criticisms were also expressed about the language the pupils used in class (Fisher & Larkin, 2008). It may be that teachers are basing their opinions on stereotypes because the real language abilities of children are simply not being assessed. In Ireland, standardised assessments of pupils' written language competencies are administered annually. However, pupils' oral language abilities are not routinely assessed or monitored, thus leaving a significant gap for teachers when evaluating the linguistic abilities of pupils and for planning language development objectives and learning outcomes.

Moreover, other challenges to implementing effective language enrichment may be due to a mismatch between what teachers believe is important to teach and their actual practice. For example, Commeyras and DeGross (1998) describe a study in which 95% of English language arts teachers reportedly valued peer discussion, yet only 33% facilitated such discussions. Similarly, Sadler and Mogford-Bevan (1997) found that teachers overestimated the frequency with which they employed language facilitating features in their interactions with language impaired children. Moreover, Ernst-Slavit and Mason (2011) demonstrated that when interviewed, teachers articulated the importance of explicitly teaching academic language, yet when observed in their classroom, they mostly used everyday language to instruct their pupils. However, this study only interviewed five teachers, all of whom were teaching students for whom English was a second language. Also, despite an emphasis on interactive whole class teaching in the UK, F. Smith et al. (2004) found that in their sampling of 72 classroom lessons, most pupils' answers lasted an average of only five seconds and consisted of three words or fewer 70% of the time. Likewise, Nassaji and Wells (2000) concluded that the IRF script continued to predominate, even when teachers in their study were actively trying to create a more dialogic style of interaction. Thus, issues of how to successfully implement changes to practices come to the fore.

A common denominator in all of the above possible explanations for difficulties implementing effective language enrichment in the educational context is the existence of different knowledges and different ways of knowing. First, there appears to be different knowledge and ways of knowing in relation to the type of communication style to use in the classroom environment, for example, employing language as a medium of instruction, direction, and testing (e.g., IRF structure) or drawing on language as a medium of enrichment (e.g., scaffolding and extending pupils' language abilities). Second, there is evidence of different knowledge based on past experiences. For instance, some teachers may have encountered minimal opportunities for debate, contributing, and asking questions when they were in

school, while other teachers may have received ongoing exposure to more active learning methods conducive to language enrichment. Third, demonstration of dissimilar knowledge and ways of knowing in relation to attitudes and beliefs are apparent. This is illustrated by conflicting perspectives in relation to the language codes and language abilities of children, especially of children from low SES communities. Fourth, disparities between theoretical knowledge and practical knowledge are inferred through examples of the mismatch between what teachers assert is important to teach and their actual practice. Discrepancies between theoretical knowledge and practical knowledge are also documented in Irish evaluations that report difficulties implementing the focus on oral language development specified in the national curriculum. Therefore, understanding the discrepancy between evidence-based language enrichment and common classroom practices may be illuminated more clearly and comprehensively when considered in epistemological terms. Hence, epistemology is a key focus of this study and is discussed in detail in Chapter 2.

1.7 Conclusion

This chapter has introduced the research area of this inquiry: language difficulties amongst school-aged children and their potential extensive impact; and language enrichment interventions to address presenting difficulties and reduce the possible negative implications. The increased risk of children from low SES areas presenting with language abilities below age expectations has been described. In addition, a systematic review of language enrichment interventions for school-aged children deduced an established EBP and a promising EBP, and highlighted the potential of SLTs and educational professionals across specialist, targeted, and universal tiers of intervention to play a crucial role in enhancing children's language development. Therefore, the central place of EBP and inter-professional practice in this inquiry is emphasised, and is discussed in more detail in the next chapter.

Furthermore, the investigation of the existing place of language enrichment in educational curricula and practice pinpointed a lack of congruence between what the empirical evidence suggests is effective for addressing language difficulties amongst school-aged children and actual everyday classroom practices. Possible explanations for this lack of synergy indicate the importance of considering this phenomenon from an epistemological perspective. Thus, the context for this study is described and the rationale for placing a key research focus on epistemology is established.

2 Research Focus: Epistemology

2.1 Introduction

Epistemology is a branch of philosophy that is concerned with knowledge and knowing. It relates to the study of the nature of knowledge, the limitations of knowledge, and how knowledge is justified (Hathcoat & Nicholas, 2014). Frequent questions that are discussed within the field of epistemology include what is knowledge?, how do we know what we know?, how are knowledge claims validated?, and what is the relationship between the knower and the known? (Coleman, 2015). The nature of knowledge and knowing is always viewed from a particular perspective and is typically socially constructed (Merleau-Ponty, 2000).

In the context of language enrichment interventions for school-aged children, epistemology may help to explain the possible discrepancy between (a) what the evidence suggests is effective and what is emphasised in national curricula and (b) what is implemented in everyday classroom practice. For example, personal epistemology encapsulates an individual's beliefs about the nature of knowledge and knowing (Ravindran, Greene, & DeBacker, 2005). It assists in the understanding of the concepts of what constitutes knowledge and how a person knows what they assert they know (Schön, 1995). It includes "beliefs about the definition of knowledge, how knowledge is constructed, how knowledge is evaluated, where knowledge resides, and how knowing occurs" (Hofer, 2001, p. 355). Hofer (2000) proposes that the underlying dimensions of our personal epistemology can be explored under the broad categories of nature of knowledge and nature of knowing, and argues that these categories and their dimensions are interrelated (Table 2.1).

Table 2.1: Dimensions of personal epistemology (based on Hofer, 2000)

Nature of knowledge (what individuals believe knowledge is)	Certainty of knowledge (e.g., fixed or fluid)
	Simplicity of knowledge (e.g., concrete or contextual)
Nature of knowing (how individuals come to know)	Source of knowledge (e.g., authority or self)
	Justification of knowledge (e.g., observation or authority)

The first category, nature of knowledge, encapsulates what individuals believe knowledge is and comprises certainty of knowledge (i.e., a continuum of how knowledge is viewed from fixed to fluid) and simplicity of knowledge (i.e., a continuum of how knowledge is perceived

as concrete to contextual). Applying this theory of personal epistemology to supporting effective language enrichment can illuminate some challenges. For example, if an individual believes that knowledge about language facilitating strategies is certain, then fixed conclusions about how to practise could be interpreted (e.g., “I must do it *this way*/Only *these strategies work*”). The opposite is also true: if an individual believes the knowledge about language enrichment is not certain, then fluid and open opinions about how to practise could be concluded (e.g., constant changing of strategies, with no consistency in interaction style). Similarly, a person’s conceptualisation about language difficulties amongst children from low SES areas - whether it is a concrete or contextual phenomenon - can influence their understanding and implementation of interventions with this cohort of ‘at risk’ children.

The second category of personal epistemology, nature of knowing, is concerned with how individuals come to know what they believe they know, and includes source of knowledge (e.g., whether the origin of knowledge is from an authority or from self) and justification of knowledge (e.g., whether knowledge is evaluated through scientific evidence and expertise or evaluated by means of observation of what feels correct). Similarly, when applied to the goal of implementing effective language enrichment, if practitioners perceive professional experience as the only genuine source of professional knowledge (i.e., value practical knowing), they may be less likely to pay attention or implement new practices presented through books, academic journals or research reports (i.e., propositional knowing). Moreover, individuals who believe discipline knowledge can only be justified through observation of what feels right may exhibit increased resistance to new practices that are only validated by external authorities. The opposite is also possible, whereby practitioners or researchers who lean solely on knowledge that is sourced and justified through published empirical evidence, may disregard important and relevant knowledge from other sources, such as peers, non-published experts and personal experience.

Thus, multiple ways of knowing considered within the field of epistemology are fundamental to exploring gaps between theory and practice in the context of language enrichment interventions for school-aged children.

2.2 Epistemology and Multiple Ways of Knowing

The notion of multiple ways of knowing can be traced back as far as Aristotle. Olav Eikeland is an avid champion of Aristotle’s multiple ways of knowing (Eikeland, 2006, 2007, 2012, 2015; Eikeland & Nicolini, 2011). He distinguishes between seven ways of knowing proposed by Aristotle and claims that each is distinct because it is founded on a different relationship between the knower and the known (Eikeland, 2012). The Aristotelian ways of knowing are presented in Table 2.2 and are described below.

Table 2.2: Aristotelian relational ways of knowing (adapted from Table 36.1 in Eikeland, 2015, p. 383)

Way of knowing – gnosis form	English equivalent	Relationship between known and knower
1. Theôresis – <u>épistème2</u>	Spectator speculation (<i>observing</i>), dispassionate explanatory, predictive modelling	Known is <i>external</i> to the knower
2. Pathos	<i>Suffering</i> ; being affected/influenced passively/'passionately' from the outside	
3. Khresis	<i>Using</i> external objects as instruments without changing them	
4. Poiesis	<i>Making/creating</i> ; manipulating external objects as materials, forming materials according to our preconceived plan	
5. Praxis2	<i>Doing</i> ; virtuous <i>performance</i> , practical reasoning, ethical deliberation	Known is <i>internal</i> to the knower
6. Praxis1	<i>Practice</i> , rehearsing, training for competence development, mastery and insight (<i>theoria</i>)	
7. Theôría - épistème1	<i>Insight</i> , understanding forms/patterns	

In this taxonomy, *épistème* is divided and rests at each extreme end (i.e., position 1 and position 7). *Épistème* corresponds to the modern meaning of 'theory' or 'science' (Eikeland, 2012; Greenwood, 2015). At the top of the table, *theôresis* (*épistème2*) relates to knowledge gleaned from observation at a distance, whereby data are collected without influencing it or intervening with it and the knower is separate from the known (Eikeland, 2012). At the bottom of the table, *theôría* (*épistème1*) relates to knowledge generated from action and insight and involves no division between the knower and the known (Eikeland, 2012). Although there are differences between *theôresis* and *theôría*, they share an orientation towards theory and a propensity to avoid intervening in what is being studied or observed.

The other ways of knowing placed between *theôresis* and *theôría*, include *pathos*, *khresis*, *poiesis* and *praxis*. In ways of knowing from 1-4 (i.e., *theôresis*, *pathos*, *khresis* and *poiesis*) the known is **external** to the knower, and the knower relates to the known as an observer, sufferer, user or maker (Eikeland, 2015). Eikeland (2012) provides useful illustrative examples of *khresis* (i.e., using external objects as instruments without changing them) and *poiesis* (i.e., manipulating external objects as materials): we don't have to be able to construct or disassemble a car, nor comprehend the mechanisms of its engine, in order to be able to drive a car competently (*khresis*); trees are manipulated into chairs, books or paper

by artificial means (*poiesis*). *Khresis* and *poiesis* relate to external objects as instruments or materials (Eikeland, 2007). These ways of knowing are reflected most often in modern social research such as positivism and qualitative research.

On the other hand, in ways of knowing 5-7 (i.e., *praxis2*, *praxis1* and *theôria*) the known is **internal** to the knower, and the knower relates to the known through doing, practising or reflecting (Eikeland, 2015). *Praxis* is “practitioner knowledge and insider knowledge generation” (Eikeland, 2015, p. 384). As a practitioner practises - habitus, experience and skills emerge, that develop into a common understanding of what constitutes competence, mastery and excellence (Eikeland, 2012). Practical knowing inherent in *praxis* and *theôria* emphasises the “particular, contextual and practical”, while scientific knowing intrinsic to *theôresis*, *pathos*, *khresis* and *poiesis* places importance on the creation of generalised, abstract statements that can be universally applied (Coghlan, 2011, p. 60). *Praxis* resonates with the knowledge, skills and judgement encompassed in conceptualisations of clinical expertise (Justice, 2010; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996), and with what Polanyi (1966, p. 4) described as ‘tacit knowledge’ to signify that “we know more than we can tell”. This practical knowing is an essential component of other research paradigms such as action research. Indeed, action research has been defined as “a form of science in the realm of practical knowing” (Coghlan, 2011, p. 55).

Hence, Aristotle’s theory of knowledge, or gnoseology, raises the profile of ways of knowing that are internal to the knower (i.e., *praxis* and *theôria*) that are traditionally marginalised and often devalued in modern conceptualisations of theory-building in a positivist oriented academy. A further classification that advocates multiple ways of knowing is Heron and Reason’s (2008) ‘extended epistemology’. They assert that the propositional knowing that dominates modern scientific and social research and is most widely accepted by society should be expanded to encompass three other forms of knowing: experiential knowing; presentational knowing; and practical knowing. Propositional knowing is depicted by Heron and Reason (2008) as knowing conceptually and knowing intellectually. It is articulated in theories, facts, propositions, statements and arguments and appears to correspond with Aristotle’s ways of knowing 1-4, where the known is external to the knower. Experiential knowing is knowing through experience, perception, empathy and encounters with others, objects or places (Heron & Reason, 1997, 2008). Experiential knowing is felt by the individual and encoded in how the individual handles the phenomenon that they have encountered (Bonderup-Dohn, 2014). It is “essentially tacit and pre-verbal” (Heron & Reason, 2008, p. 367). Presentational knowing draws on, and is grounded in, the tacit nature of experiential knowing (Heron & Reason, 1997). Presentational knowing symbolises and expresses experiential knowing, both discursively and non-discursively, through the arts, storytelling,

poetry, drama, music, movement, dance, drawing, painting or sculpture (Heron & Reason, 2008). Practical knowing is knowing how to do something and relates to skills, knacks and competencies that are backed up by a community of practice (Heron & Reason, 1997, 2008). Experiential knowing, presentational knowing and practical knowing seem to correlate with Aristotle's ways of knowing 5-7, where the known is internal to the knower.

The beliefs underpinning Aristotle's division between knowledge that is external to the knower (i.e., ways of knowing 1-4) and knowledge that is internal to the knower (i.e., ways of knowing 5-7), and the values inherent in the four forms of knowing in Heron and Reason's extended epistemology, are echoed in Ryle's (1968) influential distinction between 'knowing that' and 'knowing how'. Similarly, Polanyi (1966) discriminates between 'knowing what' and 'knowing how'. Also, Park (2001) distinguishes between representational knowledge that is theoretical in nature and two other forms of knowledge: relational knowledge and reflective knowledge. Relational knowledge is affective while reflective knowledge is social and dialogic (Park, 2001). In addition, Bonderup-Dohn (2014) differentiates between 'know that' (propositional aspect of knowledge), 'know how' (practical aspect of knowledge) and 'know of' (experiential aspect of knowledge).

2.2.1 Interaction and connection of multiple ways of knowing

Although there is broad consensus from a number of authorities that more than one form of knowing exists, there are repeated appeals not to set apart each form of knowing so much that they may seem completely unrelated, as this would not be representative of the typical experiences of active knowers (Bonderup-Dohn, 2014). For example, criticisms abound for over-reliance on practice-based evidence (aligned more with 'knowing how', 'knowing of' and known that is internal to the knower), because of its vulnerability to confirmation bias, inaccurate conclusions, and undermining of empirical evidence (Elstein & Schwartz, 2002; Tonelli, 2006). Likewise, an excessive dependence on empirical evidence (aligned more with 'knowing that', 'knowing what', and known that is external to the knower) is not recommended as it is considered very unlikely that the existing evidence will ever be able to address every single eventuality that arises in the complexity of professional practice (Hempenstall, 2006; Timmermans & Berg, 2003). Instead, it is asserted within epistemology that the different ways of knowing have mutually enhancing effects and that it is imperative that they interact and connect with each other for the most effective interpretations (Bonderup-Dohn, 2014; Heron & Reason, 2008; Seeley, 2014). In place of creating a dichotomy, some argue for the assumption of a more evaluative stance that would facilitate the coordination of epistemic beliefs (Buehl & Fives, 2009). For example, it is recommended that the producers of empirical evidence remain connected with the realities of modern practice and develop greater links with professional knowledge (Gore & Gitlin, 2004; Hiebert,

Gallimore, & Stigler, 2002). Crucially, and in parallel, it is advocated that practitioners play a greater role in determining the research questions to be addressed and become more actively involved in the research process (Biesta, 2007b, 2010; Gitlin, 2000; Gore & Gitlin, 2004).

Two key phenomena that have the interaction and connection of multiple ways of knowing at their core, and that are central to the focus of this research inquiry, are discussed in the next two sections: evidence-based practice (Section 2.3) and inter-professional practice (Section 2.4).

2.3 Epistemology and Evidence-Based Practice

2.3.1 Evidence-based practice (EBP)

Evidence-Based Practice (EBP) is a repeatedly discussed topic around the globe amongst many diverse disciplines such as medicine, psychology, education, clinical laboratory science, nursing, occupational therapy, and speech and language therapy. While it gained momentum in the early 1990s in the field of medicine, it has been suggested that the roots of EBP developed in the nineteenth century with the emergence of science and technology achievements, and the aspiration to apply those advancements to the good of mankind (Schön, 1991). From this positivistic perspective, it was believed that the achievements of science could be extended to help address concerns with professional knowledge and practice (Schön, 1991).

In every continent and within diverse fields of professional practice, the process of EBP is significantly supported. This is apparent through investment in a plethora of organisations and bodies established to review, appraise and share evidence of what works. For example, within medicine the National Institute of Clinical Excellence (NICE) has been established in the UK, and similarly the Agency for Health Care Research and Quality in the US and The National Institute for Clinical Studies in Australia (Rycroft-Malone et al., 2004). Moreover, based on evaluation of available evidence, guideline documents are created by groups such as the Scottish Intercollegiate Guidelines Network (SIGN), the Campbell Collaboration, and the Cochrane Collaboration (Gillam & Gillam, 2006). Policy has repeatedly followed suit. For instance, in the field of education, the *No Child Left Behind Act* (2002) in the US has a direct focus on funding research-based practices and programmes to improve student outcomes (Coburn & Talbert, 2006; Lefstein, 2005). In Ireland too, the *National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020* (DES, 2011) strives to improve teachers' skills in teaching, learning and assessment through drawing on research evidence. Also, Ireland's *National Policy Framework for Children and Young People*

2014-2020 - Better Outcomes: Brighter Futures operates across all Government departments and agencies and is overseen by the Department of Children and Youth Affairs (DCYA, 2014). It is guided by five key principles, one of which is 'evidence-informed and outcomes-focused' and specifies that policies and services must be supported by evidence. In addition, there are numerous databases freely available that publish reviews of the effectiveness of many programmes and practices in an accessible form for practitioners. Within education, the US government created the What Works Clearinghouse as a source of systematic reviews of education programmes (Burns & Ysseldyke, 2009). Equivalents are School Success Best Practices Database, The Coalition for Evidence Based Policy, The Best Evidence Encyclopaedia (BEE), Promising Practices Network, and the UK based EPPI-centre (Evidence for Policy and Practice Information and Coordinating Centre) (Hempenstall, 2014; Powers, Bowen, & Bowen, 2011; Slavin, 2008). Similar databases are available within the discipline of speech and language therapy in the form of SpeechBITE, the What Works database and the American Speech-Language-Hearing Association's (ASHA) evidence maps (Roulstone, 2015).

The growth of EBP has largely been explained in terms of its potential to reduce practitioner's errors, increase safety and improve outcomes (Cohen & Hersh, 2004; Kamhi, 2011; Paley, 2006; Sackett et al., 1996). It is claimed that EBP can eliminate variations in practice and prevent the implementation of unproven practices (Cohen & Hersh, 2004; Roulstone, 2015; Walshe & Rundall, 2001). Hempenstall (2006, p. 87) asserts that EBP can help to ensure professional practices are not "prey to all manner of gurus, publishing house promotions, and ideologically-driven zealots". Instead, the premise behind EBP is that decision-making and practices that draw on scientific research will be more robust, consistent, accurate, and efficient (Cohen & Hersh, 2004; Justice, 2010; Kamhi, 2011; Sackett et al., 1996; Schlosser, 2003; Sexton & van Dam, 2010). It is argued that this will result in increased confidence in clinical choices, improved interventions, and better outcomes (Dodd, 2007; Justice, 2010; Sackett et al., 1996). In addition, many contend that accountability to clients and managers is increased as decisions about interventions and services are based on the best available evidence of effectiveness (Dodd, 2007; Rycroft-Malone et al., 2004; Schlosser, 2003; Sexton & van Dam, 2010).

2.3.2 Multiple ways of knowing and EBP

Distinctions between ways of knowing debated in the field of epistemology, and claims that different forms of knowing augment each other, are echoed in classifications of EBP. Three diverse forms of knowing are typically included in every concept of EBP: knowing from systematic research; knowing from clinical practice and expertise; and knowing from client preferences (Dollaghan, 2007; Justice, 2006; Spencer, Detrich, & Slocum, 2012). Differences

between empirical evidence and clinical expertise espoused in EBP are comparable to the distinctions between the multiple ways of knowing discussed previously. They centre on the premise that knowing drawn from research findings is general, simple, indirect, formal, and explicit, whereas knowing derived from clinical expertise is the opposite: personal; complex; direct; informal and implicit (Eraut, 2000; Higgs & Titchen, 2000; McIntyre, 2005; Tonelli, 2006). Greenhalgh (1999), too, differentiates between the 'science' (empirical evidence) and 'art' (clinical expertise) of professional practice. Moreover, Schön (1991) distinguishes between 'high hard ground' of professional practice where practitioners can employ empirical evidence and theory and 'a swampy lowland' where problems do not have technical solutions. Practitioners are advised not to force the research-based scientific answers suitable for the high hard ground into the practice situations in the swampy lowlands (Schön, 1991). The renowned concepts of the 'reflective practitioner' and 'professional artistry' proposed by Schön appear to support EBP proponents of valuing clinical expertise.

Whilst there is general consensus of what constitutes knowledge from systematic research within EBP (e.g., Oxford Centre for Evidence Based Medicine (2001) levels of evidence outlined earlier in Table 1.3), there is not the same clarity on what knowledge is encompassed in clinical expertise. The traditional assertion is that knowledge inherent in clinical expertise is acquired directly through the accumulation of years of experience (Hynes, Coghlan, & McCarron, 2012; Kamhi, 1994; Paley, 2006; Petty, 2015; Sackett et al., 1996). It has been maintained that, with time and practical experience, practitioners progress through levels of proficiency, for example, transferring from novice, to advanced beginner, to competent, to proficient, and finally, to possessing expertise (Dreyfus & Dreyfus, 1986). Some have gone as far as quantifying the number of years or hours that they propose is necessary for clinical expertise to develop, that is, 10 years or 10,000 hours of deliberate practice (Petty, 2015). However, this traditional developmental perspective that claims experience alone leads to clinical expertise has been repeatedly challenged. The more current and prevailing school of thought on how clinical expertise develops rests on the premise of multi-faceted interrelations (Bradley, Paul, & Seeman, 2006; Effken et al., 2003; Spencer, Detrich, et al., 2012). Several published descriptions of clinical expertise incorporate three components – knowledge, skills, and judgement (Justice, 2010; Sackett et al., 1996). Knowledge within clinical expertise is repeatedly described as 'tacit' (Paley, 2006), what Schön (1991, p. 21) describes as "knowing more than we can say". Others refer to it as the "black box" (Law, 2001). It includes: professional knowledge such as fundamental facts and assertions relevant to the discipline; practical knowledge of how to apply the professional knowledge with speed and fluency; and personal knowledge such as an individual's frame of reference and value systems (Higgs & Titchen, 2000; Rycroft-Malone et al., 2004; Wolter, Corbin-Lewis, Self, & Elswiler, 2011). Skills of practitioners are also frequently referenced

as a core feature of clinical expertise, including reasoning skills to competently address complex cases and scenarios (Haynes, Devereaux, & Guyatt, 2002; Iwarsson, 2015; Overholser, 2010; Schlosser & Sigafos, 2009; Wolter et al., 2011). Others stress that judgement is a key component, as clinical expertise guides practitioners' appraisal of the available evidence, their capacity to respond to uncertainty, and ultimately their clinical decision-making (Biesta, 2010; Eaude, 2014; King, Batarowicz, & Shephard, 2008; McCracken & Marsh, 2008; Sackett et al., 1996).

The recurring and well-established definition of EBP proposed by D. Sackett et al. (1996) captures the importance of engaging with and integrating different ways of knowing by extending the focus of EBP purely from science to include clinical expertise and patient preferences. They state it is “the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients” and involves “integrating individual clinical expertise with the best available external clinical evidence from systematic research” (Sackett et al., 1996, p. 71). They go on to claim that “neither alone is enough. Without clinical expertise, practice risks becoming tyrannised by evidence...without current best evidence, practice risks becoming rapidly out of date to the detriment of patients” (p. 72). Thus, within an EBP theoretical framework, knowing from clinical expertise (described as *praxis* and *theôria* by Aristotle and as *practical knowing* by Heron and Reason), is valued to the same degree as knowing from external evidence (described as *theôresis*, *pathos*, *khresis* and *poiesis* by Aristotle and as *propositional knowing* by Heron and Reason). Moreover, similar to calls within the field of epistemology to assimilate forms of knowing for the most effective interpretations; within the context of professional practice there is widespread consensus of the necessity to integrate knowing from practice with knowing from scientific research (and client preferences) within EBP (Dollaghan, 2007; Haynes et al., 2002; Higgs & Jones, 2000; McIntyre, 2005; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Sexton & van Dam, 2010).

Despite its ubiquitous presence and the widespread support for the multiple ways of knowing inherent in EBP, EBP is not without its critics. Moreover, many of the arguments put forward by critics of EBP are epistemological in nature.

2.3.3 Criticisms of EBP

Criticisms of EBP fall into a number of themes. First, barriers to drawing on EBP have been documented, such as demanding workloads that result in insufficient time to keep up to date and read available evidence, and poor research literacy to understand and apply it clinically (Kamhi, 2011; Pring, Flood, Dodd, & Joffe, 2012). Second, some authors allege that the suggestion that EBP can provide definitive answers to all of practitioners' questions is simply

unrealistic. It is claimed that no evidence or knowledge is absolutely certain and what is considered watertight evidence today is always subject to change as new findings surface (Greenhalgh, 1999; Rycroft-Malone et al., 2004). It is also considered unlikely that the existing evidence will ever be able to address every single eventuality that arises in the complexity of professional practice (Hempenstall, 2006; Timmermans & Berg, 2003). In the context of practice in the here-and-now, some deem it unrealistic to wait to act until research studies have been completed (Sackett et al., 1996). As Bernstein Ratner (2006, p. 258) explains:

In an ideal world, treatments emerge, are validated through clinical trials, are disseminated to avid consumers of clinical updates, and are applied seamlessly to those whose profiles fit the trial population characteristics. In the “real” world of practising clinicians, however, frequently employed treatments may actually have little firm validation data, may or may not reach the practising clinician...and may have unclear relevance to the actual profile of the client one is seeing.

This perspective raises the second major criticism of EBP, namely that it fails to take adequate account of the individuality of people who receive programmes and services that are founded on systematic research and propositional knowing. Arguments are put forward that knowledge gleaned from heterogeneous populations, probabilities and aggregated data in randomised control trials do not seamlessly apply to the unique characteristics and circumstances of individuals (Dodd, 2007; Greenhalgh, 2014; Hedge, 2007; Overholser, 2010; Pring, 2004; Sackett et al., 1996; Tonelli, 2006). Although client preferences are considered an integral part of the evidence contributing to EBP, EBP has been described as “patient-removed practice” (Porta, 2006, p. 266), that unduly objectifies the client and may prevent interventions being tailored to individual cases (Kitson, 2002).

Related to this notion of ignoring the individuality of the recipients of EBP, is the third main criticism of EBP – that the underpinning philosophy of EBP rests too heavily on empiricism, privileging knowledge from experimental evidence over other sources of knowledge (Cohen & Hersh, 2004; Paley, 2006; Rycroft-Malone et al., 2004). Some disapprove of the multiple evidence hierarchies that rank randomised control trials (RCTs), meta-analyses of RCTs, and systematic reviews at the top rungs of the ladder and professional opinion at the bottom rung of the ladder (MacLure, 2005; Penn & Lloyd, 2007; Thomas, 2004). This disapproval stems from arguments that, in many disciplines outside of medicine, there are minimal RCTs available from which to glean evidence, and that if it is available, it can be frequently unhelpful or inappropriate (Johnson, 2005; Pring, 2004). Many interventions do not fit with the principles of RCTs if placebos cannot be administered or if it is not feasible to blind clients or practitioners, and the generalised statements of RCTs may only offer limited direction for individual cases (Bernstein Ratner, 2006; Hedge, 2007; Pring, 2004; Thompson, 2002). Furthermore, it is argued that systematic reviews are not always consistent in their

methods, can merge findings from studies that researched different populations and may be biased by their exclusion and inclusion criteria (Dodd, 2007; Slavin, 2008). The implication for many is that placing positivism on an inappropriate pedestal results in a narrow concept of research within EBP and the neglect of other valuable forms of knowledge that are important for practitioners (Biesta, 2010; Iwarsson, 2015; Jones & Sagar, 1995; Paley, 2006; Rycroft-Malone et al., 2004; Upshur, van Den Kerkhof, & Goel, 2001). For example, denigrating clinical expertise disavows the important value of practitioners' knowledge to effectively apply theory to practice (Epstein, 2011; Smith, Goodwin, Mort, & Pope, 2003). Therefore, Greenhalgh (2014) suggests that privileging empirical evidence belittles the important contribution of clinical expertise.

Finally, linked to this criticism that EBP depreciates the value of clinical expertise, is the fourth key condemnation of EBP, that is, that it may disregard the independent nature of professional practice. As a consequence of calls from advocates of EBP to standardise processes of care and practice according to what the available evidence tells us, many practitioners have judged EBP to be restrictive, overly controlling and suppressing clinical freedom (DaCruz, 2002; Iwarsson, 2015; Timmermans & Berg, 2003). Terms such as 'methodological fundamentalism' and 'cookbook medicine' are cited by critics of EBP (House, 2006; Sackett et al., 1996). They suggest EBP wrongly deprofessionalises and dehumanises - reducing practice to methods, and practitioners to mere technical operatives or scholars of manuals (Lefstein, 2005; Skovholt & Jennings, 2004). Dollaghan (2007) asserts that even though the definition of EBP clearly specifies the importance of clinical expertise in decision-making, the external systematic research aspect of the EBP definition tends to receive more attention and weight. This denigration of clinical expertise disavows the important value of practitioners' knowledge, skills, and judgement - which it is argued, is needed to effectively apply theory to practice and fine-tune interventions to meet the specific needs and circumstances of individuals and contexts (Epstein, 2011; Haynes et al., 2002; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Smith et al., 2003). Conversely, it is alleged that if clinical expertise is *overly* relied upon to make clinical decisions, there is significant potential for bias, practices becoming idiosyncratic, or practices becoming restricted to what professionals find plausible which may not be as effective as those that have been robustly evaluated (Dollaghan, 2007; Elstein & Schwartz, 2002; Hiebert et al., 2002; Justice, 2010; Kamhi, 2011; Paley, 2006; Proly & Murza, 2009; Rycroft-Malone et al., 2004; Tonelli, 2006).

In summary, from an epistemological perspective, criticisms of EBP repeatedly indicate that knowing external to the knower (i.e., empirical evidence, *propositional knowing* (Heron & Reason, 2008) and Aristotle's *theôresis, pathos, khresis and poiesis* (Eikeland, 2015)) is often privileged over knowing internal to the knower (i.e., clinical expertise, *practical knowing*

(Heron & Reason, 2008) and Aristotle's *praxis* and *theôria* forms of knowing (Eikeland, 2015)). This occurs in spite of long-standing and repeated assertions from scholars of evidence-based practice and epistemology that different forms of knowing are complimentary and therefore should be given the opportunity to interact and integrate with each other (Bonderup-Dohn, 2014; Dollaghan, 2007; Haynes et al., 2002; Heron & Reason, 2008; McIntyre, 2005; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Seeley, 2014; Sexton & van Dam, 2010).

Privileging one way of knowing over another way of knowing is also a frequent occurrence when members of one discipline work collaboratively with members of a different discipline (i.e., inter-professional practice). As discussed in the next section, inter-professional practice promotes interaction and connection of multiple ways of knowing too and yet, there is a tendency for certain forms of knowing to gain greater traction than others.

2.4 Epistemology and Inter-Professional Practice

2.4.1 Inter-professional practice

A primary policy objective in the multiple systems of health, education, and social care is to provide services for children that are integrated and are built on the premise of inter-professional practice (DCYA, 2014; Mecrow et al., 2010). This emphasis on collaborative practice is present in many international reform agendas for children's services, including the *No Child Left Behind Act* in the US, the *Every Child Matters* agenda in England and *A Fair Future for Our Children* policy in Wales (Forbes & McCartney, 2010). In Ireland, the national policy framework for children and young people 2014-2020: *Better Outcomes, Brighter Futures* (DCYA, 2014) specifies interagency collaboration as being a 'transformational goal' necessary to achieve the five national outcomes aspired to for all children and young people. *Better Outcomes, Brighter Futures* amalgamates priorities for multiple government departments such as the Department of Health (DOH), Department of Education and Skills (DES), Department of Children and Youth Affairs (DCYA), Department of Social Protection (DSP) and Tusla, and states "active involvement of the professionals themselves, working across professional boundaries, is essential to addressing improvements in systems, processes and decision-making" (p. 38). In addition, *Healthy Ireland: A Framework for Improved Health and Wellbeing 2013-2025* (DOH, 2013) names cross-sectoral working as one of its six overall targets and promotes inter-professional practice between health professionals and educational professionals. Furthermore, the inclusion movement for children with disabilities has led to legislative and discipline support for collaboration between educational professionals and therapeutic professionals, such as speech and language therapists (SLTs), to ensure the needs of all pupils are met within the mainstream school

setting (Bronstein, 2003; Shaddock, Smyth King, & Giorcelli, 2007). For instance, Ireland's *Literacy and Numeracy for Life: The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020* (DES, 2011) pinpoints the role of SLTs in supporting students with special educational needs in the Irish educational context and acknowledges the potential benefits of "greater interaction and collaboration across the education and health services" (p. 67). The promotion of greater collaboration between teachers and SLTs is echoed in the *Action Plan for Education 2016-2019* (DES, 2016) and the *DEIS Plan 2017: Delivering Equality of Opportunities in Schools* (DES, 2017a).

The prominence of inter-professional practice in national policy aims also resonates with the core competencies required of graduating professionals across the globe in numerous disciplines (Morrison, Lincoln, & Reed, 2011), including speech and language therapy and teaching. For example, the Teaching Council of Ireland's *Code of Professional Conduct for Teachers* (TeachingCouncil, 2012) stipulates professional collegiality and collaboration as one of its six standards and identifies that working in a collaborative manner with relevant professionals may be necessary to effectively meet the needs of pupils. Similarly, the Speech and Language Therapists Registration Board (CORU) *Code of Professional Conduct and Ethics* (CORU, 2014) specifies communicating and working in partnership with other professionals as key responsibilities of members of the profession. Also, the Therapy Project Office (HSE, 2008) itemises competencies required for graduating speech and language therapists that include participating in multi- and inter-professional teams, demonstrating effective team working, and driving the development and provision of cross-disciplinary services. Thus, inter-professional practice has widespread endorsement and is strongly promoted across multiple sectors and multiple professionals, including teachers and speech and language therapists.

There are a number of terms that are used interchangeably in policies and in the literature to denote inter-professional practice, including multi-disciplinary, multi-professional, multi-agency, inter-disciplinary, teamwork, collaboration, joined-up working, partnership working, integrated working, cross-professional, integrated services, seamless services, and boundary crossing provision (Hartley, 2010; Morrison & Glenny, 2012; Morrison et al., 2011; Nancarrow et al., 2013; Xyrichis & Lowton, 2008). Therefore, the term 'inter-professional practice' is very broad, can be interpreted in numerous ways, and is often used to define a variety of practices. For example, the phrase 'inter-professional practice' can be used to describe vague sporadic networking and dialogue, while at the same time, the term is applied to much more intensive joint working (Ray, 2002; Wright, 2001). Watts et al.'s (1997) typology provides an illustration of an array of collaborative practices that prevail. Their continuum ranges from co-operation (i.e., where two or more services cooperate on a shared

task), to co-ordination (i.e., where two or more services remain within their professional boundaries but alter their activities to align more with one another), to cross-fertilisation (i.e., where services work across professional boundaries and exchange skills) to integration (i.e., where boundaries between the services become dissolved). Every one of the four degrees of collaboration outlined in Watts et al.'s continuum, although distinguishable by its level of mutual engagement and exchange, could potentially be individually labelled with the all-encompassing term 'inter-professional practice'.

2.4.2 Multiple ways of knowing and inter-professional practice

Due to the multiple meanings of inter-professional practice, practitioners working together may have different perspectives from the outset on what they consider constitutes inter-professional practice. That is, their epistemological understanding of inter-professional practice can coincide or collide with that of their colleagues. For example, studies of inter-professional practice between teachers and speech and language therapists (SLTs) have documented a lack of epistemological agreement on what they consider collaboration to be (Hartas, 2004; Wilson et al., 2015). This may create a barrier to effective inter-professional practice, as shared understanding of what inter-professional practice involves has been identified as a facilitative factor for successful collaborative working (Hartley, 2010).

A shared understanding of what constitutes inter-professional practice is also necessary within a single discipline, as well as across disciplines. For instance, lack of epistemological cohesion within the SLT profession on how to implement inter-professional practice is evident from distinct service delivery models that are frequently operated under the one umbrella of inter-professional practice. The common "pull-out model" in the US provides speech and language therapy intervention for pupils in the school setting, but outside of their classroom (ASHA, 2010; Brandel & Loeb, 2012). Therapy targets are developed to support pupil's language and literacy development, but often in the past, the targets may be different to curriculum and teachers' objectives (Hartas, 2004; Korth, Sharp, & Culatta, 2010; Larson, McKinley, & Boley, 1993). This contrasts with the consultative model of service delivery more prevalent in the UK, involving SLTs providing advice and guidance to educational staff, who then carry out the language enrichment activities with the students (Law, 2000; Law et al., 2001, 2002). In a survey of SLTs working in Ireland, the most common practice of collaborative working with teachers involved sending a SLT assessment and diagnostic report with recommendations to the school (IASLT, 2007). These distinct models of SLT collaborative working may be founded on different epistemological perspectives about what is deemed legitimate inter-professional practice. The former service delivery model may be justified by a belief in the requirement of inter-professional practice to include co-location and common general educational goals (e.g., language and literacy development). The latter two

service delivery models may be justified by a conviction that inter-professional practice must involve transferring knowledge and skills from one profession to another. Alternatively, the chosen SLT service delivery model may in fact be driven by the epistemological viewpoint of a specific stakeholder. Stakeholders may include undergraduate educators (e.g., model of inter-professional practice justified through applying proven, evidence-based models), managers (e.g., model of inter-professional practice defended by being the most efficient use of resources), financial controllers (e.g., model of inter-professional practice validated by being the most cost effective), or policy-makers (e.g., model of inter-professional practice backed as a result of public demand or citizen consultation).

Thus, epistemological perspectives on inter-professional practice are pertinent because diverse ways of knowing may contribute to individual conceptualisations of inter-professional practice, and to decisions on what service model or collaborative interventions to deliver. In addition, epistemology is also relevant to inter-professional practice because sharing knowledge is repeatedly referenced as a fundamental feature of inter-professional practice (D'Amour & Oandasan, 2005; Hammick, Freeth, Copperman, & Goodsmith, 2009; Nancarrow et al., 2013). It is claimed that exchange of knowledge and experiences results in capacity gains for the professionals involved (Lawson, 2004). Such capacity gains range from: improved working conditions; break down of hierarchical relationships; clarification of role and responsibilities; reinforcement of competence; to more effective reporting between professionals and implementation of decisions (Graham & Weathall, 1999; Hallett & Birchall, 1992; Henneman, Lee, & Cohen, 1995; WHO, 1998, 2010; Zwarenstein & Reeves, 2006). When supporting school-aged children with language difficulties, an aspiration is for teachers to share knowledge and expertise relating to literacy, curriculum, and pedagogy, and for SLTs to share knowledge and expertise of language structures, language development, language disorders, and language enrichment practices (Glover et al., 2015; Hadley, Simmerman, Long, & Luna, 2000; Hartas, 2004; Kamhi, Allen, & Catts, 2001; Squires et al., 2013). The resulting professional development is recognised as a benefit of teacher and SLT collaboration (Kersner, 1996; Ritzman, Sanger, & Coufal, 2006; Throneburg, Calvert, Sturm, Paramboukas, & Paul, 2000; Tollerfield, 2003; Wright & Kresner, 2004). Researchers report that the transfer of competencies between teachers and SLTs can lead to more creative solutions of shared problems, a more holistic approach to addressing children's needs and an increased sense of personal and professional support (Korth et al., 2010; Wright & Kersner, 2001; Wright & Kresner, 2004; Wright, Stackhouse, & Wood, 2008).

2.4.3 Challenges to implementing inter-professional practice

What appears in theory to be a simple knowledge swap within inter-professional practice leading to a plethora of benefits, in practice can be difficult to achieve and fraught with

epistemological challenges. SLTs and teachers are trained separately and practise within different 'cultures' (Paradice et al., 2007). Schools, where teachers are employed, and health services, where SLTs are employed, have distinguishable frameworks of operation, practices, priorities and expectations (Baxter, Brookes, Bianchi, Rashid, & Hay, 2009; Law, Lindsay, et al., 2000; McCartney, 1999; Tollerfield, 2003). This disparity can develop early as part of the 'us-and-them' socialisation process of undergraduate education and can surface later on if there is an absence of trust or if practitioners attempt to guard their knowledge base in order to protect their status (Cameron, 2011; Milbourne, Macrae, & Maguire, 2003; Rafferty, Ball, & Aiken, 2001). Consequently, all too often within inter-professional practice, closely held specialist knowledge of each professional group that maintains their status is safeguarded, while at the same time other professionals' ways of knowing that may be alien to their discipline are rejected (Duke, 2004; Forbes, 2008; Lawson, 2004; Robinson & Cottrell, 2005; WHO, 2010). Relatedly, there have been concerns expressed within inter-professional practice that if practitioners accept others' knowledge without validation, they may lose some of their discipline-specific expertise, autonomy, and practices which have been proven to lead to effective outcomes (Dunsmuir, Clifford, & Took, 2006; Hartas, 2004; Laidler, 1991). This occurs in spite of claims that each discipline's knowledge, regardless of its professional status, can contribute and facilitates effective inter-professional practice (Friend et al., 2010; Hartas, 2004; Henneman et al., 1995). Linked to these concerns, challenges documented to implementing inter-professional practice between teachers and SLTs have also been largely epistemological in nature: fears of losing expertise; having decisions interrogated; and 'territory' invaded (Hartas, 2004; Wright et al., 2008). Resentment may also seep in if teachers feel that inter-professional practice is simply transferring SLT knowledge, and ultimately SLT workload, to teachers (Forbes & McCartney, 2012).

Furthermore, it has been documented that some practitioners may place less emphasis on empirical evidence when making decisions (i.e., propositional knowing) than they may on their own professional expertise (i.e., practical knowing) (Biesta, 2007a; McIntyre, 2005). Meanwhile, other practitioners may maintain that professional expertise should not dominate over the findings of empirical research when making decisions about interventions to deliver (Hoffman, 2014; Iwarsson, 2015; Roulstone, 2015). Therefore, in terms of Aristotelian's (Eikeland, 2015) and Heron and Reason's (2008) forms of knowing, a predominance of propositional knowing that is external to the knower may be offered by one discipline, in spite of a preference of the other discipline for practical knowing, experiential knowing, and knowing that is internal to the knower. Therefore, the different ways of knowing that each profession draws on to inform their practice may present challenges to inter-professional practice. Consequently, there is a risk that benefits of inter-professional practice may not be realised or inter-professional practice will cease altogether if no new knowledge is accepted

from the other profession because it does not fit with their epistemological experiences or preferences. Reasons for the dominance of one form of knowing over other forms of knowing within inter-professional practice, and within EBP described earlier, are consistently explained in the literature from the perspective of power (Bachrach & Baratz, 1970; Foucault, 1972, 1980; Freire, 1972; Gaventa & Cornwall, 2008, 2015; Gramsci, 1992; Hewett, 2004; Lukes, 2005). Thus, it is not surprising that power-sharing is considered a central attribute and key facilitator of genuine and effective inter-professional practice (Duke, 2004; Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010; Henneman et al., 1995). Within explorations of SLT and teacher collaboration, core components claimed to facilitate enhanced inter-professional practice - mutual respect for each individual's contribution and acceptance of different points of view - may be considered power-sharing too (Hartas, 2004; Tollerfield, 2003; Miller, 1999; Wilson et al., 2015; Dunsmuir et al., 2006). The former elements could be deemed to describe epistemological give and take, reinforcing epistemologists' assertions described earlier not to set apart each form of knowing so much that they become completely unrelated (Bonderup-Dohn, 2014; Heron & Reason, 2008; Seeley, 2014).

2.5 Conclusion

This chapter has described a key research focus, epistemology, and has discussed how epistemology relates to two core themes of this study: evidence-based practice and inter-professional practice. Classifications of multiple ways of knowing have been presented such as Aristotle's seven relational ways of knowing, Heron and Reason's four types of knowing, evidence-based practice's three sources of knowing, and distinct knowledges of each discipline within inter-professional practice. The similarities between the taxonomies have been emphasised. In addition, a common appeal from epistemological proponents, authorities in EBP and advocates of inter-professional practice for the different ways of knowing to be integrated and amalgamated has been outlined. However, in spite of the collective plea for integrating multiple ways of knowing, this chapter has highlighted that particular ways of knowing tend to dominate and are privileged over other forms of knowing. Examples of this segregation and the rationale for this division within EBP and inter-professional practice have been explored.

Epistemological phenomena that have been discussed in this chapter, including the nature of knowledge, the nature of knowing, multiple ways of knowing, and the status of knowledge are also fundamental to any research inquiry. Consideration of these epistemological themes can influence decisions about methodology, methods, research questions, and the type of knowledge that a researcher seeks through an inquiry. The methodology employed in this study, action research, including its epistemological roots is described in the next chapter.

3 Methodology: Action Research

A research methodology is a plan of action that moulds our choice and use of methods, and connects them to aspired outcomes (Crotty, 1998). It is argued that the research questions and the purpose of the research should determine the methodological approach (Hope & Waterman, 2006). This chapter outlines the research methodology employed in this inquiry: action research. It discusses the rationale for selecting action research, action research's epistemological stance relative to other research paradigms, its history, core features, and potential limitations. Quality markers in an action research study are also described.

3.1 Research Question and Choice of Methodology

This inquiry originated from the research area discussed in Chapter 1, that is, the lack of congruence between what the empirical evidence suggests is effective for addressing language difficulties amongst school-aged children and actual everyday classroom practices. It also stems from professional and personal motivations to explore how the language abilities of children from areas of low SES could be improved. In addition, the inquiry is set in the context of the epistemological considerations of two key themes from the research focus described in Chapter 2: evidence-based practice and inter-professional practice. The inter-professional practice in this study centres on SLT and teacher collaboration.

This inquiry aimed to explore the process of implementing changes to classroom practices targeting the development of pupils' language skills, drawing on evidence-based practice and inter-professional practice between SLTs and teachers. The research question is: ***“How can classroom practices be changed to support effective language enrichment?”*** The objective of effecting change as an integral part of the research process, coupled with the participation of SLTs and teachers, signifies the appropriateness of employing action research as the methodology for this inquiry. As discussed in detail in the following sections, it is argued that action research enables the process of change to be explored, rather than focussing purely on outcomes measurement, typically associated with other research paradigms (Meyer & Batehup, 1997). Action research can be both robust for scholars and useful for practitioners (Coghlan, 2011), supporting its suitability for a quality PhD study while generating practical relevance for teaching and speech and language therapy professionals.

3.2 Action Research's Epistemological Stance

Some research methodologies suggest that truth can be discovered through observation (i.e., objectivism), others contend that truth is created via engagement with the phenomenon

under investigation (i.e., constructionism), while others argue that truth is imposed by human creation (i.e., subjectivism) (Hathcoat & Nicholas, 2014).

Within the objectivist paradigm, knowledge about the world and its inhabitants is believed to be largely available, simply waiting to be discovered through logic and measurement (Coleman, 2015). From this positivist perspective, the researcher is separate from what is being researched; there is an explicit divide between the knower and the known (Hathcoat & Nicholas, 2014). Consequently, positivists strive to remain neutral and detached observers driven by the intention to avoid any form of bias that may distort meaning, on the basis that meaning is separate from the researcher (Coleman, 2015; Hathcoat & Nicholas, 2014; O'Hara, 2012). Thus, objectivist research designs and methods may include control groups and an emphasis on reliability, generalisability, internal and external validity. "Knowledge is presumed to be pitted against practice, mind separated from heart, reflection from action, expert from lay person, self from other, etc" (Bradbury, 2015, p. 3). Therefore, ways of knowing external to the knower, outlined in Chapter 2, such as *theôresis*, *pathos*, *khresis* and *poiesis* described by Aristotle and *propositional knowing* described by Heron and Reason, are reflected most often in positivism.

Although positivism remains dominant and widely accepted, it is not without its critics, particularly from qualitative researchers. Habermas (1971) argued that the suggested separation between the bias of the researcher and phenomenon being investigated, proposed by positivists, is only an illusion. Qualitative researchers argue that truth is not found within the object of an inquiry, but is indivisible from human action and involves mutual shaping between knower and known (Denzin & Lincoln, 2005; Hathcoat & Nicholas, 2014). The emphasis on detachment within objectivism outlined above may be distinguished from constructionism which is described as relativist (i.e., a belief that a diversity of interpretations exist), naturalistic (i.e., methodological procedures are conducted in the natural world) and subjectivist (i.e., a belief that meaning is co-constructed by an individual's impression and the responder's contributions) (Denzin & Lincoln, 2005). Thus, a constructivist inquiry is interpretative, while simultaneously proposing that there is no single interpretative truth (Denzin & Lincoln, 2005). In contrast to constructionism, subjectivism argues that meaning does not develop from an interaction between subject and object but is imposed on the object by the subject (Crotty, 2003). Therefore, while objectivism may propose that 'seeing is believing', subjectivism may consider 'believing determines what is seen' (Pratt, 1998). Subjectivists argue that each individual observes the world from a certain stance of interest and purpose (Moon & Blackman, 2014).

Although constructionism and subjectivism recognise the need to break the divide between the knower and the known inherent in objectivism, the qualitative researcher is solely responsible for making decisions about the inquiry, generating the questions, building theory and making interpretations, while the 'subject' frequently remains a passive participant (Fals Borda & Rahman, 1991). Heron and Reason (1997, p. 9) describe qualitative research *about* people as “a half-way house between exclusive, controlling, quantitative, positivist research *on* people and fully participatory, co-operative research *with* people”. Participative inquiry seeks to break the 'monopoly of knowledge' inherent in traditional quantitative and qualitative research (Fals Borda & Rahman, 1991). Champions of participative inquiries argue that conventional social science has resulted in blind spots and cul-de-sacs, because it does not prioritise the relational and pragmatic nature of knowledge construction and human living (Bradbury-Huang, 2014).

An established participatory inquiry methodology that rejects a divide between subjects and objects is action research. Action researchers assert that objectivity as the only process of understanding is “fundamentally wrong” because it supports the “hegemonic moves of social researchers” who may only consider their own theories and interpretations as valid (Greenwood, 2015, p. 205). Action researchers argue that many scientific studies can be meaningless for practical experts with a genuine issue to resolve because scientific studies are so reductionist (Baskerville, 2014). Hence, unlike quantitative and qualitative research, an amalgamation of the knower and the known is central to any action research inquiry (Hathcoat & Nicholas, 2014). The action research process, from design to implementation to evaluation is democratic. Stakeholders are central in defining the problem, planning the inquiry, deciding actions, interpreting the outcomes, and implementing changes (Reason, 2006). It commences 'here', not 'out there'; the orientation of change is 'with' individuals, rather than 'on' or 'about' them (Reason & Bradbury, 2008a). It may appear that action research is closely aligned to liberation efforts, such as pragmatist critique and social action movements (e.g., feminism), because of the focus on reflective observation and activism (Bradbury, 2015). However, within action research, the focus is not only on criticism, but also on action. Action researchers propose that the objective of a research inquiry is not solely to describe or explain the world around us, but also to change it (Reason & Torbert, 2001). Therefore, the action researcher shares the production of knowledge with the researched, is embedded in the specific setting, and acts as an agent in the inquiry (Coghlan, 2011).

Consequently, ways of knowing internal to the knower, outlined in Chapter 2, described as *praxis* and *theôria* by Aristotle and as *practical knowing*, *experiential knowing* and *presentational knowing* by Heron and Reason, are an essential component of action research. As previously stated, action research has been defined as “a form of science in the

realm of practical knowing” (Coghlan, 2011, p. 55). Eikeland (2012, p. 17) goes as far as stating that action research is “praxis research”. Action researchers claim that the integral element of praxis in their inquiries adds significant value and distinguishes it from other forms of research (Coghlan, 2011; Eikeland, 2015; Hathcoat & Nicholas, 2014; Heron & Reason, 1997). As defined by Reason and Bradbury (2008a, p. 4), action research is:

a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purposes. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.

Thus, action research emerges as a methodology that has the potential to embrace multiple ways of knowing, welcoming epistemological differences through direct participation of those affected by an issue coupled with the construction of knowledge that is inclusive and socially and democratically sound (Gaventa & Cornwall, 2015; Greenwood & Levin, 2007; Reason & Bradbury, 2008a). Action research is typically applied to unique social contexts, allowing the knowledge generated to be socially relevant and tested situationally (Greenwood, 2015). The relationship between the research, the participants, and a practical activity is more intimate than in any other research paradigm (Hammersley, 2004).

As a result, action research questions differ from those of social scientists (McNiff & Whitehead, 2011). Action researchers assume a reflective and inquiring approach to complicated human issues and challenges, therefore, generally asking “How to ...?” or “How can ...?” questions (Marshall, Coleman, & Reason, 2011). While a social scientist may ask “what is the relationship between teachers’ practice-based knowledge and pupils’ language abilities?”, an action researcher would be more inclined to ask “how do I study our teaching practices for the benefit of the pupils?” Therefore, action research questions intersect and introduce the potential of change on many levels and facilitate the enhancement of practice to be directly addressed for personal and social improvement (Herr & Anderson, 2005; McNiff & Whitehead, 2011). Hence, the research question of this inquiry, “*How can classroom practices be changed to support effective language enrichment?*”, aligns both with my objectives as a researcher and with the goals of action research, thereby confirming the suitability of this methodology for the present inquiry.

3.3 History of Action Research, Including Application in Teaching and Speech and Language Therapy

Action research has a complex history because it did not evolve from a single academic discipline but has developed over time from a broad range of disciplines (Brydon-Miller, Greenwood, & Maguire, 2003). Commencing in the 1930s, it has always been linked with

social change for social justice (Pine, 2009). It is generally agreed that action research began with the work of John Collier, Jacob Moreno, and Kurt Lewin. Collier, in his role as US commissioner of Indian affairs from 1933-1945, used an applied anthropology that had a social conscience and was related to practice to help improve the conditions of life of the American Indian population (Altrichter, Feldman, Posch, & Somekh, 2008). Similarly, Moreno was committed to participant observation, participation of lay people in research, and social improvement as the principle aims of research (Altrichter et al., 2008). Kurt Lewin is the person most often cited as the founder of action research. Lewin was a Jewish refugee from Nazi Germany who worked as a social psychologist in the US. He believed involving people in decision making would result in increased motivation in their work, and developed the concept of action research, bridging the worlds of philosophy and research (Newton & Burgess, 2008) and practically addressing conflict, crises and change (Pine, 2009). Lewin described a spiral process of planning, acting, monitoring, and reformulating that has continued to be synonymous with action research today (Hammersley, 2004). Moreover, the liberation movements of Orlando Fals Borda, Anis Rahman, and Paulo Freire have been credited as laying the foundations of modern action research (Bradbury, 2015; Reason & Bradbury, 2008a).

Since the 1950s, action research has been employed in education, specifically by the teaching profession, with the publication of Stephen Corey's (1953) influential book in the US: *Action Research to Improve School Practices*. Corey believed in the importance of teachers being equal partners in educational research and in building knowledge about their work, and viewed action research as an appropriate method for achieving this aim (Altrichter et al., 2008). Action research gained popularity in the field of education in the UK at the same time, as a research method which facilitated teachers to be in control of their practice instead of the much criticised top-down curriculum reform which was prevalent (McNiff & Whitehead, 2011). Lawrence Stenhouse was instrumental in arguing the case that teachers, not government officials, were the most important drivers of educational reform and advocated strongly for 'teachers as researchers' (Somekh & Zeichner, 2009). Adopting Stenhouse's assertion, Australian educators also began to use action research as the basis for school-based curriculum development policies (Noffke & Brennan, 2014). This prevailing international theme of teachers being equal research partners, capable of being in charge of their own practice and influencing the educational curriculum, has dominated the focus of modern action researchers in education, such as Stephen Kemmis and John Elliott (Koshy, 2010).

On the contrary, action research does not have an extensive history in the field of speech and language therapy (SLT). Following a search of nine international databases (i.e.,

PubMed, Science Direct, Embase, LLBA, CINAHL, ERIC, PsycInfo, Scopus and Web of Science), I found only six published studies that employed action research methodology in the context of SLT. Two studies focused on SLT at a service level, specifically on evaluating and changing SLT services for people with aphasia (Horton, Mudd, & Lane, 1998) and for pre-schoolers and their families attending an early-intervention SLT service (Lyons, O'Malley, O'Connor, & Monaghan, 2010). Horton et al. (1998) sought the views of adults with aphasia on the SLT service, and facilitated dialogue between these adults and service providers, before implementing changes to the SLT service. Similarly, Lyons et al. (2010) sought the views of parents whose children with SLI attended an early intervention group therapy service, before implementing changes to the timing of the SLT and making efforts to clarify parents' role in the therapy. An additional two action research studies targeted improvement of SLT at a practice level: focusing on the development of clinicians' expertise in paediatric dysphagia through collaboratively exploring different education and learning models (Duivestein & Gerlach, 2011) and improving the effectiveness of speech and language therapists' diagnostic and intervention packages for young children with autism (Chandler, Christie, Newson, & Prevezer, 2002). A further two action research studies were employed within SLT at a client level. McMenamin et al. (2015a, 2015b) placed their attention on the long-term outcomes of clients with aphasia engaged in a Conversation Partner Programme. Clients acted as co-researchers in analysing and appraising the interventions they received, and in the generation of evaluation criteria of the programme.

There are many possible reasons that action research is not the dominant research methodology in SLT literature. Maybe SLTs are conducting action research but simply not publishing their findings. Alternatively, it may be that the very nature of therapy leads some SLTs to direct their attention on evaluating various therapeutic techniques and they therefore are driven towards methods that draw comparisons and show statistical correlations found in more traditional quantitative methods. SLTs frequently work with clients on one-to-one basis and there is often less scope for working directly alongside colleagues in a therapeutic setting with individual clients. Thus, SLTs may sometimes place more emphasis on empirical evidence to evaluate practice, facilitated by quantitative and qualitative methods, and less emphasis on evaluating and driving change directly with practitioners, facilitated by action research. Moreover, there may be lack of knowledge of the action research methodology amongst the SLT profession. They may be unfamiliar with the features of action research and its application and so the full potential of action research as a research methodology for the SLT profession may not, to date, have been realised.

Outside the fields of education and speech and language therapy, action research has expanded and developed in many other disciplines. Depending on the profession and their

objectives, action research can have, and has had, different purposes, ranging from being a tool to liberate the oppressed to a means of personal reflection (Riggall, 2009). The assortment of domains in which action research can be found and the wide-range of professionals that have employed it, suggest it is a valuable, flexible, and dynamic research method. Twenty-seven flavours of action research have been outlined, established from dimensions of voice, practice and time (Chandler & Torbert, 2003). That is, action research can seek the perspectives of first-, second-, or third-person voices, inquire about first-, second-, or third-person practices, within the past, present, or future. Together, this twenty-seven item typology provides a comprehensive account of the possibilities of action research. Dick's (2011) thorough review of the action research literature published from 2008-2010, categorised the variety of action research into the following themes: educational action research, community research and engagement, rural and regional development, organisational and systemic applications, action learning, and appreciative inquiry. In a recent review of the *SAGE Encyclopaedia of Action Research*, the 314 entries by 267 authors also emphasise the vast variety of action research that exists, such as: action science; cooperative inquiry; pragmatic action research; participatory action research; and classroom based action research (Dick, 2015). In spite of this variety, core features of action research prevail which distinguish it from more traditional forms of social science research and unite the different approaches (Dick, 2015). The unique features of action research are key to its status as an important research methodology.

3.4 Core Features of Action Research

A core feature of action research is the definite focus on achieving change as an integral part of the process. This contrasts with other quantitative and qualitative methods, where change is mostly a consequence, not a part, of the research process (Bradbury-Huang, 2010; Riggall, 2009). Change in action research has been characterised by a number of authorities in the field. Kemmis (2009, p. 463) specifies three types of fundamental changes that action research aims to address: "practitioners' practices, their understanding of their practices, and the conditions in which they practise". These three factors are interwoven, influencing and being influenced by each other, and are key elements of the research process itself. Similarly, Noffke (2009) describes the interconnectedness of change in professional, personal and political dimensions of practice. For example, practitioners seek to improve their knowledge and effectiveness (personal) by collaboratively engaging in theory-building (professional), thereby supporting changes in the culture of instruction (political) (Lewis, Perry, & Friedkin, 2009).

An additional distinguishing feature of action research is its aims. Traditional researchers frequently aim to discover knowledge or understand social arrangements, which they believe

to be certain, through scientific means (Bradbury-Huang, 2010; Koshy, 2010). The theory that is generated is subsequently applied to practice, but often takes a long time to transfer. On the other hand, action researchers aim to generate and validate theory through practice (Brydon-Miller et al., 2003). Instead of trying to merely understand a phenomenon, action researchers aim to engage with the challenges and complexities of a particular concern – defining the issue, designing and implementing action, and evaluating the outcomes (Bradbury, 2015). Following in the footsteps of Lewin, a cycle or spiral of change is a fundamental component of action research that helps to address the aim of integrating theory and practice (Dick, Stringer, & Huxham, 2009). These self-contained cycles typically follow multiple stages of planning a change; acting and observing the process and outcomes of change; reflecting on and revising the plan; acting and observing; reflecting; and so on (Koshy, 2010). Within the spiral, thought guides action which in turn guides thought; therefore action research continuously interlinks theory and practice (Dick et al., 2009). Figure 3.1 demonstrates this spiral model.

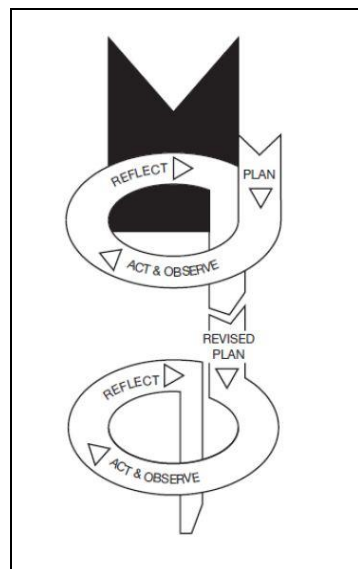


Figure 3.1: Spiral model of action research (Koshy, 2010, p. 5)

The participation and collaboration of those being researched is paramount in any action research study, and a fundamental value shared by action researchers is an honest respect for people's knowledge and for their ability to comprehend and address the issues confronting them and their communities (Arieli, Friedman, & Agbaria, 2009; Reason, 2006; Riggall, 2009). As discussed previously, typically in both quantitative and qualitative research, the relationship between those being researched and the researcher is relatively more distant (i.e., the knowing is external to the knower). This is different to action research, where the traditional boundaries between the researcher and researched are significantly blurred, and the knowing is internal to the knower (Arieli et al., 2009; Riggall, 2009). Hence, while quantitative research may hold a view that in order to be credible, research must

remain objective and value-free, action research promotes the concept of socially constructed knowledge (Brydon-Miller et al., 2003). It is argued that through the participatory, dialogic forms of inquiry inherent in action research, new perspectives or practices might be realised (Schein, 1993). There is an explicit commitment to respecting the experience and knowledge of others to collaboratively bring about change (Dick & Greenwood, 2015). Relevant stakeholders are not simply subjects of the research or sources of data, but are co-definers of problems, co-designers of solutions, and co-implementers of action (Bradbury, 2015).

Related to this core feature of participation, a further key characteristic of action research is its ability to facilitate the co-habitation of multiple ways of knowing, producing knowledge that is both robust for scholars and useful for practitioners (Coghlan, 2011). Action research can facilitate the dynamic engagement of participants in the research process through the iterative and collaborative cycles of change, providing a medium to balance power through the co-generation of knowledge. The emphasis is on “mutual learning and co-production of new ways of knowing, other than on challenging and subverting dominant forms of knowledge” (Gaventa & Cornwall, 2015, p. 469). For example, Heron and Reason position their concept of extended epistemology, with its four forms of knowing, at the centre of the action research paradigm and as the foundation for the participative processes pivotal to an action research inquiry (Seeley, 2014). Thus, within an action research inquiry:

People collaborate to define the questions they wish to explore and the methodology for that exploration (propositional knowing); together or separately they apply this methodology in the world of their practice (practical knowing); which leads to new forms of encounter with their world (experiential knowing); and they find ways to represent this experience in significant patterns (presentational knowing) which feeds into a revised propositional understanding of the originating questions...Co-researchers engage together in cycling several times through the four forms of knowing in order to enrich their congruence, that is, to refine the way they elevate and consummate each other, and to deepen the complementary way they are grounded in each other (Heron and Reason, 1997, p. 8).

Therefore, the value and distinct contribution of multiple ways of knowing can be recognised and drawn upon in action research to generate new knowledge and help solve problems that arise.

Finally, the integration of three voices of action and inquiry is characteristic of an action research inquiry: first, second, and third persons (Reason & Bradbury, 2008a; Reason & Torbert, 2001). First person action and inquiry relates to individual inquiry into assumptions, goals, strategies, behaviours, and philosophy of life (Coghlan & Brannick, 2010). Second person action and inquiry centres around democratic collaboration on an issue of shared concern (Coghlan & Brannick, 2010). Third person action and inquiry typically produces

ideas that can be generalised and shared (Reason & Torbert, 2001). Therefore, action research is typically “for *me*, for *us*, and for *them*” (Reason & Marshall, 1987, p. 112).

In summary, the core features of action research are: (i) specific focus on realising change as an integral part of the research process; (ii) generation and validation of theory through iterative cycles of change; (iii) genuine participation of co-researchers and the promotion of socially constructed knowledge; (iv) co-habitation of multiple ways of knowing; and (v) integration of first-, second- and third-person voices of action and inquiry. Ironically, some of these fundamental features of action research are often the same characteristics referenced when discussing the potential limitations of action research.

3.5 Potential Limitations of Action Research and Ways to Address Them to Ensure Quality

Being aware of potential limitations of a research methodology is an important task for all researchers. A sharp awareness of possible pitfalls can help minimise possible threats to quality and ensure actions are taken to maximise the quality and rigour of the study.

One possible limitation of action research cited in the literature is a potential lack of objectivity. Striving to bring about change in a practical situation, while a key beneficial feature of action research, can also call into question the objectivity of those undertaking the action research. The people involved and their personal constructs of the context, may influence the questions that are asked, the actions that are planned and the reflection that takes place (Cain, 2011; Carson, 2009). To address this, researchers can explicitly engage in a process of critical self-reflection (Carson, 2009), acknowledging their values and epistemological stance (Koshy, 2010). The importance of ‘critical subjectivity’ is stressed, through which the action researcher allows and shows how judgments and interpretations were subject to examination, challenge and alternative explanations (Levin, 2012). Reflexivity enables the extent of the researcher’s role in the changes implemented to be transparent and acknowledged (Bradbury-Huang, 2014). Coghlan and Brannick (2010) suggest that researchers engage in three distinct types of reflection to specifically challenge their own assumptions and interpretations: firstly, content reflection to think about what is happening; secondly, process reflection to think about how things are being done; and thirdly, premise reflection to critique assumptions and perspectives. Furthermore, to ensure quality, it is imperative that the decisions made by the researcher are explicit, including theoretical, methodological and analytical choices (Reason, 2006). Reason (2006, p. 187) asserts that “the primary rule in approaching quality is to be aware of the choices that are made and their consequences”, and to make them transparent to the reader so that they are available for

scrutiny. Credibility is added to the action research study by making the influence of the researcher and participants on the research process explicit (Parahoo, 2006). Herr and Anderson (2005) refer to this phenomenon as 'process validity'.

A second potential limitation of action research is the difficulty in generalising findings. This is due to the fact that most action research projects take place on a small scale in a unique context with an existing group of people who may not represent a random sample (Pine, 2009; Riggall, 2009). Hence, extending generalisations beyond the local context may be questionable. However, Cain (2011) suggests that the propositional knowledge that empirical positivistic studies seek can be restrictive in gaining an understanding of the world, while the multiple types of knowledge that can be gleaned from action research have the potential to inspire and encourage others in similar contexts. Koshy (2010) suggests that the findings of action research can be applicable to other professionals in comparable circumstances. Also, Brydon-Miller et al. (2003) claim that the results of action research have a greater ability to be generalised because the findings are based on the optimal combination of research knowledge and local knowledge. Therefore, to ensure quality, it is imperative that the study gives adequate contextual information so that readers can decide if the study, the findings, or the theories generated are transferable to other settings (Gomm, Needham, & Bullman, 2000; Koch & Kralik, 2006; Waterman, Tillen, Dickson, & de Koning, 2001). It may be possible that the reforms that a group has introduced are not transferable, but that the theoretical developments as a consequence of the inquiry may be transferable (Koch & Kralik, 2006). Thus, a quality trait of an action research study is the presence of sufficient detail for the reader to determine the transferability, including learning from the intersection of the specific setting and the theory applied (Baskerville, 2014). Herr and Anderson (2005)'s 'dialogic validity' resonates with this stance, resembling the peer review process in scientific research. Similar to 'critical subjectivity' described above, where the researcher's individual perspectives are open to challenge, theoretical findings of an action research inquiry must be available for scrutiny and explicitly considered from different theoretical perspectives to enhance the quality of the study (Waterman et al., 2001).

A third potential limitation of action research is 'messiness'. Action researchers do not rigorously follow a prescribed process, characteristic of other traditional forms of research. Instead, action research is frequently characterised by a "certain degree of chaos, uncertainty and messiness" (Brydon-Miller et al., 2003, p. 21). While this 'mess' can conjure up associations with poor, sloppy research for some, it is argued that it is a valuable part of the action research process. Cook (2009) believes that the multiple viewpoints brought to bear in action research can provide greater insights, create a forum for the exchange of opinions encouraging deeper exploration, and create a catalyst for new knowledge and

learning. Typically, quality of empirical evidence is appraised on a number of indicators such as comparisons, random assignment, participants, initial group similarity, blinding, measures, statistical significance and practical significance (Gillam & Gillam, 2006). As these indicators are seldom features of action research, it is difficult to judge the quality of action research based on those criteria. They don't align with key aims of action research, including helpfulness to participants, personal and group insight into practice, and social transformation (Bradbury-Huang, 2014). As Cook (2009, p. 288) states

Validity is not about straight-jacketing research into the known, but a discipline that forces us to question, critique and engage with data in a way that allows us to delve into various forms of knowing.

As an alternative to the gold standards of internal and external validity, some action researchers have proposed independent criteria for appraising the validity and quality of action research (Coghlan & Brannick, 2010; Gomm et al., 2000; Herr & Anderson, 2005; Koch & Kralik, 2006; Melrose, 2001; Reason & Bradbury, 2001; Waterman et al., 2001). Capobianco et al. (2009) recommend that quality is evaluated in two main ways: quality in the way action research is completed and quality of the action research product. A broader set of criteria is advocated by Anderson and Herr (2009): outcome validity, process validity, democratic validity, catalytic validity, dialogic validity. See Table 3.1 for a description of each criterion.

Table 3.1: Validity criteria based on Anderson and Herr (2009)

Validity Criteria	Description
Outcome Validity	The extent to which actions occur which lead to a deeper understanding of the problem
Process Validity	The extent to which problems are framed and solved
Democratic Validity	The extent to which research is done collaboratively
Catalytic Validity	The extent to which the research reorients and directs participants towards transformation
Dialogic Validity	The extent to which the research questions and findings fit with institutions of the community

Reason and Bradbury (2001) ask five questions about the quality of action research based on the features of action research: is the study explicit in developing praxis of relational participation?; is the study guided by reflexive concern for practical outcomes?; is the study inclusive of a plurality of knowing?; is the study worthy of the term 'significant'?; and is the study emerging towards a new and enduring infrastructure?. Furthermore, Coghlan and Brannick (2010) propose that rigour can be demonstrated in action research through an appraisal of: how the researcher engaged in multiple cycles and how these were recorded to signal that they are an accurate reflection of what was studied; how the researcher tested and challenged their personal assumptions and perspectives of what was taking place via

content, process and premise reflection; how the researcher engaged with different interpretations of what was happening; and how the researcher's interpretations are grounded in theory and how outcomes are confirmed or challenged in terms of the theories underpinning those interpretations. More recently, seven criteria that constitute quality in action research, based on the assertions of editors of the *Action Research* journal, are put forward by Bradbury (2015, p. 8) and include:

- (i) articulation of objectives
- (ii) partnership and participation
- (iii) contribution to action research theory-practice
- (iv) appropriate methods and process
- (v) actionability
- (vi) reflexivity
- (vii) significance (in content and process)

The range of quality criteria recommended by multiple action researchers is diverse and there is no unanimous agreement on what constitutes the 'gold standard'. However, there is much overlap and many shared values on what constitutes quality in an action research study. In addition to the quality criteria described above, it is widely agreed that a key element of quality in action research is the demonstration of change as a result of the research. For some, quality is evaluated by the ability to demonstrate that the study's input is responsible for change in practice (Gomm et al., 2000; Somekh, 1993), what Herr and Anderson (2005) describe as 'outcome validity'. For others, the emphasis is on demonstrating if, and how, the perspectives and thinking of the researcher and participants have changed as a result of the study (Coghlan & Brannick, 2010), described by some as 'catalytic validity' (Herr & Anderson, 2005). Others suggest that a worthy outcome is neither the change in practice nor the change in perspectives, but instead the explicit sharing of what was learnt from the experience of attempting change (Meyer, 2000). Reason (2006) suggests that a more significant outcome of an action research study is the facilitation of improved forums for communication and dialogue that result in democratic and participative communities of inquiry. Hence, quality of action research is also judged on the ability of the study to prove that genuine participation has taken place, known as 'democratic validity' (Herr & Anderson, 2005). It is important that the multiple voices of participants are represented and grounded in the data that emerge (Koch & Kralik, 2006).

Additional criteria for quality, while not unanimously cited as core criteria, remain noteworthy. Some authors place an emphasis on the ability of the action research study to create sustained participation so that change continuously evolves beyond the timescale of the actual study itself (Reason & Bradbury, 2001). Relatedly, it is suggested that rigour is added

when the action researcher can demonstrate that learning will be reliable into the future and evolve into embedded, operating solutions (Baskerville, 2014). Other authors stress the need for the action researcher to differentiate between change that occurred because of the actions taken, and change that happened because of the commitment and enthusiasm of those involved (Gomm et al., 2000). Moreover, others give prominence to the value of making the written account of the study accessible (Koch & Kralik, 2006). They argue that one way that the quality of an action research can be appraised is by the degree to which the written process is co-constructed and subject to cycles of feedback, to help ensure that important findings are shared with others.

3.6 Conclusion

This chapter has described the research methodology, action research, and the rationale for selecting action research to address the research question: *“How can classroom practices be changed to support effective language enrichment?”*. The epistemological stance of action research has been explained as being one in which ways of knowing internal to the knower are valued as equally as ways of knowing external to the knower. Furthermore, new knowledge generated through action research is democratically produced in a unique setting between the researcher and the researched, through direct participation in the research process.

The history of action research has been outlined, including its prevalence in the fields of education and speech and language therapy. In addition, the core features of action research have been described in detail, along with possible limitations of its fundamental features. Ways to address these potential limitations, leading to the realisation of the hallmarks of quality in action research, have also been discussed. I am acutely conscious of such characteristics of quality in action research and the requirement for the present study to be appraised using the criteria outlined.

The next chapter provides the context of this action research inquiry, a description of the research setting and profiles of the co-researchers. Methods employed for inquiry, data collection, and data analysis are also discussed, including the methods used to support the interrogation of the data and construction of interpretations and implications.

4 Orientation to the Action Research Inquiry and Methods

Employed

4.1 Profile of Research Setting and Co-Researchers

I am a Speech and Language Therapist, with 17 years' professional experience working in areas of low SES. Due to professional and personal motivations, I have always had a keen interest in exploring how the language abilities of children from areas of social deprivation could be improved. Based on the empirical evidence outlined in Chapter 1 and my own professional experiences, it seemed imperative to me to explore this phenomenon in the primary school classroom environment. This stemmed from my knowledge of the effectiveness of teacher-implemented interventions in robust studies, but the reported lack of translation of these practices to everyday classroom routines. Therefore, I initiated this action research inquiry.

From 2007 to 2016, I worked in an area of north Dublin. This is the location where the action research study took place. The area is characterised by significant social deprivation and high concentrations of poverty. The Haase and Pratschke Deprivation Index is a widely acknowledged indicator of deprivation (Haase & Pratschke, 2012). It comprises analyses of demographic profile, social class composition, and labour market situation. On the Haase and Pratschke Deprivation Index 2011 (Haase & Pratschke, 2012), the region where the study took place had an average absolute deprivation score of -19.2 (the mean is zero, with a standard deviation of 10). At the time of this action research study, the national census data of 2011 indicates that 87% of the population of the area were Irish nationals and 13% were non-Irish nationals (CSO, 2012). The non-Irish nationals were predominantly Polish nationals, UK nationals and Lithuanian nationals. One tenth of the residents included in the 2011 national census data for the area spoke a foreign language (CSO, 2012). Of those that spoke a foreign language, the most common languages spoken were Polish (27%), French (7%), and Lithuanian (6%) (CSO, 2012).

In 2008, a community organisation received a large investment from a philanthropic body and a government department with the aim of measurably improving learning and well-being outcomes for children in the area. This large-scale project involved collaborative working with all primary school teachers in the area to plan, design, implement, review and evaluate evidence-based and evidence-informed programmes to improve children's literacy attainment and social and emotional development. In addition, the community organisation placed a strong focus on early childhood development and school readiness, and worked collaboratively with members of the primary care team, early years educators, community

development workers, and families. Therefore, during this action research inquiry a range of children's services within the geographical area, including primary schools, were in the process of receiving training, coaching or other supports with the objective of changing and improving practice to measurably improve children's outcomes.

The primary school where the inquiry took place is situated in the same area. It is a single-sex school, with an enrolment of under 200 female pupils. It meets the criteria of the Department of Education and Skills' initiative to counter educational disadvantage, Delivering Equality of Opportunity in Schools (DEIS). Under the DEIS scheme, the primary school is classified as participating in Band 1 of DEIS, indicating the greatest level of disadvantage. I first started a working relationship with this primary school in 2007, and had been involved in school-based initiatives to assess and support language development of infant pupils between 2007 - 2009. I also had regular contact with the school during this time about specific pupils who were attending speech and language therapy services in the local health centre where I was working. None of the co-researchers in this inquiry were part of the former school-based initiatives or attended the former meetings about specific pupils, but I met and spoke to the co-researchers informally during visits to the school during this timeframe.

In 2009, my post changed and I was appointed to a new position with the aforementioned community organisation that aimed to measurably improve learning and well-being outcomes for all children in the area. My new role within this community organisation from 2009 – 2014 involved a transition from working directly with pupils with identified speech and language difficulties to a more preventive and universal focus on supporting the language development of all pupils within the educational, family, and community settings of the area. This is the professional role I held throughout the inquiry with the co-researchers. Between 2009 and 2012, before the action research study commenced, I had an ongoing working relationship with the primary school where the inquiry took place as part of my professional role. This included the delivery of training to the staff of the school, supporting individual teachers with planning and implementing language and literacy curricular objectives, co-delivering in-class language and literacy programmes, and attending meetings to review and evaluate changes implemented. The co-researchers of this inquiry attended training I delivered, participated in the planning and implementation of language and literacy development initiatives, and contributed to staff discussions where practices were reviewed and evaluated.

In June 2012, I invited two teachers in the school, with whom I had a working relationship, to participate in this action research inquiry. Both expressed their interest in becoming co-researchers. An additional teacher was identified by the school principal to participate, and

following discussion, this teacher also expressed interest in becoming a co-researcher. At the outset of the inquiry, all three co-researchers had eight years post-qualification experience teaching a variety of class levels in a mainstream primary school. All three co-researchers are female and all their teaching experience was gained in his single sex (girls) primary school. I am also female. Although this inquiry consisted entirely of female co-researchers teaching female pupils, it is reported that gender is only one of many possible variables that may influence teaching practice and pupil learning (Haroun, Ng, Abdelfattah, & AlSalouli, 2016), with some studies reporting conflicting or inconclusive findings of any potential influence of gender (Dee, 2006; Helbig, 2012). For the duration of the inquiry, the teachers taught one class group each, ranging from school entry level (Junior Infants) to the middle (4th class) and senior end of the school (5th class).

4.2 Ethical Approval

Ethical approval for the research inquiry was granted by the Research Ethics Committee, School of Linguistic, Speech and Communication Sciences, Trinity College, Dublin (Appendix B). Before consent was obtained, the teachers were provided with detailed written and verbal information on the study including: the purpose of the study; the duration of the study; the weekly time commitment; the aim to involve parents and pupils; their role as co-researchers in an action research study and the potential benefits; the intended use of video-recordings of classroom lessons and audio recordings of reflection/planning sessions; and information on how data collected would be used (Appendix C). The co-researchers' anonymity is maintained in all audio recordings and written documents as each co-researcher was assigned an anonymous identifier, known only to me (Table 4.1).

Table 4.1: Participating co-researchers: Anonymised identifier and class group

Participants	Anonymised identifier in transcripts	Class taught from Sept. 2012 – June 2013
Author	Co-Researcher 1 (R1)	N/A
Teacher 1	Co-Researcher 2 (R2)	Junior Infants
Teacher 2	Co-Researcher 3 (R3)	5 th class
Teacher 3	Co-Researcher 4 (R4)	4 th class

The principal and the board of management of the school also sanctioned the participation of the three teachers. In addition, the principal received supplementary information on her role as gatekeeper for the purpose of the study (Appendix D). Parents/carers consented to their children's participation in the study following the provision of an information leaflet (Appendix E). One parent denied consent for her child to be videoed. Assent was received verbally from the other pupils before any classroom lessons were videoed.

Consent forms and data collected are stored securely in a locked cabinet. All electronic files containing data, and the computer on which they are saved, are password protected and stored securely in line with the ethical approval granted.

4.3 Data Collection

Action research does not specify that any one particular method of data collection should be employed (Fine et al., 2004). Instead, action researchers indicate that:

knowledge may be advanced through reflection and research, and qualitative and quantitative methods may be employed to collect data...theory may be generated and refined, and its general application explored through cycles of the action research process (Waterman et al. (2001, p. 11)

Data were gathered primarily through weekly group meetings with the co-researchers during the school year 2012-2013. This is characteristic of action research, by which “much of the information exchange, planning and theorising takes the form of discussion” (Dick, 2015, p. 435). It is claimed that group discussion encourages learning through interaction and collective expression (Kamberelis & Dimitriadis, 2011). Also, a recurrent schedule of meetings, rather than once-off conversations, facilitates dialogic relationships between participants (Reissman, 2008). Data collection commenced on the 30th August 2012, with the initial meeting of the three co-researchers and I. We met together weekly during the school term, immediately after school hours. All meetings were held in the school meeting room or school staff room. Akin to an action research inquiry, the group sessions focussed on a combination of action and reflection, woven into an iterative cycle (Dick & Greenwood, 2015). This collective reflection offered multiple opportunities for reappraisal (Dick, 2015) of what to change, how to change it, and the evaluation of changes implemented. Co-researchers shared their experiences, opinions and ideas for change, coupled with their reflections on actions implemented, including barriers and enablers of change. Such discussions enabled the co-researchers to describe their experiences, clarify their meanings to others, and often realise the meaning for the first time during the discussion itself (Pollio, Thompson, & Henley, 1997). Trial and error was also a feature of the iterative cycles, and is recognised as an important process of an action research inquiry. As Schein (1996, p. 34), citing Lewin, stated “you cannot understand a system until you try to change it”.

In total, we met twenty-eight times over the primary school year 2012-2013. Each meeting lasted approximately forty-five minutes. Twenty-two meetings were audio-recorded using a Sony IC Recorder PX312. On completion of the first four action research cycles on 18th June 2013, almost ten months after data collection commenced, a large volume of audio data had accrued (13 hours 59 minutes of audio recorded meetings). Due to the extensive amount of

audio-recorded data collected, I decided not to transcribe the audio recordings of every meeting that was recorded. Instead, I adopted an objective, systematic approach, by which every 4th audio recording was transcribed verbatim. The audio files were downloaded into iTunes on a MacBook Pro, and subsequently played, paused, rewound, and re-played as necessary to achieve a full and comprehensive verbatim transcription. This process resulted in the orthographic transcription of six meetings, a total of 3 hours 50 minutes. The meetings that were transcribed spanned the action research cycles that were completed during the first primary school year (i.e., September 2012 to June 2013). Each transcribed meeting can be found in Appendix F. Table 4.2 also specifies the dates of recording of each meeting that was transcribed.

Table 4.2: Date of recording of each transcribed meeting

Transcript	1	2	3	4	5	6
Date of recording	25 th Sept. 2012	22 nd Oct. 2012	29 th Nov. 2012	22 nd Jan. 2013	19 th Mar. 2013	21 st May 2013

In addition, I entered copious research notes into a journal immediately after each meeting that took place. Following the recommendations of Zuber-Skerritt and Fletcher (2007), I used the journal to record (i) the experiences, discussions, and activities that took place, (ii) my reflections and learning from the former, (iii) actions planned as a result of the reflections and learning. Note-taking, integral to the use of a journal, is considered an essential aspect of working with the ‘inner arc of attention’ - developing the ability to notice, reflect and adjust accordingly (Marshall, 2006).

Furthermore, classroom practices were video-recorded on twelve different days across the school year, totalling 5 hours 53 minutes of video data. Other data collected included edited classroom practice checklists, collaboratively designed templates, assessment results of class tests, and photos of word walls.

The extensive amount of data collected enabled two main analyses to be completed – an analysis of the content of the action research cycles and an analysis of the processed underpinning the content of the action research cycles.

4.4 Data Analysis

In all action research studies there are two action research projects running in tandem, the core action research project and the thesis action research project (Zuber-Skerritt & Fletcher, 2007). In this study, the core action research focused on changing classroom practices to support effective language enrichment. This objective required an explicit emphasis by the

co-researchers and myself on iterative cycles of planning, implementing, evaluating and revising classroom practices. Operating in parallel to the core action research project, the thesis action research project focused on the process involved in supporting changes to classroom practices, concentrating and reflecting on the experiences of the core study. While the analysis of the core action research study was a collaborative inquiry between the co-researchers and myself, the analysis of the thesis action research study was completed by me independently, as a form of meta-analysis on the action research inquiry.

Therefore, two overarching, comprehensive analyses were completed to enable the data to be interrogated, meanings to be surfaced, and interpretations to be gleaned:

1. An analysis of the 'story' or content of the action research cycles (i.e., core action research analysis). This is outlined below and described in detail in Chapter 5.
2. An analysis of the processes underpinning the content of the action research cycles (i.e., thesis action research analysis). This is also outlined below and discussed in detail in Chapter 6.

4.4.1 Analysis of the core action research cycles

The analysis of the content or the 'story' of the action research cycles (i.e., core action research analysis) includes an account of what happened in each action research cycle that transpired and the decisions and events that evolved. It enables the integration of a chronological, factual narrative of the inquiry with the voices of co-researchers through excerpts from transcriptions and perspectives from my critical reflections. Numerous reflection boxes are provided to deliver insight into choices made, the corresponding consequences of those choices, and interpretations of events and outcomes as they unfolded. The reflection boxes help to distinguish between the events that took place and the meanings I attached to those events (Coghlan & Brannick, 2014) and they assist in building theory from practice (Balfour & Clarke, 2001). The findings of this analysis of the story of the action research cycles (i.e., core action research) are presented in Chapter 5.

4.4.2 Analysis of the thesis action research cycles

The analysis of the processes that occurred during action research cycles one to four during the 2012/2013 school year provides the meta-analysis of the action research inquiry, what Zuber-Skerritt and Fletcher (2007) refer to as the thesis action research. I, independent of the co-researchers, completed this analysis. It explores the strategies that were used, how action was decided upon, and how co-researchers were encouraged to participate. The method employed for this thesis action research analysis was thematic analysis. Thematic analysis was applied to the transcribed data over three phases: (i) a thematic analysis of the

processes that occurred; (ii) a thematic analysis of one of the key processes deduced from phase one, participation; and (iii) a thematic analysis of the second key process deduced from phase one, change. The three phases of thematic analysis inherent in the thesis action research cycles are outlined in Figure 4.1.

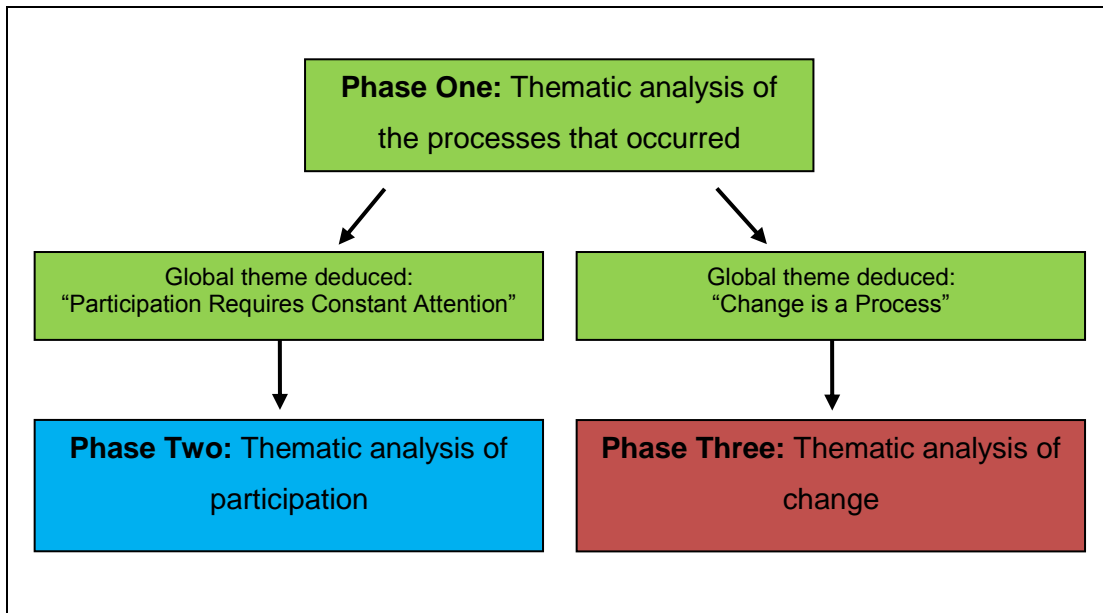


Figure 4.1: Three phases of thematic analysis inherent in the thesis action research study

4.4.2.1 Thematic analysis

Thematic analysis is one of the analytical tools frequently employed within qualitative research methodologies such as grounded theory, conversational analysis, interpretative phenomenological analysis, discourse analysis, or narrative analysis. Braun and Clarke (2006) propose that thematic analysis is not tied to one specific theoretical or epistemological stance, but due to its flexibility can be applied to a diverse range of approaches. Thematic analysis is “a method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). Each theme refers to an individual pattern of meaning, capturing something salient in the data in relation to the research inquiry (Braun & Clarke, 2006; Joffe, 2012; Joffe & Yardley, 2004). The meanings captured in the themes typically relate to the research question being explored and may focus on participants’ conceptualisations of a phenomenon under study and/or the processes involved in conducting the study.

Within the domain of action research, thematic analysis has been referenced as the method of data analysis in many recently published studies (Duenkel & Pratt, 2013; Hanson & Hanson, 2010; Jacobs, 2010; Paltved, Mette Morcke, & Musaeus, 2016). However, thematic

analysis is typically employed as a way of capturing and analysing the content of change that occurred in the action research studies, but not the processes of how the change took place. In my opinion, thematic analysis presents an opportunity for action researchers to augment their analysis of *what* happened (i.e., content/story of the action research study) with an analysis of *how* it happened (i.e., processes inherent in the completion of the action research cycles). This, in turn, can help to practically and explicitly demonstrate quality attributes for the reader. Furthermore, as thematic analysis is applied to the raw data of the transcriptions of the discussions that took place, a layer of objectivity and transparency is added, and interpretations are available for audit, inspection and scrutiny.

Braun and Clarke (2006) distinguish between an inductive ('bottom-up') approach and a deductive ('top-down') approach to identify and analyse themes within the data. An inductive approach does not rely on the questions used to collect the data or the researcher's pre-existing perspectives and theoretical understandings. Themes are identified directly from the data. In contrast, a deductive or 'theoretical' approach is directed by a particular interest or theoretical allegiance. Within this approach, themes are identified through the lens of a specific focus. An additional distinction that Braun and Clarke (2006) illustrate is whether themes are identified at the semantic level or the latent level. A thematic analysis at the semantic level entails the researcher engaging with the explicit content of the data, such as what was said by research participants. Conversely, when themes are identified at the latent level, specific attention is paid to "the underlying ideas, assumptions, and conceptualisations – and ideologies – that are theorised as shaping or informing the semantic content of the data" (p. 84).

In the same way that an action research approach to an inquiry must be transparent in the theoretical, methodological and analytical choices that are made to ensure quality (Reason, 2006), the choices made in relation to thematic analysis must also be explicit. Braun and Clarke (2006) describe four key choices that are important for researchers to consider and report when applying thematic analysis, and are relevant to a thematic analysis of the processes that occurred in this action research inquiry:

- i. what you consider constitutes a theme, that is, what you deem important in relation to the inquiry
- ii. whether to apply thematic analysis to the entire data set or a specific aspect of the data set
- iii. whether to identify themes through an inductive (bottom-up, data-driven) or deductive (top-down, theoretical) process
- iv. whether to identify themes at the semantic (explicit) level or latent (interpretative) level.

Rigour is added when the decisions in relation to the above four choices are transparent and are available for evaluation. Therefore, the decisions I made in relation to the thematic analyses that were completed over the three phases are made explicit in Chapter 6.

Furthermore, Chapter 6 describes the steps completed to deduce the findings of each phase of thematic analysis. The stages of how the raw data was coded, how the themes were refined, and how the results were synthesised are made explicit for the reader. Aligned with Braun and Clarke's (2006) six phases of analysis, details are provided in section 6.2, section 6.3 and section 6.4 on how I: (i) familiarised myself with the data; (ii) generated initial codes; (iii) searched for themes; (iv) reviewed the themes; (v) defined and named the themes; and (vi) produced the report (i.e., made an argument in relation to story that the data told). As asserted by Braun and Clarke (2006, p.86), "analysis is not a linear process of simply moving from one phase to the next" but "instead, it is more a recursive process". Consequently, the connections and inter-relationships between each phase of thematic analysis are made apparent to the reader in Chapter 6. For instance, in Phase One: Thematic Analysis of the Processes That Occurred, there is an account of how Thematic Networks, proposed by Attride-Stirling (2001), were applied to the themes identified in this phase to help organise, structure and present the themes (section 6.2.3). As a result of the Thematic Networks constructed, two Global Themes were deduced. The two Global Themes provided the foundation of the subsequent phases of thematic analysis (i.e., Phase Two: Thematic Analysis of Participation and Phase Three: Thematic Analysis of Change).

Further exploration of the literature on the subject of each Global Theme, that is, participation and change, led to the identification of distinct frameworks to help interrogate the data from these two perspectives using thematic analysis. In Phase Two: Thematic Analysis of Participation, three forms of coding described by Avgitidou (2009) were applied to the data: the frequency of each individual's engagement with problem-posing and problem-solving; the roles of the individuals with regard to the content of problem-posing and problem-solving; and the patterns of interaction between co-researchers (section 6.3). Contingent relationships within problem-solving themes were identified through parent themes and subordinate themes. In Phase Three: Thematic Analysis of Change, three conceptualisations of change were selected to support analysis of the data from a change viewpoint: dimensions of change; ways of knowing; and order of change (section 6.4).

4.5 Making Sense of the Core Action Research and Thesis Action Research Analyses

The possible meaning and implications that I extrapolated from the core action research analysis and thesis action research analysis are presented through five propositions. One proposition was identified primarily from the core action research analysis and four propositions were determined primarily from the thesis action research analysis. However, as will be discussed through the propositions that I put forward, the core action research and the thesis action research overlapped and are essentially entwined. They informed and were informed by each other. In addition, they enabled the completion of content reflection, process reflection, and premise reflection to support assumptions and interpretations to be challenged and critically appraised (Coghlan & Brannick, 2014). The five propositions I present articulate the application of this inquiry and its analyses to a wider context – on a practical level, a theoretical level, and a research level. The propositions, their limitations, and their potential implications are discussed in Chapter 7. Broader implications of this inquiry for practice, policy, theory and research are described in Chapter 8. Furthermore, a summary of the findings of this inquiry through first-, second-, and third-person voices is presented in Chapter 9.

4.6 Conclusion

This chapter has described the research setting and profiles of co-researchers. The procedures integral to ethical approval have been shared, along with the methods used for data collection. Also, the methods employed for the core action research analysis and the thesis action research analysis have been outlined.

The next chapter (Chapter 5) describes the findings of the core action research analysis - the analysis of the 'story' or content of the action research cycles. Chapter 6 presents the findings of the thesis action research analysis – the analysis of the processes underpinning the content of the action research cycles. The propositions ascertained from the two overarching analyses, and the findings on which they are substantiated, are presented in Chapters 5 and 6. Chapter 7 discusses the five key propositions individually, including their limitations and implications.

5 Findings of the Core Action Research Analysis

5.1 Introduction

The core action research in this inquiry focused on changing classroom practices to support effective language enrichment. This objective aligned with the research question and required an explicit focus on iterative cycles of planning, implementing, evaluating and revising classroom practices.

Five action research cycles emerged during the time-span of the study, from August 2012 to June 2016. Cycle One lasted from 30th August 2012 to 4th October 2012 and focused on evaluating current classroom practices. Cycle Two was longer (11th October 2012 to 28th May 2013), and concentrated on changing classroom practices. Cycle Three extended from 27th November to 9th April 2013 and explored building parental involvement. Cycle Four continued from 23rd April 2013 to 18th June 2013 and focused on sharing the learning with the school principal and other staff members. Cycle Five extended beyond the school year 2012/2013 and encompassed embedding and sustaining changes within the school where the study was located, and extending the learning from the changes to other schools in the area, and to a national context (September 2013 to June 2016). As highlighted by Figure 5.1 overleaf, which displays the spirals of cycles and their timeframes, the cycles frequently overlapped, facilitating their ability to inform and be informed by each other.

The 'story' or content of each of the five cycles are described in detail below. A chronological, factual, narrative of the inquiry is integrated with the voices of the co-researchers, through excerpts from transcriptions, and critical reflections and insights into the meanings I attached to the events that unfolded, through numerous reflection boxes.

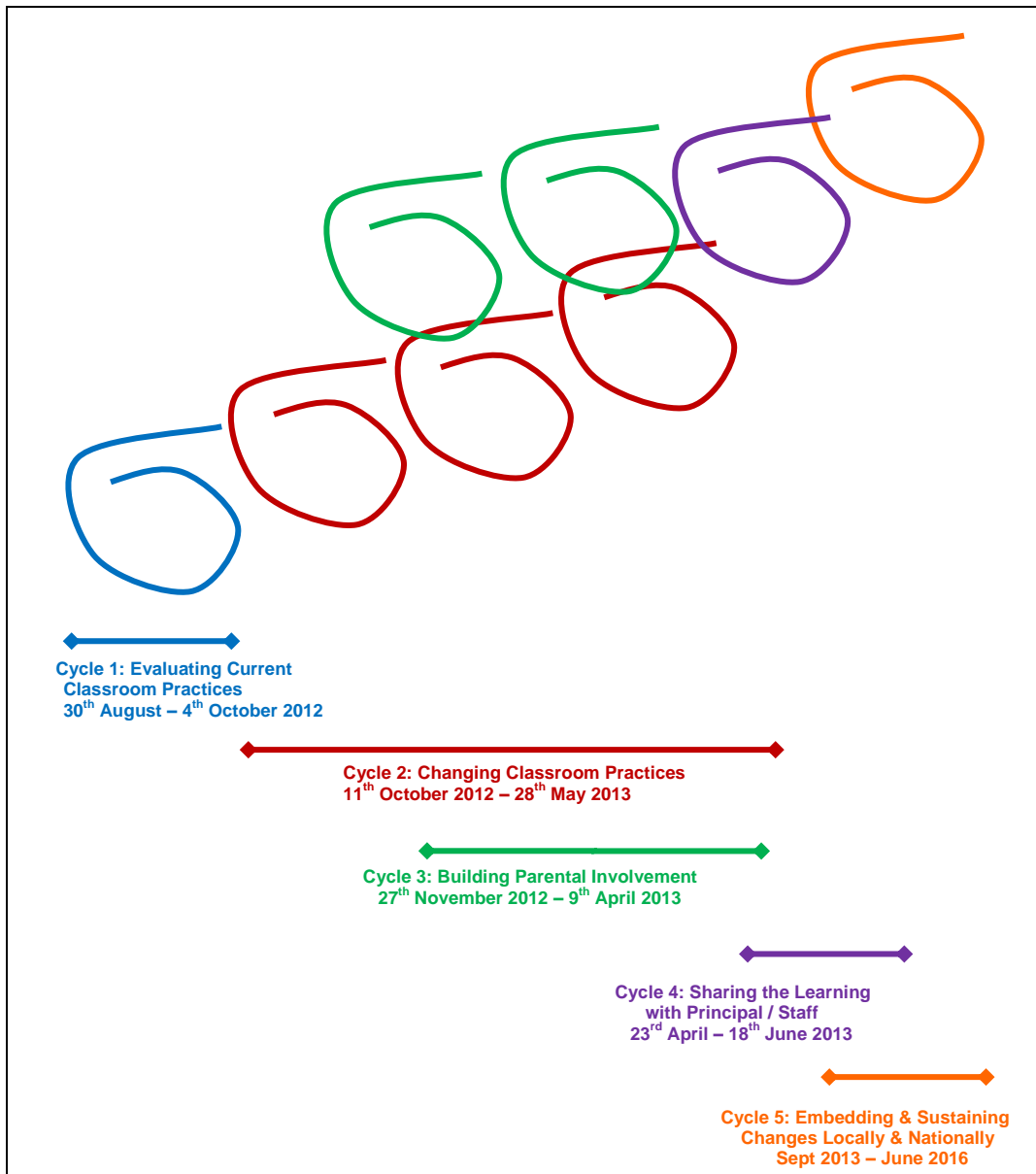


Figure 5.1: Timeframes of the five core action research cycles

5.2 Cycle One: Evaluating Current Classroom Practices (August 2012 – October 2012)

At the beginning of Cycle One I introduced the concept of evaluating current classroom practices to the three co-researchers to help us establish a baseline of what was already happening in the classroom that was supportive of enriching pupils' language skills. I expressed my opinion that this baseline would form the foundation from which existing classroom practices may continue, be modified, and/or added to. An existing checklist of classroom practices, the Self Evaluation of Teacher Talk (SETT) framework published by Walsh (2006) was shared with the co-researchers (Figure 5.2). The SETT framework (Walsh, 2006) contained some terms that were unfamiliar to the teachers (e.g., 'referential questions', 'extended teacher turn' and 'form-focused feedback'). These terms were clarified as needed.

Sept 8. R3: *I still do get confused with the old referential and display questions....*

Sept 40. R3: *And is that extended teacher turn?*

Sept 41. R1: *There is a bit of extended teacher turn there all right. I know she is explaining it but 'teacher turn of more than one clause'; yeah she is talking, explaining*

KEY	
Feature of teacher talk	Description
A Scaffolding	1 Reformulation (rephrasing a learner's contribution) 2 Extension (extending a learner's contribution) 3 Modelling (providing an example for learner(s))
B Direct repair	Correcting an error quickly and directly.
C Content feedback	Giving feedback to the message rather than the words used.
D Extended wait-time	Allowing sufficient time (several seconds) for students to respond or formulate a response.
E Referential questions	Genuine questions to which the teacher does not know the answer.
F Seeking clarification	1 Teacher asks a student to clarify something the student has said. 2 Student asks teacher to clarify something the teacher has said.
G Extended learner turn	Learner turn of more than one utterance.
H Teacher echo	1 Teacher repeats teacher's previous utterance. 2 Teacher repeats a learner's contribution.
I Teacher interruptions	Interrupting a learner's contribution.
J Extended teacher turn	Teacher turn of more than one utterance.
K Turn completion	Completing a learner's contribution for the learner.
L Display questions	Asking questions to which teacher knows the answer.
M Form-focused feedback	Giving feedback on the words used, not the message.

Figure 5.2: SETT framework (Walsh, 2006, p. 65)

We trialled the checklist's suitability for analysing classroom practices using two video clips of anonymous teachers conducting a classroom lesson. The clips were taken from YouTube and included a teacher's classroom lesson in a US primary school setting and a teacher's classroom lesson in a UK primary school setting. Both video clips were played, re-played and paused, and we tallied the teacher's behaviour in relation to the items on the SETT framework checklist. This was an overt, collaborative process whereby we consulted with each other before committing to ticking a particular item that we agreed was apparent in the teacher's behaviour. This often turned into a teaching exercise, because in deciding on what item to tally on the framework, I often used the video example to help differentiate between similar terms.

Sept. 77. R2: *That's a display question, isn't it?*

Sept 78. R1: *Yeah, 'what would you do?' So she says 'what would you do?'*

Sept 79. R2: *I'd run away!*

- Sept 80. R3: *That's a referential question then because she does not know his answer*
- Sept 81. R2: *Oh sorry, you're right*
- Sept 82. R1: *Referential*
- Sept 83. R2: *And then she repeats what he says so that is teacher echo*
- Sept 84. R1: *That's teacher echo yeah, and it is repeating, not herself, repeating him*
- Sept 85. R3: *So that's two*
- Sept 86. R1: *So she hasn't extended on anything he has said. 'Oh you'd knock on the door', she hasn't said 'oh you'd knock heavily on the door' or 'I'd tip toe', she hasn't said, "Oh you'd tip toe really quietly". She is just echoing back what they are saying.*

Following discussions, the SETT framework (Walsh, 2006) was adapted to incorporate additional classroom practices that we felt were missing: tone of voice; deep/rich instruction; modelling; gestures; use of resources; involvement of pupils; praise; and different organisational settings. Some of these additions transpired as a result of watching the YouTube clips and identifying a classroom practice and having nowhere to place it. Other additions deemed necessary became apparent when the teachers reflected on their own practice and what they felt 'worked' when teaching a classroom lesson. Hence, the SETT framework (Walsh, 2006) was adapted to incorporate these supplementary classroom practices and together we came up with a brief one-line description of each new item. Also, we grouped the new, extended list of classroom practices under the headings of 'teacher says', 'teacher does', 'teacher uses', 'class setting' and 'pupil does'.

Next, we cross-referenced the adapted checklist with an Irish commissioned research report by the National Council for Curriculum and Assessment (NCCA) that had been published three months previously and outlined the national perspective on the most effective practices for supporting language development of children: *Oral Language in Early Childhood and Primary Education (3-8 years)* (Shiel, Cregan, McGough, & Archer, 2012). This report was the most recent Irish educational publication that linked with the Primary School Curriculum (NCCA, 1999) and outlined the national perspective on the most effective practices for language development of children. The teachers expressed some objections to the technical language and formal tone of the report, complaining that a lot of the text contained too much jargon and was insufficiently accessible for the average reader. Despite the criticisms of the written style of the report, we were pleased that the majority of the effective practices for language development described by the NCCA's report were represented in the checklist, albeit sometimes labelled with different terms (e.g. expansion/extension and recast/reformulation). As a result of reading the NCCA's report, two further revisions were made to the checklist. First, the item 'motivating topic' was added. Second, the option of indicating 'differentiated' was added to four existing items: 'scaffolding'; 'referential

questions'; 'display questions'; and 'deep/rich instruction'. The final checklist for classroom practices contained 23 items in total and is presented in Table 5.1 overleaf.

The suitability of the classroom practices checklist was assessed one final time by applying it to one of the previously watched YouTube video clips. It was deemed to be sufficiently specific and sensitive to capture what was happening.

Sept 222. R1: So, this checklist, in terms of something that we are going to be looking at, are ye happy with it at the moment or is there something we need to change around or...?

Sept 223. R2: I think it's all right. I think it's got everything.

Sept 224. R4: Yeah

Sept 225. R1: Yeah. There was nothing there that she did, that we couldn't put into a box?

Sept 226. R2: No

Sept 227. R3: I think that we came up with some really important ones. I really do.

Sept 228. R4: Mmmm. I think so as well

At this final trial, all co-researchers demonstrated increased fluency in using the terms contained in the checklist and were quicker and more competent at identifying classroom practices observed.

We subsequently turned our attention to applying the checklist to our own practices. The teachers were invited to reflect on their individual teaching behaviours in relation to the checklist. The reflections on their own practices revealed a predominance of teacher echo, praise, direct repair, seeking clarification, reformulation and prompting. Next, it was agreed that the checklist would be completed based on a short video clip (3 minutes) of each co-researcher in her own classroom, teaching a typical lesson. This departure to watching and tallying their personal classroom practices, instead of those of strangers, was a significant shift. All teachers were reluctant to watch and hear themselves played back on the video clip initially. Co-researcher 2 (R2) and Co-researcher 3 (R3) were prepared to listen only to the video clip without seeing themselves. Co-researcher 4 (R4) expressed extreme discomfort at the idea of having to watch the video clip of herself and did not want to feature in any further recordings.

R3: I'll put up with it as long as I don't have to look at myself

R2: I don't mind listening, but I don't want to see my lovely self

R4: I really don't ...I didn't enjoy that now, and I'm sorry, that's not something I would like to do again....

R4's preference to abstain from future recordings was supported by the group. It was agreed that she would assist in planning changes and evaluating changes to classroom practices for the videoed lessons, but that I would be the person who would feature in the video clips in the classroom implementing the planned changes. She planned to implement the changes in her classroom, without being videoed.

Table 5.1: Classroom Practices Checklist (adapted from Walsh, 2006)

	Feature of Teacher Talk	Tally	Examples
Teacher says	(a) Scaffolding <input type="checkbox"/> <i>Differentiated</i>		
	(b) Direct Repair		
	(c) Content Feedback		
	(d) Form-Focused Feedback		
	(e) Extended wait time		
	(f) Extended learner turn		
	(g) Extended teacher turn		
	(h) Referential questions <input type="checkbox"/> <i>Differentiated</i>		
	(i) Display questions <input type="checkbox"/> <i>Differentiated</i>		
	(j) Seeking clarification		
	(k) Confirmation checks		
	(l) Teacher echo		
	(m) Teacher interruptions		
	(n) Turn completion		
(o) Praise			
(p) Prompt			
(q) Tone of voice			
(r) Deep/rich instruction <input type="checkbox"/> <i>Differentiated</i>			
Teacher does	(s) Gestures/actions		
Teacher uses	(t) Resources		
	(u) Motivating topic		
Class setting	(v) Organisational setting		
Pupil does	(w) Involvement of pupils		

- (a) Scaffolding**
 1. Reformulation (rephrasing a learner's contribution)
 2. Extension (extending a learner's contribution)
 3. Modelling (correcting a learner's contribution)
- (b) Direct Repair**
Correcting an error quickly and directly
- (c) Content Feedback**
Giving feedback to the message rather than the words used
- (d) Form-Focused Feedback**
Giving feedback on the words used, not the message
- (e) Extended wait time**
Allowing sufficient time (several seconds) for students to respond or formulate a response
- (f) Extended learner turn**
Learner turn of more than one clause
- (g) Extended teacher turn**
Teacher turn of more than one clause
- (h) Referential questions**
Genuine questions to which the teacher does not know the answer
- (i) Display questions**
Asking questions to which the teacher knows the answer
- (j) Seeking clarification**
 1. Teacher asks a student to clarify something the student has said
 2. Student asked the teacher to clarify something the teacher has said
- (k) Confirmation checks**
Making sure that teacher has correctly understood learner's contribution
- (l) Teacher echo**
 1. Teacher repeats a previous utterance
 2. Teacher repeats a learner's contribution
- (m) Teacher interruptions**
Interrupting a learner's contribution
- (n) Turn completion**
Completing a learner's contribution for the learner
- (o) Praise**
Giving feedback in an evaluative way (e.g. good girl, well done)
- (p) Prompt**
Providing the first letter of a word or hinting at a desired answer
- (q) Tone of voice**
Intriguing and engaging tone of voice
- (r) Deep/rich instruction**
Making connections, activating prior knowledge, giving examples
- (s) Gestures/actions**
Use of body language
- (t) Resources**
Use of pictures, videos or other materials
- (u) Motivating topic**
Following the pupil's(s) interest and attention
- (v) Organisational setting**
 1. Individual
 2. Pairs
 3. Small groups
 4. Whole class
- (w) Involvement of pupils**
Active involvement of students in an activity

The video clips of R2 and R3 were played, paused and re-played and their classroom practices were tallied using the checklist. Based on her observations during the re-playing of the video clips, R2 reflected that she echoed and praised pupils' contributions frequently, dominated the amount of classroom talk, and extended pupils' contributions infrequently. Moreover, she reflected that the questions she posed were mostly display questions. Similarly, R3 reflected that her communication with the pupils was outweighed with questions, the majority of which were display questions that she knew the answer to. She also tallied a lot of examples of teacher echo, extended teacher turn and praise. As a result of these observations, R2 planned to implement a change to her classroom practices by introducing more referential questions and extending pupils' answers more often. R3 planned to employ fewer display questions and use more scaffolding and rich instruction with her pupils. R4 concurred with my suggestion to concentrate on scaffolding, specifically extending. I was conscious of the evidence-base supporting the positive effects of scaffolding for language enrichment (Wasik & Jacobi-Vessels, 2017) and it was a positive strategy that was least evident in the teachers' video clips.

Reflection on Cycle One

Creating and finalising the classroom practices checklist felt like a major achievement. Not only had we agreed on a final product that we were happy with, but also we had reached that point in a collaborative manner and demonstrated that the four of us could work well together.

The teachers' unfamiliarity with the technical terms and jargon surrounding language enrichment suggested to me that they had not been exposed to the theory of language development before. The study was exposing them to new knowledge and learning in relation to language enrichment. I was struck by the teachers' disdain for the formal and theoretical writing style of the NCCA report. Their negative reactions implied to me that they may not learn best from dense and technical summaries of research findings nor depend on their outcomes. In contrast, the teachers displayed confidence in adding some items to the classroom practices checklist that were based on their own experiences as teachers, without always having solid evidence to support them (e.g. giving feedback in an evaluative way e.g. "good girl", "well done" and using an intriguing and engaging tone of voice). This differs to my experience as an SLT where evidence-based practice is a dominant discourse amongst colleagues when deciding on how best to support pupils' language skills. I was aware that I would have to be more cognisant of the balance between evidenced-base practice and practice-based evidence in future discussions related to language enrichment.

The transition from analysing and evaluating video clips of strangers' classroom practices to

self-analysis and self-evaluation, based on video clips from their own classes, was a major step for the co-researchers. I concluded that the difficulty was not with reflecting on practice, but with simply seeing themselves on the TV in front of their peers and exposing 'the good with the bad' of their teaching practices to their colleagues. Perhaps I did not allow enough preparation for the significance of this step. This could have been due to the fact that being videoed, observed and analysed was part of my undergraduate training and continues to be a regular part of my working life. This is not the case for teachers in initial teacher education. Also, I am aware that I often seem to care less than other colleagues about personal appearance/sound of my voice on video, so perhaps was not as empathetic as I could have been about being exposed in that way.

Traditionally, teachers are considered the 'sage on the stage' operating behind closed doors (Morrison, 2014). When visitors do arrive, the classroom lesson typically pauses and then resumes once the visitors have left the classroom again. Therefore, the teacher's classroom practices 'in action' are rarely seen by others and maybe the teachers were under-prepared and feeling vulnerable with the prospects of this new experience.

On listening again to the conversation between R4 and I, I was satisfied that I had respected her wishes not to watch her video clip or feature in future recordings. My initial feelings of frustration, that R4 did not want to watch her video clip or feature in future recordings, mellowed to acceptance – every one is different and changing classroom practices cannot depend solely on being videoed! Nevertheless, the exchange did heighten my awareness that the weekly reflective meetings would require careful attention to ensure ongoing participation from all and to achieve the intended outcomes of the study.

R4's decision not to participate in any further recordings cast me in a new role as 'teacher' in the classroom for the recording of the video clips. I also assumed a role as 'teacher' with the co-researchers by selecting to focus on the evidence-based language facilitating strategy of scaffolding. In my opinion this strategy was not sufficiently prevalent in the teachers' video clips or reflections. It was not a pre-meditated decision for me to take up a 'teacher' role of modelling, but I felt I was responding to their previous preference to learn from practice, not research reports. Therefore, I thought that 'seeing' this evidence-based strategy in operation, with their pupils in their classroom, could be more powerful than reading about it in a formal report. I began to wonder if R4's self-removal could have been the silver lining of a black cloud!

5.3 Cycle Two: Changing Classroom Practices (Oct. 2012 - May 2013)

Cycle Two was the longest of the four cycles, spanned three school terms and consisted of twenty-one meetings, of approximately 45 minutes per meeting. It overlapped with Cycle Three: Building Parental Involvement and Cycle Four: Sharing the Learning with the School Principal and Other Staff Members (see Figure 5.1). Cycle Two was initially informed by the previous cycle (Cycle One) that evaluated classroom practices, and continued from that point with many iterative revolutions of constructing, planning action, taking action and evaluating action.

5.3.1.1 October – December 2012

First, we focused our attention on implementing the targeted changes that were identified from appraising current practices through completing the checklist, as described in Cycle One. Evaluating this implementation was assisted by observation of video clips of the co-researchers' personal classroom practices. A total of seventeen video clips of individual classroom practices (approx. 5-10 minutes per video clip) were watched and analysed between 11th October 2012 and 11th December 2012. Viewing the video clips allowed the exact changes in practices to be identified, and was often followed by praise and reassurance from the co-researchers and myself. For example, in the transcripts below I highlighted the specific incidents on the video clips when R3 achieved her objective of extending pupils' contributions and when R2 achieved her objective of rich instruction while teaching the word 'address'.

Oct 48. R1: Ok, so I was just writing them down there. So the child said 'singing' and you said 'yeah they're singing, they're performing'. They said one of them, 'Harry is his name' and you said 'yeah, he's the lead singer'. They said 'microphone' and you said 'speakers'. They said some other lad and you said 'he's a member of the band'. They said 'guitar' and you said it was an 'instrument'. They said, my personal favourite, 'the lights are shining', 'yes, they're illuminating the stage'. They said 'steps', you said 'stairs'. They said 'stage', you said 'raised platform'. She said 'happy', you said 'cheerful', 'delighted', 'enjoying themselves'. So there's loads-

Oct 49. R2: Fair play (name of R3)

Oct 50. R1: Loads of examples of adding on, and that was just 3 minutes, I think it's 3 minutes 20 seconds, you know.....

Nov 450. R1: We had (name of address), we had (name of different address), we had (name of area). Like I think there was examples, and then non-examples, I thought it was quite obvious that it's not our name, you know, it's not the envelope, it's not the stamp, it's this bit here that's written. Do you know, if I was doing that with a 5th class you'd be saying 'it's not the stamp, it's not the envelope, it's not her name'

Nov 451. R2: Yeah

Nov 452. R1: I thought that was it, because you're doing that all orally, and then, their own definition, what did you say?

Nov 453. R2: It's the name of your house

.....

Nov 459. R1: *Because I'm thinking of rich instruction, that's the, I'm thinking of the square and other bits. Did you give examples? Yeah. Did you give what it's not? Yes. Did you tell them what it is in their own words?*

I was the co-researcher who most frequently identified the use of intended language enrichment strategies, but this process was often collaborative with input from the other co-researchers. The transcript below demonstrates R3 and R4 taking part in the analysis of R2's video clip of teaching the vocabulary item 'costume'.

Oct 129. R1: *Like, what I've written down is, all the different ways, if your focus is rich instruction, I've written down things you said: 'different clothes', 'not your normal clothes', 'dress up', 'handbags, scarves, hats and dresses', 'witch costume', 'ghost costume'-*

Oct 130. R3: *Like you're totally connecting it to everything they would know you see*

Oct 131. R4: *mmmm [affirmative]*

The video clips of me aiming to enhance the language abilities of R4's class were also shown alongside the other video clips. The teachers joked about the 'turning of tables', having the opportunity to analyse my practice, and they teased me on how I sounded on the video. Discussion that followed the viewing of my video clips predominantly turned into teaching how to implement the language enrichment strategies and the rationale behind them.

Oct 194. R1: *So you can see I put up all the words they gave me, 'scared, afraid, terrified, frightened, what's this..? Freaked out, horrified, spooked'...*

Oct 199. R1: *And that is right, there is no right answer. The reason why we do this is that it gets the kids thinking about all these words. ... if they can talk about them and give examples and say what you do in those, and when you would be or what that's associated with. Like you might associate afraid with a spider but terrified with ghost, or whatever. It helps them to get a really good understanding of the words ...*

By showing examples from my practice where there were many incidents of scaffolding and extension of language, I was able to highlight the distinction between extending language and simply extending pupils' ideas, which was the dominant practice in the teachers' early video clips. My conviction was challenged after showing the first video clip I recorded, when the co-researchers requested that I test the pupils' knowledge of the new words the following week. Their hypothesis was the pupils would forget the new words introduced, which they reported was their common experience. To their surprise, four of the five words I introduced through extension of language were remembered by the pupils, thus challenging their perception of the long-term value of extending pupils' linguistic contributions.

The evidence behind the language enrichment strategies did not appeal enormously to the co-researchers. In November, I summarised a recently published review of evidence and good practice in relation to vocabulary instruction (Steele & Mills, 2011) into three A4 pages.

Similar to the NCCA report that I had shared earlier in the term, the co-researchers had minimal interest in the research findings and when offered a full copy of the article, nobody took one. However, following the reading of the summary of the article, a short discussion followed about the importance of being explicit, putting words in context, and using student-friendly definitions instead of dictionary definitions to explain the meanings of new vocabulary. The video clips of the teachers' own practice had a much stronger influence. Not only did they help the co-researchers to identify the intended classroom practices, but they also facilitated further reflection on practice.

Nov 429. R2: But I'm just trying to think, you would NEVER do definitions. You'd put it into a sentence, or you'd give them another words for it, but you'd never give them a definition

Following the viewing of several video clips, R2 changed her approach to the lessons. Instead of her previous strategy of picking vocabulary to teach based on incidental occurrences, she based her vocabulary instruction on words from a storybook. This change enhanced her ability to plan for language enrichment and to be clearer on the exact linguistic objective of the lesson. There was a definite shift from facilitating the pupils to simply talk to having explicit language development targets.

R2: Like just looking at a picture and talking about it is all well and good but...what would my word be?

Reflections also centred on changes to their classroom practices. In the beginning, R3 found the concentration required to extend pupils' contributions so arduous that she reported she was omitting other positive classroom practices. For example, she believed that using unfamiliar language enrichment strategies was happening to the detriment of other familiar and important practices, such as praising pupils or prompting them. This dilemma was resolved as the new practices became more habitual and were used in parallel with old practices. This was seen in a positive light.

Nov 862. R3: I like this...this is ok

Nov 863. R1: Yeah, and what do you like about it?

Nov 864. R3: I don't know, I just, it sounds like I'm really listening to what they're saying

Nov 865. R1: I think so as well

Nov 866. R3: It does. It sounds like I'm really listening to what they're saying and I'm actually giving them REAL feedback on what they're saying then, you know?

There were many episodes where the co-researchers made comparisons between their new classroom practices and how they would have approached the same lesson in the past. These comparisons drew attention to the previous limited use of language enrichment strategies, as displayed in the quote from R3 below.

Oct 80. R3: You see if I had done that lesson, like not with the video camera in my face, I would been 'great verb' and I would have written down, 'great

adjective' and I would have written it down. I don't think I would have looked for anything else

Reflections also demonstrated co-researchers' awareness that the changes to their classroom practices were starting to become more automatic and habitual the more they employed them.

Oct 149. R2: Well I find myself doing it more now...

Nov 848. R1: Yeah, what do you think is making it more automatic?

Nov 849. R3: Practice. It's just practice isn't it?.....

Nov 859. R1: Yeah...because remember you were saying 'oh God, I'm not even thinking about what they're saying'. It looked like you were thinking about; you were able to listen to what they were saying

Nov 860. R3: Yeah, because I wasn't initially. I just like 'oh brilliant, what will I ask them the next question?', so it's kind of gone listening more, and kind of extending their ideas, so it is, I definitely think it's becoming more automatic

Spurred on from the positive evaluations of their practice, the need for further embedding of the new classroom practice was recognised. Some co-researchers felt that they were applying the language enrichment strategies inconsistently and could utilise them more regularly in their teaching.

Oct 149. R2: ... so if they don't know a thing, you definitely use it, but I probably could use it more, like if they say something and then I extend it out, whereas I kind of only extend if they don't understand what the thing is

Nov 432. R1: Yeah, so it might be something we'll do again, because if that's what the research is saying HELPS them, their OWN definition, not us saying 'look up the dictionary', their own words, that's what they're saying works. Em, same with, like younger kids, like, their own definition of cutlery is 'knife and spoon and fork'

Other gaps and areas to focus on were also identified. In four different meetings, the reflections of the co-researchers drew attention to the importance of repeating and reviewing new vocabulary for pupils and the difficulties in achieving that for every new vocabulary item that was introduced. Difficulties stemmed from their perceived memory weakness of some of the pupils, time constraints, and lack of knowledge of strategies to incorporate repetition and review into classroom practices.

Oct 246. R3: If I went back into my class after that lesson, I don't think I would get 'illuminating' back, I don't think I'd get...

Oct 247. R2: Platform

Oct 248. R3: Raised platform, you know, I'd just..

Oct 249. R1: And we know that we need repetition

Oct 250. R3: Yeah, we do, and it has to be, like those words, d'you know when you came in, and we had just done recurrent and vacant and stuff?

Oct 251. R1: Yeah, they were great words

Oct 252. R3: They knew them by Friday but I'd say if I asked them today they wouldn't know, I'd have to go back over them again

.....

Oct 257. R1: ...well I suppose what we all have said is that review and repetition is needed, so what's the best way to do that? And maybe something like extension or asking questions would help with review or maybe we need to do something else? Like how do you keep 'recurrent' keep recurring?!

Oct 258. R3: I've no clue

One strategy to help with the goal of repetition and review was the idea of introducing a 'word wall', a place where new vocabulary taught would be collated and displayed. It was suggested that this would increase the pupils' awareness of the vocabulary targets and would remind the teachers of the new words introduced so that they could be presented and repeated in other contexts during other subject lessons.

Dec. R2: Like even the word wall up there is handy for YOU....just for you to use it in your own everyday language like

Dec. R1: It's a trigger, isn't it?

Dec. R2: Yeah, when you see it you say, 'oh yeah, I'm going to put that in there now'

In addition, we discussed the possibility of using the word wall as a means of designing weekly assessments of the pupils' vocabulary enrichment. By December 2012 each co-researcher had a word wall on their classroom wall where they displayed pictures (Junior Infants class) or written forms of new vocabulary (4th and 5th class), as displayed in Figure 5.3.



Figure 5.3: Examples of Word Walls from co-researchers' classrooms

At our last meeting of the first school term, 11th December 2012, I presented a summary of the content of our study to date, including the action research methodology, the adapted classroom practices checklist, the use of the adapted SETT checklist with YouTube clips, reviewing video clips of their own practice, and a list of emerging themes that I took directly from my notes in my research journal. The emerging themes included key discussion points that we had engaged in from September to December and consisted of predominant topics of discussion: the benefit of pre-selecting vocabulary targets over relying on incidental

conversations; planning referential questions to ask pupils; impact of extending pupils' language; the value of repetition and review; pupil assessment; use of resources; and the significance of having explicit language targets that pupils are made aware of. Co-researchers were asked to identify the most important themes from their individual perspectives. Two themes were selected by the co-researchers: the value of repetition and review; and the use of resources. Other themes they identified as most significant were pupil assessment, the positive impact of reviewing and reflecting on practice, parental involvement, and the need to continue the focus on automaticity of new classroom practices. One negative remark that emerged was the co-researchers' belief that they were completing a much greater number of compulsory additional working hours (Croke Park hours), as per the Public Service Agreement 2010-2014 (Department of Public Expenditure and Reform, 2010), than their colleagues in the school, as a result of being involved in this action research inquiry. All teachers in the school were required to complete one additional working hour per week, outside of direct contact with the pupils. The co-researchers' hour was achieved by our weekly meetings, but other teachers in the school were not always being required by their principal to stay back and complete the hour.

Reflection on Cycle Two, Part 1: October-December

This initial phase of changing classroom practices (Oct – Dec 2012) demonstrated to the teachers that they could make small changes to how they teach, leading to positive outcomes for the pupils. The video clips, although uncomfortable for the co-researchers to watch in the beginning, were a powerful aid to reflecting on practice. Seeing and hearing what they were doing assisted them in identifying positive changes, and encouraged them to plan for further changes. I was encouraged at the last meeting of the term by how positive they were about reflecting on their practice, their comments that using the new classroom practices was starting to become second-nature, and their expressed desire to increase this automaticity.

My tendency to 'teach the teachers' using the video clips was very apparent when I reviewed the recordings of the reflection meetings. I think this stemmed from the co-researchers' apparent lack of knowledge of the language enrichment strategies and my awareness of their importance and their evidence-base. I was also responding to the co-researchers' explicit disregard of research reports and evidence findings and the weight they placed on practice-based evidence. It became clear to me that the co-researchers were challenging the evidence-based practice when they wanted to test what the pupils' gained from language extension. The positive pupil results helped to challenge their doubts about its significance.

The discussion at the end of this phase helped to construct a new plan of action for

changing classroom practices, as our reflections indicated an aspiration to concentrate on the task of reviewing and repeating, pupil assessment, parental involvement, using resources to support language enrichment, and increasing the automaticity of new classroom practices.

5.3.1.2 January – May 2013

In the second and third term of the school year we continued our focus on changing classroom practices, although the content of our meetings was shared with the subject matter of the other two overlapping cycles (Cycle Three: Building Parental Involvement and Cycle Four: Sharing the Learning with the School Principal and Other Staff Members). In total we discussed changing classroom practices in eleven meetings between January and May. The reliance on reviewing video clips was also significantly less during this period. We only evaluated four video clips of classroom practices. Two of the video clips were repeats of clips taken in the first term, which we re-viewed for comparison purposes, and the other two video clips were recorded in April 2013. It was planned to record two further video clips of R1, R2 and R3 but these had to be cancelled because of unforeseen personal circumstances. The limited use of video clips from January to May 2013 meant that R4 was a more equal participant in discussions during this time, as the reflections were not concentrated on video clips of practice that she did not directly partake in.

A major classroom practice change implemented during this timeframe was the introduction of oral language homework for the pupils by all co-researchers. This action was a direct result of reflections in the overlapping Cycle Three: Building Parental Involvement and will be discussed in more detail in Section 5.4. In summary, the oral language homework consisted of one new vocabulary item per day, Monday to Thursday, along with a topic to discuss at home with a family member. Every pupil was provided with an A4 page, entitled 'Talk Time', that was a pupil record of their oral language homework and included a space for a parent/caregiver's signature (Figure 5.4).

We agreed to trial this practice for nine consecutive weeks between January and the Easter Holidays. The targeted vocabulary chosen related to a topic, theme or text. The word walls documented the vocabulary given for homework that was recorded in each pupil's A4 'Talk Time' record sheet.

Jan 206. R3: Do you know what's deadly? Those sheets that you gave us, because I've mine on the whiteboard now, and it's just up beside the whiteboard for the week so it's in front of them for the whole week

Week seven: _____

Day	Word	Topic to Talk about for 10 mins	Signed
Mon.			
Tues.			
Wed.			
Thurs.			

Week eight: _____


Day	Word	Topic to Talk about for 10 mins	Signed
Mon.			
Tues.			
Wed.			
Thurs.			

Week nine: _____

Day	Word	Topic to Talk about for 10 mins	Signed
Mon.			
Tues.			
Wed.			
Thurs.			

Talk Time

Homework



_____ Class

Figure 5.4: ‘Talk Time’ pupil record of oral language homework

The prevailing concern of the co-researchers about the oral language homework was the belief that some parents were completing the oral language with their children while others were not. This impacted on their enthusiasm and commitment to this new classroom practice. There were remarks made by R2 and R4 that indicated oral language homework added to their workload and was not balanced by a similar input from parents. However, pupils who demonstrated successful acquisition of the new vocabulary targeted, without perceived parental support, emphasised the efficacy of their classroom practices for them. It shifted their discourse from attributing blame to the parents for pupils’ language difficulties to acknowledging their own responsibility and capability as teachers to enrich the pupils’ language abilities.

Feb. R2: The more you put in, the more you get out, regardless of parental input

A second key change to classroom practices during this timeframe was the introduction of an assessment of pupils’ knowledge of the new vocabulary taught. For the 4th and 5th class pupils (R3’s and R4’s classes), this was a written assessment, whereby the teacher called out a definition of a word and the pupils had to write down the corresponding word. For the junior infant pupils (R2’s class), this was a verbal assessment in which the pupils labelled the items on the word wall that the teacher pointed to.

Jan 168. R1:..so basically Friday then, the test, what (name of R2) is going to do, she’ll have her pictures, so (name of R2) is going to bring the kids up and say ‘what’s that?, what’s that?, what’s that?, what’s that?’

Jan 169. R2: mmmm

.....

Jan 185. R1: So week one is, you’re going to give the definition and you’re going to say, this is the little drops of water that fall from the sky.....

Jan 189. R4: So we’ll call that out, isn’t it?

- Jan 190. R1: Yeah
- Jan 191. R2: So it's like a spelling test, except a word test.....
- Jan 195. R4: Just call, call that out and then they write in the word. It's only 4 like, it's not going to take-
- Jan 196. R1: And they'll be told before they even start, 'make any attempt, because I don't care how you spell it'
- Jan 197. R4: Oh, yeah

In response to a parent's request, the weekly test score of each pupil was marked on the 'Talk Time' record sheet (Figure 5.4).

- Jan 250. R1: I mean I thought it was interesting that one, one of the parents said 'will we know how they get on?' so I think the fact that she asked for that, to put in the score, two out of four, one of four, three out of four, four out of four
- Jan 251. R3: We could just write it here

The two new classroom practices of oral language homework and pupil assessment led to the consideration of a third classroom practice - choosing exactly which vocabulary items to target. Previously, co-researchers had indicated that the unknown vocabulary they taught their pupils predominantly came from texts they were reading. I introduced the well-cited framework for selecting vocabulary, by conceptualising vocabulary in terms of tiers of words (Beck et al., 2002). I explained the distinction between familiar vocabulary (Tier 1), unfamiliar vocabulary that recurs across different domains (Tier 2), and infrequent and subject-specific vocabulary (Tier 3). As the research suggests, I discussed the importance of teaching tier 2 words most often because of their positive impact on language development (Beck et al., 2002). The co-researchers demonstrated the fact that they were incorporating this information into their classroom practices, as evidenced by R4's quandary of whether to teach the word 'turrets' or not.

- Jan 96. R4: We only started reading the first few pages of it yesterday, and there is quite a few...you know, difficult words that, oh Jesus, there's actually a lot in it, but one of the first ones we came across was 'turrets'
- Jan 97. R1: Turrets?
- Jan 98. R4: Turrets. You know the kind of, like the...towers, you know on a castle.....But then I was thinking 'when are they going to use that word again?'
- Jan 103. R2: Yeah
- Jan 104. R1: Well that's the only thing I would say is that, you know the way we talk about tiers of words? Tier one, tier two, tier three? That to me would be a tier three word, that would come up in specific situations, probably like-
- Jan 105. R4: You're not going to be saying that...it's not going to be every day
- Jan 106. R1: No...no...whereas something like em...I'm just trying to think, something related to turrets, like 'immense' or 'gigantic', maybe that will come up in lots of different situations?
- Jan 107. R4: Yeah...

However, there were times when co-researchers did not take the evidence related to vocabulary selection on board and continued to teach words that were subject specific and do not come up in many different contexts, therefore possibly reducing their potential impact (e.g. subject specific words associated with the election of a Pope outlined in the quote below).

Mar 117 R3: I used the, is that 2 weeks ago? I used the, the Pope, the papal stuff

Mar 119. R3: Seeing as that was just in the news. It's great, they'll all tell you what conclave is, because it's one of their words, you know?

Throughout the discussion about the numerous changes in classroom practices of introducing oral language homework, pupil assessment and selecting suitable vocabulary to teach, I repeatedly brought the focus back to the importance of *how* to teach the words in addition to *which* words to teach. There was a noticeable predominance of reflections on the vocabulary chosen and little mention of the classroom practices being employed to teach the vocabulary. The notion of language enrichment started to be simplified into three steps by the teachers: 'select the word, record the word and assess the word'. The classroom practices to support language enrichment were not included in these three steps.

Jan 334. R1: Ok, so I suppose the next thing to talk about is...I suppose it's just thinking about, in terms of, what we're doing in the classroom to help with that. ...Like there is so much that you're doing to make sure it's [Talk Time] happening and then I suppose on top of that, it's looking at what are we going to do in terms of our classroom practices....

A concrete activity and classroom practice to support language enrichment that they reportedly employed most often was a visual organiser called a '4 square'. An example of its application to assist with evidence-based instruction for the vocabulary target 'donation' is presented in Figure 5.5. It seems the visual organiser templates also led to requests from some of the students to develop their oral language skills further by asking to complete extra 4 squares at home:

Jan 143. R3: And then (name of pupil) said to me this evening "can I do one of these for 'meteorologist' when I go home?", and I looked at it, what was it? It was the 4 square... So that's kind of cool that she was thinking of using that herself then.

<p>1. Target Word: Donation</p>	<p>2. Examples Money to charity Clothes to charity</p>
<p>4. Child's Own Definition Something that you give away for free to help others</p>	<p>3. Non- Examples Pay a bill A set amount of money</p>

Figure 5.5: '4 Square' to assist with evidence-based instruction for the vocabulary target 'donation'

As classroom practice change was the aim of this action research inquiry, I made a decision to refocus our attention to evaluating and changing classroom practices, and re-visit the classroom practices checklist we collaboratively designed. When the co-researchers reviewed the classroom practices checklist, they reported that they were now competent in applying them all to their lessons.

Jan 374. R2: You see the scaffolding, you do it, reformulating, extending, modelling, you do it directly, correct, yeah feedback to the message rather than the words. That depends on the situations, so I suppose, giving feedback on the words, extending the message, special time [reading list]

Jan 375. R3: You see we do, we definitely do these, confirmation checks

Jan 376. R1: Yeah

Jan 377. R3: Making sure the teacher has correctly understood learner's contribution

Jan 378. R1: Yeah

Jan 379. R3: Well, that's teacher echo too

Jan 380. R1: Yeah...(7 seconds)

Jan 381. R2: Yeah, like the prompt, the tone of voice, you probably would do the....gestures and actions...cues and pictures...

Given that the co-researchers were now feeling competent with the practices outlined in the checklist, our focus shifted to a practice that was not on the checklist: the importance of repetition and review of targeted vocabulary to ensure pupils remembered them (Beck et al., 2002). The co-researchers had previously expressed a desire to concentrate on ways to integrate repetition and review into their classroom practices and agreed that it was a worthwhile objective, and hence it became the fourth main change to classroom practices of this phase. Together we brainstormed and suggested methods and activities to incorporate repetition and review of language targets (e.g., incidental reinforcement, using story books that contained the targeted vocabulary, creating opportunities for review, tallying the number of repetitions by placing a tick beside the word on the word wall, using games, videos and/or pictures).

Jan 383. R3: Maybe every time it rains 'oh look at the precipitation'

Jan 384. R1: Ok, yeah

Jan 385. R3: Incidentally, incidental reinforcement rather than explicit reinforcement

Jan 386. R1: Yeah, ok, so that's, and for some things that's, in a country like Ireland, that's going to happen a lot more, but something like 'turrets'-

Jan 387. R3: Is it then you kind of get storybooks and you'd be like 'oh look'

Jan 389. R1: Yeah, so you have to CREATE, you have to create incidental learning, if you like

Jan 390. R2: Yeah

Jan 391. R1: So no more than if I was doing owls, it might be like 'oh look, let's read this book, The Owl Babies'

Jan 392. R3: mmmmm

Jan 393. R1: You know, that I might be creating opportunities...

Jan 450. R1: ...there are words that aren't going to naturally repeat themselves to allow for review so what can we do, and if we were able to come up with, you know, 3 things or 5 things that we can do to help, whether that's em...a game, whether that's a chat, whether that's a video, a

picture, it's whatever...things that we could do to help them come up. Like if you wanted to bring up precipitation, one, your idea related to current affairs, the news, a video, a picture

Jan 451.R3: Weather forecast, did you spot any precipitation on the weather last night? What was the name of the meteorologist?...

To supplement our ideas for repetition and review, I shared a concrete example from a scheme that has an explicit objective of achieving this aim: 'Text Talk' (Moses, 2005). An example lesson plan from 'Text Talk' draws on a storybook called 'Ruby the Copycat', and bases its recommendations for teaching on Beck et al.'s (2002) robust vocabulary instruction writings, and consists of numerous activities and ideas for integrating repetition and review of targeted vocabulary (Moses, 2005) (Appendix G). Unlike previous published texts that I had shared (e.g. SETT framework (Walsh, 2006), NCCA report (Shiel et al., 2012), and a review of evidence and good practice for vocabulary intervention (Steele & Mills, 2011), this was the first written handout that the co-researchers immediately responded positively to. A copy of the 'Ruby the Copycat' Text Talk example was given to each co-researcher, from which we selected eight different activities and practices that would help reach an objective of explicit repetition and review of targeted vocabulary. The activities included: 'relating to a story'; 'explaining the meaning'; 'giving examples'; 'prompting'; 'idea substitute'; 'oral cloze test'; 'concept web'; and 'a quiz on the word'. Feedback from the co-researchers was positive on the potential impact of these activities for clarifying and reinforcing meaning. However, there were no further desires expressed to trial any further activities from the Text Talk example at that time.

Reflection on Cycle Two, Part 2: January – May 2013

This phase of the study saw four main changes to classroom practices: oral language homework; pupil assessment; selection of Tier 2 vocabulary; and repetition and review of targeted vocabulary.

Having templates and structures in place supported the successful implementation of 'Talk Time', such as an agreed procedure of '1 word a day', pupil record sheets, word walls, timetabled assessments, and agreed assessment formats. In my opinion, these physical prompts, that were readily accessible, helped to ensure the changes in classroom practice of introducing and assessing oral language homework. Similarly, concrete examples of how to integrate explicit repetition and review of targeted vocabulary, as demonstrated by the Ruby the Copycat Text Talk example, were also facilitative of change.

I felt a recurring need to draw attention back to the core of the study: changing classroom practices. I sensed a shift from this objective to a simpler focus on selecting and assessing

words for the pupils to learn, disregarding the necessary methodologies that were required to achieve the main objective. I was surprised when the co-researchers reported that they were applying all the classroom practices from the classroom practices checklist in their daily lessons. I did not share their view. Yet, I did not overtly challenge it. Instead I switched focus to a classroom practice that was repeatedly reported by them and the evidence-base as important, and a practice that they have previously expressed difficulty in planning and implementing: repetition and review of targeted vocabulary. Hence, I thought that this classroom practice would be relevant and motivating for the co-researchers to implement and also effective for the pupils' language development. This appeared to be accurate, as there was not the same resistance to focusing on repetition and review as there was to concentrating on the practices from the classroom practice checklist

A significant outcome of this phase of the study was the change in perception of the co-researchers – what they do in classroom for language enrichment matters just as much, if not more, than what they perceive the parents are not doing at home. Many of the pupils' ability to learn new vocabulary as demonstrated by weekly assessments, independent of support from their parents, was based on their classroom practices alone. Therefore, the value and importance of their classroom practices was amplified, creating a driving force for embedding and sustaining changes to classroom practices.

On the fourth meeting of this phase, on 5th February 2013, the subject of the frequency of our weekly meetings surfaced. I was asked if we had to meet every week for reflections/planning or could we meet less regularly. It was implied that because the changes to classroom practices were progressing, weekly reflection meetings were no longer necessary. Also, the teachers echoed their previous disgruntlement that they were completing a greater quantity of compulsory additional working hours per week (Croke Park hours) (Department of Public Expenditure and Reform, 2010), than their peers in the school. Following a brief discussion about the purpose of the meetings, we agreed that we would meet for shorter length of time every week (i.e., 10 minutes less). Subsequent to this proposal for less frequent reflective meetings, at the next meeting I distributed a timetable of the weeks remaining between then (12th February) and the end of the school year. There were twelve weeks remaining and the teachers only had nine more hours outstanding to fulfil their annual obligation of 33 additional working hours. Therefore, we reached an agreement to only meet nine more times before the close of the school year. Everyone was involved in deciding which weeks to omit and decisions were based on school holidays and co-researchers' personal preferences.

I outlined a tentative possible goal for the remaining nine meetings of the inquiry to focus on what we were doing (e.g. oral language homework, word walls, using resources), how we

were doing it (e.g. extending, rich instruction, repetition and review, watching video clips), and the process involved (e.g. how we are doing this, how we are making decisions). The goals were met with unanimous consensus from the co-researchers. In addition, I posed some reflective questions for the co-researchers to consider about aspects of the study that were/were not working well and what, if any, changes were necessary to the structure or focus of the meetings. Positive feedback centred on employing effective language enrichment strategies, having a structure for classroom planning, pupils' positive regard and motivation for 'Talk Time', and having protected time for reflecting on practice that was sometimes 'therapeutic'. Negative feedback was mostly directed at a perception that there was too much time spent reiterating the same points and talking about the same issues, leading to a sense of burden.

Feb. R3: The more I have to talk about it, the more bogged down I get....we were talking about it [language enrichment] for weeks and weeks

Feb. R2: It feels like it's more work than it is

Feb. R4: It feels like it's bigger than it actually is....bigger workload

There were also remarks surrounding the fact that they had thought that they would be more passive participants in the study, implementing an oral language programme that would be provided to them. I responded with a brief summary of the study objectives and my opinion that repetition was a necessary part of incremental changes that happened over time. I also stated that I respected their perspectives and accepted their stance that less discussion time could be appropriate. Consequently, we agreed that for the remaining nine meetings, updates on progress of how changes to classroom practices were developing would be kept brief and efforts would be made to reduce the sense of intensity and repetition of subject matters.

Reflection on Cycle Two, Part 3: January – May 2013

Before the meeting with the co-researchers on 12th February, I re-read my notes on action research and an essay I had written on 'Quality in Action Research'. A line spurred me on to address the request from the teachers to meet less frequently: "Don't shy away from the difficult subjects, that is where the crux of the issues are".

This episode was the first time the teachers overtly expressed criticism towards the inquiry in which they were co-researchers. I was grateful for their honesty and openness, but found myself searching for the reasons behind their criticism. Their greatest gripe seemed to be with the time they were spending discussing and reflecting, and the subsequent sense of increased workload. I wondered was this issue with time based on the process of the study, or the fact that they felt aggrieved that they were the only three staff members fulfilling their Croke Park hours obligations. While they stayed back in school to meet me, their colleagues

got into their cars and went home....weekly!

If Croke Park hours had nothing to do with it, then perhaps the process we engaged in to change classroom practices was too intense. From my reflections and reviews of the transcripts of the meetings, it never appeared to me to be in the slightest bit intense. However, maybe I have a different learning propensity to the co-researchers? It is possible that my emphasis on evidence-based practice and their preference for practice-based evidence was perceived as 'intense'.

Alternatively, perhaps my motivation as a PhD student, committed to action research, blinded me to the additional energy required in planning, acting, and reflecting. Their opinion that there was too much repetition clashed with my opinion that week on week, we slowly reviewed what was happening, built on that with some minor tweaks/additions, reviewed what was happening.....etc. I believed we were making slow, incremental changes that required time to embed and become automatic. I appeared to be wrong in my belief that a slow and steady pace would prevent feelings of being somewhat overwhelmed.

It also struck me that maybe the teachers' narrower view of language development restricted their understanding of the quantity and quality of language enrichment strategies that are required in order to be effective. Therefore, they may have an over-inflated sense of their current efficacy, influencing their opinion that they were doing 'too much'. Conversely, they simply may not have thought it worth the effort to try and fit it in with competing demands and workloads.

Another thought I had was that perhaps the co-researchers had reverted to the roles they are most familiar with: teacher/pupils. Except in this case, I was cast as the teacher and they were playing out the role of the pupils, testing the boundaries.

Overall, I was pleased that we had the discussion and felt that we had 'cleared the air'. I believed that they felt listened to and respected when we agreed to reduce the number of meetings and shorten updates. I also got a sense that they were trying to retract some of their earlier comments and at times backtracked on some remarks. My impression at that point was that they may have believed they were helping me out with my PhD more than they were co-researchers attempting to change classroom practices to increase their effectiveness and improve pupil outcomes. I now had a greater insight into their perspectives of the process of change, which would help inform Cycle Four: Sharing the Learning with the School Principal and Other Staff Members.

The subsequent meetings that discussed changing classroom practices gave their attention to the assessment of all the targeted vocabulary introduced through oral language homework ('Talk Time'), sending report cards to parents on their child's assessment results, and comparing video clips of classroom practices at the beginning of the school year with video clips of classroom practices at the end of the school year.

Previously it was agreed that 'Talk Time' would run for nine consecutive weeks between January and the Easter holidays. The idea of testing all the vocabulary targeted in one assessment, on the completion of the nine weeks, was agreed by all. In theory, this would have been a test on the knowledge of 34 words. However, R3 and R4 reported that they had not given the oral language homework every day/week. The main reason provided for this was the fact that student teachers were teaching their classes and other competing demands.

Mar 4. R3: I have to say it was on the back burner for me when my student was here

Mar 5. R1: Ok

Mar 6. R3: Hand on heart...It was something that I had said to myself that I was going to do...But it just didn't happen

Mar 11. R4: We're...we're, (name of R1), I'm the same. It wasn't..It was just the student and everything else that seemed to be going on

Mar 12. R1: Yeah, yeah

Mar 13. R4: We're like...

Mar 14. R2: Last week was Seachtain na Gaeilge, and everything was mad

Mar 15. R4: Oh Seachtain na Gaeilge

Mar 16. R1: Oh ye had that for Paddy's Day?

Mar 17. R4: Yeah, so...

Mar 18. R3: And I was absent, sick for the first week, and then I had the wedding so I wasn't there for like, four or five days

Because of this, assessments of the targeted vocabulary at the end of the nine weeks were based on a smaller number of words (R2 = 30 words, R3 = 22 words and R4 = 28 words). A suggestion by one co-researcher to send a report card home to parents with the results of their child's 'Talk Time' assessment was deemed a useful idea. After much discussion (a full account will be provided in Section 5.4 that describes Cycle Three: Building Parental Involvement), we agreed on a rubric to classify assessment results. The rubric consisted of three different score categories, with a corresponding explanatory comment for each score category (Table 5.2). The rationale given for sending report cards was to add to the formality of the test, communicate with parents, and provide feedback on each pupil's achievement.

Mar 248. R2: Well then do we send home a little note in an envelope with the results of their Talk Time test?

Mar 249. R3: That's official then

Mar 250. R2:but this is an envelope sealed, and it's for your parents, they're going home, for all the classes that took part in Talk Time and it just has to say '(name of pupil) received lah, lah, lah. She achieved so many words out of forty'

Mar 251. R3: *Then for maybe the ones who did really well. Thank you for your support and please keep it up*

Mar 255. R3: *We could give them a rubric then.... 0 to 10 more work needed, 10 to 20 good, 20 to 30 excellent, well done...*

Mar 258. R2: *Yeah, and you could just put a comment then saying 'em she tried really hard and I'm delighted with her'. It wouldn't even have to be...the ones who did well 'I appreciate all your support and your help'*

Mar 259. R3: *But the ones who didn't, would it be any harm saying 'more work needed'?*

The classroom practice of assessing all vocabulary targeted proved to be very successful for both pupils and teachers. The co-researchers were positively surprised and extremely happy with the results achieved. The accomplishments of the pupils exceeded their expectations - especially the pupils who were considered low achievers and the pupils for whom it was perceived had less parental support with homework.

April. R2: *I didn't think it was going in so much or that it was being done at home*

The list of vocabulary tested and the assessment results for each class are outlined in Table 5.2 and Table 5.3.

Table 5.2: Assessment results of each class

Score range and explanatory comment	Jr. Infants (R2)	4 th class (R4)	5 th class (R3)
20 + <i>"Fantastic Work. Talk Time Champion. Well done!"</i>	91% of pupils	88% of pupils	100% of pupils
10-20 <i>"Good Effort. Keep up the good work at home"</i>	9% of pupils	6% of pupils	
0-10 <i>"Would benefit hugely from more help with words at home"</i>		6% of pupils	

Table 5.3: Targeted vocabulary list of each class

Junior Infants (R2)		4 th class (R4)		5 th class (R3)	
Tear	Cupboard	Turrets	Similar	Precipitation	Architect
Meadow	Handle	Laboratory	Stumbled	Meteorologist	Scarce
Nest	Lantern	Quotation	Portraits	Insulate	Parish
Crunch	Crept	Absent-minded	Occasion	Migrate	Parishioners
Owl	Paw	Inventor	Festival	Hymn	Diocese
Indoor	Hare	Transport	Celebrate	Storey	Archbishop
Supper	Reach	Vehicle	Apologise	Appliances	Wealthy
Trunk	Branches	Pedestrian	Fascinate	Bowling gutter	Observe
Cauldron	Axe	Loyal	Extraordinary	Momentous	Conclave
Fetches	Dump	Ambitious	Approaching	Lugging	Glare
Badger	Searched	Perform	Exhausted	Approaching	Memorise
Bump	Picnic	Confident	Laundry		
Grumpy	Curry	Exit	Garment		
Brave	Snuggly	Fake	Moaned		
Hungry	Gigantic				

Reflections on what contributed to the pupils' positive assessment results cited the change to classroom practices, incorporating new classroom practices into daily routines, selecting vocabulary from a book/theme, explicit focus on one word per day, repetition and review, having a written record for pupils, word walls, and motivating influence of weekly tests and end of term report card on assessment results. The results also provided the opportunity to reinforce the important and effective role of the co-researchers' classroom practices.

May 106. R2: I used to be so disheartened. But now it's just, you do what you do and, it's rarely reflected. Like this was reflected, it was great when they did their test, and they were able to see it

May 107. R3: That's the thing you were able to see it here. It's motivating.

Strengthening the reflections on the positive changes to classroom practices, a comparison of the initial video clips of classroom practice recorded in first term (October 2012) were made with video clips of classroom practice recorded in the last term (April 2013). Once again, classroom practices were appraised using the SETT checklist that we had adapted in September 2012 (Table 5.1). Observations of the video clips were supplemented by the co-researchers' self-reflection on practice.

For R3, changes were notable in use of praise, use of activities, teacher talk, planning for language enrichment, and pupil involvement. R3 reported, and there were examples on the video clips, of changes in her classroom discourse. Her language input in the later video clip had a majority of extension and scaffolding, whereas before it had a majority of praise. At the end of the school year, R3 was planning vocabulary to target and the activities that she would employ to achieve her objective, compared to her previous reliance on vocabulary targets emerging ad hoc from whatever the topic of conversation was. Moreover, the video clips demonstrated that the pupils' involvement in learning the vocabulary shifted from passive recipients to becoming actively involved in constructing their own meaning and knowledge.

There were a lot of similarities in the changes evident in the video clips of R2's classroom practices. Like R3, R2 had altered her approach to selecting vocabulary to teach. In her first video clip, R2 had a word in mind and proceeded to question and test the pupils, waiting for them to say the word. In contrast, in her video clip at the end of the school year, R2 was explicitly stating the targeted word and employing numerous language enrichment strategies to support the pupils' understanding and expression of the target. R2 had embraced the classroom practice of rich instruction and demonstrated excellent examples of incorporating repetition and review into a lesson.

It was difficult to observe and evaluate changes to R4's classroom practices because she did not partake in any video recordings. However, her reflections conveyed the fact that she was

spending more time on language enrichment strategies. In addition, R4 reported that she was more focused on selecting vocabulary to teach and using language enrichment strategies (e.g., 4 square template). Thus, it was evident that all co-researchers accomplished changes to classroom practices.

Next, we explored the factors responsible for the changes reported. Individual co-researchers' responses often overlapped or were echoed. We categorised the factors responsible for change into five broad themes: 'what you do', 'plans/structures', 'help from others', 'observation and reflection', and 'repetition and review'. The factors that constructed each theme are outlined in Table 5.4. One co-researcher also identified two factors that were least helpful in changing classroom practices. The two least helpful factors were 'being thrown in at the deep end' and 'self-evaluation'. However, the other two co-researchers considered these elements as being facilitative of change.

Table 5.4: Themes and factors responsible for changes to classroom practices

Theme	Factors
What you do	Topic, content, cross-curricular, integrated approach, context, word consciousness, extending vs. echoing and praising
Plans/Structures	Pupil assessment, review at staff meetings, monthly plans, leadership from principal
Help from Others	Resources, relevant topics, activities planned, resources pre-made, list of methodologies, pupils achievements rewarding
Observation and Reflection	Video clips, other teacher's support, observing someone else, learning from experience
Repetition and Review	Consistency, repetition

Echoing the reflections on the elements responsible for changes to classroom practice were written reflection pieces that each co-researcher was asked to complete individually. They were not asked to share this self-reflection piece with any of the other co-researchers. The written reflection piece consisted of one A4 page with the following question/title: "What was it like for you?!: My Personal Reflections on Being Involved in this Shared Oral Language Project". The factors that emerged that were facilitative of change confirmed the themes identified above and fed into plans for sharing the learning with the school principal and other staff members (Cycle Four).

R4: One of the things I found beneficial...was discussing and trying out the different methods involved when teaching target words.

R3: How to effectively teach vocabulary. I've really enjoyed the classroom practice – putting ideas into practice and using resources such as the '4 Square'

R2: Trying different methodologies and seeing the benefits of each was quite rewarding

Reflection on Cycle Two, Part 4: January – May 2013

Cycle two involving changing classroom practices ended on a positive note. There was an overall sense of achievement - pupil achievement, and achievement as both teacher and co-researcher.

The positive pupil outcomes, as evidenced by their assessment results, shifted the co-researchers' perspectives on the value of giving oral language homework. Midway through the nine weeks, they gave various excuses for not continuing with the oral language homework (e.g., student teachers, leave, other commitments etc). When they saw the positive results of the pupils, their enthusiasm and commitment to it dramatically increased. Two of the co-researchers self-selected to continue providing oral language homework beyond the timescale, emphasising their trust in its positive impact. However, one co-researcher opted to continue with explicit vocabulary instruction in the classroom without the oral language component. No reason was given as to why and I didn't press for one. All of her pupils achieved 100% in the assessment. Therefore, was it a sense that positive pupil outcomes could be achieved regardless of the level of parental support or a belief that it added too much to her existing workload?

The factors deemed responsible for the changes to classroom practices provided interesting perspectives. It appeared that a key reason for making changes to classroom practices was the notion of making the task of reaching curriculum objectives and fulfilling teacher responsibilities easier (e.g., 'monthly plans', 'resources', 'activities planned', 'resources pre-made', 'list of methodologies', 'cross-curricular', 'integrated approach', 'topic-based', and 'leadership from principal'). Another major rationale for changing classroom practices seemed to stem from creating a sense of competency to try them out and feel confident that they were sufficiently proficient (e.g., 'observing someone else', 'other teacher's support', 'learning from experience', 'video clips', 'trying out different methods', 'putting ideas into practice'). The third reason for changing classroom practices appeared to emerge from a focus on what was most effective for positive pupil outcomes (e.g., 'word consciousness', 'extending vs. echoing and praising', 'consistency', 'repetition', 'context', 'pupil assessment', 'pupils' achievements').

Their reflections and factors identified provided a useful foundation for planning to share the learning with the school principal and other staff members (Cycle Four).

5.4 Cycle Three: Building Parental Involvement (Nov. 2012 – April 2013)

This cycle concentrated on building parental involvement. It overlapped directly with Cycle Two (Changing Classroom Practices) and both informed, and was informed by it. The whole concept of addressing parental involvement as a classroom practice originated from the co-researchers comments early in the study. Examples from their personal experiences were shared which drew attention to the different language abilities they perceived their pupils to have.

Nov 256. R2: Like even we were doing about the body, like, and I gave them a body and they drew on all the bits and I was like 'do your two arms, do your hand, do your finger', they were like 'your knuckles, put in your knuckles', you know put in your nails, put in your toenails, put in your eyebrows, put in your eyelashes, but it was the 5 bright ones that were saying 'eyebrows', 'eyelashes, 'cheeks', 'dimples', you know, the other ones were just like 'big head', 'big arms', lucky to get fingers and a thumb out of them, you know, like 'I don't know how to do that'

The co-researchers attributed the limited language abilities of some of their pupils to their perceived differences in the pupils' language environments at home and parent-child interaction styles that they had witnessed that they believed were not conducive to language enrichment. Dialectical differences and use of slang were also viewed as inhibiting language ability.

Oct 264. R3: You really notice the deficit coming from home, don't ya?

Nov 230. R2: I don't know (name of R1), because a lot of them, they don't even talk to them... even you see them collecting them, you see them '(name of child), come on' ... and it's no 'did you have a good day?' 'Say bye to your teacher'

Nov 233. R4: Yeah, none of that

Nov 234. R2: You see the ones that would be like 'say bye to your teacher', 'oh, what do you have there in your hand?' you know, 'oh no homework, give me your folder, we'll pop it in your bag', like you see those parents but then you see the 'C'mon, put on your coat. Give me that', you know...

Nov 510. R3: ... I'd have great difficulty in imagining them going home reading and somebody trying to explain it to them...

Oct 272. R3: Like (name of pupil) said to me something is 'lethal'. Well it's not really; 'lethal' means it will KILL you

There was a strong feeling expressed that parents should be more involved in their children's language development and that there was scope for sharing the responsibility for language enrichment between school and home.

Oct 266. R4: ... there's only so much we can do in school from 9 to half 2, and it's the parents that spend most of the time [with them]

When we reviewed existing classroom practices to support parental involvement, only two practices emerged: ad hoc involvement of parents in classroom-based learning initiatives

and homework. For the most part, neither the classroom-based learning initiatives nor the homework had a specific focus on language enrichment. Consequently, the co-researchers did not positively rate their current classroom practices for involving parents in the language development of their pupils.

- Nov 362. R1: *...on a scale of 1-10... where 10 is having this issue resolved, where are you now in relation to parents and language development?*
Nov 363. R2: *I'd say we're about a 1 or a 2, (name of R4) what do you think?*
Nov 364. R4: *I was going to say, I'd say minus one, ah no, look it, a 1 or a 2*
Nov 365. R2: *There's no point in saying we're 5, we're not half way there*
Nov 366. R4: *No, we're not near there*
Nov 367. R1: *So why are you two and not a one?*
Nov 368. R2: *One or two, either or, it depends on your class*

It was reported that parents' involvement in classroom-based learning initiatives and support for completing homework was predominantly from parents of pupils in the junior end of the school, who they believed to be more motivated to become involved in class-based activities.

- Nov 7. R2: *And you see it's probably easier with the likes of junior infants because they've only started in school, and like a lot of them are new parents that don't have older brothers and sisters, you know, and like a lot of them would be taking-, you know the sheets for the language games that we do on a Monday...*
Nov 8. R1: *So if they're new to the school it's all fresh and new*
Nov 9. R2: *Yeah, they like helping*
Nov 10. R4: *They'd help, yeah*

Additional potential reasons for different levels of parental involvement were considered. For instance, some co-researchers thought that parents were simply unaware of the importance of actively supporting the language development of their children. Others referred to the inadequate way knowledge and skills were shared with parents and low expectations of the potential of parents' support. Moreover, the issue of power dynamics was raised, whereby it was felt that parents would be too anxious to enter the formal teaching environment of the classroom. A final reason cited was lack of interest of the parents.

- Nov 33. R4: *They're too busy though*
Nov 35. R1: *... I suppose I'm trying to think about that. Too busy, as in 'do you know what? That's boring' or is it too busy?*
Nov 36. R4: *Couldn't be bothered*
Nov 37. R1: *Couldn't be bothered. Or is it too busy, 'oh my God, I probably won't know the words. I'm not going there'*
Nov 38. R4: *You see, I think there could be that fear as well*
Nov 39. R1: *Yeah*
Nov 45. R2: *If you explained to them, 'you literally have to play a game of bingo with them. I just need another pair of hands'. That's better than saying 'it's literacy week. Let's all play a load of language games'....*

Nov 149. R2: *..... you tell them things, you involve them in things, and they either come back to you or they don't and more often than not they don't, because you're going to do it anyway or some other parent is going to do it anyway. So, why should they be worried about it?.....*

Nov 644. R3: *It's lots to do with their own self-esteem too, you know, a lot of them wouldn't feel able to come in and do it*

Nov 676. R3: *But you see, if we go expecting something more of them, you know, we might, we might scare them off altogether*

We all agreed on the importance of building parental involvement and regarded it as having a promising positive influence on pupils' language ability. Therefore, possible changes to classroom practices to incorporate parental involvement were mulled over. After extensive collaborative discussion, agreement was reached. We decided to trial the introduction of oral language homework for nine weeks (January – April 2013), as described in Cycle Two in the previous section (Section 5.3). Also, a topic was given for parents and pupils to discuss for ten minutes every night.

Nov 333. R2: *Like Monday, whatever, and circle these 3 words, I don't know, next three, I don't know, or even word a day?*

Nov 334. R1: *Word a day maybe?*

Nov 335. R2: *That's 4 words a week, like*

Nov 336. R4: *Yeah, we could do word a day or...*

Nov 337. R1: *Word a day might be more doable*

.....

Nov 245. R1: *Have a conversation*

Nov 246. R2: *Yeah*

Nov 247. R1: *Talk about whatever you want. It can be the salt, the computer, the fridge, the whatever...talk to them...or talk with them*

In order to help ensure parental involvement in the new classroom practice of giving oral language homework, we decided to provide a written record of the new vocabulary items and topics to be discussed. This record was placed in pupils' homework journals and required a parent's signature. Parents were further engaged through providing feedback on a weekly assessment of the vocabulary items given for homework. We agreed that the assessment would have a clear emphasis on word knowledge, thus disregarding any spelling errors that were made in answering the test.

Nov 329. R1: *...Is there anything else we should change? Talk, listen and we're going to be giving you words, they will be in your...homework journal?*

Nov 330. R4: *Well, we could, you know, we can...*

Nov 331. R2: *We can even staple it in to the front page*

Nov 332. R4: *Staple it in*

Nov 115. R2: *... And like you could have the word, Monday's word, Tuesday's word, and just ask the parent to sign it, like*

Nov 345. R1: *So the test would be 'ok, tell me the word for white skin'.... 'Right, tell me the word for a cartoon....begins with, you know, A', 'tell me the word for knife and fork and spoon'*

Nov 349. R2: *Yeah*

Nov 351. R4: *Yeah, we could (name of R1). We could try it, like why not, we could try it and...after Christmas, as you say...*

Nov 352. R2: *Yeah, like if it's 4 a week, that's 16 a month, like when you think about it, over 2 months, that's 32 words, that's a lot*

Nov 353. R4: *Yeah...*

Nov 536. R3: I think what will have to happen there is, that will have to be explained particularly well, because I think the parents will just see that as a spelling test

There were some reservations expressed. Some co-researchers were of the opinion that not all parents would complete the oral language homework with their children. They based these judgments on their previous experiences as described earlier. Other doubts stemmed from a concern that some parents may have difficulty in supporting the oral language homework if the vocabulary introduced was not known to them. However, it was felt that if this was the case, the need to explain the meaning of the word could in fact help develop pupils' language skills.

Nov 76. R2: And you know, if the mother is not too bothered, the child, no matter how much she gives, 'ok, the words, the words, the new words, let's go, we have our list, la, la, la', it makes no difference. They do it in here for you, but they won't do it when they go home

Nov 248. R2: the small ones might do that, half of them, but yours (R4's pupils), aren't going to have 5 minutes conversation, who's going to do that?

Nov 93. R2: It is, I know we sound very negative-

Nov 94. R4: Nooooo

Nov 95. R2: But that's from years of it. It's not...

Nov 97. R4: Its sounds bad like

Nov 98. R2: It does sound bad but that's the reality of it

Jan 142. R3: I think that that's better that the parents don't know it, because it means the kids have to explain it to them, and they have to explain it in a way that the parents have to get it.

To facilitate a smooth transition to the new classroom practice of building parental involvement by providing oral language homework, an explanatory parent meeting was deemed necessary. Historically in the school, meetings with parents were in the format of one-to-one parent-teacher meetings with a focus on a student's progress with school subjects. Group meetings were typically only scheduled for infant pupils to welcome them to the school and outline school policies and procedures. Meetings to focus on learning objectives or new classroom practices were rarely arranged.

Nov 621. R1: Would you have ever have had class meetings? I know you had the parent-teacher meetings

Nov 622. R3: I've had, I've only had two I think. ...It was the start of the year. We just kind of did your expectations, what you expect from them and their uniforms and their...going through the policies and stuff.

Nov 625. R1: Yeah. Would you ever have had class meetings about curriculum or...learning objectives? That type of thing?

Nov 626. R3: No.

The co-researchers requested that I facilitate the meeting with parents at the beginning of the second term (16th January 2013). They suggested attending part of the meeting. We agreed

that at the meeting I would discuss the teachers' participation in this study, the possible positive impact if parents were more involved in pupils' language development, what the oral language homework and weekly assessment entailed, possible topics for homework and the timeframe for the trial. Co-researchers proposed to discuss the link between language development and the standardised reading assessments (i.e., MICRA-T) that parents receive the results of each year. A flyer inviting parents to attend was designed collaboratively, and included quotes from the pupils' using the new vocabulary they had acquired since the start of the study in September (see Figure 5.6).

<p>Some quotes from the children from this year's talking project!</p> <p><i>"<u>the Simpsons</u> is an animation"</i></p> <p><i>"<u>a donation</u> can be clothes, toys or money"</i></p>	<p>Research Project: "How can classroom practices be changed to support effective language enrichment?"</p> <p>We need you!</p> <p>Parent Meeting</p> <p>Wednesday 16th Jan. at 9am</p>  <p>XXXXXXXXXXXX N.S.</p> <p>4th <u>Class</u> – Ms. XXXXXXXX</p>
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<p>Your child is taking part in a 'talking project' this year!</p> <p>Good talking abilities help children express <u>themselves</u>, understand what others say, read better, have better social skills and do better in school.</p> <p>The aim of this talking project is to help improve children's talking abilities, by changing what happens in the classroom.</p> <p>Since September, we have been working hard!</p> <p>We have been working with your child and her class to help improve their vocabulary and talking skills. We have spent extra time on 'talking' and tried out new things in the classroom to help boost your child's talking skills. The girls are doing great!</p>	<p>Now, we need your help!</p> <p>We need you, the parents, to help us improve the girls' talking skills even further!</p> <p>So we are having a meeting to discuss the best ways you can help.</p> <p>When will the parent meeting take place?</p> <p>Wednesday January 16th</p> <p>9:00 – 10:00 a.m.</p> <p><u>in</u> the XXXXXXXXX</p> <p><u>school</u> library</p>
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Figure 5.6: Flyer distributed for parent meeting

Reflection on Cycle Three, Part 1: November 2012 – April 2013

Discussing the notion of building parental involvement was a journey with highs and lows. It seemed to me that the co-researchers' negative experiences of poor parental involvement in the past resulted in two conflicting influences. One influence was to motivate them to 'do' something to address the issue and resolve their dissatisfaction with the status quo. The other contrasting influence was the inclination to avoid doing anything, as they believed it would simply be a waste of their time, with similar disappointing outcomes to their previous endeavours. It appeared from our reflections on the lack of current practices to engage parents in the language development of their children, that the second influence had been the dominant one in the past. However, throughout our conversations on how to build parental involvement, optimistic comments were frequently juxtaposed with pessimistic comments, often in the same utterance, implying that perhaps there was more inconsistency than negativity in their experiences. I believed that it was this inconsistency that led to the agreement to "try" the oral language homework and parent meeting.

The consensus to target a word a day, a topic a day and a weekly assessment was easily reached. The emphasis was always on ease of implementing for the co-researchers and ease of understanding for the parents. To ensure the oral language homework was completed, our dialogue could be categorised by the familiar 'carrot or stick' dichotomy. The 'carrots' were increased language abilities of the pupils and higher results on their standardised scores. The 'sticks' were the requirements for a parent's signature each night, weekly assessment results and positioning it under the homework umbrella, for which failure to complete could have negative consequences.

There was a feeling of confidently entering unknown territory, but being prepared for less than perfect engagement. The co-researchers showed a further ability to step outside their comfort zones, couched by their expectations of what could be achieved. I recorded their expectations and their previous experiences and planned on returning to them later in the study to evaluate what, if any, changes were made.

Seven parents attended the parent meeting (42 were invited). Although the number of attendees was low, the co-researchers were surprised by the parents who turned up and by their active participation in the meeting.

Jan 255. R3: In fairness to (name of parent), ... last week, she was really good, you know, she was really asking questions and trying

Jan 256. R1: She was really into it really, wasn't she? In fairness

Jan 257. R3: She seemed very into it

Jan 258. R2: I'm just looking there again, (name of pupil)'s mother came... I never saw that mother when I had (name of pupil). Not for parent teacher

meetings, I asked her to come in about her behaviour and everything. I never saw her...I'm just looking at her name there now, I can't believe it

The parent meeting discussed the teachers' participation in this study, the possible positive impact if parents were more involved in pupils' language development, what the oral language homework and weekly assessment entailed, possible topics for homework and the timeframe for the trial. Positive feedback was received on the objective of the oral language homework and its link with their children's reading abilities. Parents suggested a list of possible topics that they could talk to their children about at home (i.e., princesses, TV, music, sleepovers, DVDs). Due to the low attendance at this meeting, co-researchers placed greater emphasis on explaining the oral language homework to the pupils.

Between the parent meeting and the commencement of the oral language homework (January 2013) and the assessment of the vocabulary taught at the end of term (April 2013), we regularly conferred about the perceived parental involvement with the oral language homework. There were reports of fluctuating parental support, with estimates of approximately 66-80% participation from parents cited. Some parents signed the homework, while others didn't. The co-researchers relayed their pupils' testimonies that their parents were involved but were simply not signing the record sheet. Some pupils knew the all four words at the end of the week, while others didn't.

Mar 173. R3: I'd say in my class, I'd say 80% did it at home...

Mar 184. R2: ... I probably would be, it mightn't be 80% but...there'd be 9 of them, 8 of them, I suppose, but then it's only 8 out of 12

Mar 185. R1: Oh, 8 out of 12, three quarters!

Mar 186. R2: D'you know?...maybe less, it depends, some weeks are better than other weeks but you could pick out the top 5 there now who wouldn't

As time went on, there were reports that the parents' application to the oral language homework began to lose momentum in one class.

Mar 150. R2: You know but it's just you can even see from the parents, like, you can see them come in on a Friday and like 'you know your words now and lah, lah, lah', it just loses momentum. It's like anything, you know, it's like they're great with their little copies at the beginning and then it's like any old shit, you know, is thrown into the folder kind of thing

The co-researchers expressed frustration at the decline in parental involvement that they perceived. They wanted their efforts to be matched by the efforts of the parents and they believed that this was not happening. Their dissatisfaction was evident when designing the report card to send home to parents that would share a pupil's result on a test of all words given for homework between January and April (i.e., nine weeks). Suggested comments for pupils who did not score well included 'more work needed', 'disappointing effort', 'serious work needed', 'would benefit from more help at home', and 'would benefit hugely from more help with words at home'.

- Mar 313. R1: Ok, disappointing effort...*
- Mar 314. R2: I don't know. Does that sound terrible?*
- Mar 315. R3: No, but d'you know what, why not call a shagging spade a spade? If we're killing ourselves doing this-*
- Mar 316. R2: We had the meeting, everything is done, it's a piece of paper, take it out and say 'oh princesses, tell me about princesses'. It's not like you're asking them to do fecking...I don't know what*
- Mar 317. R3: At the end of the day, if you, like if you're not going to spend 10 minutes talking to your child, why are we going to kill ourselves doing it ?*

However, this was balanced with suggested positive comments for the pupils who did score well on the test, including 'she tried really hard and I'm delighted with her', 'I appreciate all your support and help', 'excellent', 'genius', 'keep up the great work at home', 'keep up this fantastic work', 'thank you for your support and please keep it up', and 'Talk Time Champion'. The final rubric and comments for the report card that were agreed were 0-10: 'Would benefit hugely from more help with words at home', 10-20: 'Good Effort. Keep up the good work at home' and 20+: 'Fantastic Work. Talk Time Champion, Well done!' (Table 5.2).

The practice of giving specific feedback to parents on a classroom-based initiative was a new departure for the co-researchers. Typically, reports on educational progress are provided verbally at parent-teacher meetings. As per the DES guidelines, written reports on a pupil's achievement in standardised reading and maths assessments were introduced in June 2012, a mere nine months earlier. The reason we agreed to send report cards to parents was to act as a follow up to the parent meeting introducing oral language homework, and to provide specific feedback on their child's Talk Time assessment outcome.

The overwhelming positive results of the oral language assessments, detailed in Cycle Two and summarised in Table 5.2, challenged the assumptions that parents were not sufficiently involved. It led to a decision to continue providing oral language homework to the end of the school year by two co-researchers, as they felt parental involvement was having a positive impact.

April. R2: I didn't think it was going in so much or that it was being done at home

During a class visit, I asked the pupils their opinions on the oral language homework they received and their parents' involvement in helping them to learn the targeted vocabulary. Their comments suggested that they enjoyed the homework and that their parents supported them in developing their understanding of the words. The pupils also indicated that they frequently had a role in teaching their parents the meanings of the words.

Pupil A: You learn a new word but when you go home, sometimes your Mams or guardians don't know the word so you're learning them a new word as well

Pupil B: You tell your Mam the word that you got and then you learn it and then you keep on going over the word so you know it

Pupil C: We done it, like, at home with our parents

Pupil D: Me Ma wouldn't know some of the words, so I would have to explain them because I knew them and she didn't

Reflection on Cycle Three, Part 2: November 2012 – April 2013

This phase of the study challenged a number of assumptions of the co-researchers. Firstly, it challenged the opinion that parents would not attend a parent meeting – 7 parents attended. Secondly, it challenged the view that they could handpick the parents who would attend – R2 was surprised at the attendance of one parent who she assumed would not have participated. Thirdly, it challenged the opinion that parents would not complete oral language homework with their children – engagement was estimated at 66-80% and there were much higher reports from the pupils themselves who stated that parents assisted them even when they did not know the words. Fourthly, it challenged their belief that many pupils would not perform well on the assessment of all the vocabulary taught – the results were extremely positive.

Transforming constructs of how your environment and the people within it operate is a powerful means of sustainable change. The co-researchers willingness to 'try' a new way resulted in changes to their classroom practices, but also changes to their perspectives and attitudes towards pupils and their parents. A fresh outlook was activated on the feasibility of harnessing parental involvement to support the language enrichment of pupils.

Thus, changes to classroom practices were rewarded and reinforced, resulting in a desire to maintain the changes that were introduced and share the learning gleaned with the school principal and other staff members.

5.5 Cycle Four: Sharing the Learning with the School Principal and Other Staff Members (April – June 2013)

Cycle Four was informed directly by the other three cycles. Its focus was to share the collective learning from the study with the school principal and the other staff members. The cycle commenced with agreement from the school principal that we could share the learning by giving a presentation to the whole staff at a staff meeting after school hours. The principal labelled this presentation 'an exposé', a term we adopted and continued to use throughout the cycle.

Initially, clarity was sought by the co-researchers on the precise purpose of the exposé. They were unsure as to whether it was to (a) convince other staff members to make the changes that they had, (b) inform other staff members that they would be requested to replicate what they had achieved in the next school year, or (c) simply to share information on the study they participated in. It was their opinion and experience that the decision to implement any changes to school practices rested with the principal. They reported that they would be continuing the changes to classroom practices that they had introduced in their own classrooms, but they would not be asking or telling other staff members to do the same. Hence, we agreed that the purpose of the exposé would be to inform the principal and other staff members about the study and the changes they made to classroom practices.

- May 33. R2: *It's probably up to (name of principal) though, isn't it?*
May 34. R3: *Yeah, I think it's up to (name of principal)*
May 35. R2: *If she says, 'yeah, you have to do it', then...*
May 36. R3: *Everyone has to do it*
May 37. R4: *It's not a case of...*
May 38. R2: *I don't think she's going to leave it your own devices, to be honest. I think she's either going to say 'we're either doing it or we're not'*
May 39. R1: *And I suppose this exposé is for them to hear about it and, including (name of principal) to hear about it, and then make a decision....*
May 40. R3: *Yeah*

After the presentation to the staff, I met with the principal and asked her how changes to school practices are typically implemented. Her perspective contrasted to that of the co-researchers. It was her opinion that new initiatives could be led by a class teacher, and did not have to rely on the school principal to instigate them. However, she asserted that a suggested change needs to be met with the motivation to implement the change.

July. Principal: Like if someone came to me...I would love if someone came to me and said 'look, delighted with this...em....want to roll it out...' I'd say 'great, run with it'. Anyone who has ever come to me, I'd say 'run with it'...although I do think that in terms of, it doesn't matter how many ideas somebody has, ...you know, there has to be a sense of, people have to kind of WANT to think it's a great idea to do it. It has to be something...that people in the classroom have identified as something that's not working or can't get a handle on..., where people don't think there isn't anything wrong or they haven't seen ...There has to be motivation

As our focus for the exposé was on sharing information, we compiled a list of the essential elements of the study to date that we wanted to share. They included: the purpose of language enrichment; explicitly teaching vocabulary using different methodologies (e.g. topic-based, visual organisers, word walls); oral language homework; and pupil assessment. In addition, we identified key resources that we wanted to display. Two of the resources were directly related to providing oral language homework and assessing pupils' progress (i.e. Talk Time pupil record sheet and Talk Time homework report card). The other resources chosen to share were associated with introducing word walls, visual organisers, and

extending pupils' comments. In addition, it was agreed to disseminate a copy of Ruby the Copycat Text Talk example.

May 211. R4: Yeah I liked that handout [Ruby the Copycat Text Talk example]...

May 215. R3: There'd be no harm in handing that out

May 216. R4: I think so, there'd be no harm in handing that out because they give examples and ideas

May 217. R2: You could just flick it up and say 'oh I'll do that or I'll do that', you know, I just think sometimes, like it's fair enough we know how to do it now, but it took us a long time to learn how to do it easily

May 218. R3: We weren't always fantastic?

May 219. R2: We weren't and I just think if you've something to look at, I just think it makes it an awful lot easier

In parallel to a focus on the content of the presentation, we spent considerable time discussing how best to communicate the subject matter of each selected element. As the quote above demonstrates, the co-researchers wanted to have something to circulate that could be looked at and referred back to. We decided on an A4 double-sided handout that would summarise the key information that we wanted to share (Figure 5.7). The co-researchers emphasised the need to avoid jargon (e.g., 'extension of language') and share the learning using familiar terms. They also expressed a preference to simplify the process (e.g., pick a word, teach it, give it for homework, test it). They stressed the need to make it sound easy if other teachers were to consider replicating what they did.

May 267. R1: ...what about some of these ones that, that we looked at from September to December? What about that? You know what you're talking about teacher echo or extension or...?

May 268. R3: If you go with words like that to a staff meeting then they'll switch off....Leave them out, don't go there

....

May 284. R3: ...add on to what the kids say

May 285. R1: Add on...does that sound, is everyone happy with that or do you think it's a bit too much?

May 286. R4: No add on to what the child says, yeah

In addition, we agreed to share three video clips, one of R3 using a visual organiser (i.e., 4 square) to teach a vocabulary item, one of R2 employing rich instruction to teach the word 'ravenous' from a storybook, and one of pupils giving their opinion on Talk Time.

Every co-researcher agreed to participate in the presentation and we divided the content into four equal parts. The need to keep the exposé presentation brief was also highlighted.

May 404. R3: I just think, remember the auld golden rule there, short and sweet

May 405. R4: Yeah

May 406. R3: Very important because otherwise you lose people

Talk Time

Why?

- Improve pupils' oral language abilities
- Provides oral language planning
- Teach target words and extend vocabulary
- Improve quantity and quality of oral language

How?

- Pick words from a context (e.g. book, topic, or child)
- Teach words using different methods
 - Examples, non-examples, synonyms, opposites, games, adding on to what the pupil says
 - Repetition & review
- Encourage pupils to generate their own definitions for words
- Use word walls (pictures or written words)
- Give oral language homework (1 word per night and a topic to discuss)
- Regular assessment (daily/weekly)

Results

No. of words taught between Jan. and Easter 2013 = 76
 Average % of words correct in Easter test = 93%

Talk Time Homework

Word	Meaning	Example

Class _____

Adding on to Pupils' comments

Pupil: "One Direction are on the stage!"

Teacher: "One Direction are performing on the stage"

donation

1. Target Word: donation

2. Examples: Money to charity, Clothes to charity, Books to charity

3. Your Child's Own Definition: Something that you give away for free to help others

4. Non-Examples: Pay a bill, A set amount of money

Talk Time Homework Report Card

Teacher: _____

Pupil: _____

Talk Time Result: _____

Talk Time Score	Comments
0-15	Should benefit Pupils from where help with words at home
16-25	Good effort. Keep up the good work at home.
25+	Excellent work. Talk Time Champion Well done!

Figure 5.7: Handout shared at presentation to principal and school staff

The exposé was well received by the school principal and other staff members. The co-researchers answered questions posed to them by their colleagues with ease and a lot of positive feedback centred on the handouts and video clips that were shared. Consequently, the co-researchers reported that they were pleased with the presentation to the school principal and staff members and proud of the knowledge and skills they shared.

June. R3: We were very impressive...we do know what we're doing

Reflection on Cycle Four (April – June 2013)

The co-researchers' proposal to share information rather than promote changes to classroom practices set the scene for their intended responsibilities. Although the principal indicated that it would be acceptable for them to lead on promoting this changes to classroom practices, they did not want to be cast in that role.

Selecting what to share with their peers illuminated what the co-researchers believed was the key learning from their involvement in this study (i.e., why we did it, how we did it, proof that it worked, and resources that helped to make it work). There was an explicit focus on simplifying how to explain (i.e., brief, no jargon, bullet points, 1 page handout, show short video) and simplifying how to implement the classroom practices (i.e., provide copies of ready-made resources such as Talk Time pupil record sheet). Perhaps their repeated emphasis on making things sound easy was in direct contrast with their experiences, or perhaps their suggestions were rooted in their knowledge and beliefs of what constitutes a successful presentation to a teaching staff.

Previously the co-researchers had identified factors that were responsible for changes to their classroom practices, which were categorised into five themes (Cycle Two). I was interested in the fact that the co-researchers chose to share the learning from four of those themes and completely omitted one theme - Observation and Reflection. Even though they identified the importance of observing and evaluating their practice using the video clips and checklist, they were not prepared to promote this to other staff. The disproportionate stress on 'what to do' over 'what to say' left me with the feeling that we were only scratching the surface with the information that we shared. I was confident that the co-researchers would sustain the changes they had made to their classroom practices because of the foundations they had laid in evaluating and reflecting on their practice. However, I doubted the other staff members' ability to make the same changes without the same strong foundations.

5.6 Cycle Five: Embedding and Sustaining Changes Locally and Nationally (September 2013 – June 2016)

June 2013 marked the end of the primary school year, and also the end of the weekly audio-recorded meetings with the co-researchers. I was informed that one of the co-researchers, R2, moved to a new school in a different geographical area. This resulted in only two co-researchers, who had been part of action research Cycles One to Four, remaining in the school.

After the school summer holidays, in September 2013, the two remaining co-researchers, R3 and R4, contacted me and requested hard copies of the 'Talk Time' A4 record sheet for documenting pupils' oral language homework (Figure 5.4) and the A3 versions of the same sheet, which they wanted to use as word walls in their classroom. They expressed their intention to continue with the classroom practices described in Cycle Two: Changing Classroom Practices, namely to explicitly teach vocabulary using different methodologies, provide oral language homework, and administer weekly pupil assessments of the words taught/given for homework.

In December 2013, the school principal contacted me requesting support for the other staff members to implement 'Talk Time'. The principal stated she wanted to "roll it out with the whole staff" because of the noticeable positive impact on students' language skills. She also referenced the fact that some of the pupils who were in classes that took part in the action research inquiry had demonstrated improvements in their standardised literacy assessment scores. The principal was agreeable to my suggestion that the support for staff could be provided by myself alongside the two co-researchers who were still teaching in the school.

I met with R3 and R4 to plan how we would collectively deliver the support to staff. We agreed on a plan to deliver four after-school workshops to school staff, on a fortnightly basis between January and March 2014. R3 and R4 expressed their willingness to support teachers outside the workshop in whatever way was helpful (e.g., helping them to select words, demonstrating the use of a visual organiser). The workshops began with a rationale for 'Talk Time', rich vocabulary instruction, selecting Tier 2 words to teach, repetition and review, and weekly assessment. We drew on the staff handout that was shared at the exposé (Figure 5.7) and the video clips that were previously shared to support the points we made. Each workshop focused on one/two different language enrichment strategies and visual organisers to support the practice (i.e., 4 square, word ladder, Venn diagram, semantic feature analysis, acting out words). I introduced the topic of the workshops each week, and then we broke into three small groups to practise using the methodology/visual organiser. Each small group was led and facilitated by either myself, R3 or R4. R3 reported that she

also gave support to teachers outside of these workshops to implement the classroom practices for specific topics and themes.

The staff agreed to assess all the words they taught their pupils between January and May 2014. The results of the assessments administered, of the words taught from each class level, were shared in June 2014 and are presented in Table 5.5. The results indicate that the majority of the pupils tested scored within the 80-100% accuracy range, with the exception of 4th class. The teachers expressed their satisfaction with the positive results and their intention to continue implementing the classroom practices. They proposed writing 'Talk Time' into their 'Whole School Plans for English and Literacy Across the Curriculum', which specified their school's language and literacy monthly objectives. The principal of the school gave her consent for this addition. As well as sharing assessment scores, staff members shared their perception that many pupils had become more word conscious, explicitly remarking on new words in texts, and were using the vocabulary targets from 'Talk Time' in their free writing copies. On a more negative note, they reported that the additional time they were spending on language enrichment presented challenges to their ability to meet other time-intensive curricular demands (e.g., standardised testing, school reports, preparation for religious sacraments). Consequently, the staff articulated their preference for the following school year that 'Talk Time' would be implemented from October to December, followed by an end of term test, and again from January to February followed by an end of term test. This decision was approved by all staff members and the school principal.

Table 5.5: Assessment results of each class, May 2014

Class level	Percentage of children who scored 80-100% accuracy	Percentage of children who scored 60-79% accuracy	Percentage of children who scored 40-59% accuracy	Percentage of children who scored 20-39% accuracy	Percentage of children who scored 0-19% accuracy
Junior Infants	100%	0	0	0	0
Senior Infants	63%	37%	0	0	0
1 st Class (R4)	100%	0	0	0	0
2 nd Class	78%	11%	11%	0	0
3 rd Class	57%	0	14%	29%	0
4 th Class	33%	67%	0	0	0
5 th Class	73%	18%	9%	0	0
6 th Class (R3)	87%	13%	0	0	0

The school where the action research inquiry took place is in a geographical area where eleven primary schools are located. There was an initiative in this community towards the end of the school year, amongst the eleven schools and a previously described community

organisation, to share best practices in language and literacy development. Each school was asked to pick one practice or programme that they had found to be effective in developing children's language and literacy skills. The task was then to describe the activity in no more than 2 pages and to provide an accompanying video of it in action. The chosen practice/programme from each school was then compiled into a single resource ('Class Acts in Literacy') and shared with approximately 150 teachers across the 11 schools. The school where the co-researchers of this inquiry taught chose 'Talk Time' as their practice to share. Therefore, a summary of the rationale of 'Talk Time', the practices, and a short video of its implementation in the classroom was shared with the community of principals and teachers in the geographical area (Appendix H).

Reflections on Cycle Five, Part 1: School Year September 2013 – June 2014

I was acutely aware of Reason and Bradbury's (2001) assertion that one significant marker of quality in an action research study is the ability of the project to embed and sustain the changes implemented, so that change continues beyond the life scale of the study itself. The fact that R3 and R4 initiated contact with me in September 2013 for the necessary handouts was, for me, a sign that they would continue to implement the changes in this subsequent school year. Hence, I was satisfied that many changes would continue independently beyond the timeframe of Cycles One to Four.

In my opinion, the principal's contact in December 2013 indicated that the exposé at the end of the previous school year was insufficient to support the other staff members to implement the new practices without additional support. They had not completed the foundational steps like R3 and R4, and so clearly, a one-hour information session was inadequate. This also reinforced the perspectives of the co-researchers, who had at the time stated that whole school change would require the principal to initiate and lead the change.

I was determined not to be cast in the 'expert' role with the other staff members, as 'Talk Time' had been designed, implemented, and reviewed collectively. It was disappointing that R2 was no longer working in the school to be part of sharing the learning. However, R3 and R4 were able and willing co-facilitators and I believe the small group format assisted them to coach their peers in the use of the strategies and visual organisers. I think the confidence and enthusiasm of R3 and R4, coupled with the positive pupil assessment outcomes and the support for curricular planning with oral language, led to the commitment from the staff team to continue with the language enrichment practices in the next school year. Even though the staff team were adamant that it would only be manageable, from a time perspective, to implement for 5 months of the school year (October to February), I really felt that the fact that 'Talk Time' was going to be written into the 'Whole School Plan for Literacy and English

Across the Curriculum' was a significant step. It indicated that the language enrichment practices had become part of the school policy for curriculum planning and implementation. This implied a major shift in practice, and an important measure of how the changes had been shared, embedded and could be potentially sustained into the future in this school.

Separate to the whole staff meetings in the school, I met with R3 and R4 on their own in June 2014, to obtain their reflections one year following the end of Cycle Four (i.e., June 2013). In addition, I followed up by phone with R2, who had been teaching in a different school in a different area for the year. Firstly, I inquired about the content of the changes implemented in Cycles One to Four. I asked them “what changes to their practice stuck?” and “what changes to their practice didn’t stick?” in the subsequent school year 2013/2014. Both R3 and R4 identified that ‘Talk Time’ as a concept had been maintained in their classrooms and in their school. For them, ‘Talk Time’ encompassed a framework consisting of identifying target words to teach, using word walls to document target words, using the ‘4 square’ visual organiser to help teach the words, providing daily oral language homework, administering weekly assessments of the words taught, and using the structure of ‘Talk Time’ to help with mandatory oral language curricular planning. They remarked that, for the pupils, the notion of identifying target words to learn, learning words by making connections, documenting new words in their homework diaries and on their classroom walls, and being tested on the new words, had become embedded into everyday classroom life. They also commented that pupils enjoyed experiencing success on their weekly assessment. On the other hand, R2, who was teaching in a different school with a new set of colleagues, reported that she had maintained many changes to her practice but did not sustain the structure of ‘Talk Time’. R2 stated that as a result of Cycles One to Four, she now habitually extended pupil’s utterances, gave pupils’ increased time to contribute, provided more thorough explanation of new vocabulary, and explicitly repeated and reviewed vocabulary taught.

Conversely, all co-researchers identified changes from action research Cycles One to Four that were not maintained in their routine classroom practices in the school year 2013/2014. R3 and R4 noted that they no longer used the variety of visual organisers to support language enrichment that they had trialled (e.g., semantic feature analysis, Venn diagrams, word lines). Instead, they consistently used the ‘4 square’ visual organiser only to support rich vocabulary instruction. R2 reported that she did not sustain previously implemented changes such as use of word walls, providing oral language homework, or weekly assessments.

Secondly, I inquired about their reflections one year on, on the process of change during the school year 2012/2013 (Cycles One to Four). My questions were: “Looking back, and

thinking about the process of how things happened, what was most dominant?, least dominant?, most enjoyable?, and least enjoyable? R3 and R4 both pinpointed the use of video as the most dominant process in bringing about changes to their practice. R3 added that reviewing videos of her practice helped her to slow down and think about what she was doing and saying, and how she was teaching. According to R3, this focus on and self-reflection on her teaching, in turn, facilitated the implementation of changes to her practice. R2 named constant review and reflection that enabled incremental changes, as the processes that she believed supported changes to her practice. R2 also referenced the importance of flexibility, and the fact that each change was moulded on top of previous learning from preceding changes that were implemented. Moreover, references were made to the motivating and affirming impact of positive pupil test results. There was general agreement that the pupils' assessment results helped to confirm the effectiveness of their efforts and encouraged them to continue the changes to their practices. Co-researchers listed external motivation as the least dominant process that facilitated changes.

In terms of enjoyment, there was consensus from all co-researchers that the extra time required after-school for weekly reflective/planning meetings was the least enjoyable aspect of Cycles One to Four. R3 also shared her discomfort in the initial stages of opening up her practice to review and analysis by her peers. On the contrary, R2 regarded reviewing the videos of her practice as the most enjoyable and affirming aspect. Other processes that were deemed to be enjoyable related to the participatory nature of the process, such as listening to each other's experiences, working as a team, sharing the workload, and reaching a group consensus for decisions.

Reflections on Cycle Five, Part 2: Co-Researchers School Year September 2013 – June 2014

Hearing the reflections of the co-researchers a full year later was extremely encouraging. Firstly, the comments and remarks of the co-researchers provided evidence of 'outcome validity' (Anderson and Herr, 2009). Although not every change implemented was sustained, the core objective of changing classroom practices to support effective language enrichment was, on the whole, achieved and sustained a year later. For instance, all co-researchers gave one or more examples of consistently teaching differently by using evidence-based strategies in their daily classroom routines (e.g., utilising visual organisers, documenting target vocabulary, extending pupils' utterances, repeating and reviewing vocabulary taught).

I was disappointed that R2 did not sustain the changes to the same extent as R3 and R4. This led me to ponder possible explanations. Maybe R2 simply chose the practices that she felt were most effective or manageable. Alternatively, this may have been due to the

transition to a new school and the extra demands inherent in such a move. Perhaps it was a result of the lack of support from peers/leader in implementing changes; supports that would have been present in her former school setting.

Secondly, the co-researchers' reflections presented evidence of 'catalytic validity' (Anderson and Herr, 2009). It was apparent from their comments that, aided by the use of video and regular review, their participation in the action research Cycles One to Four had led to genuine transformation. Not only did they report changes to their practices, but changes to their perspectives. For example, the pupils' positive assessment results helped to affirm for them the effectiveness of their individual classroom practices, regardless of parental input. I found it interesting to note that the process deemed to be less dominant in affecting changes was unrelated to the teachers' role or their practices (i.e., external motivation), perhaps reinforcing such a perspective on the importance of personal agency in implementing changes.

Thirdly, the remarks of the co-researchers indicated the presence of 'democratic validity' (Anderson and Herr, 2009). Some of the most enjoyable processes for the co-researchers related to the collaborative nature of completing the action research cycles. They made references to the participative nature of the weekly planning/reviewing meetings, working as a team, and engaging in collective decision-making. It was heartening and reassuring to hear that the processes they enjoyed most mirrored the core features of action research.

In spite of the evidence of 'outcome validity', 'catalytic validity' and 'democratic validity', it appeared from the co-researchers' comments that engaging in the action research study, although perceived as mostly positive, came at a personal cost in terms of the extra time required to participate in out of school hours' meetings.

During the following two school years, September 2014 – June 2015 and September 2015 – June 2016, I witnessed further expansion of the changes that were implemented in Cycles One to Four. Spreading of the changes to practice occurred to a variety of degrees in the geographical area where the school was located, and on a broader, national level. The extension of the changes took place within four domains: (i) a teacher in a different school; (ii) 3rd and 4th class teachers in eight schools in the community; (iii) whole staff of eight schools in the community; and (iv) inclusion in the support material for the national Primary Language Curriculum. Each domain will be described in brief below:

(i) Teacher in a Different School

As a result of sharing a summary of the rationale, practices, and a short video of 'Talk Time' through the community resource 'Class Acts in Literacy', there was a request from a teacher in a different school in the area for information and guidance on how to implement 'Talk Time' with her class. I met with the teacher fortnightly, before school (8am – 8:45am), five times between September 2014 and December 2014, accompanied by a colleague. The role of my colleague was to support language and literacy development for all pupils in the community, through working with parents, teachers, principals, and other educational support staff. I shared with the teacher and my colleague the principles of 'Talk Time' and together we planned lessons that were related to a topic, subject or textbook from the teacher's class. I modelled the use of some of the language enrichment strategies and visual organisers in the teacher's classroom, allowing the teacher and my colleague opportunities to join in, ask questions or clarify anything that arose. The teacher used the 'Talk Time' A3 word walls to document vocabulary targets and the 'Talk Time' homework sheet was completed by each pupil. Weekly assessments of vocabulary taught were also administered.

Feedback from the teacher was very affirming as is evident in the following testimonial:

I admit I was skeptical about the 'talking topic' for homework. The idea was that the child would be sent home with a talking topic-anything from ice-cream to One-Direction to the Omni Shopping Centre and they would have to talk about it for ten minutes at home with a parent/guardian. The parent/guardian would then sign to say they had completed the talking homework. To my surprise it worked really well and the children loved coming in and telling us the next day what they had talked about at home! If only parents knew what children divulged!They also suggested different approaches to teaching the new vocabulary including target word sheets, Venn diagrams, semantic feature analysis, word ladders, vocab games etc. Once a fortnight they also came in to demonstrate a lesson (each lesson used a different teaching tool and vocab game) and were always very welcomed visitors by the children! I have honestly never seen a programme impact quite as quickly as this did. Before my very eyes I could see the children's expressive language increase and with it their confidence. They used their new vocabulary at every opportunity and if it was used in the correct context I would dong a bell in the classroom Children coming in from yard asking when lunch was because they were "ravenous", or asking the visiting recorder teacher was she doing "voluntary" work or would she be getting an "income" and then questioning if she was a "professional" meant Talk Time was working in my class but left me with some explaining to do at times! What amazed me even more about this programme was the fact that the children retained the vocabulary. All too often you think that something is embedded - and two weeks later you realise it is forgotten. This very week I had a child at my desk helping him 1:1 with a maths problem. He turned to me half way through and said "Teacher, we're interacting now aren't we?". "Interaction" was a word from Talk Time back in November! CUE GOOSEBUMPS!

(ii) 3rd and 4th Class Teachers from Eight Schools in the Community

Twenty-five teachers from eight schools in the community took part in a working group organised by my colleague, during the school year September 2014 – June 2015, to explore

ways of addressing significant literacy difficulties of pupils in 3rd and 4th class documented in the community. The teachers in the working group identified two priorities: (a) increasing parental/family engagement to support language and literacy development and (b) enhancing children's vocabulary development. To help address the objective of enhancing children's vocabulary development, my colleague supported the twenty-five 3rd and 4th class teachers to implement 'Talk Time'. Over the school year, she facilitated fifteen individual or small group meetings to assist the 3rd and 4th class teachers plan lessons to integrate the principles of 'Talk Time' into existing curricular areas. In addition, she modelled over thirty lessons to demonstrate the use of the language enrichment strategies and the visual organisers within existing lessons. Feedback from the 3rd and 4th class teachers was also very positive. They specifically highlighted the practical support it provided to: select words to explicitly teach; implement strategies for rich instruction; and create a structure for oral language homework. Also, it was frequently stated that the results of the teachers' efforts were instantly noticeable, which was very motivating for the teachers. Once again, teachers were happily surprised with the frequency with which pupils understood and retained their knowledge of vocabulary targets when provided with rich instruction, as reported in the following quote from a 3rd class teacher:

A few weeks after I had taught the word, a boy asked me could he "disseminate" the school newsletter. I couldn't believe my ears!

Teachers who shared less favourable feedback expressed an opinion that 'Talk Time' was an extra demand on an already overloaded curriculum.

(iii) Whole Staff of Eight Schools in the Community

As a consequence of the successful implementation of 'Talk Time' in twenty-five 3rd and 4th classes in the community, the principals of all of the eight participating schools requested support to implement 'Talk Time' with other classes in the school. Therefore, during the following school year (i.e., September 2015 – June 2016) support was provided to the eight schools by my colleague to implement 'Talk Time' in other classes. This entailed the delivery of eight whole staff workshops outlining the principles of 'Talk Time'. The workshops were followed by regular, on-site support for planning and implementing the language enrichment strategies. In total, fifty additional teachers participated in the supports offered to implement 'Talk Time'. The teachers taught every class level, from Junior Infants to 6th class. Following this experience of implementing 'Talk Time', all eight schools chose to include 'Talk Time' in their 'Whole School Plans for Literacy and English Across the Curriculum' for the school year Sept. 2016 – June 2017.

I asked my colleague why she thought there was such interest in and approval of 'Talk Time' from the schools in the community. In her opinion, this was a result of the practical support it

offered for planning and teaching oral language, the tangible methodologies (e.g., word walls, visual organisers, oral language homework sheets), the noticeable increase in pupils' retention of words taught, and the minimal cost associated with its implementation. She also referenced school and leadership priorities when she stated:

Principals have a bee in their bonnet about oral language, and so it meets that need

(iv) Support Material for the National Primary Language Curriculum

In parallel to the expansion of 'Talk Time' to other classes and schools in the local community in the school years 2014/2015 and 2015/2016, the NCCA contacted me and requested my involvement in contributing to the Support Material for the new National Primary Language Curriculum for Junior Infants to 2nd class pupils. Through my employment at the time, I had made a submission with recommendations to a national and open request from the NCCA for feedback on the draft Primary Language Curriculum.

Adhering to the NCCA's template, I submitted a description of 'Talk Time' as the support material for the Primary Language Curriculum. The submission was reviewed by staff in the NCCA, and also independently reviewed by two officials from the Department of Education and Skills, before being accepted with minor revisions. The Primary Language Curriculum and the accompanying Support Materials was disseminated to every primary school teacher in Ireland in September 2016 and can be freely accessed online (<http://www.curriculumonline.ie/Primary/Curriculum-Areas/Language/Support-Material-for-Teachers>) (Appendix I).

Reflections on Cycle Five, Part 3: School Years September 2014 – June 2015 and September 2015 – June 2016

All of the planning, implementing and reviewing of changes by the co-researchers in Cycles One to Four, and the ultimate design of 'Talk Time', was shared widely in the latter phase of Cycle Five. This dispersion meets with a quality marker of an action research study specified by Meyers (2000), that is, the explicit sharing of what was learnt from the experience. The reach to a much larger number of teachers in the local community (over 75 teachers in 8 schools) occurred through a number of snowball incidents. The request for support to implement 'Talk Time' from a teacher in a different school originated from the 'Class Acts in Literacy' community resource that featured 'Talk Time'. Meanwhile, the request from the principals in eight additional schools stemmed from the feedback of teachers in a working group, who had experienced the implementation of 'Talk Time' in their own classes.

It was regretful to me that, because of our respective work commitments, the co-researchers

and I were not in a position to co-facilitate sharing of the learning with the teachers across the eight primary schools in this latter phase of Cycle Five. Instead, this task rested with my colleague, whose role and responsibilities made the provision of such support possible. Nevertheless, I believed it to be an optimistic scenario that the knowledge and skills inherent in the implementation of 'Talk Time' were transferred to my colleague, and she was confident in her role as coach in the practices involved. As neither the co-researchers nor I were present during my colleague's planning, modelling or coaching sessions with the 3rd and 4th class teachers or the other 50 teachers in the eight schools, it is not feasible to describe exactly how this was applied. However, I personally heard the feedback from principals and teachers in the community, which was almost always positive. When grouped together, the reasons for the positive reception towards 'Talk Time' overlapped enormously. It was clear to me that their affirmation consistently referenced four factors: practical support to plan for oral language objectives; practical and tangible resources to support the teaching of vocabulary; instantaneous and perceptible impact on pupils' language development; and observable evidence that pupils retained the vocabulary taught. Hence, the motivating factors for change were based on the fact that 'Talk Time' met a need for support with oral language planning, was easy to implement, and the impact was visible in the short-term and long-term.

Thus, the feedback from this large cohort of educators, coupled with the insertion of 'Talk Time' into 'Whole School Plans for English and Literacy Across the Curriculum' and the inclusion of a description of 'Talk Time' in the support material for the Primary Language Curriculum, appeared to verify two additional features of quality proposed by Reason and Bradbury (2001): a reflexive concern for practical outcomes and a emergence towards a new and enduring infrastructure. The practical outcomes were evident from the support 'Talk Time' reportedly provided to plan and teach the curricular objective of developing oral language skills, along with pupil impact that was readily observable. The emergence towards a new and enduring infrastructure was evident from the policies and structures in which 'Talk Time' became embedded, namely the 'Whole School Plans for English and Literacy Across the Curriculum' and the Support Material for the Primary Language Curriculum. The sustainability of the practices inherent in 'Talk Time' seemed to be growing more secure each year with the expansion to other teachers and educational structures and policies. However, I wondered would the changes to classroom practices implemented by so many teachers in the community be sustained into the long-term if there was no 'person/s' providing ongoing supportive structures or no communicative space to facilitate reflection and review? Also, would the description of 'Talk Time' in the new Primary Language Curriculum translate from paper to actual practice in other classrooms outside the community without the same degree of discussion, collaboration, facilitation, demonstration, and practical focus?

5.7 Conclusion

The five action research cycles described above outline the 'story' of the present inquiry and describe the core action research study. How the cycles informed and were informed by each other is highlighted. The reflection boxes provide insight into choices made and interpretations of events and outcomes as they unfolded. Based primarily on the content of the action research cycles, and the critical reflections described in the reflection boxes, I deduced the following proposition, which is discussed in detail in Chapter 7:

Collaboratively designed activities are central to changing classroom practices to support effective language enrichment.

The findings of the core action research analysis set the foundations for the next stage of analysis: the findings of the thesis action research analyses. They are presented in the next chapter.

6 Findings of the Thesis Action Research Analyses

6.1 Introduction

Coghlan and Brannick (2010) assert that to ensure quality in action research, three distinct forms of reflection are required: content reflection to think about what is happening; process reflection to think about how things are being done; and premise reflection to critique assumptions and perspectives. Reflections on the content of the action research cycles (i.e., core action research analysis), and critical perspectives on the content, have been described in detail in the previous chapter. This chapter presents the analyses of the thesis action research study, providing a means of conducting the second form of reflection described by Coghlan and Brannick (2010), process reflection, and critical reflections on the processes that underpinned the inquiry.

As outlined earlier, the analyses of the thesis action research study focused on the processes involved in supporting changes to classroom practices, concentrating and reflecting on the experiences of the core study. I, independent of the co-researchers, completed it. The analyses were conducted on transcriptions of six meetings that spanned the action research cycles that were completed during the first primary school year (i.e., Cycles One to Four). The meetings took place on 25th September 2012, 22nd October 2012, 29th November 2012, 22nd January 2013, 19th March 2013, and 21st May 2013 (Table 4.2). In order to complete the thesis action research analyses, thematic analysis was applied to the transcribed data over three phases: (i) a thematic analysis of the processes that occurred; (ii) a thematic analysis of one of the key processes deduced from phase one, participation; and (iii) a thematic analysis of the second key process deduced from phase one, change (Figure 4.1). Each phase is described in detail below. The four propositions that emerged from the thesis action research analyses are also identified.

6.2 Phase One: Thematic Analysis of the Processes That Occurred

A deductive approach to thematic analysis, at the semantic level, was adopted in phase one, whereby the processes that occurred in the transcriptions were captured descriptively in the themes coded. I made a decision to focus on what was happening, how action was being decided upon and how co-researchers participated, defining the codes using surface meanings. This approach to data coding is illustrated in the excerpt below (Table 6.1). This excerpt is from a discussion that occurred after the co-researchers watched a video clip of a classroom lesson. By creating a column to the left of the text, it is apparent how the

transcripts were coded line by line in terms of the process that occurred. A fully coded transcript can be found in Appendix J.

Table 6.1: Deductive approach at the semantic level to coding the data

Theme	Transcript
Teaching with example	202. R1: A bit like you (name of R3), I was repeating back what she said
Asserting expertise	203. R3: And trying to come up with the next one
Affirming	204. R1: Yeah, trying to come up with more of the words.
Asserting expertise	205. R3: Yeah, you need your stall tactic
Agreeing with positive outcomes of change	206. R1: Exactly, so it's, so maybe that's something that's realistic, repeating back and extending, that's ok....
Proposing action	so from watching that, what did you think (name of R4), you know your class well? From watching that
Directing inquiry at particular researcher	with the kids, whatever, you think the Venn diagram got more out of them?
Affirming	207. R4: I do, yeah, I do think the Venn diagram did
Agreeing with opinion	208. R1: I think so as well

Themes that were identified in phase one were then scrutinised for duplication, overlap and fit and re-assigned as appropriate. After coding half of the transcripts in this way, 105 themes had emerged, but further scrutiny demonstrated that many were duplicates or overlapped considerably with other themes. Table 6.2 provides examples of themes that were deleted or merged for a better fit with existing themes. Consequently, the number of themes reduced from 105 to 46.

Table 6.2: Examples of reassigning and merging of themes

	Initial theme	Merged with existing theme
Examples of duplication	Setting the scene	Keep it going: setting the scene
	Proposing change	Proposing action
	Negotiating	Negotiating action
Examples of overlap	We are great	Self-praise
	I know the checklist	Asserting expertise
	Doing this already	Relating to personal experience
Examples of better fit	Taking the lead	Proposing action
	Seeking agreement	Testing
	Make it all ok	Backing down

6.2.1 Ensuring the reliability of coding

Next, in order to help determine the reliability of how the transcripts were being coded, another researcher independently coded transcript 2 (October 2012 transcript) using only the

46 process codes. A comparison was made between how the other researcher and I coded the same transcript. Initially only 42% agreement was reached on code categories. Discrepancies were examined and discussed between both coders. Differences in coding arose from two key sources. Firstly, differences emerged from the use of multiple theme identifiers for similar processes, for example ‘relating to personal experience’/‘reflecting on practice’ or ‘agreeing’/‘affirming’ or ‘asserting expertise’/‘teaching’. The discussion around these discrepancies allowed the operational definition of each theme to be refined and clarified, adding transparency to their meaning. A second source of discrepancies related to inconsistencies in how themes were applied. This was resolved through closer inspection of the precise process that was taking place and agreement was reached on the most appropriate theme to assign. Examples are presented in Table 6.3.

Table 6.3: Examples of reassigning and merging of themes

Transcript example	Theme I assigned	Theme assigned by other researcher	Theme agreed by both researchers
Oct 31. R1: Which one do you think would-, you'd like to focus on?	Directing inquiry at particular researcher	Negotiating action	Negotiating action
Oct 47. R1: So they're saying 'they're singing' and (name of R3) says 'they're performing'	Teaching with examples	Setting the scene	Teaching with examples

Following this cross-check, a more thorough and cohesive meaning of the 46 process themes emerged. Discussion and review continued until full consensus was reached between the other researcher and I on the exact theme to assign to each text segment across the entire transcript, thus adding to the transparency and trustworthiness of the process codes.

6.2.2 Refinement of the themes

Thematic analysis continued by coding the remaining transcripts line by line, and reviewing the coding of themes in terms of existing themes. Each line was then either assigned to one of the existing themes or a new theme evolved to reflect the process that was happening. Themes were scrutinised one by one to help ensure that they adequately reflected the process that was occurring. In this way the refinement of the themes was repeatedly cross-examined and re-evaluated with reference to the transcripts to ensure integrity with the data. Such thorough analysis was repeated three times and led to changes to the number and names of themes.

In the first refinement, five new themes evolved to accurately capture how things were being done in the action research inquiry, resulting in a total of 51 themes. In the second and third

refinements, themes were comprehensively analysed to ensure they were “specific enough to be discrete” and “broad enough to encapsulate a set of ideas contained in numerous text segments” (Attride-Stirling, 2001, p. 392). There were some themes that had previously seemed sufficiently narrow when coding the transcripts. However, when it came to looking for relationships between themes, it became apparent that some themes were too broad to capture one core concept. For example, the theme ‘agreeing’ referred to a variety of agreement for different intentions. Therefore, the theme ‘agreeing’ was subdivided into ‘agreeing with proposed action’, ‘agreeing with positive outcomes of change’ and ‘agreeing with opinion’. In the third refinement, the opposite also occurred whereby some themes were merged with other existing themes that adequately reflected the process that was occurring. Table 6.4 outlines the themes that were subdivided and Table 6.5 lists the themes that were merged.

Table 6.4: Examples of themes that were subdivided during the second phase of refinement

Initial theme	Themes that it was subdivided into
Agreeing	<ul style="list-style-type: none"> • Agreeing with proposed action • Agreeing with positive outcomes of change • Agreeing with opinion
Challenging	<ul style="list-style-type: none"> • Challenging opinion • Challenging positive outcomes of change
Counter challenging	<ul style="list-style-type: none"> • Counter challenging opinion • Counter challenging positive outcomes of change • Counter challenging proposed action • Counter challenging resistance to change
Polite challenge	<ul style="list-style-type: none"> • Polite challenge of excuses • Polite challenge of opinion • Polite challenge of positive outcomes of change • Polite challenge of proposed action • Polite challenge of resistance to change

Table 6.5: Examples of themes that were merged during the third phase of refinement

Initial theme	Theme(s) that they were merged into
Expressing fear	Negotiating action
Checking in	Social niceties
Challenging resistance to change	Polite challenge to resistance to change
Half agreeing with opinion	Agreeing with opinion
Asserting lack of expertise	Expressing uncertainty
Expressing disbelief	Praising parents (1 incident) Praising pupils (1 incident) Judging (1 incident)
Identifying challenges of language enrichment strategies	Reflecting on practice
Half agreeing to action	Agreeing with proposed action
Challenging proposed action	Polite challenge to proposed action (5 incidents) Clarifying (5 incidents)
Challenging positive outcomes of change	Polite challenge of positive outcomes of change

Consequently, the final number of themes from the analysis of the data from a process perspective was 63. Every example from the transcripts of each of the 63 themes was collated into a Word document. This facilitated the collation of a complete record of all the examples of the data that helped to generate each theme. On a practical level, it helped to more easily determine the number of incidents of each theme. The number of incidents of each theme ranged from 300 to 2. However, Braun and Clarke (2006) assert that a theme is not preoccupied by the number of times a certain pattern appears, but rather with the relevance and importance of the pattern to the research objectives. A list of the final themes from the thematic analysis, with the number of incidents in parenthesis is presented in Table 6.6.

Table 6.6: List of the final 63 themes (number of incidents)

1. Accepting expertise (8)	33. Mimicking pupils (7)
2. Accepting praise (6)	34. Misunderstanding (3)
3. Acknowledging negative opinions (5)	35. Motivating (2)
4. Affirming (167)	36. Negotiating action (208)
5. Agreeing with opinion (300)	37. Paraphrasing (45)
6. Agreeing with positive outcomes of change (40)	38. Polite challenge of excuses (3)
7. Agreeing with proposed action (261)	39. Polite challenge of opinion (52)
8. Asking for opinion/inquiry (151)	40. Polite challenge of positive outcomes of change (5)
9. Asking the expert (29)	41. Polite challenge to proposed action (89)
10. Asserting expertise (132)	42. Polite challenge to resistance to change (8)
11. Backing down (58)	43. Praising parents (11)
12. Challenging opinion (8)	44. Praising pupils (13)
13. Clarifying (138)	45. Praising researcher (49)
14. Counter challenging opinion (7)	46. Praising self (12)
15. Counter challenging positive outcomes of change (2)	47. Proposing action (160)
16. Counter challenging proposed action (4)	48. Reassuring researcher (24)
17. Counter challenging resistance to change (4)	49. Reflecting on practice (113)
18. Demonstrating checklist (25)	50. Relating to personal experience (62)
19. Describing challenges of change (7)	51. Repeating (62)
20. Describing change (46)	52. Requesting resources (6)
21. Describing positive outcome of change (35)	53. Self-criticism (12)
22. Describing the process (9)	54. Setting the scene (25)
23. Directing inquiry at particular researcher (10)	55. Sharing opinions of other researchers (18)
24. Expressing frustration (14)	56. Social niceties (15)
25. Expressing uncertainty (18)	57. Summarising (90)
26. Filler (57)	58. Teaching jargon (5)
27. Finishing sentence (4)	59. Teaching quoting evidence (13)
28. I know the answer (18)	60. Teaching with examples (77)
29. Inquiry about practice (21)	61. Teaching with explanation (64)
30. Judging (100)	62. Testing (19)
31. Making excuses (46)	63. Using humour (93)
32. Mimicking parents (7)	

6.2.3 Presenting the themes

Presenting the themes using Thematic Networks can help to organise and structure identified themes, illustrating how relationships between themes are construed and how interpretations were gleaned from the data (Attride-Stirling, 2001). To construct Thematic Networks, Basic Themes from the data are grouped into “similar, coherent groupings”, categorised into Organising Themes on the grounds of associated content or reference, and then unified to create Global Themes (Attride-Stirling, 2001, p. 392). Describing the construction of the Thematic Networks, from the initial generation of themes to grouping themes into Global Themes, and all the steps in between, provides a transparent audit trail for readers in appraising the assumptions and claims made in the thematic analysis and choices in relation to further analyses.

The 63 Basic Themes (Table 6.6) were grouped into 11 Organising Themes, on the grounds of relationship or associated content or reference. For example, the Basic Themes ‘proposing action’, ‘negotiating action’, ‘agreeing with proposed action’, ‘requesting resources’, ‘motivating’ and ‘describing the process’ were grouped based on their related content and constructed the Organising Theme of ‘planning change’. As Braun and Clarke (2006, p. 92) suggest, this method of refining and defining the themes ensures that the “essence” of what the themes are about are presented. Subsequently, the 11 Organising Themes were reviewed and unified to deduce two distinct Global Themes that reflected the core processes of the action research inquiry. Firstly, the Organising Themes ‘inquiring’, ‘keeping it going’, ‘using praise’, ‘common ground’, ‘sharing knowledge’, ‘sharing expertise’, ‘sharing practice’ and ‘sharing opinions’ were amalgamated to deduce the Global Theme ‘Participation Requires Constant Attention’. Secondly, the Organising Themes ‘planning change’, ‘resistance to change’ and ‘reflecting on change’ were amalgamated to deduce the Global Theme ‘Change is a Process’. Table 6.7 illustrates the construction of the two thematic networks, from Basic Themes to Organising Themes to Global Themes. The thematic networks are also represented in Figure 6.1 and Figure 6.2.

Table 6.7: Constructing the Thematic Networks

Basic Themes	Organising Themes	Global Theme	
Proposing action	Planning change	Change is a process	
Negotiating action			
Agreeing with proposed action			
Requesting resources			
Motivating			
Describing the process			
Polite challenge of excuses	Resistance to change		
Making excuses			
Polite challenge to proposed action			
Polite challenge to resistance to action			
Counter challenging proposed action			
Counter challenging resistance to change			
Describing change	Reflecting on change		
Describing challenges of change			
Describing positive outcomes of change			
Agreeing with positive outcomes of change			
Polite challenge of positive outcomes of change			
Counter challenging positive outcomes of change			
Basic Themes	Organising Themes	Global Theme	
Asking for opinion	Inquiring	Participation requires constant attention	
Directing inquiry at particular researcher	Keeping it going		
Using humour			
Clarifying			
Summarising			
Paraphrasing			
Backing down			
Misunderstanding			
Social niceties			
Repeating			
Setting the scene			
Finishing sentence			
Filler			
Praising researcher			Using praise
Praising self			
Accepting praise			
Reassuring researcher	Common ground		
Agreeing with opinion			
Affirming			
Testing	Sharing knowledge		
I know the answer			
Asking the expert			
Asserting expertise			
Accepting expertise			
Teaching quoting evidence			
Teaching jargon			
Teaching with examples			
Teaching with explanation			
Expressing uncertainty			
Demonstrating checklist			
Relating to personal experience		Sharing expertise	
Inquiry about practice			
Reflecting on practice		Sharing practice	
Self-criticism			
Praising parents	Sharing opinions		
Praising pupils			
Judging			

Mimicking pupils		
Mimicking parents		
Expressing frustration		
Acknowledging negative opinions		
Sharing opinions of other researchers		
Challenging opinions		
Polite challenge of opinion		
Counter challenging opinions		

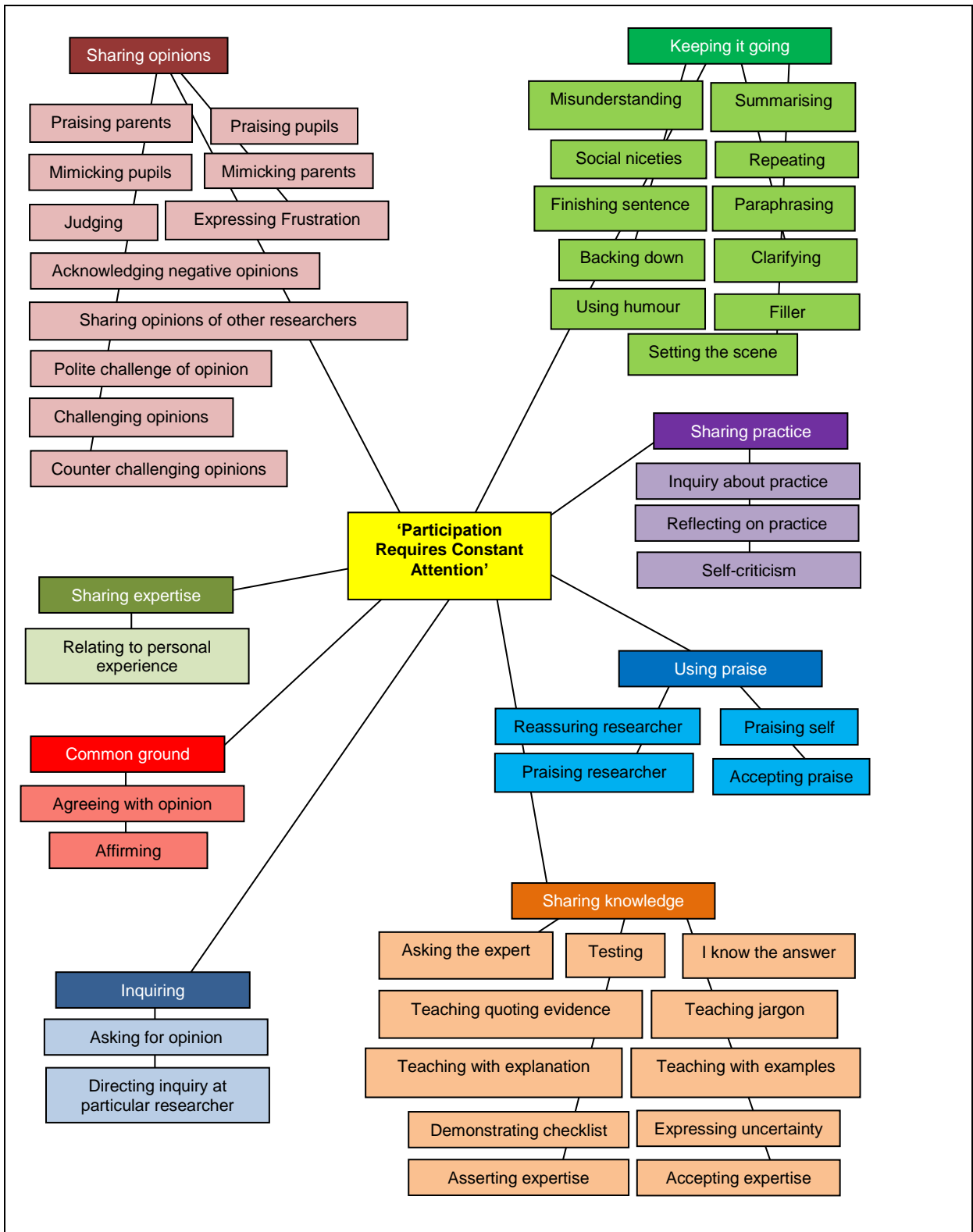


Figure 6.1: Thematic Network for 'Participation Requires Constant Attention'

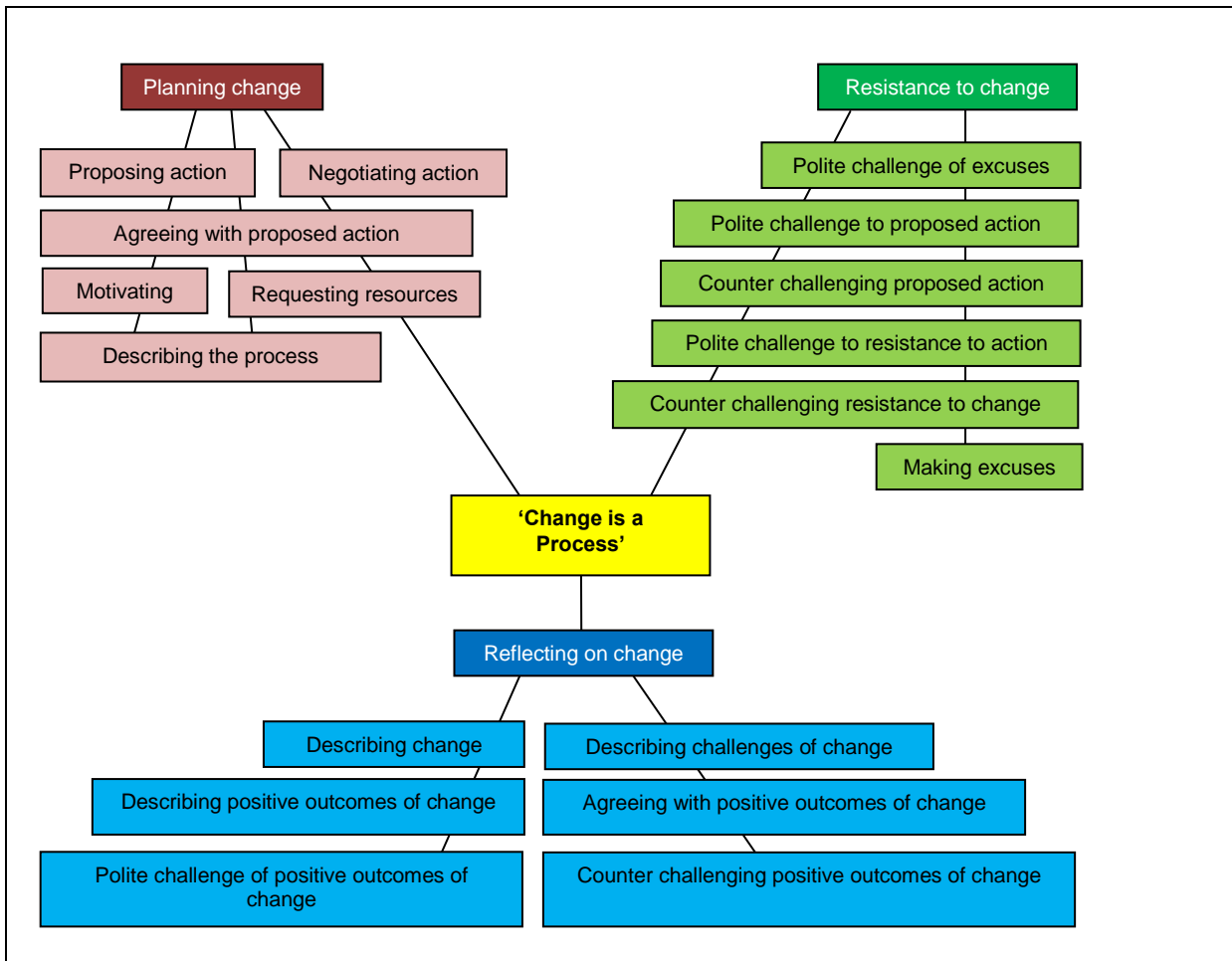


Figure 6.2: Thematic Network for 'Change is a Process'

Member-checking has been used by researchers to validate conclusions by presenting interpretations to participants for comment (Varpio, Ajjawi, Monrouxe, O'Brien, & Rees, 2017). However, as previously stated, this analysis of the thesis action research study and the construction of the Thematic Networks were completed by me independently, albeit directly rooted in the transcribed data of all co-researchers' contributions. The Thematic Networks were not presented to the co-researchers for comment or validation. Some argue that member checking can raise ethical and methodological challenges (Goldblatt, Karnieli, & Neumann, 2011). For example, participants' possible reluctance to provide honest feedback (Karnieli-Miller, Strier, & Pessach, 2009) or potentially coercing co-researchers to prolong engagement with the research (a time commitment of one school year was stated in the consent form of this inquiry and the Thematic Networks were constructed the following school year). In addition, member checks can get distorted into a response to one co-researcher's interpretations and not the co-researchers' own interpretation of the original processes, thus reducing their validity (Sandelowski, 2002). Also, many studies report minimal changes to initial interpretations after member checking (Goldblatt et al., 2011).

6.2.4 Drawing on the thematic analysis of phase one to plan for phase two and phase three

The two Global Themes that were deduced from Phase One (Thematic Analysis of the Processes that Occurred), set the foundations for subsequent analyses and interpretations. This is a typical occurrence within action research for direction for further inquiry to evolve with each action research cycle and each action research meta-cycle (Coghlan & Brannick, 2010). This action research inquiry aimed to explore how classroom practices can be changed to support effective language enrichment. Therefore, it was anticipated that further thematic analyses of the two key processes that emerged would lead to greater insights and augmented understanding of the factors that influenced changes to classroom practices in this inquiry.

The Global Theme 'Participation Requires Constant Attention' is constructed from eight Organising Themes. Half of the Organising Themes relate to sharing knowledge and experiences (i.e., 'sharing opinions', 'sharing expertise', 'sharing knowledge', 'sharing practice'), while the other half pertain to the processes of obtaining and continuing the flow of all co-researchers' contributions (i.e., 'inquiring', 'keeping it going', 'common ground' and 'using praise'). The former Organising Themes were founded from multiple Basic Themes (i.e., total of 45). As participation was at the centre of this Global Theme and is a core feature of action research, I chose to explore the phenomenon of participation in more detail. I subsequently reviewed the literature in relation to participation. In addition, I completed additional thematic analysis of the data from the perspective of participation. The literature review and the thematic analysis of participation are described in Section 6.3 below.

The Global Theme 'Change is a Process' is constructed from three Organising Themes (i.e., 'planning change', 'resistance to change', 'reflecting on change') and numerous Basic Themes (i.e., total of 18). Hence, as change emerged as a focal construct from the thematic analysis in phase one and change is central to any action research inquiry, I also completed a review of the literature on the phenomenon of change. Then, I carried out further thematic analysis of the data through a change lens. The literature review and the thematic analysis of change are presented in Section 6.4.

6.3 Phase Two: Thematic Analysis of Participation

This section presents a synopsis of the literature that was reviewed in relation to the concept of participation after the deduction of the Global Theme: 'Participation Requires Constant Attention'. It also describes the thematic analysis of the data that was completed from the perspective of participation, through three different lenses: frequency of engagement in

problem-posing and problem-solving; roles of co-researchers with regard to the content of problem-posing and problem-solving; and patterns of interaction between co-researchers. The rationale for choosing these viewpoints is outlined, along with the findings and insights gleaned from the thematic analysis completed.

6.3.1 Participation

Participation has been described as “an infinitely malleable concept” (Cornwall, 2008, p. 269) due to the fact that it can refer to a plethora of things that involve people. For example, patient involvement can range from helping to choose the colour of paint for the waiting room to delegating power in decisions about what the clinic does (Cornwall, 2008). The term ‘participation’ can be found with a variety of qualifying prefixes, such as civic, civil, individual, political, public, community and citizen, all of which imply some level of involvement in a process. Moreover, technological advancements have enabled people to become involved in new ways and new spaces (Brodie et al., 2009). However, being involved in a process is not the same as having a voice in the process (Cornwall, 2008). McTaggart (1997, p. 28) distinguishes between ‘involvement’ and ‘participation’, stating:

Authentic participation in research means sharing in the way research is conceptualised, practised, and brought to bear on the life-world...mere involvement implies none of this and creates the risk of co-option and exploitation of people in the realisation of the plans of others.

In action research, participation is construed as authentic collaboration between researchers and others, as they commit to collectively explore and work towards changing a shared concern (Koch & Kralik, 2006). In essence, those who will be most affected by the study are the co-researchers (Harate Te Aika & Greenwood, 2009). They are facilitated to examine and explore their own understanding of the issue, rather than how an outsider understands it (Reason & Bradbury, 2008a). Participation has been identified as one of the three essential elements of action research (action and research being the other two). “Unless all three elements are present, the process may be useful but it is not action research” (Greenwood & Levin, 2008, p. 5).

Action researchers posit that genuine participation has two key dimensions: epistemological dimensions and political dimensions (Reason & Bradbury, 2008a). Firstly, from an epistemological stance, the world is considered by action researchers to have multiple vantage points and knowledge is believed to be socially constructed through a collective process (Gaventa & Cornwall, 2008; Stringer, 2007). Authentic participation aims to produce knowledge based on joint inquiry and meaning-making rather than through the frame of an individual researcher’s perspective (Reason & Bradbury, 2008a). As a consequence of authentic participation, Kemmis and McTaggart (2000) assert that action research enables

objective perspectives (researcher) and subjective perspectives (participants) to be taken of a shared concern, from both an individual and social viewpoint. This ensures a more encompassing view of practice is taken, what they describe as a 'reflexive/dialectical perspective'. Alternating between these perspectives enables participants to truly explore their actions, understandings, and practices, a fundamental precursor to meaningful social change (Kemmis & McTaggart, 2000). Consequently, the quality of the knowledge that is generated is enhanced as new insights and definitions of issues are socially constructed (Ospina, Dodge, Foldy, & Hofmann-Pinilla, 2008). Secondly, from a political stance, participation in action research acknowledges the rights and abilities of people to play a role in the construction of knowledge and the decisions that influence their lives (Reason & Bradbury, 2008a). By giving voice to all members of the community through genuine participation, a commitment to democratic principles and power-sharing is achieved (Israel et al., 2003). Also, the very nature of inquiring and creating new knowledge through a democratic process may result in group empowerment, the mobilisation of a community and ultimately, social transformation (Gaventa & Cornwall, 2008; Israel et al., 2003). Consequently, the ability to prove genuine participation is repeatedly referenced as a crucial element to evaluate in the appraisal of the quality of an action research study (Coghlan & Brannick, 2010; Herr & Anderson, 2005; Koch & Kralik, 2006).

However, there are a number of potential challenges to ensuring genuine participation that an action researcher must be cognisant of. According to Cooke and Kothari (2001), researchers have to avoid the possible trap of "tyranny" whereby researchers, in their strong attempts to encourage participation, may actually end up reinforcing inequalities of power. Similarly, Arieli et al. (2009, p. 275) describe a "paradox of participation", in which

action researchers, acting to actualise participatory and democratic values, unintentionally impose participatory methods upon partners who are either unwilling or unable to act as researchers.

They suggest that this type of pseudo-participation can lead to participants simply going through the motions of participation without any real commitment to the process, also resulting in reinforcement of power inequalities. Tensions in facilitation are an additional potential challenge of participation. There is a risk that a researcher may control, patronise, suffocate or misunderstand the community, and/or that the community will become over dependent or reject the outsider (Reason, 2006). A further potential challenge of participation is the co-construction of new knowledge. The action researcher must be aware of the possibility that obstructive familiar procedures may become automatically engrained in the actual participatory process. Although reassuringly familiar, those parameters and roles may stifle and limit authentic participation in the production of knowledge. Co-researchers may draw on and repeat previous methods of collaboration from their experiences in other meetings or committees, such as using jargon and favouring academic knowledge over local

knowledge (Coenen & Khonraad, 2003; Gaventa & Cornwall, 2008). Due to power differentials between researchers and practitioners or communities, there is a risk that a researcher's knowledge retains a higher status and is privileged over other forms of tacit or practice-based knowledge (Coenan & Khonrad, 2003). However, others argue that the opposite is also possible. As Anderson and Jones (2000) caution, efforts to ensure participation through mutual sharing of knowledge and expertise may result in practitioner's knowledge becoming elevated to a more privileged status than that of the researcher's, to the detriment of the researcher's valuable contributions. Aligned to this challenge is the notion of 'errors of consensus collusion' (Reason, 2006), whereby individuals from the community may become defensive of their accounts of reality and refuse to engage with alternative perspectives, thus preventing necessary changes in perpetuating policies or structures. Furthermore, what is promoted as agreed and valid community knowledge may in fact simply be the voice of one dominant member of the community and not based on legitimate consensus, serving only to replace one singular dominant rhetoric with another (Gaventa & Cornwall, 2008).

Therefore, participation is a fundamental element of action research and its core features have been documented, but participation is not realised without preventing or overcoming some of the potential challenges described. As will be discussed in the next section, conducting a thematic analysis of participation on the raw data of an action research inquiry has the potential to shed light on a number of the important features of participation and evaluate whether challenges were surmounted.

6.3.2 Thematic analysis and participation

Thematic analysis of participation may provide objective information on the contributions from each co-researcher. Moreover, it may share insights into the two key dimensions that according to action researchers encompass genuine participation: epistemological dimensions and political dimensions (Reason & Bradbury, 2008a). Thematic analysis of participation may help to display how knowledge was democratically and socially constructed through analysing and reporting what happened when a concern was raised. Evidence may also be provided of the facilitative roles, if any, that were taken up to enable the views and perspectives of all co-researchers to be heard. Hynes et al. (2012) assert that an action research inquiry should attend to views that support the status quo and views that conflict with it. They draw on Bakhtin's (1981) notion of 'heteroglossia' as offering a nuanced view of participation in which different and conflicting voices that pull away from the dominant worldview (centrifugal forces) are valued and recognised as much as centripetal forces that support the status quo, and may minimise differences and stunt change. Thematic analysis may illustrate how conflicting perspectives were voiced and attended to throughout an action

research inquiry. Thus, through the application of systematic and rigorous thematic analysis, evidence may be produced of the diversity of voices and worldviews that surfaced to enrich the production of new meanings and create more effective solutions (Israel et al., 2003; Munoz & Jeris, 2005).

Furthermore, thematic analysis may provide information for quality appraisal by facilitating an assessment of the degree of participation that took place during the inquiry. The continuums and typologies of participation outlined by Arnstein (1969), Cornwall (1996) and Pretty (1995) provide useful frameworks for appraising the extent of participation. Arnstein's (1969) ladder of participation (Figure 6.3) places 'citizen power' at the top of the ladder and includes categories of partnership, delegated power, and citizen control. This is differentiated from 'tokenism', placed on the middle rung of the ladder, and 'non-participation' appearing at the bottom of the ladder.

Citizen Control Delegated Power Partnership	<i>Citizen Power</i>
Consultation Informing Placation	<i>Tokenism</i>
Therapy Manipulation	<i>Non Participation</i>

Figure 6.3: Arnstein's (1969) Ladder of Participation

Differing degrees of possible participation are also evident in Cornwall's (1996) six-point continuum of participation, outlined by Herr and Anderson (2005). The continuum ranges from 'co-option', whereby participants are merely token representatives and the research is *on* local people, to 'collective action', whereby participants set their own agenda for the research and implement it by themselves (Table 6.8). Similarly, Pretty's (1995) seven forms of participation in their typology range from no participation in stage one ('manipulative participation') to 'interactive participation' and 'self-mobilisation' in stages six and seven (Table 6.9). Thematic analysis may provide a credible audit trail for appraising the levels of participation that took place, and for plotting it on the typologies and continuums described.

Table 6.8: Cornwall's (1996) Continuum of Participation in Herr and Anderson (2005, p. 40)

Mode of Participation	Involvement of Local People	Relationship of Research & Action to Local People
Co-option	Token; representatives are chosen, but no real input or power	On
Compliance	Tasks are assigned with incentives; outsiders decide agenda	For
Consultation	Local opinions asked, outsiders analyze and decide on a course of action	For/With
Cooperation	Local people work together with outsiders to determine priorities; responsibility remains with outsiders for directing the process	With
Co-learning	Local people and outsiders share their knowledge to create new understanding and work together to form action plans, with outsider facilitation	With/By
Collective action	Local people set their own agenda and mobilise to carry it out in the absence of outside initiators and facilitators	By

Table 6.9: Pretty's (1995) Typology of Participation

7. Self-mobilisation	Community members set their own agenda and organise for action. Professionals have a role in the background, are facilitative and supportive but only if asked.
6. Interactive participation	Professionals and community members work as equal partners in defining the problems or needs and the strategies for change. There is a sharing of knowledge and valuing of 'local' or 'lay' knowledge. Professionals facilitate and support the process.
5. Functional participation	Community members are involved in decision-making and the development and execution of programmes or activities. Professionals are in control and take responsibility for the process
4. Participation for material incentives	Community members are asked to give their opinions on the programme plans. The professionals decide what to do.
3. Participation by consultation	Community members are informed in an early stage about the programme plans and are given the opportunity to ask questions.
2. Passive participation	Professionals are in control of the programme; community members are informed about the programme.
1. Manipulative participation	Community members are not informed about the programme, only about the activities for which they have been recruited.

6.3.3 Interrogating the data from the perspective of participation using thematic analysis

A comprehensive literature review for a structure to robustly interrogate the data from the perspective of participation led to the application of three forms of coding described by Avgitidou (2009). Avgitidou (2009) gives an account of how she explored the roles and participation of a facilitator and two teachers involved in an action research study in an education setting. She drew on the literature published on participation, collective decision processes, knowledge ownership and trust (e.g. (Day, 1985, 1998; Deketelaere &

Kelchtermans, 1996; Elliott, 1991; Somekh, 1994) to analyse the seven transcripts she collected throughout the duration of her year-long study. Firstly, she conducted an analysis of the frequency of each individual's engagement in problem-posing and problem-solving over time. Secondly, she carried out an analysis of the roles of the individuals with regard to content of problem-posing, problem-solving and actions/participation. Thirdly, she completed an analysis of the patterns of interaction between the facilitator and the teachers.

I systematically conducted those same three forms of thematic analysis of participation that Avgitidou (2009) describes. Therefore, the six transcribed meetings I had with the co-researchers were re-analysed and coded in terms of participation. I applied Avgitidou's (2009) descriptive codes to what the co-researchers said, to try and capture the frequency of co-researchers' participation, how co-researchers participated, what their role was in the participation, and the patterns of participation. This approach aligns with a deductive approach at the semantic level for identifying themes (Braun & Clarke, 2006). Thus, I engaged with the explicit content of what co-researchers said and did not categorise the underpinning ideologies of the content. In order to complete the analyses, I created three columns to the right of the text of each transcript – one column for each form of analysis (i.e., (i) frequency of engagement in problem-posing and problem-solving, (ii) roles of co-researchers with regard to the content of problem-posing and problem-solving, and (iii) patterns of interaction between co-researchers). The three iterations within this thematic analysis of participation are described below.

6.3.4 Iteration 1: Frequency of engagement in problem-posing and problem-solving

This analysis identified any instance of problem-posing or problem-solving in a line, phrase, sentence or paragraph in the transcript. As each transcript was read thoroughly, I asked questions such as 'is this a problem being posed?', 'what is the problem being posed?', 'is the content of this problem similar to the content of a previous problem posed?', 'is the co-researcher providing a way of solving the problem posed?', 'what problem does this problem-solving response correspond with?' and 'what is the problem-posing response?' Each individual problem that was posed was given an identifier (e.g. Problem-posing Sept 4). Any excerpts in the transcript that conveyed the same problem content were given the same identifier. For example, the identifier 'Problem-posing May 15' related to a concern that using technical jargon with other staff members would not be appropriate. This problem was also raised by two other co-researchers and therefore was labelled with the same identifier, as illustrated in the excerpt in Table 6.10.

Table 6.10: Example of duplication of problem-posing identifiers

May Transcript	Participation
268. R3: If you go with words like that to a staff meeting then they'll switch off	Problem-posing May 15
271. R4: They'd first of all be like 'what the hell is extension?', 'what?'	Problem-posing May 15
272. R2: Yeah, all of these new things, like even we were going back over them weeks later and I hadn't a clue, I knew what extension was, what was referential questions	Problem-posing May 15

Similarly, every problem-solving response was labelled with an identifier that corresponds with the problem it refers to. For example, the identifier 'Problem-Solving May 15' marks all the excerpts from the transcript that provide a suggestion on how to resolve the problem-posed in 'Problem-posing May 15', such as omitting the jargon or simplifying it. The association between the problem-posing identifiers and the problem-solving identifiers is demonstrated in the excerpt in Table 6.11.

Table 6.11: Example of how problem-solving responses correspond to problem-posing identifiers

May Transcript	Participation
268. R3: If you go with words like that to a staff meeting then they'll switch off	Problem-posing May 15
269. R4: Yeah, I'd...	
270. R3: If you come in and start talking to me about extension and review and all that-	
271. R4: They'd first of all be like 'what the hell is extension?', 'what?'	Problem-posing May 15
272. R2: Yeah, all of these new things, like even we were going back over them weeks later and I hadn't a clue, I knew what extension was, what was referential questions	Problem-posing May 15
273. R4: 'Referential questions', what's that?	
274. R1: Yeah, I know there was a lot of-	
275. R3: Leave them out, don't go there	Problem-solving May 15
276. R1: Ok, we'll leave that out. Is there anything about then, add on to children's language or...	
277. R2: Extens-, I suppose...	
278. R3: Do we have that in the 'why'?	
279. R1: I'm thinking of 'add on when they say something to you', like I'm thinking of extension with an easy accessible...	Problem-solving May 15
280. R3: Isn't that a different methodology then?	
281. R1: Yeah, ok	
282. R3: So 'you extend the children's turn'	Problem-solving May 15
283. R1: Now you're talking about extend, but you said that's the wrong word to use!	
284. R3: Ok...'add on to what the kids say'	Problem-solving May 15
285. R1: Add on...does that sound, is everyone happy with that or do you think it's a bit too much?	
286. R4: No 'add on to what the child says', yeah	Problem-solving May 15

I collated a list of all the problems posed and problem-solving responses, indicating the co-researcher responsible and provided a brief caption of the content of each one (Appendix K). Across the six transcripts there were 141 specific problems posed. Not all problems posed

had a corresponding problem-solving response. In total, 109 of the problems posed had one or more corresponding problem-solving responses (77%).

The sum of all the individual instances of problem-posing and problem-solving by all co-researchers in the six transcripts was 297 and 520 respectively. In addition, the total number and proportion of problem-posing and problem-solving incidents per co-researcher across the span of the study was assessed. Table 6.12 displays the range and percentage of the total number of incidents of problem-posing and problem-solving by each co-researcher.

Table 6.12: Range of total number of incidents and percentage of incidents of problem-posing and problem-solving per co-researcher

	Number of incidents by a co-researcher	Percentage of incidents by R1	Percentage of incidents by R2	Percentage of incidents by R3	Percentage of incidents by R4
Problem-posing totals (297)	43-90	27%	30%	28%	15%
Problem-solving totals (520)	49-217	42%	21%	28%	9%

The sum of all problem-posing incidents by an individual co-researcher across the six transcripts ranged from 43-90. This was spread relatively equally between R1, R2 and R3 (27%, 30% and 28% respectively); R4 posed approximately half as many problems as the other co-researchers (15%). However, the distribution of the total number of problem-solving incidents was less uniform. With a wide range of incidents (i.e., 49-217), R1 provided double the amount of problem-solving responses as R2, one and a half times more problem-solving responses than R3 and almost five times more problem-solving responses than R4. Figure 6.4 clearly illustrates the differences in distribution amongst co-researchers of total problem-posing incidents and total problem-solving incidents.

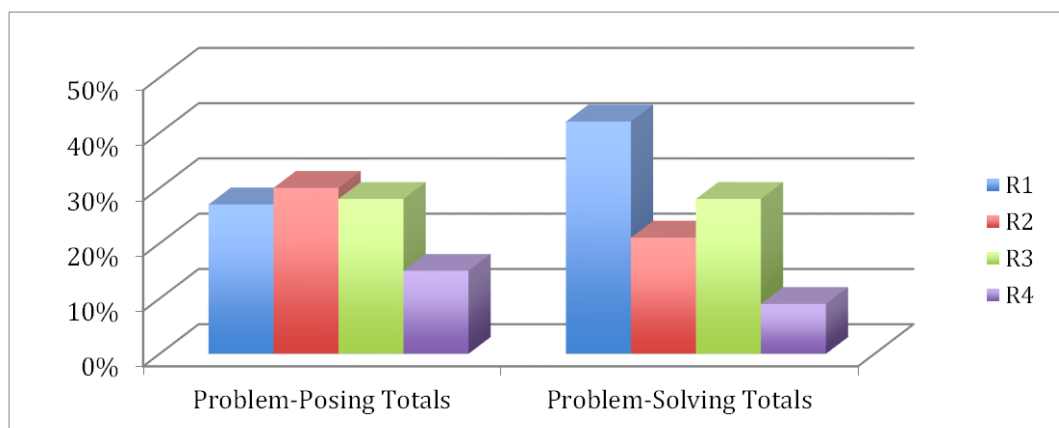


Figure 6.4: Percentages of total problem-posing incidents and total problem-solving incidents by co-researcher

Changes to the distribution of problem-posing and problem-solving instances across the timeline of the inquiry are presented in Table 6.13, Figure 6.5 and Figure 6.6. Figure 6.5 overleaf displays the percentage of incidents of problem-posing by every co-researcher within each transcribed meeting. When problem-posing incidents are examined more closely across time, it is apparent that the relatively equal distribution of total incidents of problem-solving between R1, R2 and R3 was not static over time. For example, in the September transcript R1 posed a higher proportion of problems than the other co-researchers, whereas in the November, January and March transcripts R2 posed the highest proportion of problems and in the October and May transcripts, R3 posed the highest proportion of problems. The higher incidents of problem-posing by R1 in September coincide with the focus of the action research cycle on evaluating current classroom practices. Conversely, R1 posed only 33% of problems and provided problem-solving responses 37% of the time in the May transcript when the focus was on sharing the learning with the school principal and other staff members. The increased instances of problem-posing by R2 and R3 between October and May coincide with the time when the content of the action research cycles was concentrating on 'action' through changing classroom practices and building parental involvement. R4 posed the least amount of total problems, but again, this was not consistent over time. For instance, in the November transcript R4 posed more problems than R1 and R3.

Table 6.13: Range of number of incidents and percentage of incidents of problem-posing and problem-solving by each co-researcher

	Range of number of incidents by a co-researcher	Percentage of no. of incidents by R1	Percentage of no. of incidents by R2	Percentage of no. of incidents by R3	Percentage of no. of incidents by R4
Problem-posing					
September	0-11	46%	21%	33%	0%
October	9-18	28%	20%	34%	17%
November	18-36	18%	37%	22%	24%
January	8-16	26%	32%	26%	16%
March	2-14	31%	36%	28%	5%
May	1-13	33%	24%	39%	4%
Problem-solving					
September	3-21	51%	17%	24%	7%
October	3-30	60%	15%	20%	5%
November	10-61	47%	23%	23%	7%
January	14-36	41%	24%	18%	17%
March	11-37	29%	26%	35%	10%
May	8-42	37%	15%	40%	8%

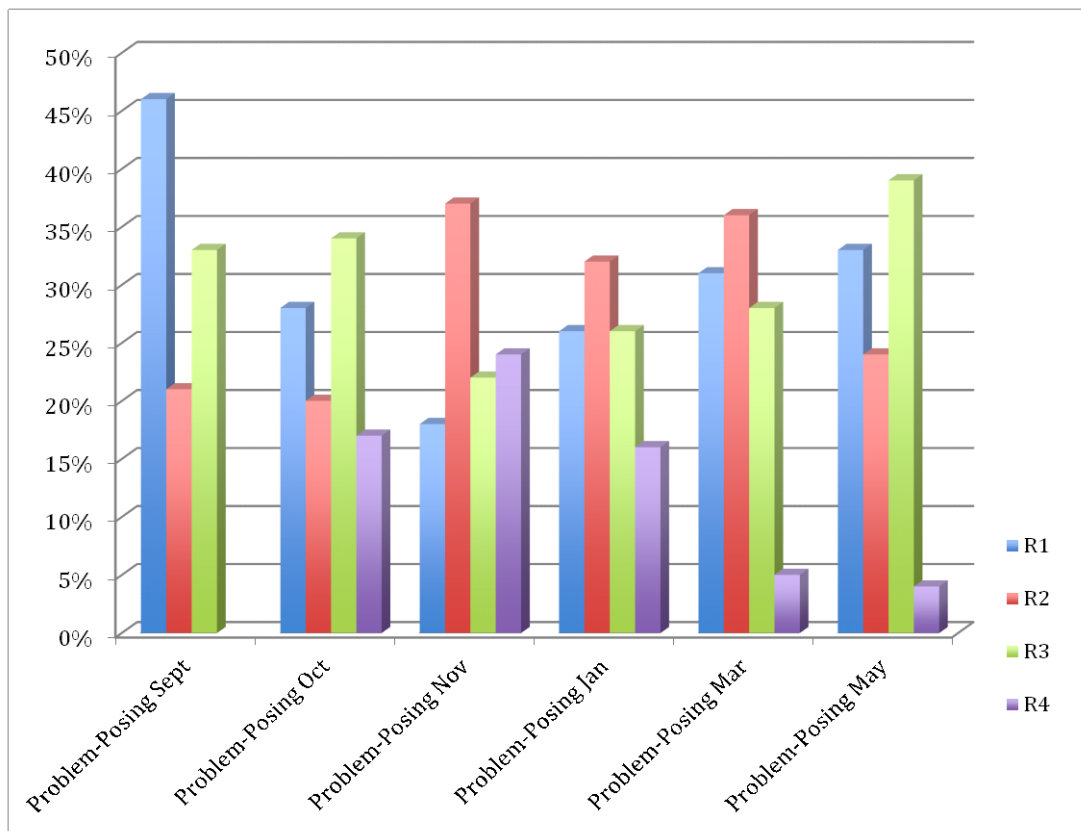


Figure 6.5: Percentages of problem-posing incidents by co-researcher over time

Similar fluctuations in the proportion of problem-solving responses across the time-span of the study were also identified. Figure 6.6 presents the percentage of incidents of problem-solving by each co-researcher within each transcribed meeting. Although R1 had the greatest proportion of problem-solving responses in the September, October, November and January transcripts; this was not the case for the transcripts towards the latter part of the study (i.e., R3 had greatest proportions in the March and May transcripts). The share of problem-solving responses by R2 ranged from 15-26%, the highest proportion evident in the March transcript and the lowest proportion resting in the October and May transcripts. Somewhat more elevated than R2's share, the proportion of problem-solving responses by R3 ranged from 18-40%, the highest proportion evident in the May transcript and the lowest in the January transcript. R4 consistently contributed the least amount of problem-solving responses (5-17%), but in the January transcript her proportion of incidents was almost equal to that of R3 (18%).

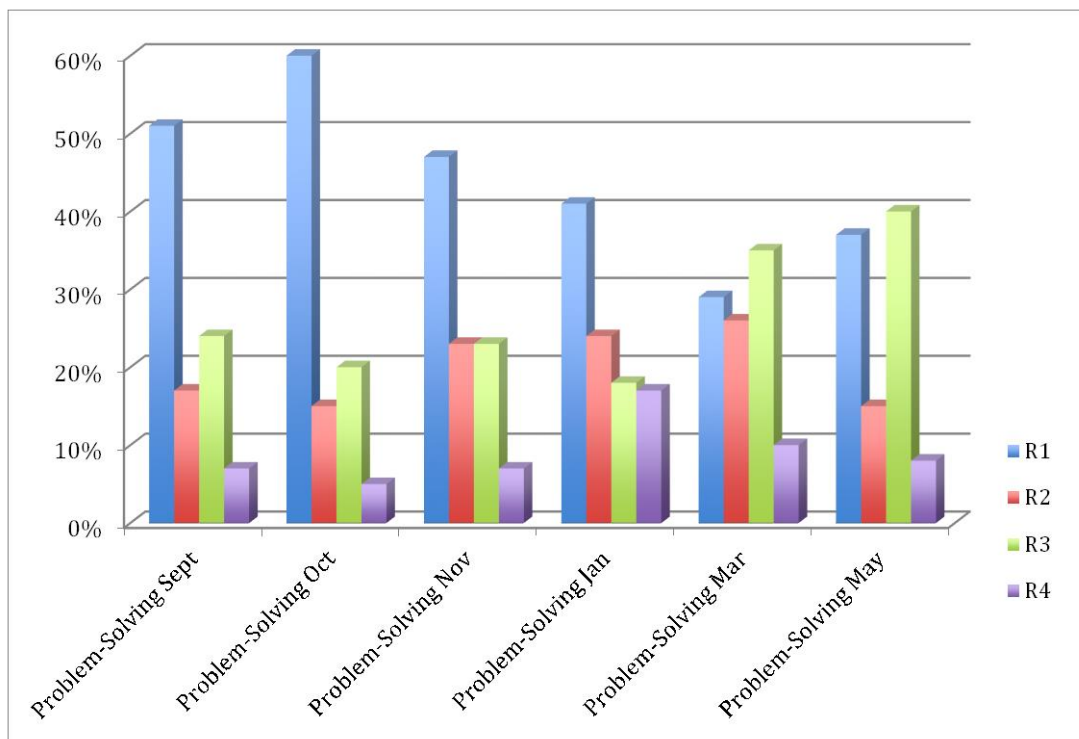


Figure 6.6: Percentages of problem-solving incidents by co-researcher over time

The above analyses of the frequency of engagement in problem-posing and problem-solving by each co-researcher across the time span of the study helps to verify the representation of the multiple voices of the co-researchers throughout Cycles One to Four of the action research inquiry.

6.3.5 Iteration 2: Roles of co-researchers with regard to the content of problem-posing and problem-solving

A further form of thematic analysis through a participation lens was of the roles of co-researchers with regard to the content of problem-posing and problem-solving incidents. Avgitidou (2009) categorised all roles of problem-posing with one of the following fourteen themes: ‘concerns re: aims’; ‘concerns re: methods’; ‘describes related issues’; ‘describes individual behaviour’; ‘asks for clarification’; ‘asks for an answer/solution’; ‘describes/gives information on what happened’; ‘agrees’; ‘disagrees’; ‘gives answer’; ‘answers and asks for feedback’; ‘doubts’; ‘questions to find out’; or ‘describes-poses practical problems’. Therefore, I re-read the transcriptions of the six meetings, and in the second column that was created beside the text, I categorised all of the problem-posing instances using the themes outlined by Avgitidou (2009). Each problem-posing incident was read carefully to inform the selection of the theme that described the role of the co-researcher in that instance. To aid the selection of the most appropriate theme, I asked questions such as ‘what is the role of the co-researcher?’, ‘what is the nature of the problem-posed?’, ‘what is the co-researcher trying to communicate?’ and ‘is there a different role evident in this incident that is not captured by

one of Avgitidou’s themes?’. Additional themes were not required as Avgitidou’s (2009) themes adequately captured the variety of roles that were expressed across the transcripts. All themes were scrutinised one by one to help ensure that they satisfactorily reflected the precise role that was adopted. The themes were repeatedly cross-examined and re-evaluated with reference to the transcriptions to ensure an accurate description of the role. The examples in Table 6.14 illustrate how some of the problem-posing incidents were coded with regard to the roles of co-researchers.

Table 6.14: Examples of coding of roles of co-researchers with regard to problem-posing incidents

Transcript	Participation	Roles – content of actions
33. R3: The only thing about this is you need to prepare, the referential questions, you need to prepare	Problem-posing Oct 5	Describes-poses practical problems
295. R2: None of them say ‘crisps’ because they all say “crips” because their parents say “crips”, everyone says “crips”	Problem-posing Oct 28	Describes related issues
100. R4: Should I use words from this book, do you think?	Problem-posing Jan 8	Asks for an answer/solution
213. R1: The parents won’t see it up there	Problem-posing Jan 16	Concerns re: methods
95. R3: Yeah, I looked through the ideas but I didn’t try out any of them because obviously I had the student there who was doing her own thing	Problem-posing Mar 1	Describes/gives information on what happened
194. R3: But you see I don’t think that’s right, that wouldn’t be an accurate reflection because-	Problem-posing Mar 12	Disagrees

When all of the problem-posing incidents across the six transcripts were coded in this manner, I investigated the number of incidents of each role and calculated the proportion of incidents of each role per co-researcher (Table 6.15). ‘Asking for an answer/solution’ had the highest number of incidents by a co-researcher (i.e., 44). This was followed by three other themes with higher numbers of incidents per co-researcher than all the remaining themes: ‘describes/gives information on what happened’ (range of 3-29); ‘describes individual behaviour’ (range of 5-16); and ‘concerns re: methods’ (range of 3-15). The remaining problem-posing roles coded had incidents that ranged between 1 and 10. ‘Concerns re: aims’ had the lowest number of incidents (i.e.,1).

Of the four most prevalent themes that categorised co-researchers’ roles with regard to the content of problem-posing (i.e., ‘asking for an answer/solution’, ‘describes/gives information on what happened’, ‘describes individual behaviour’ and ‘concerns re: methods’), the distribution amongst co-researchers was dispersed. For instance, amongst these four most

common themes, R1's most frequent role was to ask for an answer/solution, the role most often expressed by R2 and R4 was describing/giving information on what happened, and R3 displayed greater proportions of expressing concerns about the methods. In relation to the other ten less common themes, R1 exhibited the roles of 'questions to find out' and 'answers and asks for feedback' more regularly than other co-researchers. R2 demonstrated the role of 'describes-poses practical problems' and 'agrees' more often than the other co-researchers. R3 adopted the roles of 'asking for clarification' and 'disagree', and R4 adopted the roles of 'describes related issues' and 'concerns re: aims' more frequently.

Table 6.15: Range of no. of incidents and percentages of incidents of problem-posing roles by each co-researcher

Problem-posing Role (total number of incidents)	Range of number of incidents by a co-researcher	Percentage of no. of incidents by R1	Percentage of no. of incidents by R2	Percentage of no. of incidents by R3	Percentage of no. of incidents by R4
<i>Asks for an answer/solution (61)</i>	1-44	72%	7%	20%	1%
<i>Describes/gives information on what happened (60)</i>	3-29	6%	48%	23%	23%
<i>Describes individual behaviour (40)</i>	5-16	18%	40%	30%	12%
<i>Concerns re: methods (36)</i>	3-15	25%	25%	42%	8%
<i>Describes-poses practical problems (14)</i>	0-7	7%	50%	43%	0%
<i>Asks for clarification (15)</i>	0-7	13%	40%	47%	0%
<i>Describes related issues (18)</i>	3-6	17%	22%	28%	33%
<i>Questions to find out (7)</i>	0-6	86%	0%	14%	0%
<i>Agrees (11)</i>	0-6	9%	55%	0%	36%
<i>Gives answer (15)</i>	3-5	27%	33%	20%	20%
<i>Disagrees (3)</i>	0-3	0%	0%	100%	0%
<i>Answers and asks for feedback (4)</i>	0-2	50%	25%	25%	0%
<i>Doubts (5)</i>	0-2	0%	40%	40%	20%
<i>Concerns re: aims (1)</i>	0-1	0%	0%	0%	100%

Following the thematic analysis of the problem-posing incidents, I turned my attention to the roles of co-researchers with regard to the content of problem-solving incidents. Avgitidou (2009) categorised all roles with problem-solving incidents with one of the following eleven codes: ‘proposes a strategy’; ‘answers with a solution’; ‘answers with a question’; ‘proposes a strategy and asks for feedback’; ‘agrees with strategy’; ‘disagrees with strategy’; ‘gives feedback to a proposed strategy-elaborates’; ‘gives an example’; ‘gives a specific guideline’; ‘challenges with a question’; or ‘doubts’. Consequently, I re-read all of the six transcripts from the study and categorised all of the problem-solving incidents using the themes outlined by Avgitidou (2009). Each problem-solving incident was scrutinised to inform the selection of the theme that described the role of the co-researcher in that instance. Similar to the process for assigning the themes for the roles with regard to the content of the problem-posing incidents, I asked questions such as ‘what is the role of the co-researcher?’, ‘what is the nature of the problem-solving response?’, ‘what is the co-researcher trying to communicate?’ and ‘is there a different role evident in this incident that is not captured by one of Avgitidou’s codes?’. The themes were thoroughly re-evaluated with reference to the transcriptions to ensure an accurate description of the role. This led to the addition of three supplementary themes not in Avgitidou’s list, but that were required to capture the specific roles that were expressed. The additional themes I applied were: ‘challenges with quoting evidence’; ‘gives feedback on the use of strategy’; and ‘answers with clarification’. Thus, a total of fourteen themes were applied to the transcripts. The following examples in Table 6.16 show how some of the problem-solving incidents were coded with regard to the roles of co-researchers.

Table 6.16: Examples of coding of roles of co-researchers with regard to problem-solving incidents

Transcript	Participation	Roles - Content of Actions
239. R1: Ok, so hopefully we’re happy enough with the checklist. Let’s see if it fits with what we do...let’s see if it fits based on what we do on 10 minutes each. So next week we’ll look at, maybe we’ll take 5 minutes each....	Problem-solving Sept 6	Proposes a strategy
260. R3: Unless you were talking about the weather, like ‘this is terrible weather, it’s ‘recurrent’ or....	Problem-solving Oct 24	Gives an example
107. R4: You could try that (name of R1), you know, as you say, three new words	Problem-solving Nov 7	Agrees with strategy
312. R2: Say ‘would benefit from more work, more help at home’	Problem-solving Mar 16	Gives a specific guideline
73. R3: But like, it’s, it’s not, it’s teacher echo with an extension now rather than just teacher echo for the sake of it	Problem-solving May 5	Gives feedback on use of strategy

I grouped the themes of the roles of the co-researchers in relation to problem-solving in accordance with contingent relationships, and classified each theme as being either a parent theme (i.e., higher level problem solving role) or a subordinate theme of the parent themes (i.e., lower level problem solving role). Two parent themes were identified: (i) ‘proposes a

strategy' and (ii) 'proposes a strategy and asks for feedback'. Both parent themes had contingent relationships with the subordinate themes of 'agrees with strategy', 'disagrees with strategy', 'gives feedback to a proposed strategy', 'gives an example', 'gives a specific guideline', 'doubts', 'gives feedback on use of strategy', 'challenges with a question' and 'challenges with quoting evidence'. Two of the remaining subordinate themes: 'answers with a solution' and 'answers with a question' had contingent relationships with the problem-posing role of 'asks for an answer/solution'. Similarly, 'answers with clarification' had a contingent relationship with the problem-posing role of 'asks for clarification'. These contingent relationships can be seen in Figure 6.7.

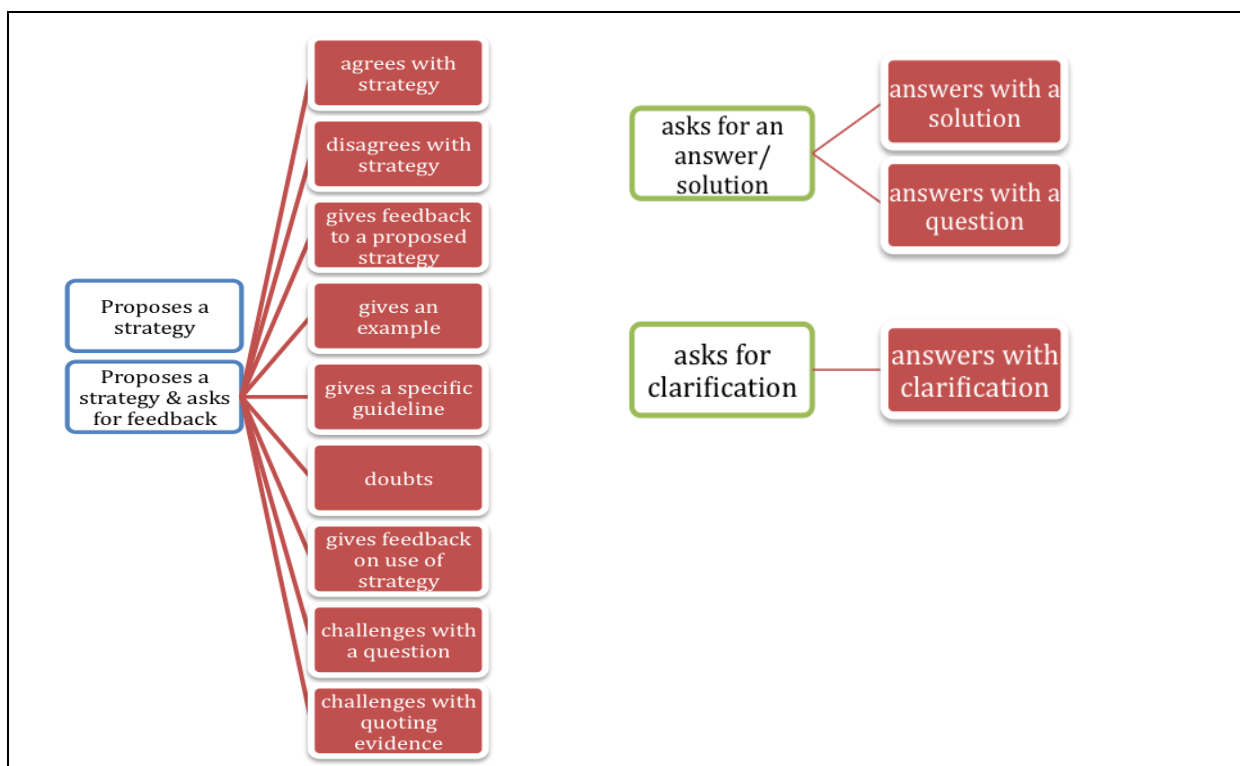


Figure 6.7: Parent problem-solving role themes and subordinate problem-solving role themes

When all of the problem-solving incidents across the six transcripts were coded, I calculated the number of incidents of each role and calculated the proportion of incidents of each role per co-researcher (Table 6.17). The parent theme 'proposes a strategy' had the highest number of incidents in total (i.e., 96) and by an individual co-researcher (i.e., 52). This was followed by three other themes with higher numbers of incidents by a co-researcher than the remaining themes: 'give a specific guideline' (range of 3-38); 'gives feedback to a proposed strategy-elaborates' (range of 11-29); and 'answers with a solution' (range of 2-24). The remaining problem-solving roles coded had incidents per co-researcher that ranged between 0-17. 'Doubts' had the lowest number of incidents (i.e., 1).

Table 6.17: Range of no. of incidents and percentages of incidents of problem-solving roles by each co-researcher

Problem-solving Role (total no. of incidents)	Number of incidents by a co-researcher	Percentage of no. of incidents by R1	Percentage of no. of incidents by R2	Percentage of no. of incidents by R3	Percentage of no. of incidents by R4
<i>Proposes a strategy (96)</i>	2-52	54%	23%	21%	2%
<i>Gives a specific guideline (79)</i>	3-38	29%	19%	48%	4%
<i>Gives feedback to a proposed strategy – elaborates (89)</i>	11-29	33%	26%	29%	12%
<i>Answers with a solution (47)</i>	2-24	51%	19%	26%	4%
<i>Proposes a strategy and asks for feedback (20)</i>	1-17	85%	5%	5%	5%
<i>Agrees with strategy (46)</i>	5-16	11%	24%	30%	35%
<i>Gives an example (49)</i>	4-16	33%	31%	29%	7%
<i>Gives feedback on use of strategy (36)</i>	4-14	36%	11%	39%	14%
<i>Challenges with a question (18)</i>	0-12	67%	28%	5%	0%
<i>Answers with a question (19)</i>	1-10	53%	21%	21%	5%
<i>Answers with clarification (18)</i>	1-9	50%	11%	33%	6%
<i>Challenges with quoting evidence (9)</i>	0-8	89%	0%	11%	0%
<i>Disagrees with strategy (8)</i>	1-3	13%	25%	25%	37%
<i>Doubts (1)</i>	0-1	0%	0%	100%	0%

Of the four themes that categorised co-researchers' most prevalent roles with regard to the content of problem-solving (i.e., 'proposes a strategy', 'gives a specific guideline', 'gives feedback to a proposed strategy-elaborates', and 'answers with a solution'), the distribution

amongst co-researchers was scattered. For example, amongst these four most frequent themes, R1's most common role was to propose a strategy, the role most often adopted by R2 and R4 was to give feedback to a proposed strategy, and R3 displayed greater proportions of providing specific guidelines. With regard to the remaining ten themes, R1 exhibited with greater regularity than the other co-researchers the roles of 'proposes a strategy and asks for feedback', 'gives an example', 'challenges with a question' 'answers with a question', 'answers with clarification' and 'challenges quoting evidence'. R3 adopted the roles of 'gives feedback on use of strategy' and 'doubts' more than her co-researchers. R4 took up the roles of 'agrees with strategy' and 'disagrees with strategy' more frequently than her peers.

This form of thematic analysis uncovers how individual perspectives of a shared concern were obtained to ensure the democratic and social construction of knowledge, characteristic of action research. For instance, when a concern was raised (i.e., problem-posing), a number of facilitative roles were taken up to enable the views of all co-researchers to be heard. The most prominent problem-posing roles that supported collective meaning-making included asking for an answer/solution, describing what happened, describing individual behaviour and sharing concerns about the methods employed. In parallel, there were a number of roles assumed to democratically give voice to the perspectives of all co-researchers on how to address concerns raised (i.e., problem-solving). The most prevalent facilitative roles varied to include 'proposes a strategy', 'proposes a strategy and asks for feedback', 'gives a specific guideline', 'gives an example', 'answers with a solution', 'agrees with strategy' and 'gives feedback on use of strategy'.

In addition, this form of thematic analysis illustrates that conflicting perspectives were voiced and attended to throughout this study. For example, across the time span of the study when problems were posed, there were a number of recurring roles that expressed conflicting voices: thirty-six incidents of the role 'concerns re: methods'; fourteen incidents of the role 'describes – poses practical problems'; five incidents of 'doubts', three incidents of 'disagree'; and one incident of 'concerns re: aims'. Likewise, during problem-solving responses there is verification that conflicting viewpoints were aired and considered through the documentation of eighteen incidents of 'challenges with a question', nine incidents of 'challenges with quoting evidence', eight incidents of 'disagrees with strategy' and one incident of 'doubts'. Thus, it is apparent that diversity of voices and worldviews surfaced and were valued, which it is argued helps to enrich the production of new meanings and more effective solutions (Israel et al., 2003; Munoz & Jeris, 2005).

6.3.6 Iteration 3: Patterns of interaction between co-researchers

The third form of thematic analysis I completed with a focus on participation explored the patterns of interaction between co-researchers. Avgitidou (2009) coded the dynamics in her study using descriptors such as ‘facilitator poses problem - teacher responds’ and ‘teacher poses problem – facilitator responds’. I adapted the names of Avgitidou’s (2009) codes to establish four distinct themes to capture the patterns of interaction in this study: ‘R1 poses problem – R1 responds’; ‘R1 poses problem – co-researcher responds’; ‘co-researcher poses problem – co-researcher responds’ and ‘co-researcher poses problem – R1 responds’. I re-read each transcript and coded the patterns of interaction with one of the four themes. I pinpointed who was posing the problems and who was responding to the problems posed. Each theme assigned was reviewed repeatedly to ensure it accurately captured the pattern of interaction that occurred. The following excerpt from the January transcript in Table 6.18 illustrates how patterns of interaction were coded. In the excerpt, the co-researchers are discussing oral language homework, and specifically the topic that a pupil discusses with their parent each night as part of the homework. R4 posed a problem in relation to not telling her pupils that they couldn’t repeat and reuse the same topic to discuss. R1 provides a problem-solving response of reminding the pupils about it next week and R4 agrees with this suggestion. R1 follows up with a specific guideline around what to say to pupils to help resolve the problem posed. The patterns of interaction between R1 and R4 are coded accordingly in the third column.

Table 6.18: Examples of coding of patterns of interaction

Transcript	Participation	Roles – Content of Actions	Dynamics – Patterns of Interaction
72. R4: Yeah.. I don’t think I said that to mine [not to repeat the topic to discuss with parents]	Problem-posing Jan 6	Describes individual behaviour	
73. R1: Oh but sure you can say it for next week	Problem-solving Jan 6	Proposes a strategy	Co-researcher poses problem – R1 responds
74. R4: Yeah, I’ll say it to them tomorrow...just in case One Direction comes up again tomorrow	Problem-solving Jan 6	Agrees with strategy	Co-researcher poses problem – co-researcher responds
75. R1: Yeah, exactly, but that’s it, it’s all teething problems, that’s so that they know ‘right if you pick One Direction now, you can’t pick it again’, but there’s ways to get around that isn’t there? They might pick Harry Styles, you know?!	Problem-solving Jan 6	Gives a specific guideline	Co-researcher poses problem – R1 responds

I calculated the sum of the incidents of each pattern of interaction within all six transcripts. In total, there were 601 dynamics present in the data. The number of incidents of each pattern of interaction ranged from 107-200. Out of all the dynamics, the pattern of interaction that

was most prevalent was ‘co-researcher poses problem – co-researcher responds’ (i.e., 33%) and the pattern of interaction that was least prevalent was ‘R1 poses problem – R1 responds’ (i.e., 18%). As evident in Figure 6.8, the ‘R1 poses problem – co-researcher responds’ pattern of interaction was present in 29% of incidents and the ‘co-researcher poses problem – R1 responds’ was present in 20% of incidents. This highlights that across the span of the study there was no individual pattern of interaction that considerably dominated the others. Also, there was no single pattern of interaction that was notably overshadowed by others.

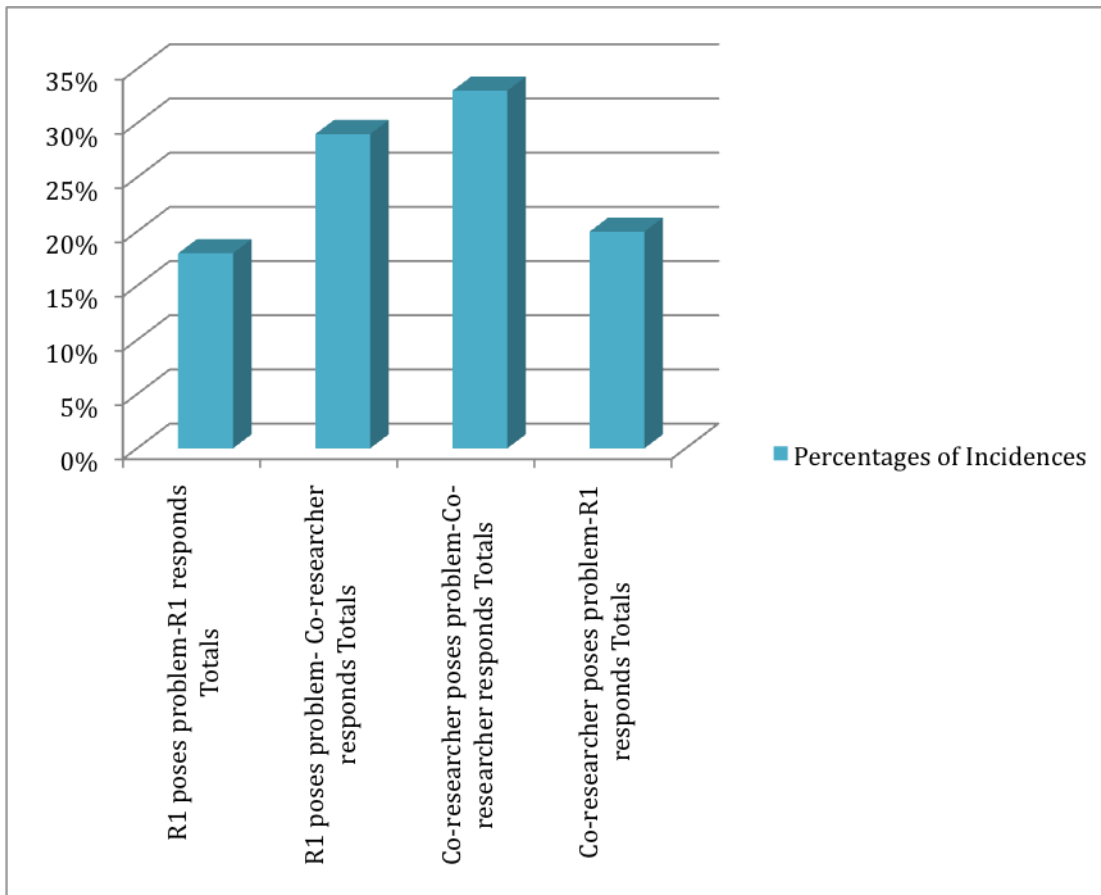


Figure 6.8: Proportion of incidents of each pattern of interaction

Next, I closely examined the proportion of incidents of each pattern of interaction per transcript. This analysis, presented in the bar chart in Figure 6.9, reveals a number of trends in relation to fluctuations in dynamics over time.

Although the pattern of interaction ‘co-researcher poses problem – co-researcher responds’ was more prevalent than others across the time-span of the study, it was the least common pattern of interaction in the initial phases of the study (i.e., September transcript – only 15% of incidents). Instead, the pattern of interaction that predominated in the initial stages of the study was ‘R1 poses problem – co-researcher responds’ (i.e., 37% of incidents in September transcript). Moving sequentially, the most common pattern of interaction in the October

transcript was 'co-researcher poses problem-R1 responds' (i.e., 42% of incidents in October transcript). Mid-way through the study, the pattern of interaction 'co-researcher poses problem – co-researcher responds' was repeated most frequently (i.e., 45% and 38% of incidents respectively in November and January transcripts). The predominant pattern of interaction in the latter part of the study was 'R1 poses problem – co-researcher responds' (i.e., 38% and 42% of incidents respectively in March and May transcripts). At no stage in the study did the pattern of interaction 'R1 poses problem – R1 responds' exceed the share of incidents of other patterns. In half of the transcripts, the least prevalent pattern of interaction was 'co-researcher poses problem – R1 responds' (i.e., 16%, 11% and 15% of incidents respectively in November, March and May transcripts). In the other half of the transcripts, there was no consistent trend. The least frequent pattern of interaction in September was 'co-researcher poses problem – co-researcher responds', In October it was 'R1 poses problem – co-researcher responds' and in January it was 'R1 poses problem – R1 responds' (i.e., 15%, 14% and 10% of incidents respectively). The number of incidents of each pattern of interaction and the proportion per transcript are detailed in Table 6.19.

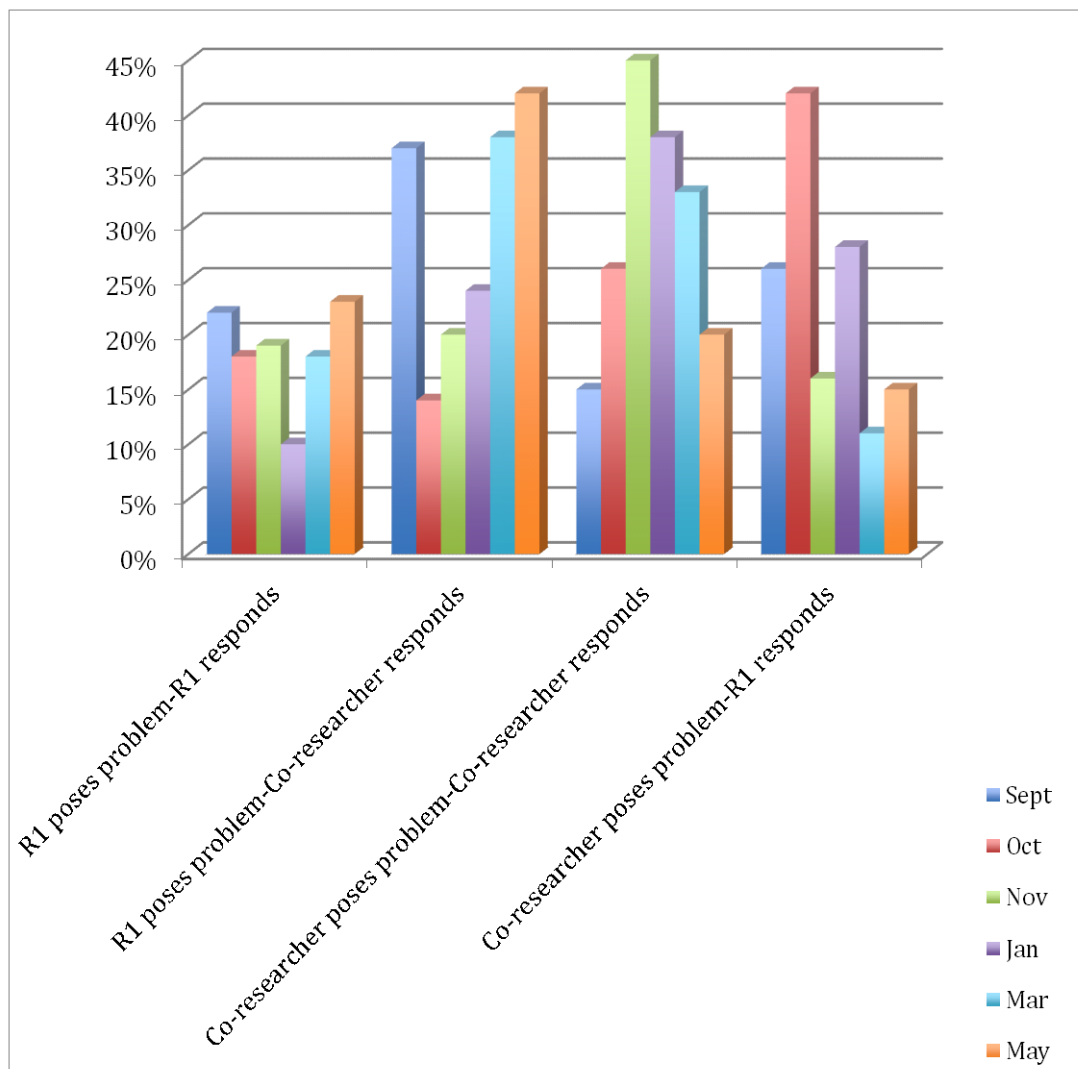


Figure 6.9: Proportion of incidents of each pattern of Interaction per transcript

Table 6.19: No. of incidents and proportion of patterns of interaction per transcript

Dynamic	Number of incidents	Proportion of patterns of interaction per transcript
R1 poses problem – R1 responds		
September	9	22%
October	10	18%
November	33	19%
January	10	10%
March	21	18%
May	24	23%
<i>R1 poses problem – R1 responds – totals</i>	<i>107</i>	<i>18%</i>
R1 poses problem – co-researcher responds		
September	15	37%
October	8	14%
November	36	20%
January	25	24%
March	44	38%
May	45	42%
<i>R1 poses problem – co-researcher responds – totals</i>	<i>173</i>	<i>29%</i>
Co-researcher poses problem – co-researcher responds		
September	6	15%
October	15	26%
November	80	45%
January	39	38%
March	38	33%
May	22	20%
<i>Co-researcher poses problem – co-researcher responds – totals</i>	<i>200</i>	<i>33%</i>
Co-researcher poses problem – R1 responds		
September	11	26%
October	24	42%
November	29	16%
January	29	28%
March	12	11%
May	16	15%
<i>Co-researcher poses problem – R1 responds – totals</i>	<i>121</i>	<i>20%</i>

This form of thematic analysis shows that the exchanges in the transcripts were not uni-directional. No single pattern of interaction dominated over the others across the time span of this study, thus ruling out the presence of the lowest degrees of participation, such as tokenism, co-option or passive participation (Arnstein, 1969; Cornwall, 1996; Pretty, 1995). Furthermore, there is evidence of R1 ensuring interactive participation of co-researchers throughout the duration of the study. For example, when posing problems, R1 had the largest proportion of the roles: ‘asks for an answer/solution’ (i.e., 72%); ‘questions to find out’ (i.e., 85%) and ‘answers and asks for feedback’ (i.e., 50%). In addition, the analysis confirms that co-researchers shared their knowledge to solve problems that arose. In an examination of the most prevalent codes that categorised co-researchers roles with regard to the content of

problem-solving, R2, R3 and R4 gave feedback to a proposed strategy (64% collectively) and provided specific guidelines (71% collectively) most frequently. The shared distribution of the various patterns of interaction and the evidence of interactive participation and sharing of knowledge by all co-researchers, suggests that overall, participation in this action research study could be placed on the top rung of Arnstein's (1969) ladder (i.e., citizen power), the outer edges of Cornwall's (1996) continuum (i.e., co-learning – "local people and outsiders share their knowledge to create new understanding and work together to form action plans, with outsider facilitation") and on one of the later stages of Pretty's (1995) framework (i.e., stage 6: interactive participation – "professionals and community members work as equal partners in defining the problems or needs and the strategies for change. There is a sharing of knowledge and valuing of 'local' or 'lay' knowledge. Professionals facilitate and support the process").

However, the thematic analysis indicates that the degree of participation was not consistent throughout the duration of this action research study. For example, towards the beginning of the study, the pattern of interaction 'R1 poses problem – co-researcher responds' was the most prevalent dynamic in September (i.e., 37%). This is more indicative of lesser degrees of participation, and rests more on Cornwall's (1996) 'cooperation' rung of the ladder ("local opinions work together with outsiders to determine priorities; responsibility remains with outsiders for directing the process") or an earlier stage of Pretty's (1995) continuum 'functional participation' ("community members are involved in decision-making and the development and execution of programmes or activities. Professionals are in control and take responsibility for the process"). This lesser degree of participation may simply reflect the early stages of the research process. Alternatively, it could relate to the content of the action research cycle at that time, which focused on evaluating current classroom practices with the help of a checklist that was unfamiliar to the co-researchers, and so lent itself to more functional participation. Conversely, when the content of the action research cycles was concentrating on action through changing classroom practices and building parental involvement (i.e., October – April), the most prevalent patterns of interaction were 'co-researcher poses problem - R1 responds' in October, 'co-researcher poses problem - co-researcher responds' in November and January, and 'R1 poses problem – co-researcher responds' in March. Also, patterns of interaction where co-researchers responded were more prevalent than patterns of interaction where R1 responded in Cycle Four (i.e., 62% of incidents of the former and 38% of incidents of the latter). Therefore, the analysis indicates that during action research Cycles Two, Three and Four, greater degrees of participation were occurring, that corresponded to Arnstein's (1969) 'citizen power', Cornwall's (1996) 'co-learning' and Pretty's (1995) 'interactive participation'.

6.3.7 Summary of thematic analysis of participation

As a result of the deduction of a Global Theme: 'Participation Requires Constant Attention', this thematic analysis explored in depth the phenomenon of participation. The three iterations of thematic analysis completed, drawing on the work of Avgitidou (2009), provide objective evidence that genuine participation occurred in this action research study, on both an epistemological and a political dimension. It has verified the representation of the multiple voices of co-researchers and provided auditable evidence that genuine participation was a fundamental feature of this inquiry. As stressed previously, the ability to verify that genuine participation occurred is repeatedly referenced as a crucial element to evaluate in the appraisal of the quality of an action research study (Coghlan & Brannick, 2010; Herr & Anderson, 2005; Koch & Kralik, 2006).

The form and degree of participation in this study was not consistent or static. This was evident from the thematic analysis of participation and also the analysis of the content or core action research study (Chapter 5). Consequently, I deduced the proposition: ***Degrees of participation may fluctuate*** which will be discussed in detail in Chapter 7.

The thematic analysis pinpoints a number of variables that influenced fluctuations in degrees of participation, such as time point in the study, content of the action research cycles, roles assumed by co-researchers, and individual participation of co-researchers. Based on the three iterations of thematic analysis conducted in this phase, I suggest that the "constant attention" required to support participation, as advised in the Global Theme 'Participation Requires Constant Attention', points to the essential place of facilitation. The vital role of facilitation was particularly evident from the roles of co-researchers with regard to the content of problem-posing and problem-solving that were highlighted. Coupled with the findings from the core action research study analysis, a further proposition I determined from the thematic analyses in phase two was: ***Facilitation is an essential third dimension of participation, shared by all co-researchers.***

6.4 Phase Three: Thematic Analysis of 'Change'

As described previously, a thematic analysis of the processes that occurred during this study in Phase One led to two Global Themes: 'Participation Requires Constant Attention' and 'Change is a Process'. In the former section (6.3), the Global Theme 'Participation Requires Constant Attention' and the phenomenon of participation as it appeared in the data was scrutinised through further thematic analysis, leading to two propositions: '*Degrees of participation may fluctuate*' and '*Facilitation is an essential third dimension of participation, shared by all co-researchers*'. This section describes the exploration of the second Global

Theme: 'Change is a Process'. As outlined earlier and illustrated in Figure 6.2, the Global Theme: 'Change is a Process' was constructed from three Organising Themes (i.e., 'planning change', 'resistance to change', 'reflecting on change') and numerous Basic Themes. Therefore, change emerged as a key phenomenon of this inquiry. This section presents the literature that was subsequently reviewed in relation to change, including three conceptualisations of change that were chosen to support further thematic analysis of the data: dimension of change; ways of knowing; and order of change. The basis for choosing these ideologies to apply to the data is outlined. The findings and propositions gleaned from the thematic analysis in this phase are also described.

6.4.1 Challenge of evaluating the processes involved in change through thematic analysis

Providing an objective and transparent way of documenting change and the multiple processes involved in achieving change that is auditable and replicable can be challenging. For example, in the thematic analysis focussed on participation, participation was explicitly apparent and easily mineable from the transcriptions of the six meetings. The frequency of each co-researcher's engagement in posing a problem or solving a problem in the data was unambiguous and their role with regard to the content of problems was clear. Also, the patterns of interaction between co-researchers evident in the data were unequivocal. This enabled a reliable translation of participation as it appeared in the discourse between co-researchers, to a thematic analysis of the phenomenon of participation in the action research inquiry. However, change as it appears in data is not always equally explicit. To illustrate, in this study co-researchers repeatedly talked about change, but the data (i.e., verbatim transcripts of meetings) does not measure actual change in knowledge, beliefs, practices, attitudes, culture etc. Instead, change is implicit in the utterances of the co-researchers. Hence, one possible solution to resolve the issues of objectively documenting change is to conduct a thematic analysis of all incidents of 'change-talk' that appear in the data, that is, all incidents when co-researchers talk about plans for change, talk about change that they report has happened, talk about change that they report has not happened, or talk about changes they believe are necessary.

A thematic analysis in this form concentrates on a particular aspect of the data, this time the topic of change, corresponding to a deductive approach to identifying themes. The former two thematic analyses (i.e., Phase one and Phase two) were conducted at the semantic level (Braun & Clarke, 2006). In Phase one and Phase two the content of the data was engaged with, such as what was said by the co-researchers. Themes were named descriptively to try and capture what was happening, how action was being decided and how co-researchers were participating. Conversely, this third thematic analysis of change was conducted at the

latent level (Braun & Clarke, 2006). Hence, the analysis moved beyond the content of what co-researchers said to “examine the *underlying* ideas, assumptions, and conceptualisations – and ideologies – that are theorised as shaping or informing the semantic content of the data” (p. 84). Conceptualisations of change, and those selected to apply to the transcribed data, are described in the next sections.

6.4.2 Conceptualisations of change: Ideologies relating to an individual, to practices, and to contexts

Since the foundation of action research, cycles of change have been identified as a key component of this methodology. These self-contained cycles typically follow the stages of constructing, planning, taking action and evaluating (Coghlan & Brannick, 2010). Action researchers explicitly focus on implementing change that is validated in action (Brydon-Miller et al., 2003). Consequently, quality in action research is often evaluated by the ability to demonstrate that the study’s input is responsible for change (Coghlan & Brannick, 2010; Herr & Anderson, 2005). Whilst action research clearly addresses the objective of change, it appears that there is sometimes insufficient attention paid to the diverse and multiple variables associated with implementing that change.

Fixsen et al. (2005) assert that the implementation of change is often more complex than the practices that are the subject of the implementation. The gap between science and service, and the challenges associated with implementing change are a universal phenomenon and reported across multiple sectors and disciplines. For instance, it is estimated that approximately two thirds of all projects that necessitate change fail (McKinsey & Company, 2008; Szabla, 2007). Theories of change may support a deeper understanding, improve implementation, and increase evaluation of change. While there is no single theory or framework of change that has consensus recognition as a gold standard, and theories of change are constantly evolving, there appears to be unanimous agreement that change is a complex process that involves more than one mechanism (Michie, van Stralan, & West, 2011).

The plethora of theories, models, frameworks and taxonomies of change reported in the literature range from simple to complex. For example, the simple and concise formula presented by Beckhard and Pritchard (1992): $C = (A+B+D) > X$ proposes that change (C) occurs when the accumulation of the level of dissatisfaction with the current system (A), plus the appeal of the proposed system (B), plus the feasibility of change (D), outweigh the cost of changing (X). The majority of alternative theories and frameworks of change published are much more nuanced and multi-faceted than Beckhard and Pritchard’s formula. Three features stand out.

First, many theories of change focus exclusively on the individual person who is required to change a behaviour or practice. For example, the Transtheoretical Model of Change (Prochaska & DiClemente, 1983; Prochaska, DiClemente, & Norcross, 1992) concentrates on the individual who will be/is making a behavioural change. It is claimed that an individual progresses through five stages of behavioural change: (i) Precontemplation – the individual has no intention to change or no awareness of a need to change; (ii) Contemplation – the individual is aware that there is a need to change but has not yet made a commitment to change; (iii) Preparation – there is an intention to change; (iv) Action – behaviour is changed in some way; and (v) Maintenance – behaviour changes are maintained into the long term. An alternative theory of individual behaviour change is the widely accepted Operant Learning Theory (Skinner, 1963). This theory posits that behaviour is directly influenced by reinforcements (rewards) or the expectation of such reinforcements. Conversely, an individual is less likely to repeat a behaviour if punishment or negative reinforcement is provided. Overlapping with Operant Learning Theory, Social Cognitive Theory (Bandura, 1997) holds that behaviour is determined by incentives and expectancies surrounding environmental influences, outcomes and self-efficacy. With a similar perspective to Operant Learning Theory and Social Cognitive Theory, the Theory of Planned Behaviour (Ajzen, 1991) places an emphasis on three factors that determine an individual's intention or motivation to make changes to perform a behaviour: (i) attitude, including a belief that the behaviour will result in favoured consequences; (ii) subjective norms, including social approval or pressure and; (iii) perception of how easy or difficult the behaviour will be to perform.

Second, theories and frameworks of change that have been published more recently take into account a much larger number of variables that are positioned outside the level of individual behavioural change, such as the actual practices and strategies employed to implement the practices (Chaudoir, Dugan, & Bar, 2013; Greenhalgh, Robert, MacFarlane, Bate, & Kyriakidou, 2004). An informative theory of change that relates to actual practices and strategies to implement them is the Theoretical Domains Framework (Michie et al., 2005). The framework integrates the perspectives of health psychology theorists, health service researchers and health psychologists to provide valuable insights into behavioural change. A comprehensive project obtained contributions from each group of experts, who had reviewed 128 theoretical constructs in over 30 psychological theories. Consensus was reached on twelve theoretical domains to attain improved implementation of evidence-based practices and the domains are presented in the Theoretical Domains Framework (Michie et al, 2005). The domains include: (i) knowledge; (ii) skills; (iii) social/professional role and identity; (iv) beliefs about capabilities; (v) beliefs about consequences; (vi) motivation and

goals; (vii) memory, attention and decision processes; (viii) environmental context and resources; (ix) social influences; (x) emotion; (xi) behavioural regulation and (xii) nature of the behaviours. Table 6.20 provides examples of how a domain may be used when assessing a change of practice or behaviour.

Table 6.20: Theoretical Domains Framework (TDF) adapted from Michie et al. (2005) in Porcheret et al. (2014)

TDF Domain	Example of use of domain when assessing target group concerning a behaviour change 'X'
Knowledge	Are they aware of X?
Skills	Do they know how to do X?
Social/professional role and identity	Is X compatible with professional identity?
Beliefs about capabilities	How confident are they that they can do X?
Beliefs about consequences	What do they think will happen if they do X?
Motivation and goals	How much do they want to do X?
Memory, attention and decision processes	Will they remember to do X?
Environmental context and resources	Are there physical or resource factors which will facilitate or hinder X?
Social influences	Will they observe others doing X?
Emotion	Does X evoke an emotional response?
Behavioural regulation	What preparatory steps are needed to do X?
Nature of the behaviour	How understandable is X?

Another theory of change that relates to practices, and strategies to implement practices, is Rogers' (2003) seminal Diffusions of Innovations Theory. This theory has evolved over the past 50 years to examine the dissemination of innovations amongst potential adopters. Rogers (1995) proposes a framework that outlines five attributes of innovations that he believes determines their rate of adoption: (i) relative advantage of the new innovation over existing practices; (ii) compatibility of the innovation with values and needs; (iii) complexity – innovations that are easy to understand and adopt; (iv) trialability – the ability to gradually trial and adopt a new practice; and (v) observability – the ability to observe the practice being used by others. An additional theory of change that relates to the actual practices and strategies to support their implementation is the Cochrane Effective Practice and Organisation of Care Review Group (EPOC) framework (EPOC, 2010). The EPOC

framework addresses changing health professionals' behaviour and categorises interventions into professional (e.g., media), financial (e.g., incentives), organisational (e.g., communication), social organisational (e.g. communication) or regulatory (e.g. social influence). A similar outlook is presented by Colquhoun, Leeman, Michie, et al. (2014). Their hypothesis arose from an international working group that reached consensus on a framework of interventions to change practices, systems and policies through the introduction of evidence-based practices (Colquhoun et al., 2014). The working group consisted of international representatives from diverse disciplines and fields including behavioural science, health systems research, policy, public health, quality improvement, nursing and medicine. The four elements they put forward address: (i) the intended objectives of the intervention (e.g., changing behaviour of an individual or changing policies and procedures); (ii) the intervention strategies and techniques (e.g., motivation, skill building, removing environmental barriers); (iii) how the intervention strategies and techniques are applied (e.g., mass media, face to face); and (iv) how the intervention brings about change (e.g., persuasion, education). Moreover, Leeman, Baernholdt & Sandelowski's (2007) Taxonomy of Implementation Methods is built on the foundations of Diffusion of Innovations theory and draws on contingency theory and behavioural change theories. The taxonomy comprises the following elements, many of which overlap with the theories of change discussed above and that relate to actual practices and strategies employed to implement the practices: (i) increase behavioural control – e.g., reminder systems, environmental change; (ii) persuade by reinforcing belief that behaviour will lead to desirable results – e.g., data collection and feedback, incentives; (iii) persuade via interpersonal channels/norms – e.g., workgroup, opinion leader; (iv) increase coordination to manage interdependence – e.g., pilot testing, centralised care management; and (v) raise awareness of the practice change – e.g., education, external change agents such as government policy.

Third, many taxonomies of change address factors outside of individual behaviour and actual practices, as they consider a more diverse range of variables in the change context. One such framework that is frequently cited in the literature comes directly from the founder of action research, Kurt Lewin. The framework looks beyond the individual practitioner and the actual practices, to the wider system in which the individual is operating. Lewin (1951) specified three stages of change that are necessary in order for the targeted behaviour to become part of a system: Unfreezing - a belief that change requires the status quo to be disturbed and driving forces for change to be enhanced; Moving – a recommendation to take a specific action by activating the resources needed to effect the change; and Refreezing - a focus on embedding changes into the system. Lewin's (1951) model is criticised for not being broad enough as it ignores organisational politics and assumes that organisations function in stable conditions (Burnes, 2004; Higgs & Rowland, 2005; Mitchell, 2013). Also, some

opponents of Lewin's three-step model maintain that change is not as simplistic, orderly and linear as Lewin suggests (Burnes, 2004). Subsequently, approaches to change have been proposed that are more bottom up, open-ended and adaptive to the internal and external environments (Todnem, 2005). Less focus is afforded to pre-planned steps and more on the complexity of change, readiness for change and facilitators of change (Burnes, 1996, M. Higgs & Rowland, 2005).

The relatively recent field of Implementation Science attempts to synthesise the diverse theories of change and take greater account of complex contextual factors. Implementation science has been described by over 60 different models (Tabak, Khoong, Chambers, & Brownson, 2012) and over 100 different terms including 'knowledge translation', 'quality improvement', 'dissemination', 'effectiveness research', 'research utilisation', 'translational research', and 'research to practice' (McKibbin et al., 2010; Rabin, Brownson, Haire-Joshu, Kreuter, & Weaver, 2008). It positions itself at the nexus between empirical research and professional practice, and scholars in the field of implementation science constantly strive to amalgamate change-determining variables and theories of change that operate at multiple levels. One such multiple-level model that considers the context in which change is occurring is the Behavioural Change Wheel (Michie et al., 2011). This was designed following a review of 19 frameworks of behaviour change interventions and contains three layers (Figure 6.10). At the core of the Behavioural Change Wheel are three essential conditions: capability – both physical and psychological capability; opportunity – both physical and social opportunity; and motivation – both automatic processes and reflective processes. These essential conditions overlap with theories of individual behavioural change discussed above. Surrounding these three essential conditions are nine intervention functions whose purpose is to address any deficits in the core conditions. The nine intervention functions include education, persuasion, incentivisation, coercion, training, restriction, environmental restructuring, modelling and enablement. Again, the intervention functions correspond with earlier discussions and examples above of theories of change that relate to actual practices and the strategies employed to implement the practices. Uniquely, on the outer layer of the Behavioural Change Wheel are seven policy categories including communication/marketing, guidelines, fiscal, regulation, legislation, environmental/social planning, and service provision. Michie et al.'s (2011) attention on broader contextual aspects of change provides direction for wider systemic influences that are required for embedding change that goes beyond the level of an individual or practice.

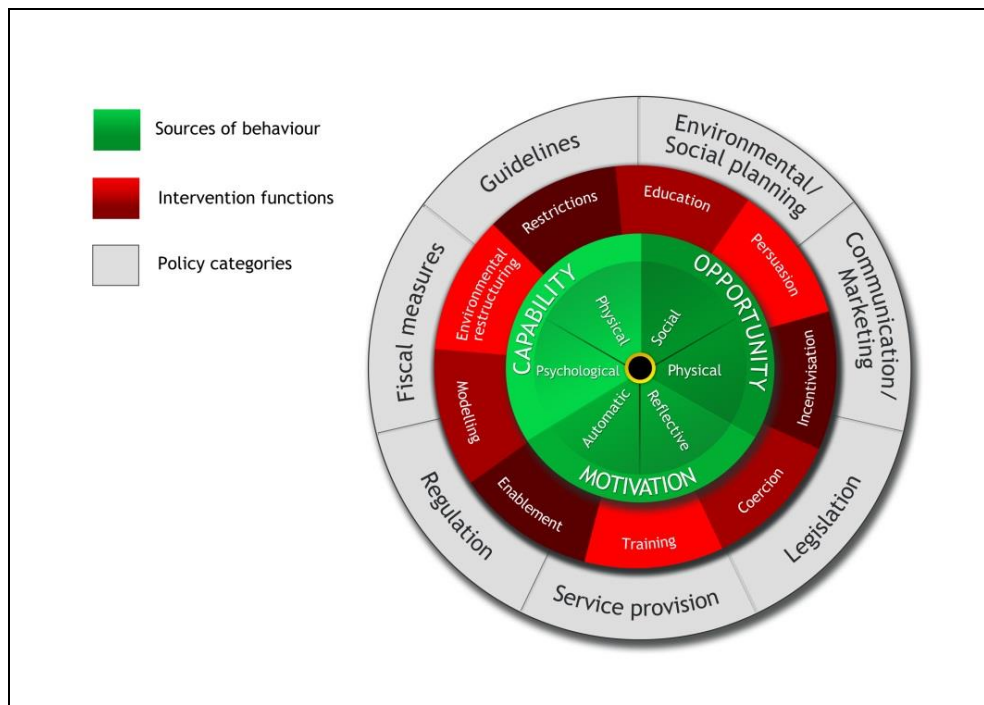


Figure 6.10: Behavioural Change Wheel (Michie et al., 2011, p. 7)

A further excellent example of a multi-level theory of change that takes account of the context is Chaudior, Dugan, & Bar's (2013) framework to describe the factors that influence the successful implementation of evidence-based health practices. The framework is based on the synthesis of two comprehensive reviews. The first review extracted predictive constructs by evaluating over 500 studies (Damschroder et al., 2009; Durlak & DuPre, 2008) and the second review extracted predictive constructs from 19 existing implementation theories and frameworks (Damschroder et al., 2009). Chaudoir et al.'s (2013) framework is based on the conclusions of these reviews and outlines the following factors that may predict the success of how practices are implemented: structural level factors, organisational level factors, provider-level factors, patient-level factors and innovation-level factors. Structural level factors consider the context including the physical environment, infrastructure, political landscape or public policies. Organisational-level factors could comprise leadership effectiveness, culture or morale. Provider-level factors encompass attitude or perceived behavioural control. Patient-level factors include motivation and beliefs. Innovation-level factors take account of advantages of new practices over existing practices and weight of evidence behind them. Chaudoir et al. (2013) propose that the outcomes of the implementation of change are directly affected by the multi-level factors they outline. Once again, factors external to individual behavioural change (patient level factors, provider level factors) and factors outside of actual practices (innovation level factors) and the strategies employed to implement the practices (organisational factors), are brought to light by Chaudoir et al.'s (2013) specification of the importance of structural factors.

Another multi-level theory of change cited in the implementation science literature that includes an explicit focus on context and systems is proposed by Fixsen, Naoom, Blase, Friedman & Wallace (2005). Their large-scale synthesis of the literature in implementation research identified several core implementation components (i.e., implementation drivers) to create and support practitioner behaviour that is rooted in evidence-based practices. The implementation drivers consist of competency drivers (i.e., staff selection, training and coaching), organisation drivers (i.e., decision support data systems, facilitative administration and systems intervention) and leadership drivers (i.e., technical leadership and adaptive leadership). The implementation drivers are integrated and compensatory as illustrated by the National Implementation Research Network (NIRN) in Figure 6.11.

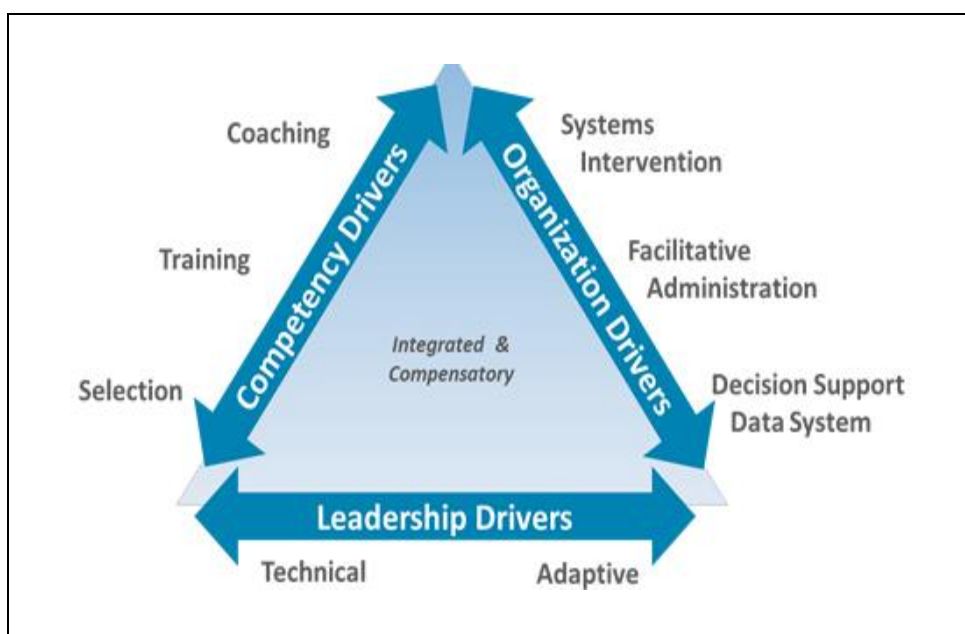


Figure 6.11: Implementation Drivers Model (NIRN, 2013, p. 1)

Competency drivers are mechanisms to develop an individual's ability to implement an intervention or practice with fidelity (Fixsen et al., 2005). Similar emphasis is placed on selecting and training practitioners, as there is on providing coaching. This position has its foundations in Joyce and Showers' (2002) meta-analysis of the effects of training and coaching on teachers' implementation in the classroom. Teachers who received theory and discussion only in training sessions, demonstrated a minor gain in knowledge, limited ability to demonstrate the new skills in training and zero transfer of skills into the classroom. Conversely, teachers who received coaching in their classroom in addition to the theory and discussion shared in training sessions, displayed substantial increases in their knowledge, ability to demonstrate new skills and transfer to classroom practices, as high as 95% transference. Similar findings on the impact of coaching on the implementation of changes to practices have been reported in health settings (Ager & O'May, 2001; Fine et al., 2003; Kelly

et al., 2000). According to Fixsen et al. (2005), successful implementation of change requires that the competency drivers described above are supported by organisational drivers, that can develop and sustain facilitative change environments. This view corresponds with earlier discussions on how theories of change of individual strategies employed to implement the practices, both inform and are informed by each other. Organisation drivers in Fixsen et al.'s (2005) model are decision support data systems, facilitative administration and systems intervention. Decision support data systems identify, gather and analyse data to help inform appropriate decision making for successful implementation. Facilitative administration addresses the environments that will support changes in practices, including the organisation's structures, practices or processes necessary to support the change (e.g. timetabling, materials, equipment). At a more macro-level, systems intervention influences implementation, and takes account of external factors such as national policies, funding priorities, advocates' concerns (Corrigan, 2001; Zins & Illback, 1995). Systems intervention appears to correlate with 'structural factors' in Chaudior et al.'s (2013) framework and 'policy categories' in Michie et al.'s (2011) Behavioural Change Wheel. Thus, repeating the call to consider wider systemic facets of change in any change initiative or research study. The third implementation driver in Fixsen et al.'s (2005) model focuses on the leadership required to implement change and transform systems to support change. Attention is drawn to two main leadership strategies, technical leadership and adaptive leadership (Heifetz, 2009). Heifetz promotes the use of technical leadership for more clearly defined challenges that have a more concrete path to address them. On the other end of the scale, adaptive leadership is required for challenges that are more nuanced, complex, and have a less clearly defined solution.

6.4.3 Selection of conceptualisations of change to apply to the thematic analysis

The evaluation of the three distinct categories of theories of change described above (i.e., theories of change that relate to individual behavioural change, theories of change that relate to actual practices and the strategies employed to implement the practices, and theories of change that relate to the context where the practices will be changed) directly influenced my selection of the conceptualisations of change to apply to incidents of 'change-talk' that appeared in the transcribed data. Specifically, within the thematic analysis of the data from the perspective of change I wanted to explore change related to the individual, change related to practices, and change related to the context - as aligned with the distinctive categories of change above. Therefore, within the thematic analysis of change, I chose to apply three conceptualisations of change to the 'change-talk' in the data: dimension of change; ways of knowing; and order of change. The rationale for the selection of each conceptualisation of change is explained below.

6.4.3.1 Dimension of change

The three tiers of change discussed above are frequently echoed in the types of change that have been characterised by action researchers. Multiple dimensions of change within action research and the interconnections between them are described comprehensively by Noffke (2009). She distinguishes between personal, professional, and political dimensions of change, resonating with the three overarching categories of theories of change. The change that is characterised as operating at the level of a *personal* dimension refers to the possible influence of action research on an individual: self-development; individual beliefs about practices or broader political concepts; and the impact of personal life experiences on practice (Noffke, 2009). She also posits that the influence of change arising from action research can extend beyond the level of the individual. According to Noffke (2009), the *professional* dimension represents the potential of action research to generate knowledge, theory and new ways of understanding practice and the *political* dimension includes the promise of addressing social justice issues, increasing participation of marginalised groups, and enacting policy and organisational reform. However, it is important to note that each dimension is interwoven with and interdependent on the other dimensions. For the purpose of data analysis, the distinction may help to identify the most dominant dimension in a particular moment, but over the course of an action research study each dimension influences and is influenced by others (Carr & Kemmis, 2009).

Nevertheless, the distinction between personal, professional and political dimensions of change arising from action research and the relationships between them is affirmed by Kemmis (2009), albeit through different terminology. He also puts forward three types of change realised in action research, “practitioners’ practices, their understanding of their practices, and the conditions in which they practise” (p. 463). Each of Kemmis’ aspects can be aligned to the personal dimension (i.e., practitioners’ practices), professional dimension (i.e., understanding of practices) and political dimension (i.e., conditions in which they practise) of change. Moreover, levels of analysis in action research and the dynamics between them resonate with Noffke’s dimensions of change. Levels of analysis include action research at the individual level, at the group level, at the intergroup level and at the organisational level (Coghlan and Brannick, 2010). Each level corresponds with the concepts of personal (e.g., individual level of analysis), professional (e.g., group level of analysis) and political (e.g., intergroup and organisational level of analysis) dimensions of change.

In light of their relevance in the literature relating to theories of change, and their ability to capture the change typically described by action researchers, I chose to include in the thematic analysis of phase three, an exploration of Noffke’s (2009) dimensions of change: personal, professional, and political dimensions of change.

6.4.3.2 Ways of knowing

It is widely documented that recommended changes to practices that are discussed and promoted are not universally applied and implemented (Burns & Ysseldyke, 2009; Gitlin, 2000; Gore & Gitlin, 2004; Hiebert et al., 2002; Hoagwood, Burns, & Weisz, 2002; Joram, 2007; McIntyre, 2005; Zipoli & Kennedy, 2005). A key research focus of this thesis (i.e., epistemology), and the theories of change discussed above, strongly indicate that some of the most important factors bearing on the implementation and change of practices are rooted in epistemology and individuals' personal epistemological assertions. For example, Michie et al.'s (2005) Theoretical Domains Framework specifies knowledge, beliefs about capabilities, and beliefs about consequences as core constructs relevant to the implementation of change. Similarly, Chaudior et al.'s (2013) framework that identified predictive factors of successful implementation of change included factors related to the nature of knowledge and the nature of knowing, such as attitude and beliefs. Hence, I considered the analysis of epistemological factors as they appeared in the 'change-talk' of the data as also being critical to the thematic analysis I conducted of change. I drew on Heron and Reason's (2008) four forms of knowing that were described in detail Chapter 2: (i) experiential knowing; (ii) presentational knowing; (iii) propositional knowing; and (iv) practical knowing. I chose to identify and examine the way of knowing that was presented in each incident of 'change-talk' that was deduced from the thematic analysis.

6.4.3.3 Order of change

I identified order of change as an important conceptualisation to analyse as part of the thematic analysis of change, because it considers both the individual practitioner and the broader contextual system in which the change is occurring. First order change takes place when a change occurs within a current way of thinking; second order change takes place when the fundamental assumptions inherent in an issue are questioned and transformed; and third order change involves altering the organisation and occurs when organisational members interrogate existing perspectives and design and implement new ones (Coghlan & Rashford, 2006).

The significance of transforming stagnant perspectives and fixed organisational assumptions to achieve meaningful change has been recognised for many years. As illustrated in many of the theories and frameworks of change presented above, factors such as context and organisational structures are equally important as factors relating to individual behaviour and specific practices for the implementation of change. For instance, Unfreezing, Moving and Refreezing described in Lewin's (1951) stages of change appear to align with the objectives of first order change, second order change and third order change. In addition, numerous

models of change in the field of implementation science propose questioning existing personal and organisational perspectives as described in second order and third order change. The Behavioural Change Wheel (Michie et al., 2011) specifies the need to consider various individual conditions, as well as functions of intervention and contextual aspects necessary for the implementation of change, such as physical and social opportunity, environmental restructuring, and guidelines. Likewise, Chaudoir et al.'s (2013) multi-level framework predicting implementation outcomes includes patient, provider, organisational and structural factors. Such factors can be mapped onto an explicit focus on first-order change (e.g., patient-level factors such as beliefs, provider-level factors such as attitude), second order change (e.g., organisational-level factors such as culture) and third order change (e.g., structural factors such as public policies). Moreover, the Implementation Drivers Model (Fixsen et al., 2005) posits that competency drivers that relate to individuals' practice (e.g., training and coaching) require support from organisational drivers to develop and sustain change. Organisational drivers such as decision support data systems (e.g., analyses of data), facilitative administration (e.g., organisations' structures, practices or processes) and systems intervention (e.g., national policies, funding priorities and advocates' concerns) appear to align with second and third order change. Thus, in the thematic analysis I completed of change I deemed it necessary to analyse order of change as it appeared in the 'change-talk' in the data.

6.4.4 Thematic analysis of change and quality appraisal

A thematic analysis of change, drawing on the three distinct ideologies of change discussed above (i.e., dimension of change, way of knowing, and order of change), may provide detailed information to support an evaluation of the quality of an action research inquiry. It may help appraise whether change was a dominant feature of the study - a fundamental objective of action research and a core quality attribute (Kemmis, 2009; C. Lewis et al., 2009, Coghlan & Brannick, 2010). For instance, the number of overall incidents of 'change-talk' deduced from the data can be documented and reported. More detailed evidence may also be produced of the nature of the change. Changes in practice ('outcome validity') or changes to the perspectives and thinking of the researcher and participants ('catalytic validity') (Coghlan & Brannick, 2010; Herr & Anderson, 2005), may be evaluated through exploring the incidents of change within the professional dimension that were identified in the thematic analysis. Moreover, transformation of individual beliefs and practices may be assessed through documenting and appraising the incidents of change within the personal dimension in a thematic analysis. Further support for this assessment may be achieved through examining evidence of questioning and changing existing assumptions, inherent in second order change (Coghlan & Rashford, 2006). An additional quality standard in an action research study is the sustainability of changes (Reason & Bradbury, 2001). If changes are

embedded within organisational and structural elements, they are more likely to be sustained (Chaudoir et al., 2013). Thematic analysis conducted in a systematic and rigorous way may highlight changes related to organisational and policy reform and implementing new organisational perspectives, through documenting and assessing all the incidents of 'change-talk' within the political dimension and third order change. As previously noted, within the paradigm of action research, a core value stressed is an honest respect for people's knowledge and their multiple ways of knowing (Arieli et al., 2009; Riggall, 2009). Others within the field of action research assert that the inclusion of knowledge other than that based on intellectual theories and concepts produces greater transformation and more valid outcomes (Brydon-Miller et al., 2003; Greenwood & Levin, 2007; Taylor, Pettit, & Stackpool-Moore, 2006). Therefore, the objective documentation of different ways of knowing inherent in the 'change-talk' may facilitate an impartial quality appraisal of the inquiry's adherence to the philosophy of action research and its core epistemological tenets.

6.4.5 Coding of the three conceptualisations of change in the thematic analysis

The process of applying the three distinct ideologies of change discussed above to a thematic analysis of data mirrored that of the previous thematic analyses. Three columns were created to the right of the text of each transcript – one column for each focus of analysis – to facilitate the systematic and transparent identification of any incident of 'change-talk' in a line, phrase, sentence or paragraph in the transcript. As each transcript was read meticulously, questions were posed such as 'does this excerpt describe change?', 'what change is it describing?', 'what is the dimension of change described?', 'what is the form of knowing described?' and 'what is the underpinning order of change outlined?'. As a result, the underpinning theoretical ideologies that appeared to inform the content of the data were coded. Therefore, the dimension of change inherent in an excerpt from the data was categorised as being personal, professional or political. The way of knowing presented was classified as experiential knowing, presentational knowing, propositional knowing or practical knowing. The order of change shaping the content of the data was labelled as first order change, second order change or third order change. Each of the analyses conducted will be discussed below.

6.4.6 Thematic analysis of dimension of change

Each individual instance of 'change-talk' in the transcripts was categorised as to whether it fell within a personal, professional or political dimension. Every incident of 'change-talk' was given an identifier based on the dimension of change and the transcript in which it occurred. For example, the identifier 'Professional May 6' refers to an incident of 'change-talk' that arose in the May transcript that was classified as describing a professional dimension of change. Any excerpt in the transcript that conveyed the same content of change was given

the same identifier. For instance, Table 6.21 outlines an excerpt from the November transcript that has a number of conversational turns coded using the identifier 'Personal Nov 9'. It relates to a personal dimension of change described by a co-researcher who was then implementing rich vocabulary instructional practices more habitually. I consistently made a clear distinction between an incident of 'change-talk' and the number of conversational turns relating to that incident. To illustrate, there were a total of seven conversational turns within the November transcript relating to the identifier 'Personal Nov 9', three of which are presented in Table 6.21.

Table 6.21: Example of duplication of dimension of change identifiers

November Transcript	Dimension of Change
845. R3: It's kind of becoming a bit more automatic	Personal Nov 9
846. R1: Is it?	
847. R3: I think so	Personal Nov 9
855. R3: No, like that's better. I'm definitely still thinking about it when I'm doing it here but it's happening incidentally I think, I hope it is	Personal Nov 9

I collated a list of all the incidents of 'change-talk' and provided a brief caption of the content of each one (Appendix L). Then, I calculated the total number of incidents of each dimension of change. I also computed the sum of all conversational turns within each dimension of change. Across the six transcripts, there were 79 incidents and 397 conversational turns relating to professional dimensions of change; 59 incidents and 167 conversational turns relating to personal dimensions of change; and 32 incidents and 118 conversational turns relating to political dimensions of change (Table 6.22). Hence, the thematic analysis confirms that a focus on change was a dominant feature of this study, which is a core objective of action research (Kemmis, 2009; C. Lewis et al., 2009, Coghlan & Brannick, 2010).

Table 6.22: Number of incidents and number of conversational turns of total professional, personal and political dimensions of change

	Number of Incidents (Proportion of all incidents of dimensions of change)	Number of Conversational Turns within that Dimension of Change (Proportion of total)
Professional Dimensions of Change- totals	79 (46%)	397 (58%)
Personal Dimensions of Change- totals	59 (35%)	167 (25%)
Political Dimensions of Change -totals	32 (19%)	118 (17%)

A key factor for evaluating the quality of an action research study is the ability to demonstrate change in practice, or 'outcome validity' (Herr & Anderson, 2005). As outlined previously, this phase of thematic analysis did not measure actual change in knowledge, beliefs or practice,

but examines in detail all incidents of 'change-talk' when co-researchers planned, discussed or evaluated changes they reportedly implemented. Nevertheless, while the thematic analysis in this phase does not allow an exact measure of actual change in practice, it does provide valuable insights on the dimension of change that was reported in co-researchers' contributions. As evident from Table 6.22, almost half of all incidents of 'change-talk' fell within the professional dimension (i.e., 46%). This indicates that the majority of 'change-talk' in the study referred to changes to professional practices (Noffke, 2009). Moreover, quality assurance in action research places an emphasis on assessing changes to the perspectives and thinking of the researcher and participants (Coghlan & Brannick, 2010), also described as 'catalytic validity' (Herr & Anderson, 2005). Transformation of individual beliefs, practices or the impact of personal experiences (i.e., personal dimension) were evident in over a third of all incidents of 'change-talk' (i.e., 35%). A further quality standard in an action research study is the sustainability of changes (Reason & Bradbury, 2001). If changes are embedded within organisational and structural elements, they are more likely to be sustained (Chaudoir et al., 2013). The thematic analysis highlights that almost one fifth of all incidents of 'change-talk' were related to organisational and policy reform (i.e., 19% of incidents of political dimensions of change). The prevalence of political dimensions of change in the co-researchers discussions highlights a potential for changes to be sustained by the school staff, culture and policies.

6.4.7 Thematic analysis of ways of knowing

The second form of thematic analysis completed through a change lens was of the way of knowing presented within each incident of 'change-talk'. Therefore, in the second column that was created beside the text, I categorised all of the incidents of 'change-talk' according to the way of knowing that was presented. Each incident of 'change-talk' was read in detail to inform the selection of the theme that described the epistemological category portrayed in the excerpt. To aid the selection of the most appropriate theme, I asked questions such as 'what is the way of knowing presented?', 'are the data presenting perceptions?', 'are the data describing facts and theories?', and 'are the data signifying skills or competencies?'. The themes were repeatedly cross-examined and re-evaluated with reference to the transcriptions to ensure a precise description of the way of knowing. The following examples in Table 6.23 illustrate how some of the incidents of 'change-talk' were coded with regard to dimension of change and way of knowing.

Table 6.23: Examples of coding of incidents of ‘change-talk’ with regard to dimension of change and way of knowing

Transcript	Dimension of Change	Way of Knowing
190. R2: Oh Yeah, I’ll write it down, I’ve been keeping track every week of what they’ve been getting so I thought I’d bring up all the pictures, lay them out on the table and say “right, go, go, go, go” and then just turn over the ones they don’t know or whatever	Personal Mar 2	Practical Knowing
298. R2: well it is disappointing, considering the amount of work that we put in, there was supposed to be work done at home...	Personal Mar 10	Experiential Knowing
67. R1: All the interventions, all the research is usually on those early kids, that’s to help them to talk and talk a bit better. There is not so much done on the over 5s. so once they get talking, it’s more the studies are done on the kids that have problems.	Professional Oct 2	Propositional Knowing

When all of the incidents of ‘change-talk’ across the six transcripts were coded in this manner, I investigated the number of incidents of each way of knowing and the number of conversational turns within that way of knowing (Table 6.24). In total, there were 44 incidents and 94 conversational turns relating to experiential knowing, 25 incidents and 88 conversational turns relating to propositional knowing and 120 incidents and 501 conversational turns relating to practical knowing. There were no incidents of presentational knowing coded in any transcript. This may be due to the nature of presentational knowing which is presented through “the arts, storytelling, image making, movement, dance, sculpture or music” (Seeley, 2014, p. 329) and therefore not mineable in written transcripts of what was said by the co-researchers.

I also calculated the proportion of total number of incidents of each way of knowing and proportion of total number of conversational turns of each way of knowing (Table 6.24). Of the three forms of knowing coded, practical knowing had the highest proportion of incidents (i.e., 64%) and propositional knowing had the lowest proportion of incidents (i.e., 13%). Thus, there were five times more incidents of talk of practical knowing than propositional knowing. Also, there were almost twice as many incidents of experiential knowing than propositional knowing (i.e., 23% of incidents compared to 13% of incidents). Similar to the coding of the dimensions of change, the distribution of incidents of each way of knowing was echoed in the distribution of the proportions of conversational turns. There was the largest proportion of conversational turns within the practical knowing category (i.e., 73% of conversational turns) and the lowest proportion of conversational turns within the propositional knowing category (i.e., 13% of conversational turns).

Table 6.24: Number of incidents and proportion of incidents of total ways of knowing

	Number of Incidents (Proportion of all incidents of ways of knowing)	Number of Conversational Turns within that Way of Knowing (Proportion of total)
<i>Experiential Knowing-totals</i>	44 (23%)	94 (14%)
<i>Presentational Knowing-totals</i>	0 (0%)	0 (0%)
<i>Propositional Knowing – totals</i>	25 (13%)	88 (13%)
<i>Practical Knowing – totals</i>	120 (64%)	501 (73%)

Hence, the thematic analysis reveals that a specific way of knowing, practical knowing, dominated the attention of the co-researchers in this study. This implies that the most common changes reported and presented in the data were related to skills, knacks and competencies (Heron & Reason, 2008). Within the paradigm of action research, a core value stressed is an honest respect for people’s knowledge (Arieli et al., 2009; Riggall, 2009). The predominance of discussion and reports of change through practical knowing and the relative inattention to propositional knowing, deduced in this thematic analysis, resonates with the philosophy of action research. In addition, the focus throughout the inquiry was on changing what co-researchers do within their classroom practices, and so the presence of practical knowing is not surprising. However, what is noteworthy is the *extent* of the presence of practical knowing within the ‘change-talk’ (i.e., 64% of incidents respectively). There were almost 5 times more incidents of practical knowing as there were incidents of propositional knowing within the ‘change-talk’.

6.4.8 Thematic analysis of order of change

The third form of thematic analysis I completed of change explored the order of change shaping the content of the data: first order change, second order change; or third order change. Hence, in the third column that was created beside the transcript texts, I categorised all of the incidents of ‘change-talk’ according to the order of change that was represented in the content of the data. All themes were scrutinised to help ensure that they reflected the order of change that was inherent in the incident. To assist the process of capturing the order of change, I considered questions such as ‘what is the order of change shaping the content of the data?’, ‘are changes identified within existing perspectives?’, ‘are core assumptions being questioned?’ and ‘is the organisation being altered?’. The themes were continuously reviewed with reference to the data to ensure they accurately captured the order of change. The following examples in Table 6.25 illustrate how some of the incidents of ‘change-talk’ were coded with regard to dimension of change, way of knowing and order of change.

Table 6.25: Examples of coding of incidents of ‘change-talk’ with regard to dimension of change, way of knowing and order of change

Transcript	Dimension of Change	Way of Knowing	Order of Change
70. R3: I did the same thing there that I did last week. I repeated what they said in a bid to give myself a bit of time to come up with the scaffolding or the extension	Personal Oct 5	Practical Knowing	1 st Order Change
91. R1: So we started with words into a context and then we moved from context into words	Professional May 6	Practical Knowing	2 nd Order Change
428. R3: Forget ‘helps’, provides a template for oral language planning [discussing what to state on handout for staff]	Professional May 30	Practical Knowing	3 rd Order Change

Each instance of ‘change-talk’ was coded according to the order of change contained within it. Following this, I collated the total number of incidents of each order of change and the total number of corresponding conversational turns (Table 6.26). There were 84 incidents and 288 conversational turns corresponding to first order change, 45 incidents and 126 conversational turns corresponding to second order change and 44 incidents and 265 conversational turns corresponding to third order change. The proportion of incidents of each specific order of change and the proportion of conversational turns of each was also calculated. First order change was the most prevalent order of change (i.e., 49% of incidents), holding almost double the amount of incidents than second order change and third order change (i.e., 26% and 25% respectively). The fact that first order change was present most frequently in the ‘change-talk’ suggests that the majority of changes that were reported by the co-researchers in this study occurred within an existing way of thinking (Coghlan & Rashford, 2006). Of note, even though incidents of second order change and incidents of third order change were distributed evenly, there almost twice as many conversational turns relating to third order than related to second order change (i.e., 39% of conversational turns compared to 19% of conversational turns). This suggests that there was a greater amount of discussion about altering the school organisation through interrogating existing perspectives and designing new ones, compared with the amount of dialogue about questioning and transforming the assumptions inherent in an issue (Coghlan & Rashford, 2006).

Table 6.26: Number of incidents and proportion of incidents of total orders of change

	Number of Incidents (Proportion of all incidents of orders of change)	Number of Conversational Turns within that Order of Change (Proportion of total)
First Order Change-totals	84 (49%)	288 (42%)
Second Order Change – totals	45 (26%)	126 (19%)
Third Order Change – totals	44 (25%)	265 (39%)

Combing the three distinct elements of change that were investigated through thematic analysis, it became apparent the most dominant individual factors shaping the change process in this study were alterations of professional practice through existing ways of understanding and thinking about skills and competencies (i.e., professional dimensions of change, first order change and practical knowing). In addition to identifying the most prevalent elements within each ideology of change, the thematic analysis provides additional viewpoints on patterns over time.

6.4.9 Patterns of change over time

When considered over time, it is evident that while there was the largest proportion of professional dimensions of change and change in the form of practical knowing categorised in the 'change-talk' throughout the duration of the study, the majority of incidents of each occurred towards the end of the study in the May transcript (i.e., 38% of incidents of professional dimensions of change in May, Table 6.27/Figure 6.12; 26% of incidents of practical knowing in May, Table 6.28/Figure 6.13). The greatest proportion of reported incidents of professional dimensions of change and reported changes in the form of practical knowing in the latter phases of the study may simply reflect the research process and the content of what was discussed in those transcripts. Alternatively, it may suggest that the capacity for change and the momentum of change increases with time and with each action research cycle completed. On the contrary, descriptions of first order change by co-researchers (most prevalent overall) were not the most prevalent towards the end of the study. Instead, first order change peaked in the January and March transcripts (i.e., 24% and 25% of incidents respectively: Table 6.29/Figure 6.14) and third order change was most prevalent in the final stages of the study (i.e., 59% of incidents). Again, this may reflect the content of what was discussed at those particular time points or perhaps the nature of first order change, that takes place within an existing way of thinking, precedes third order change in which broader organisational perspectives are altered. Thus change, and the nature and processes underpinning change within this action research study were not static.

Table 6.27: Number of incidents and proportion of incidents of professional, personal and political dimensions of change over time

	Number of Incidents (Proportion of all incidents within that dimension of change)	Proportion of all dimensions of change in that particular transcript
Professional Dimensions of Change		
September	2 (3%)	33%
October	10 (13%)	38%
November	11 (14%)	41%
January	21 (26%)	52%
March	5 (6%)	17%
May	30 (38%)	73%
Personal Dimensions of Change		
September		
October	4 (7%)	66%
November	14 (24%)	54%
January	11 (18%)	41%
March	10 (17%)	25%
May	16 (27%)	53%
	4 (7%)	10%
Political Dimensions of Change		
September		
October	0 (0%)	0%
November	2 (6%)	8%
January	5 (16%)	18%
March	9 (28%)	23%
May	9 (28%)	30%
	7 (22%)	17%

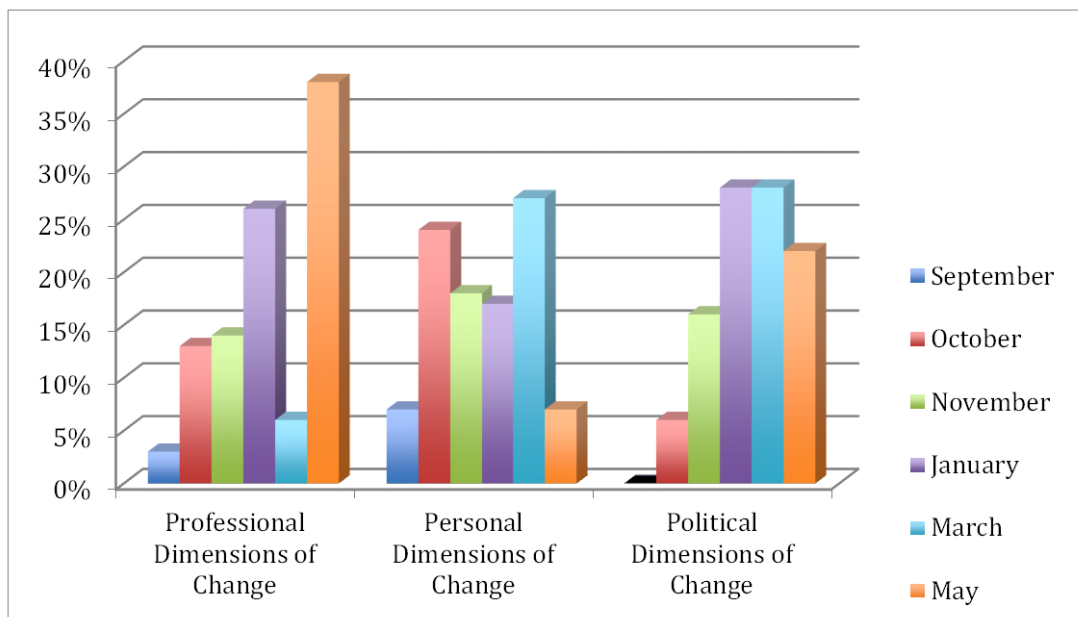


Figure 6.12: Dimensions of change: Proportion of total incidents over time

Table 6.28: Number of incidents and proportion of incidents of ways of knowing over time

	Number of Incidents (Proportion of all incidents within that way of knowing)	Proportion of all ways of knowing in that particular transcript
Experiential Knowing		
September	1 (2%)	17%
October	8 (18%)	26%
November	10 (23%)	30%
January	11 (25%)	24%
March	9 (21%)	30%
May	5 (11%)	12%
Presentational Knowing		
September	0	0%
October	0	0%
November	0	0%
January	0	0%
March	0	0%
May	0	0%
Propositional Knowing		
September	2 (8%)	33%
October	6 (24%)	19%
November	2 (8%)	6%
January	9 (36%)	20%
March	1 (4%)	3%
May	5 (20%)	12%
Practical Knowing		
September	3 (3%)	50%
October	17 (14%)	55%
November	21 (18%)	64%
January	26 (22%)	56%
March	20 (17%)	67%
May	33 (26%)	76%

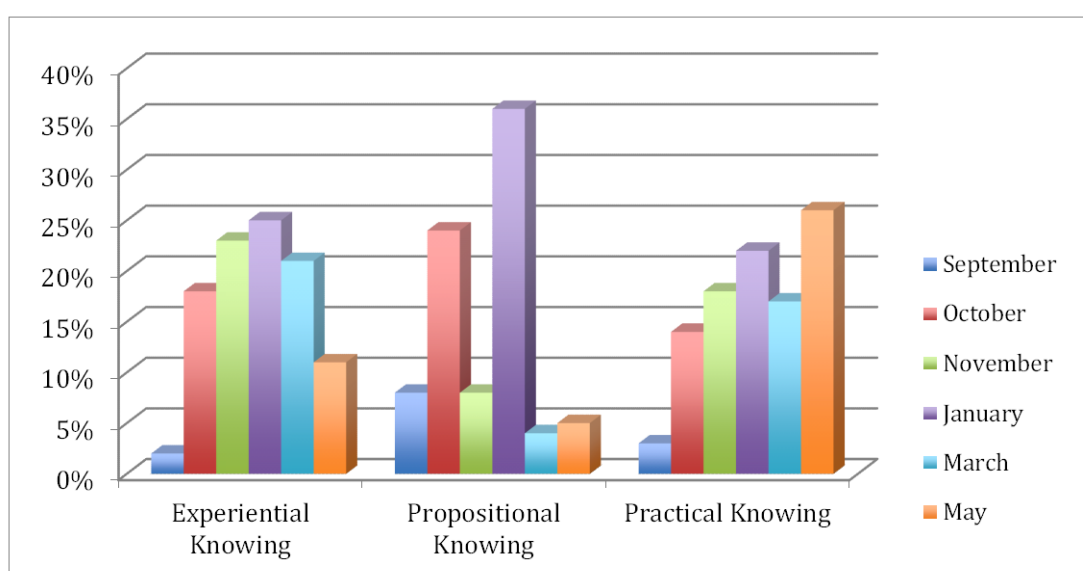


Figure 6.13: Ways of knowing: Proportion of total incidents over time

Table 6.29: Number of incidents and proportion of incidents of orders of change over time

	Number of Incidents (Proportion of all incidents within that order of change)	Proportion of all orders of change in that particular transcript
First Order Change		
September	3 (3%)	50%
October	15 (18%)	52%
November	15 (18%)	55%
January	20 (24%)	50%
March	21 (25%)	70%
May	10 (12%)	24%
Second Order Change		
September	2 (4%)	33%
October	9 (20%)	31%
November	8 (18%)	30%
January	16 (36%)	40%
March	5 (11%)	17%
May	5 (11%)	12%
Third Order Change		
September	1 (2%)	17%
October	5 (12%)	17%
November	4 (9%)	15%
January	4 (9%)	10%
March	4 (9%)	13%
May	26 (59%)	64%



Figure 6.14: Order of change: Proportion of total incidents over time

6.4.10 Summary of thematic analysis of change

As a result of the deduction of a Global Theme: 'Change is a Process', the phenomena of change within the transcribed meetings of the action research inquiry was explored in depth through thematic analyses. Change is also important to investigate because it is a fundamental feature of action research and appears repeatedly in criteria for appraising the quality of a study (Brydon-Miller et al., 2003; Herr & Anderson, 2005; Kemmis, 2009; C. Lewis et al., 2009; Coghlan & Brannick, 2010). The thematic analyses were completed to examine the process of how change was implemented, by drawing on a number of underlying conceptualisations of change (i.e., dimension of change, way of knowing, and order of change).

The systematic exploration of the 'change-talk' of the data described above confirms that change was an integral part of this study. It also provides evidence of the specific elements most prevalent in the change process: change within an existing way of thinking, in the professional dimension, using a practical form of knowing. Based on the thematic analyses, and backed up by the findings of the core action research analysis, I ascertained a key proposition from this phase to be: ***Practical knowing is a critical element in models of change.*** Furthermore, when considering this thematic analysis of change with the findings of the core action research analysis, I deemed a further proposition resulting from this inquiry to be: ***Power plays a role in the interface between practical knowing and propositional knowing.*** The former two propositions will be discussed in detail in Chapter 7.

6.5 Conclusion

Integral to my evaluation of the findings of this action research inquiry, I explicitly sought to analyse the two action research projects that ran in tandem (Zuber-Skerritt & Fletcher, 2007): the core action research study and the thesis action research study. In summary, this chapter and the former chapter have presented the findings of four main analyses of the data that were completed:

1. The findings of the core action research analysis – the content or the 'story' of the action research inquiry, including what happened in the action research Cycles One to Five and the decisions and events that evolved (Chapter 5).
2. The findings of the thesis action research analyses – a meta-analysis of the processes involved in supporting the core action research study. This included:
 - i. A thematic analysis of the processes that occurred during action research Cycles One to Four, over the school year 2012/2013, including exploration of the strategies that were used, how action was decided upon and how co-researchers were encouraged to participate (Section 6.2).

- ii. A thematic analysis of the phenomenon of participation as it occurred in the data of Cycles One to Four, over the school year 2012/2013. This thematic analysis drew on three forms of coding outlined by Avgitidou (2009): frequency of co-researchers' engagement in problem-posing and problem-solving; the roles of individuals with regard to the content of problem-posing and problem-solving; and the patterns of interaction between the co-researchers (Section 6.3).
- iii. A thematic analysis of the phenomenon of change as it occurred in the data of Cycles One to Four, over the school year 2012/2013. Three distinct conceptualisations of change were applied to the 'change-talk' in the data: dimension of change (i.e., personal, professional, or political); ways of knowing (i.e., propositional knowing, practical knowing, presentational knowing or experiential knowing); and order of change (i.e., first order change, second order change or third order change) (Section 6.4).

The core and thesis action research analyses support three distinct types of reflection asserted by Coghlan and Brannick (2010) as necessary to ensure quality in an action research study: content reflection to think about what is happening; process reflection to think about how things are being done; and premise reflection to critique assumptions and perspectives. Furthermore, many quality attributes of this inquiry have been explicitly demonstrated through the core and thesis action research analyses, and are available for appraisal. Moreover, employing thematic analysis to the raw data in the transcripts within the thesis action research analysis enables a layer of objectivity and transparency to be added, as interpretations are accessible for audit and scrutiny.

I deduced five key propositions from the core and thesis action research analyses. The propositions correspond to my initial research question: 'How can classroom practices be changed to supportive effective language enrichment?' The first proposition offers a contribution to practice. As depicted in Figure 6.15 above, *Proposition 1* may be perceived as the base from which the other propositions stem. *Proposition 1* asserts that *collaboratively designed activities are central to changing classroom practices to support effective language enrichment*. The four other propositions that were abstracted provide theoretical contributions to the themes of participation, change, and epistemology:

- Participation
 - *Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers*
 - *Proposition 3: Degrees of participation may fluctuate*
- Change

- *Proposition 4: Practical knowing is a critical element in models of change*
- Epistemology
 - *Proposition 5: Power plays a role in the interface between practical knowing and propositional knowing*

The findings of this action research inquiry that led to the five individual propositions often connected and supported each other. This connection and support is also evident in Figure 6.15. Next, the propositions are discussed, including their limitations and implications for practice, theory and research (Chapter 7: Discussion).

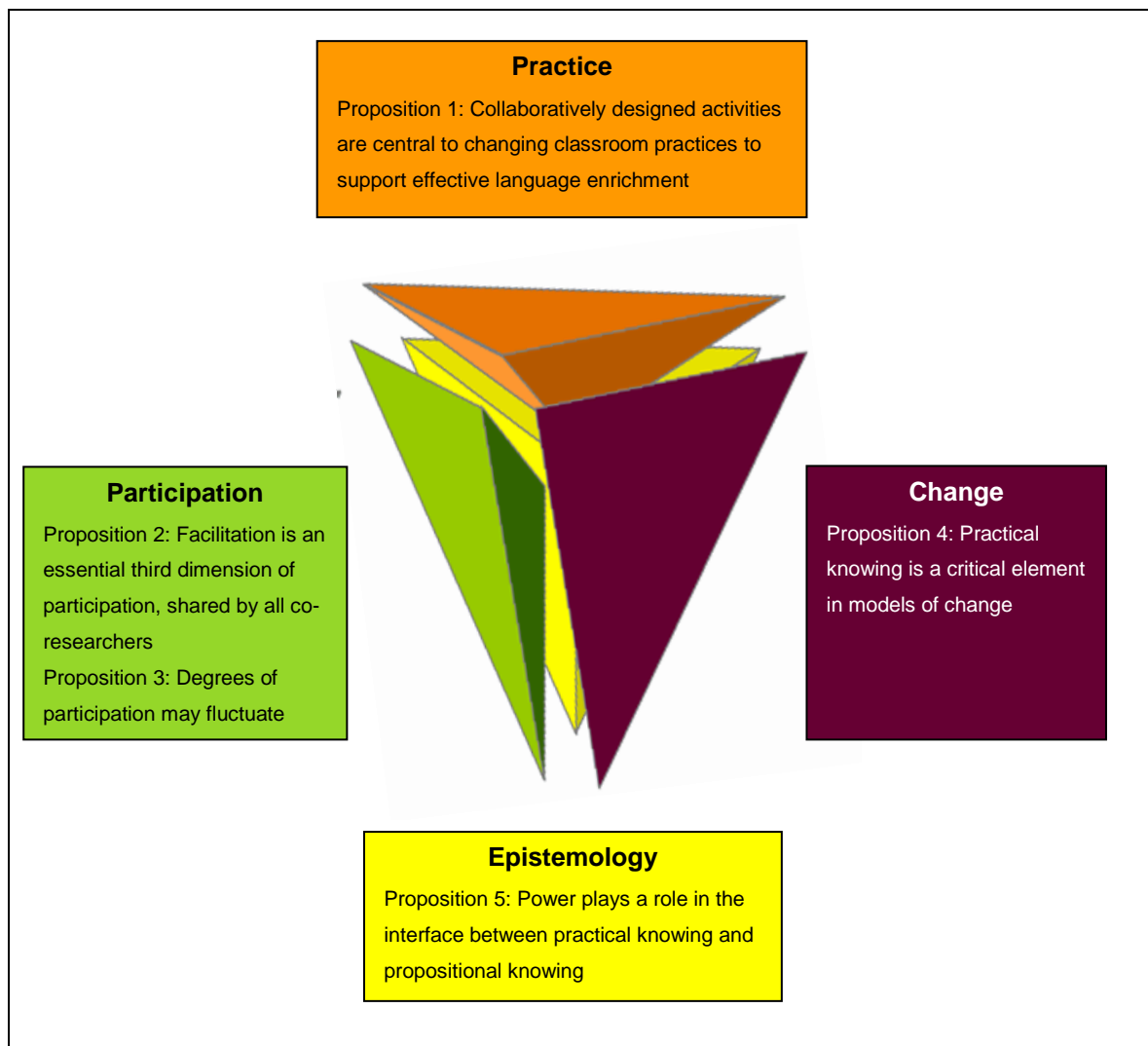


Figure 6.15: Key propositions identified through this action research inquiry

7 Discussion

7.1 Introduction

This chapter addresses the five key propositions identified through the core and thesis action research analyses (Chapter 5 and Chapter 6; Figure 6.15):

- *Proposition 1: Collaboratively designed activities are central to changing classroom practices to support effective language enrichment*
- *Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers*
- *Proposition 3: Degrees of participation may fluctuate*
- *Proposition 4: Practical knowing is a critical element in models of change*
- *Proposition 5: Power plays a role in the interface between practical knowing and propositional knowing*

7.2 Proposition 1: Collaboratively designed activities are central to changing classroom practices to support effective language enrichment

The first proposition offers a contribution to practice: *Collaboratively designed activities are central to changing classroom practices to support effective language enrichment*. There are two key aspects to this proposition: (i) activities should be concrete and tangible and (ii) the manner in which the activities are created should be collaboratively designed. In this action research inquiry, collaboratively designed activities are exemplified through the construction of the Classroom Practices Checklist and then through the development of 'Talk Time'.

The design of the Classroom Practices Checklist occurred in Cycle One: Evaluating Current Classroom Practices. We drew on the SETT framework (Walsh, 2006) which was adapted collaboratively by all co-researchers, based on analysis of video clips and reflections on our own practice, to incorporate additional items (i.e., tone of voice, deep/rich instruction, modelling, gestures, use of resources, involvement of pupils, praise, and different organisational settings) (Table 5.1). We assigned a simple one-line description to each item on the checklist and categorised items under specific headings (i.e., 'teacher does', 'teacher uses', 'class setting' and 'pupil does'). We also cross-referenced our adapted checklist with a national educational publication on effective practices for supporting language development (Sheil et al., 2012) and assessed its suitability by applying it to video clips of strangers' and our own practices. This collaboratively designed checklist was then used as a tool to identify our existing, routine practices that support language enrichment and plan our initial changes to classroom practices.

'Talk Time' originated from the classroom practice change of introducing oral language homework for pupils. This action was a direct result of Cycle Three: Building Parental Involvement. 'Talk Time' was collaboratively designed to consist of one new vocabulary target for oral language homework per day (Monday to Thursday), along with a topic to discuss at home with a family member. The targeted vocabulary related to a topic, theme, or text. Every pupil was provided with an A4 record sheet, entitled 'Talk Time' that was a pupil record of his or her oral language homework and the page included a space for a parent/caregiver's signature (Figure 5.4). In parallel, the co-researchers recorded and displayed the weekly vocabulary targets given for homework on an A3 word wall in the classroom that was also entitled 'Talk Time' (Figure 5.3). They also drew on this word wall to assess the students' knowledge of the vocabulary targets at the end of the school week.

The collaboratively designed activities of constructing the Classroom Practices Checklist, using 'Talk Time' templates, and adhering to the daily/weekly structure of completing the 'Talk Time' templates drew heavily on practical knowing to support language enrichment changes in the classrooms. For instance, items added to the Classroom Practices Checklist often emerged from co-researchers' competencies and skills, and from the practices they believed were effective in their classrooms. Likewise, practices described in detail in theoretical research reports (e.g., Sheil et al., 2012) were given a simple, brief description on the checklist of how they would translate into real-life practice and skills (e.g., "motivating topic: following the pupil's interest and attention"). Integral to 'Talk Time' was the selection of daily vocabulary targets, incorporation of vocabulary items into pupils' daily homework, physical display of vocabulary learning objectives in the classroom, reminders to repeat the vocabulary goals in other relevant curricular areas, and regular assessment and monitoring of pupils' learning. As a consequence, the activities of 'Talk Time' provided concrete and physical prompts that promoted and supported the necessary skills and competencies to support pupils' oral language development. Therefore, the theoretical assertions of empirical evidence were transformed into something doable – propositional knowing was converted into practical knowing through activities that were collectively created.

Dec. R2: Like even the word wall up there is handy for YOU...just for you to use it in your own everyday language like... when you see it you say, 'oh yeah, I'm going to put that in there now'

Jan . R2: Well I just take them out on a Friday, I pick the words, I read the story on the Friday, I pick the 4 words then, take all these out of their folders, write the 4 words, the topics and then fire them into their folder

The term 'Talk Time' evolved over the duration of the inquiry. It expanded from its origins of a way of describing the selection, recording, and assessment of oral language homework, to encompass the methods used to teach the vocabulary to pupils in the interval between

selection and assessment. While the methods used were primarily drawn from empirical evidence, once again activities were central to supporting their implementation. Thus, while many of the methods emerged from traditional propositional knowing sources, practical knowing was pursued to champion their application. This fortifies *Proposition 4's* stance that *practical knowing is a critical element in any model of change*. Theoretical assertions and established evidence-based practices described in the systematic review previously, such as the importance of increasing exposure to the target vocabulary, highlighting semantic relationships with other known words, demonstrating the wider application of the target vocabulary in a variety of different contexts, discrimination and generalisation tasks, and scaffolding opportunities to practise using the target vocabulary (Coyne et al., 2007, Duff et al., 2014, Pollard-Durodola et al., 2011, Zipoli et al., 2011, Zucker et al., 2013), were translated into classroom practices through the use of visual organisers that incorporated those methods (e.g., 4 square, word ladder, Venn diagram, semantic feature analysis).

- R2: I suppose over time we change, like I know I changed. Remember at the start we were just trying to see if they knew a word and get them to say a word, whereas then we decided we were going to actually PICK the words from a book, or from something to focus it*
- R3: I've really enjoyed the classroom practice – putting ideas into practice and using resources such as the '4 Square'...the 4 square wasn't, you didn't have to sit down at a computer, you didn't have to come up with it, like I literally got a pen and broke it in 4, you know, it's doable...*
- R4: One of the things I found beneficial...was discussing and trying out the different methods involved when teaching target words.*

During discussions about 'Talk Time' the co-researchers' emphasis was always on ease of implementation in the classroom and ease of understanding for the parents at home, not its theoretical foundations. In addition, the teachers utilised their practical knowing of parents' priorities and school regulations in efforts to maximise completion of the oral language homework provided. Their contributions from their practical knowing were described with the familiar 'carrot or stick' dichotomy. The 'carrot' they wanted stressed to parents was the potential for the children's language abilities to be increased and the potential for their standardised literacy scores to elevate – two factors they believed, from their experience, motivated parents. The 'sticks' were the requirements for a parent's signature each night and positioning 'Talk Time' under the homework umbrella, where failure to complete could have negative consequences – another factor from their experience that encouraged compliance. They proposed that sharing of weekly assessment results with parents may be a 'carrot' or a 'stick', depending on the pupil's score.

In Cycle Five: Embedding and Sustaining Changes Locally and Nationally, the teachers in other schools also explicitly highlighted the benefits of the hands-on activities inherent in

'Talk Time' (i.e., practical knowing). They reported that the tangible activities of 'Talk Time' provided support to select words to teach, implement strategies for evidence-based instruction, and create a structure for regular oral language homework. Moreover, sustainability of the implementation of effective language enrichment was strengthened by decisions to incorporate the activities of 'Talk Time' into schools' policies for curriculum planning and implementation through including it in their 'Whole School Plans for English and Literacy Across the Curriculum'. Furthermore, the collaboratively designed activities of 'Talk Time' were selected by the Department of Education and Skills to support effective language enrichment nationally through its acceptance and inclusion into the Toolkit for the new Primary Language Curriculum for Junior Infants to 2nd class pupils. The 'Talk Time' excerpt included in the Toolkit draws attention to the practical activities that can translate theory into practice, such as how to apply evidence-based instruction to teach the word 'loyal' (Figure 7.1). The toolkit was disseminated to every primary school teacher in Ireland in September 2016 and can be freely accessed online (<http://www.curriculumonline.ie/Primary/Curriculum-Areas/Language/Support-Material-for-Teachers>) (see Appendix H for full document).

Support Material
ENGLISH | ORAL LANGUAGE | Stages 1 & 2

Talk Time

4 SQUARE

TARGET WORD Loyal	EXAMPLES Pet who waits for you; friend who tells people how great you are; supporter of a sports team, win or lose
OWN DEFINITION Someone who will always be there for you	NON-EXAMPLES Stray dog; classmate who teases you; someone who only supports the football team at the top of the league.

WORD LINES
Arrange the words in terms of least fan/supporter to greatest fan/supporter:

- Follow Ballymun Kickhams
- Devoted to Ballymun Kickhams
- Loyal to Ballymun Kickhams
- Support Ballymun Kickhams
- Watch Ballymun Kickhams play
- Wear Ballymun Kickhams jersey

VENN DIAGRAM

WHAT IS UNIQUE ABOUT LOYAL? Someone who is always there for you	WHAT'S THE SAME ABOUT THEM? Someone who's nice to you	WHAT IS UNIQUE ABOUT FRIEND? Someone who enjoy spending time with
---	---	---

SYNONYMS
True, trustworthy, dependable

ANTONYMS
Disloyal, unreliable

SENTENCE
My loyal friend stuck up for me in the yard

NON-EXAMPLES:
Someone who lets you down or doesn't take your side

EXAMPLES
A friend who sticks up for you; a pet dog

www.curriculumonline.ie
www.ncca.ie/primary

Figure 7.1: Excerpt from 'Talk Time' (p. 4) included in the Toolkit for the new national Primary Language Curriculum for Junior Infants to 2nd class pupils

Previously (Section 1.6: Language Enrichment in the Educational Curricula and Practice), I outlined the gulf between the explicit promotion of oral language development by the National Primary School Curriculum (DES, 1999; NCCA, 2015) and the less than satisfactory implementation of oral language development documented in the classroom (Cregan, 2010;

Eivers et al., 2004; Lewis & Archer, 2003; Weir et al., 2002). The published evaluations point to lack of teacher confidence in this curricular area, insufficient time allocated to oral language development, and ineffective use made of a variety of approaches for oral language development (DES, 2005b; NCCA, 2005). Possible explanations for this gap between policy and practice, drawn on the literature were suggested (Section 1.6.1), including: (i) teachers' emphasis on language as a medium of instruction in classrooms (e.g., IRF recitation scripts) and not as an area to be enriched (Fisher & Larkin, 2008; Hargreaves et al., 2003; Myhill, 2006; Nystrand, 2006; Reinsvold & Cochran, 2011; Smith et al., 2004); (ii) lack of teacher awareness of the impact of a predominantly monologic discourse (Dockrell & Lindsay, 2001; Fisher & Larkin, 2008); (iii) time pressure and curriculum demands (Myhill & Warren, 2005); (iv) teachers' simply repeating patterns of talk that they experienced in their own education that were not always conducive to language enrichment (Fisher, 2011; Moguel, 2004); (v) teachers' emphasis on the perceived linguistic deficits of their pupils (Bernstein, 1975; Fisher & Larkin, 2008); or (vi) a mismatch between what teachers believe is important to teach and their actual practice (Commeyras & DeGroff, 1998; Ernst-Slavit & Mason, 2011; Nassaji & Wells, 2000).

Proposition 1 (i.e., *collaboratively designed activities are central to changing classroom practices to support effective language enrichment*) adds to this body of literature by suggesting that an additional possible explanation for the gap between oral language development promoted in policy and the less than ideal implementation documented in practice, is the absence of activities to facilitate optimal language enrichment in the classroom. For instance, the National Primary School English curriculum has three strands: reading, writing, and oral language. The former two strands have many established, tangible activities associated with their teaching and learning. Within the reading strand, teachers and pupils routinely engage in activities that promote evidence-based practices such as reading the book, decoding unfamiliar words, describing pictures, predicting what will happen next, making connections etc. Within the writing strand, teachers and pupils consistently complete activities that incorporate evidence-based practices such as focusing on letter formation, spelling, writing in different genres (e.g., procedures, reports, narratives), writing for different audiences etc. In the Department of Education and Skills' own inspection report, it was reported that a quarter of Irish pupils are in classrooms where oral language is not being taught effectively, where receptiveness to language is not emphasised, and where teachers are making ineffective use of a variety of approaches for oral language development (DES, 2005b). This departmental report suggests that there is presently a distinctive lack of customary and established activities to support the implementation of evidence-based practices for oral language enrichment. A package of activities moulded from empirical evidence, but designed collaboratively, could help meet this requirement. For example, the

Classroom Practices Checklist may help teachers to compare their own practice with practices promoted by empirical evidence and teacher expertise that are supportive of effective oral language enrichment. In addition, 'Talk Time' provides a suggestion of how activities to support pupils' oral language development may be organised (e.g., selection of optimum vocabulary targets, templates for rich instruction of the vocabulary, incorporation of vocabulary items into pupils' daily homework, physical display of vocabulary learning objectives in the classroom, reminders to repeat the vocabulary goals in other relevant curricular areas, and regular assessment and monitoring of pupils' learning). Thus, tangible and accessible activities to promote and support the necessary skills and competencies to assist pupils' oral language development may be useful – in the same way that reading and writing have their particular compendium of accepted activities that support the development of pupils' literacy skills.

Furthermore, both reading and writing have time-honoured end-products, based on their respective teaching activities, that are explicit, tangible and measurable: a pupil will learn to read a specific book appropriate to their ability - a teacher will be able to listen to the pupil reading and assess their competency; a pupil will learn to write in particular genres appropriate to their ability – a teacher will be able to read the writing product and assess a pupil's competency. It is convention for progress in reading to be documented through types of storybooks read (e.g., "progressed to level 4 books"), knowledge of grapheme-phoneme correspondence (e.g., pupil demonstrates knowledge that the letters 'ph' represent the sound [f]), reading comprehension accuracy (e.g., the pupil can correctly answer factual and inferential questions based on the text), or standardised literacy assessment scores (e.g., pupil scored above the 90th percentile). Likewise, proficiency in writing is customarily evaluated through assessing the pupils' physical and concrete writing products that can be recorded in copy books, displayed on school corridors, and appraised via published writing assessment rubrics. Oral language's end-products (i.e., receptive and expressive language), by their very nature, are not as definitive or as easily quantifiable in the group classroom setting. In Ireland, formal or informal assessments of pupils' oral language abilities are not routinely administered, thus leaving a considerable gap for teachers when attempting to evaluate the linguistic abilities of their pupils. Assessment activities could potentially provide one method of bridging this gap, and as a result scaffold teachers' planning for language enrichment objectives and pupil learning outcomes. For example, weekly and end-of-term tests were encompassed in 'Talk Time'.

While all of the above arguments assert the importance of physical and tangible activities that are collaboratively designed as central to changing classroom practices to support effective language enrichment, it is crucial to acknowledge the *processes* of how such

activities are developed, reviewed, evaluated, and adapted in the first place. What exactly does 'collaboratively designed' entail? Action researchers frequently refer to first-person action research, second-person action research, and third-person action research, and promote the integration of all three persons within an inquiry (Coghlan & Brannick, 2010; Reason & Bradbury, 2008a; Reason & Torbert, 2001). First-person action research refers to a form of inquiry and practice into an individual's own life; second-person action research attends to inquiry and practice with others on a phenomenon of shared concern; while third-person action research addresses general impact rather than specifics and aims to create a broader community of inquiry (Coghlan & Brannick, 2010; Reason & Bradbury, 2008a; Reason & Torbert, 2001). The processes by which activities are collaboratively designed may reflect all three persons of inquiry.

The strong presence of second-person action research in collaboratively designing the Classroom Practices Checklist and the activities within 'Talk Time' was confirmed. The core and thesis action research analyses verify that genuine participation was a strong feature of this inquiry. The thematic analyses verified that no single pattern of interaction dominated over the others across the time span of this study, and that co-researchers shared their knowledge to solve problems that arose. Thus, the checklist and the activities were designed through the participation of all co-researchers. Moreover, the description of the story of the action research cycles demonstrates that a 'participatory space' (Ayar, 2010; Cornwall, 2008; Gaventa, 2004) was opened through this inquiry. It began at the start of the school year with the first meeting, and we entered back into it twenty-eight times before the end of the school year. This participatory space provided recurrent protected time, away from the busy demands of daily school life, to design, review, and adapt the checklist and the activities. By safeguarding time to meet together regularly, there is evidence that we formed working relationships, exchanged information, learned together, planned cooperatively, shared evaluations, and theorised collectively. A secure space was established to question our attitudes, assumptions and knowledge about our practice. Hence, second-person action research is a leading process in collaboratively designing activities.

In parallel, each co-researcher returned to their individual classrooms every week and modified what they were personally doing to develop pupils' language abilities. They shared their reflections on their existing practices, engaged in open discussion about practices evident from video clips of their practices, and reviewed and reported changes they were making to their individual teaching methodologies. This inquiry and practice into their own lives reflects the fact that first-person action research also supported the collaboratively designed activities of the Classroom Practices Checklist and 'Talk Time'. In addition, third-person action research, whereby people beyond the direct second person action are involved

(Coghlan & Brannick, 2010), is evident from Cycle Five in which changes were extended to schools' policies, teachers in other schools, and the toolkit for the national Primary Language curriculum for Junior Infants to 2nd class pupils. Hence, first-person, second-person, and third-person action research can be amalgamated to support the process of collaboratively designing activities, although second-person action research may predominate. This was the case in this action research inquiry, through weekly meetings with co-researchers during the school year.

There are other *processes* that can support activities central to changing classroom practices for effective language enrichment, to be collaboratively designed. The importance of grounding the activities in individuals' practical knowing has been stressed above, and is recognised in *Proposition 4: practical knowing is a critical element in models of change*, which will be described in Section 7.6. In addition, I believe that three other key processes emerged from this action research inquiry that enabled the activities to be collaboratively designed – participation, facilitation, and re-evaluating what knowledge is considered legitimate or not. Each process will be outlined briefly below. These processes are also reflected in the propositions that will be discussed in detail later in this chapter (i.e., *Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers; Proposition 3: Degrees of participation may fluctuate; and Proposition 5: Power plays a role in the interface between practical knowing and propositional knowing*).

Even though second-person action research was a leading process, and participation of all co-researchers was confirmed through the analysis of the data collected, there were also illustrations of variations in degrees of participation. This led to *Proposition 3: Degrees of participation may fluctuate*. For example, it was decided initially that 'Talk Time' would be implemented for nine consecutive weeks between January and the school's Easter holidays (April). Co-researchers agreed to test all the vocabulary targeted in one assessment on the completion of the nine weeks. This would have resulted in an assessment of the pupils' knowledge of thirty-four words. However, R3 and R4 reported that they had not given the oral language homework every day/week. Their explanations varied from the fact that student teachers were teaching their classes, the pressures of other competing curricular demands, illness, and personal commitments. As a consequence, assessments of the targeted vocabulary at the end of the nine weeks were based on a smaller number of words (i.e., a range of 22-30 words).

Mar 4. R3: *I have to say it was on the back burner for me when my student was here....hand on heart....It was something that I had said to myself that I was going to do...But it just didn't happen*

Mar 11. R4: *I'm the same. It wasn't...It was just the student and everything else that seemed to be going on*

Mar 14. R2: *Last week was Seachtain na Gaeilge, and everything was mad*

Mar 18. R3: And I was absent, sick for the first week, and then I had the wedding so I wasn't there for like, four or five days

Hence, examining participation in more detail, the analyses of the core and thesis action research study explicitly indicate that the participation of the co-researchers that enabled the activities to be collaboratively designed would not have been optimised without facilitation. In addition, it was demonstrated that methods of facilitation were distributed amongst co-researchers. This led to *Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers*. Thus, facilitation can have a positive influence on the design, implementation and sustainability of collaboratively designed activities. This was the case for the activities integral to the design and review of the Classroom Practices Checklist and 'Talk Time'. For instance, in the following excerpt R1, R2 and R4 share the facilitative methods of asking questions, seeking clarification, summarising, probing for opinions, providing hypothetical examples, agreeing and affirming - all with the aim of collaboratively designing activities.

Nov 333. R2: Like Monday, whatever, and circle these 3 words, I don't know, next three, I don't know, or even word a day?

Nov 334. R1: Word a day maybe?

Nov 335. R2: That's 4 words a week, like

Nov 336. R4: Yeah, we could do word a day or...

Moreover, the process of how activities were collaboratively designed indicates the role of power, and methods of severing the dichotomy between knowledges that are privileged and those that are not. To illustrate, one co-researcher indicated that the items we added to the SETT framework through our reflections, competencies and skills (i.e., items 'n' to 'w' on the Classroom Practices Checklist) may be more applicable and relevant than the existing items published by Walsh (2006).

Sept 178. R1: Well we started off with that one [SETT framework]. Yer man's book there, Steve Walsh... but we added all these ones, didn't we? From praise down. From 'N' down.

Sept 179. R3: And that's where most of the ticks are, I hate to say

The role of power was also evident through the focus on building parental involvement through 'Talk Time' (Cycle Three). The discussions highlighted the co-researchers' perspectives that the pupils' language environments at home, and the parent-child interaction styles they had observed, were not always conducive to language enrichment. Co-researchers also cited lack of parental interest as a barrier to parental involvement. This supports Bernstein's (1975) theory of elaborated and restricted codes outlined in Chapter 1. Similar to Bernstein, the co-researchers focused on the perceived deficits of their pupils and the parent-child interactions they engaged in, even though none of the teachers had ever been on a home visit to confirm their beliefs about the pupils' language environments at home. Such a perspective also aligns with a study in an area of low SES in the US, in which

teachers tended to describe the types of language experiences that were *not* occurring in their students' homes, as opposed to the types of language experiences that were happening (Hamel, 2003).

Oct 264. R3: *You really notice the deficit coming from home, don't ya?*

Nov 230. R2: *I don't know (name of R1), because a lot of them, they don't even talk to them... even you see them collecting them, you see them (name of child), come on' ... and it's no 'did you have a good day?' 'Say bye to your teacher'...*

Nov 233. R4: *Yeah, none of that*

In the co-researchers' statements above there is evidence within the discussions of interrelated interactions of power, as espoused by Foucault (1980). The co-researchers privileged their own perspectives, experiences, and competencies (i.e., practical knowing) as legitimate, without subjecting them to validation or cross-referencing them with the facts (i.e., propositional knowing). Thus, power played a role in the interface between practical knowing and propositional knowing (i.e., *Proposition 5*). Power decided what was their truth.

Nov 93. R2: *It is, I know we sound very negative-*

Nov 94. R4: *Nooooo*

Nov 95. R2: *But that's from years of it. It's not...*

Nov 97. R4: *It sounds bad like*

Nov 98. R2: *It does sound bad but that's the reality of it*

However, severing the dichotomy between knowledge that is privileged and knowledge that is not privileged, by opening up perspectives to alternative points of view and evaluation, can directly influence how activities are collaboratively designed. For example, even though the co-researchers in this inquiry were not confident that involving parents would dramatically enhance the children's language skills, they were open to trialling it and reviewing it. Together, they were willing to question their practical knowing, in light of the propositional knowing supporting the benefits of parental involvement repeatedly documented. As a result, a number of the co-researchers' assumptions were challenged and the power upholding specific outlooks as truth was contested. For instance, the perception that parents would not attend a parent meeting was challenged – 7 parents attended. The view that the co-researchers could anticipate the parents who would attend was also contested – R2 was surprised at the attendance of one parent who she assumed would not have participated. In addition, their perspective that parents would not complete oral language homework with their children was challenged – engagement was estimated at 66-80% and there were reports of much higher parent involvement by the pupils themselves, who stated that parents assisted them even when they did not know the words. Furthermore, their belief that many pupils would not perform well on the assessment of all the vocabulary taught was discredited – the results were extremely positive.

R2: *I didn't think it was going in so much or that it was being done at home*

Thus, the attendance of parents at the parent meeting and the assessment results component of 'Talk Time' (i.e., propositional knowing) enabled the deconstruction of the co-researchers' previous truth claims. Parents' attendance and assessment results also facilitated a rebalancing of power between 'erudite knowledges' (e.g., teachers' perspectives) and 'subjugated knowledges' (e.g., parents' perspectives) (Gigengack, 2014). Such power-sharing enabled a fresh outlook to be activated on the feasibility of harnessing parental involvement to support the language enrichment of pupils. Together, this reinforces *Proposition 5*, that *Power plays a role in the interface between practical knowing and propositional knowing*, and highlights the role of power in collaboratively designing activities.

In conclusion, *Proposition 1* asserts that *collaboratively designed activities are central to changing classroom practices to support effective language enrichment*. Proposition 1 is the base from which the other four propositions hang. Physical and tangible activities helped to transform the theoretical assertions of empirical evidence into something doable, supporting *Proposition 4: Practical knowing is a critical element in models of change*. In this action research inquiry, the physical and tangible activities were exemplified through the Classroom Practices Checklist and 'Talk-Time'. In addition, a number of key processes reflecting first-person, second-person and third-person inquiry enabled the activities to be developed, reviewed, evaluated, and adapted. Additional processes included participation, facilitation, and re-evaluating what knowledge is considered legitimate or not - supporting *Proposition 2 (Facilitation is an essential third dimension of participation, shared by all co-researchers)*, *Proposition 3 (Degrees of participation may fluctuate)* and *Proposition 5 (Power plays a role in the interface between practical knowing and propositional knowing)*.

There are a number of implications of *Proposition 1: Collaboratively designed activities are central to changing classroom practices to support effective language enrichment*. First, speech and language therapists who work collaboratively with educational professionals cannot rely solely on a presentation of theoretical assertions to effect change in the classroom. In a systematic review of knowledge translation strategies employed by allied health professionals, the included studies implemented by SLTs only used educational meetings or educational outreach visits to help bridge the research to practice gap (Scott et al., 2012). Educational meetings by SLTs resulted in consistent, non-significant effects on primary outcome measures (Scott et al., 2012). Therefore, a common practice I have witnessed during my seventeen years working experience in public speech and language therapy services, of a speech and language therapist providing a one hour theoretical power-point presentation to a group of teachers at their staff meeting on ways to support language development, may be ineffective. It may need to be replaced by, or supplemented with, tangible activities that have been jointly designed by both disciplines. In that way, the

activities will be grounded in the empirical evidence of what works to support effective language enrichment, but also shaped to fit with more established, palpable teaching practices and priorities. For example, 'Talk Time' incorporated visual organiser templates such as 4-squares, Venn diagrams, and semantic feature analyses that drew on established evidence-based practices such as highlighting semantic relationships with other known words, demonstrating the wider application of the target vocabulary in a variety of different contexts, and scaffolding opportunities to practise using the target vocabulary (Coyne et al., 2007, Duff et al., 2014, Pollard-Durodola et al., 2011, Zipoli et al., 2011, Zucker et al., 2013). In addition to being enablers of evidence-based practices, the format of the activities was aligned with established and familiar teaching methods (i.e., asking pupils to complete a specific worksheet that focuses on a learning objective). Systematic reviews have also indicated that more successful strategies to translate research to practice were those that could be tailored to the priorities and preferences of the users (La Rocca, Yost, & Dobbins, 2012). Thus, through collaboratively designed activities the theory-to-practice gap may be more likely to be bridged and optimum implementation of effective evidence-based practices in the classroom may be more probable.

As a precursor to this, a second implication of this proposition is that regular opportunities and support are required to collaboratively design language enrichment activities, so that the activities translate the evidence of what works into workable classroom assignments. Efficacy and effectiveness of the activities constructed may need to be established before they are widely distributed with teachers for use with pupils. Ideally, appraisal of effectiveness would incorporate pupil feedback as well as practitioner feedback. A challenge may be securing researchers, practitioners, and pupils who are willing and supported to spend time designing and evaluating activities. This may also require a range of knowledge elicitation techniques to draw out pupil and practitioner knowledge and expertise, such as discussion groups, case analysis, interviews, or consensus tasks (Roulstone, 2001). Another related challenge may be a potential lengthy time lag from when empirical evidence is published to the design, evaluation, publication, distribution, and widespread implementation of activities based on the evidence. Already, it is estimated that the time lapse between research and adoption of research findings is as long as eight to thirty years (Bostrom & Wise, 1994). Therefore, it is imperative that activities keep up to date with the contemporary research to shorten this gap. Moreover, it may be advantageous for empirical research published in journals to be accompanied by recommendations of how to apply the findings in practice. Classroom practices checklists or activities designed for the classroom could be one possible way of demonstrating how to apply the scientific findings in practice.

The third implication of this proposition extends beyond the boundaries of the classroom. If, as this proposition suggests, collaboratively designed activities are central to changing *classroom practices* to support effective language enrichment, then the same may be true for practices implemented in children's other environments. For instance, it may be valuable to investigate whether collaboratively designed activities between SLTs and parents may also emerge as central to supporting effective language enrichment in the home. The fusion of empirical evidence that demonstrates effectiveness, with parents' perspectives of what will fit with typical home routines and practices, to create collaboratively designed activities may also emerge as central to changing *home practices* to support effective language enrichment. This process could provide an alternative to the traditional 'home programme', which typically consists of activities that a SLT has independently decided may be useful, often without parental input. Similarly, it may be beneficial to explore whether collaboratively designed activities between SLTs and a variety of other professionals involved in children's lives may surface as pivotal to supporting effective language enrichment in a range of different contexts and practices. Potential individuals to invite for further collaborative inquiry may include sports coaches, music teachers, after-school project leaders, or youth workers. Once again, challenges may relate to motivation, time, and support from management to conduct such inquiries. Hence, appropriate infrastructures (e.g., organisational, technological, instrumental) may be required that facilitate access, exchange, and utilisation of relevant evidence (Grimshaw, Eccles, Lavis, Hill, & Squires, 2012).

The final implication reaches beyond the professions of speech and language therapy and teaching. That is, this proposition may have implications for other disciplines too. Perhaps the focus on activities that are collaboratively designed to support the effective implementation of a classroom practice may provide useful direction for other professions. For example, educational psychologists who want to promote a change in the classroom practices of teachers may find it valuable to spend time collaboratively designing checklists and/or activities that support that change. Likewise, other professionals in diverse fields may discover benefits to investing time and resources in translating theory into practice within inter-professional practice through designing and implementing jointly created activities that reflect the cornerstones of evidence-based practice - scientific research, clinical expertise, and client preferences (Dollaghan, 2007). As a result, empirical evidence may be moulded to align with established professional practices and priorities of colleagues, potentially leading to better outcomes. The repeatedly cited barriers to establishing and capitalising on such potentially effective collaborative relationships (i.e., insufficient time and inadequate resources) (Archibald, 2017), may be surmounted with support from the management and leadership of each discipline's organisation.

7.3 Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers

As discussed in previous sections (3.4 Core features of action research, 3.5 Potential limitations of action research and ways to address them to ensure quality, and 6.3.1 Participation), action researchers construe participation in a particular way. Leaders in the field reference two key dimensions of participation: epistemological dimensions and political dimensions (Reason & Bradbury, 2008a). From an epistemological perspective, participation in an action research study is believed to bring multiple viewpoints to the fore to generate new knowledge through collaborative inquiry and mutual meaning making (Kemmis & McTaggart, 2000; Koch & Kralik, 2006; Reason & Bradbury, 2008a). From a political perspective, the generation of this socially constructed knowledge and the provision of agency in decisions related to future directions through genuine participation, are considered fundamental and democratic rights of the individuals (Israel et al., 2003; Ospina et al., 2008; Reason & Bradbury, 2008a). Based on the findings of this action research study, I propose that there is an extra, third dimension of participation that should be considered equally essential in every conceptualisation of participation: facilitation. Genuine participation that harnesses multiple perspectives through democratic power sharing cannot occur by simply gathering people together – it has to be skilfully facilitated.

The nature and place of facilitation in relation to participative inquiries has been previously described in the literature. McArdle (2008) observes the role of facilitation in “getting in, getting on, getting out”, using this analogy to describe how facilitation is needed in the beginning, middle and end of inquiries. In the ‘getting in’ phase she refers to the need to work energies – facilitation enables the researcher to read participants’ responses to the research proposal and make corresponding adaptations as necessary to make the proposal appear more or less familiar and inviting. In the ‘getting on’ phase she speaks of facilitation as letting go of the reins of the inquiry and supporting the group’s independence. In the ‘getting out’ phase, she describes facilitation as processing what has been achieved in order to end well. Similar to McArdle’s (2008) stance, Mackewn’s (2008) discussion of facilitation emphasises the choices that action researchers make when confronted with a specific situation – from the purpose of the study, to the conceptualisation of how meaning is constructed within the group, to the wider context in which the study is placed, to the choreography of energy. She describes a polarity and paradox in facilitation that requires the two ends of dichotomies to be valued, along with an appreciation of all the points in between. For example, facilitation involves appraising the need to follow with the need to lead, the need to listen with the need to tell, the need to nurture with the need to challenge, the need to provide structure with the need to provide flexibility, or the need to notice with the need to ignore. Comparable contradictions that facilitation has to grapple with are echoed by Heft (2014).

McArdle's (2008), MacKewn's (2008) and Heft's (2014) focus on facilitation is primarily as a skill that is implemented internal to the researcher – often silent thoughts, unspoken deliberations, and voiceless choices - all occurring within the researcher's mind in an effort to match the presenting scenario with an appropriate response. Thus, they construe facilitation as a meta-skill - being mindful of what is happening in the moment and choosing how to respond to it. They reference the need for facilitation to find the right fit between the researcher's role and methods that will be employed on the one hand, and the study's objectives, intended outcomes, group culture and dynamics on the other hand (Heft, 2014). Again, this 'fit' is decided on by making choices in relation to adjustments that are/are not deemed necessary. Mindful management of what is unfolding is highly regarded too by other experienced action researchers (McCallum & Nicolaidis, 2015). Mindful management mirrors the former assertions in relation to facilitation. It is self-reflection and referred to as 'knowing in action'. It incorporates triple-loop awareness - attending to a researcher's sense of self (being), alongside their ways of knowing for achieving objectives (knowing), and their subjective experience of what they are performing (doing), in relation to the context and conditions of the inquiry (McCallum & Nicolaidis, 2015).

Others describe facilitation as encompassing internal 'meta' dimensions but also external, explicit, and tangible aspects. For instance, Chevalier, Buckles and Bourassa (2015) argue that the means by which we carry out research is as important as the ends. For them, sound practice requires the silent, internal skills of facilitation - it "involves doing the right things at the right time with the right people, knowing that things, time frames, and people crisscross, get out of sync, and keep moving" (p. 617). However, they also recognise the voiced, external features of facilitation. Two of their five recommended skills central to engaged research have a spoken facilitative component: mediating (i.e., engaging dialogue across knowledge, social and cultural boundaries) and sense-making (i.e., building meaning collaboratively) (Chevalier et al., 2015). The quality of the dialogue in a research inquiry, and how it is commenced, nurtured and facilitated throughout the process, has been recognised as significant in determining the successful outcome of a research process by others too (Park, 2001; Snoeren, Niessen, & Abma, 2011). Moreover, Cook (2009) argues that puncturing existing perceptions (e.g., through voiced facilitation) provides the necessary space to clarify what is known (i.e., explicit knowledge) and nearly known (i.e., implicit knowledge), and enable the creation of new transformational knowledge. Therefore, explicit and spoken facilitation in this manner maintains co-researchers' confidence in their knowledge and practice, while simultaneously assisting them to critique them and act accordingly – known as the 'messy turn' (Cook, 2009).

In this study, the rigorous scrutiny of the transcribed data of meetings with co-researchers helped to dissect and illuminate the external aspects of facilitation that occurred. These central, external aspects of facilitation implemented by all co-researchers that were deduced from the data will be illustrated in examples below. Firstly, through the thematic analysis of the processes that occurred (Section 6.2), coding and refinement of themes was completed on what was happening, how action was decided upon, and how co-researchers participated. A global theme 'Participation Requires Constant Attention' was deduced (Figure 6.1), indicating the need for action researchers to maintain continual consideration of participation during an inquiry. The manner in which that constant attention can be achieved is revealed from the organising themes that constructed the global theme, all of which I consider to be facilitative in nature: 'inquiring', 'keeping it going', 'using praise', 'common ground', 'sharing knowledge', 'sharing expertise', 'sharing practice' and 'sharing opinions'. Furthermore, the organising themes were in turn assembled from numerous basic themes, which provide copious examples of how facilitation can be externalised and expressed. For example, *inquiring* ('asking for opinion'; 'directing inquiry at particular researcher'), *keeping it going* ('using humour'; 'clarifying'; 'summarising'; 'paraphrasing'; 'backing down'; 'misunderstanding'; 'social niceties'; 'repeating'; 'setting the scene'; 'finishing sentence'; 'filler'), *using praise* ('praising researcher'; 'praising self'; 'accepting praise'; 'reassuring researcher') and *sharing opinions* ('praising parents'; 'praising pupils'; 'judging'; 'mimicking parents'; 'mimicking pupils'; 'expressing frustration'; 'acknowledging negative opinions'; 'sharing opinions of other researchers'; 'challenging opinions'; 'polite challenge of opinion'; 'counter challenging opinions').

Secondly, the transcript data was re-interrogated using thematic analysis – this time a thematic analysis of participation (Section 6.3). The roles of the co-researchers with regard to problem-posing or problem-solving incidents were categorised with one of twenty-eight themes (Table 7.1). Once again, I consider the themes to illustrate the important role of facilitation, and they supply an abundance of concrete illustrations of how facilitation can be externalised and articulated in the moment.

In addition to elucidating more precisely how facilitation may be realised and expressed externally, the inspection of the data led to *Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers*. The analyses point to the essential function of facilitation in democratically (political dimension of participation) illuminating multiple perspectives (epistemological dimension of participation).

Table 7.1: Problem-posing and problem-solving role themes

Problem-posing role themes	Problem-solving role themes
<ul style="list-style-type: none"> • concerns re: aims • concerns re: methods • describes related issues • describes individual behaviour • asks for clarification • asks for an answer/solution • describes/gives information on what happened • agrees • disagrees • gives answer • answers and asks for feedback • doubts • questions to find out • describes-poses practical problems 	<ul style="list-style-type: none"> • proposes a strategy • answers with a solution • answers with a question • proposes a strategy and asks for feedback • agrees with strategy • disagrees with strategy • gives feedback to a proposed strategy-elaborates • gives an example • gives a specific guideline • challenges with a question • doubts • challenges with quoting evidence • gives feedback on the use of strategy • answers with clarification

The role of facilitation in enabling the *epistemological dimension* of participation in this action research study is evident from inquiries I made of the co-researchers about their current knowledge, skills and attitudes, and their opinions on potential future practices (Table 7.2). Likewise, the co-researchers took up facilitative roles in the questions they asked me and each other in relation to their practices and perspectives (Table 7.3).

Table 7.2: Examples of questions posed by R1 to facilitate the epistemological dimension of participation

Transcript	Theme
Nov 71. R1: <i>If parents were totally on board and we knew that by the end of the year, their language is going to be brilliant, one, because of what we're doing but part of that is because the parents are totally on board... What would they be doing if they were totally on board for language development?</i>	Asking for opinion
Nov 848. R1: <i>Yeah, what do you think is making it more automatic?</i>	Inquiry about practice

Table 7.3: Examples of questions posed by co-researchers to facilitate the epistemological dimension of participation

Transcript	Theme
May 95. R3: <i>Do you think you'll take that with you when you go to the other school? Do you think it's something you'll continue?</i>	Directing inquiry at particular researcher
May 243. R2: <i>I'd be half and half with the homework. Half of mine are doing it, half of them aren't ... (name of pupil), for example, 'did you talk about a cocoon last night?', 'yeah', 'what did you say?', 'eh, (name of sister) didn't know what it was, 'did you tell her?', 'no', 'do you know what it is?', 'yeah', 'why didn't you tell her?', 'I don't know'....so how do you handle that one lads?</i>	Relating to personal experience

The central place of facilitation to draw out co-researchers' varied epistemological outlooks is also visible from the multiple roles of co-researchers that were coded in instances of problem-posing or problem-solving. The facilitative roles were distributed amongst all co-researchers and were frequently realised in the form of inquiry (e.g., problem-posing: 'asks for clarification'; 'asks for an answer/solution'; 'answers and asks for feedback'; 'questions to find out'. Problem-solving: 'answers with a question', 'proposes a strategy and asks for feedback', 'challenges with a question'). Other facilitative roles were in the form of declarations or testimonials (e.g., problem-posing: 'concerns re: aims'; 'concerns re: methods'; 'gives answer'; 'describes-poses practical problems'. Problem-solving: 'disagrees with strategy'; 'disagrees'; 'doubts'; 'challenges with quoting evidence'). Examples from the transcripts are provided in Table 7.4.

Table 7.4: Examples of questions and declarations to facilitate the epistemological dimension of participation

Transcript	Theme
<i>R4: Should I use words from this book, do you think?</i>	Asks for an answer/ solution
<i>R3: But you see I don't think that's right, that wouldn't be an accurate reflection because-</i>	Disagrees

The place of facilitation in ensuring the *political dimension* of participation in this action research inquiry is apparent from questions inviting different perspectives and assertions providing alternative opinions to existing outlooks. For instance, in the thematic analysis of the data from the perspective of participation, there were incidents of the roles 'concern re: methods', 'challenges with a question', 'describes–poses practical problems', 'challenges with quoting evidence', 'disagrees with strategy', 'doubts' and 'disagree'. In addition, the role of facilitation in assisting democratic diversity is demonstrated from the thematic analysis of the processes that occurred in the study, that led to the deduction of the basic themes 'asking for opinion', 'sharing opinions of other researchers', 'polite challenge to proposed action' and 'describing challenges of change' (Table 7.5).

Table 7.5: Examples of questions and declarations to facilitate the political dimension of participation

Transcript	Theme
<i>Sept 195. R1: So, what do you think having now looked at the checklist?</i>	Asking for opinion
<i>Nov 560. R3: ... but then, are you taking the focus away from the oral language homework and turning it into written homework?</i>	Polite challenge to proposed action

The other essential function of facilitation in this study, in the political dimension of participation, was managing conflict that arose that may have obstructed the intentions of the

study. Facilitation was realised in the choices made based on particular issues that surfaced. For instance, in Cycle One of this study the co-researchers reacted negatively to a research report that was presented for review (i.e., ‘Oral Language in Early Childhood and Primary Education’ (Shiel et al., 2012)). They objected to the formal tone and technical language used, which they felt, rendered the report inaccessible. Following this, I adapted the manner in which future research reports were shared, by providing only a succinct summary (e.g., 3 page summary of Steele and Mills’ (2011) review) or a practical guide to accompany research findings (e.g., an example lesson plan for a storybook called ‘Ruby the Copycat’ rather than the seminal textbook on which it was based: ‘Bringing Words to Life: Robust Vocabulary Instruction’ (Beck et al., 2002)). Also, when one of the co-researcher’s voiced her preference not to be videoed, facilitative skills enabled a compromise to be reached that she would assist in planning changes and evaluating changes, but that I would be the person who would feature in the video clips implementing the agreed changes. In addition, the co-researchers’ disgruntlement towards the end of the school year, that we were meeting too frequently and that they were completing a greater number of compulsory additional working hours (Croke Park hours) than their peers, was managed through facilitation – we negotiated that the amount of time we would meet for each week would be shortened and collaboratively decided on the remaining number and dates of meetings that we would attend.

There are also additional facilitative competencies that emerged that point to the importance of explicitly supporting the flow of discourse that takes place between co-researchers and preserving the motivation of co-researchers. Facilitative methods and skills to maintain the flow of discourse are marked in this action research study by the presence of the organising themes ‘keeping it going’ and ‘common ground’ and through basic themes such as ‘using humour’, ‘clarifying’, ‘paraphrasing’, ‘backing down’, ‘social niceties’, and ‘setting the scene’ (Table 7.6).

Table 7.6: Examples of facilitative methods to maintain the flow of discourse

Transcript	Theme
<i>Nov 681. R3: Is this language development in general or language development specific to what we’re teaching in school?</i>	Clarifying
<i>Mar 110. R1: ...so basically, from what you’re saying, ... you’re finding yourself, because of Talk Time you’re talking about similarities and opposites...</i>	Paraphrasing
<i>Sept 12. R1: OK, so far?</i>	Social niceties
<i>Jan 1. R1: One of the things that we did before the meeting last week was, we just kind of thought about, what did you think the outcome will be?</i>	Setting the scene

Facilitative methods and skills to preserve the motivation of co-researchers can be found in the existence of the organising theme ‘using praise’ and basic themes like ‘praising researcher’, ‘praising self’, ‘accepting praise’, and ‘reassuring researcher’. Uncertainties expressed by a co-researcher were gently allayed through facilitation in the form of a reassuring comment (i.e., ‘reassuring researcher’ theme). When reflecting on the changes they had implemented, co-researchers praised their own efforts and those of the other practitioners, spurring themselves and each other on to continue the new practices (e.g., ‘praising researcher’, ‘praising self’ in Table 7.7). Yet again, such facilitative roles were dispersed amongst the co-researchers (Table 7.7).

Table 7.7: Examples of facilitative methods to preserve the motivation of co-researchers

Transcript	Theme
<i>Oct 211. R4: I thought that was, that was really good</i>	Praising researcher
<i>Nov 866. R3: It does. It sounds like I'm really listening to what they're saying and I'm actually giving them REAL feedback on what they're saying then, you know?</i>	Praising self
<i>Jan 49. R1: Yeah, Ok...and it's early days as well. It's only day 2.</i>	Reassuring researcher

Hence, drawing on all of the numerous examples above, the core and thesis action research analyses demonstrate that facilitation was assumed by all co-researchers. This signifies that facilitation may not only be undertaken by the initiating action researcher but is a collaborative act with co-researchers. Indeed, it could be argued that if facilitation is not shared, the inquiry may be at odds with second-person action research inherent in many forms of action research inquiries. In addition, the analyses demonstrate that facilitation does not refer to a single method, but rather a multitude of internal and external skills, tactics and methods to optimise participation. As documented above, the shared, multi-faceted presence of facilitation in this study, enabled the epistemological and political dimensions of participation to be realised. This led me to *Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers*. I consider facilitation to be critical ‘oil’ in a participatory ‘machine’, paving the way for the epistemological and political dimensions of participation to be attained. All human beings, by our very nature and regardless of our levels of motivation, may become momentarily distracted, temporarily disinterested, or briefly wander off topic in a group situation, such as a participatory inquiry. Through facilitation a co-researcher may keep track of the conversations, draw together different strands of the discussions, and ensure all co-researchers have the chance to contribute (Hunt & Thompson, 2002). Therefore, facilitation is central to maintaining engagement with the shared concern, preserving a sustained focus on the issues at hand, and continuing the process of collective meaning making (Chevalier et al., 2015). Ultimately,

the quality of facilitation may determine the success of a participative inquiry (Park, 2001; Snoeren et al., 2011).

This proposition aligns with the promotion by others of the key role of facilitation in a participative inquiry (Heft, 2014; MacKewn, 2008; McArdle, 2008). This is especially comparable in relation to the promotion of facilitation as a way of responding to conflict. However, in contrast to my proposition, their focus on facilitation is primarily internal to the researcher and relates to choices made in an effort to appropriately match the presenting scenario with an appropriate response. They do not reference the shared role of facilitation with co-researchers, or its pivotal position in enabling the political and epistemological dimensions of participation to be realised. Instead their focus leans more heavily on facilitation as a meta-skill - being mindful of what is happening in the moment and choosing how to respond to it. This conceptualisation of facilitation as a 'meta-skill' differs to the more concrete, external, and practical description of facilitation that manifested itself in the transcribed data of meetings with co-researchers in this study (i.e., in the form of questions, statements, proposals, illustrations, motivators). It is possible that my professional qualifications as a speech and language therapist, trained to assess and analyse communicative interactions, may have brought greater attention to the minutiae of how facilitation is realised in dialogue and how it is shared by each person contributing to the discussion. Alternatively, the nature of data analysis I employed in the thesis action research study, thematic analyses of each line of the transcribed data of meetings, may have emphasised the particular external expressions of facilitation by each co-researcher. Regardless of the possible reason, more specific direction on how to bring facilitation to fruition through external, verbal means may be provided for action researchers through this study than the former broad and general statements of Cook (2009), Park (2001), Snoeren et al., (2011) that recommend 'quality of dialogue' or opportunities to 'puncture existing perceptions'. Other suggestions advocated for effective facilitation in other fields sometimes lack specifics also, such as suggestions to establish effective communication channels, support interactive problem solving or build trusting relationships (Doherty, Harrison, & Graham, 2010). However, there have also been repeated calls about the importance of the quality of the dialogue, interaction, and exchange that occurs in determining the success of a participative inquiry (Chevalier et al., 2015; Grant, Geoff, & Mitchell, 2008; Heft, 2014; Jacobs, 2010; Lincoln & Guba, 2000; Mackewn, 2008; McArdle, 2008; Snoeren et al., 2011; Wicks & Reason, 2009). As a result of this inquiry, greater and more explicit direction may be provided on how facilitation may be realised by each co-researcher through the facilitative methods and skills inferred from data analyses, such as open inquiry, honest sharing of opinions, encouragement of discussion, and motivation of co-researchers.

There are four key implications for theory, practice, and research from the proposition that *'Facilitation is an essential third dimension of participation, shared by all co-researchers'*. The first implication is for the well-established notion of participation within action research to expand from a two-dimensional concept (i.e., epistemological and political dimensions) (Reason and Bradbury, 2008a), to a three-dimensional concept (i.e., epistemological, political, and facilitation dimensions). As the analyses of this study demonstrated, facilitation was an enabling factor that harnessed multiple perspectives and supported democratic power sharing. Without facilitation, a full range of epistemological viewpoints may not have surfaced and an overt attention on power sharing may not have been realised. It could be argued that facilitation is implied in any participative act or concept. However, I believe facilitation is too important to remain this haphazard and tenuous. Theoretical constructs of participation that include the essential dimension of facilitation can assist in emphasising its central role. This will, in turn, support the attention provided to, and the implementation of facilitation in practice. As a consequence, a possibility that action researchers may expect the crucial epistemological and political dimensions of participation to simply transpire by gathering people together may be avoided – instead they may be more aware of the role of facilitation in ensuring their attainment, and act accordingly.

The second implication is that some existing conceptualisations of facilitation (e.g., Heft, 2014; McKewn, 2008; McArdle's, 2008) may need to be expanded from a perspective of facilitation as purely an internal, 'meta-skill' of the initiating researcher, to a broader understanding of facilitation that includes external manifestations and that can be enacted by other co-researchers. Constructs of facilitation as unspoken deliberations may need to be widened to encompass spoken problem-posing and/or problem-solving. Ideas of facilitation viewed as voiceless thoughts may need to be extended to incorporate voiced statements. Perspectives on facilitation limited to internal choices that a researcher makes may need to be broadened to include external verbal statements of how decisions were made and described. Moreover, a narrow lens that only sees the initiating researcher as an agent of facilitation may need to be replaced with a more panoramic lens that recognises the potential of co-researchers to be agents of facilitation also. With this augmented and expanded viewpoint of facilitation, a more supportive framework for participative endeavours may be provided. However, it is possible that some co-researchers would not want to take up the responsibility of facilitation if it was suggested it was integral to their participation in an inquiry. As a consequence, they may refuse to get involved in an action research study and their important contribution would be lost, perhaps negatively affecting the potential positive outcomes. Therefore, it is imperative that a facilitative role is not forced on co-researchers, rather understood as a potential occurrence that would be advantageous to nurture and support. On the other hand, other co-researchers may welcome the opportunity to be directly

and explicitly involved in facilitation but may feel ill-equipped to assume the role competently. For that reason, a focus on skills and strategies to support facilitation may be required.

Thus, the third implication is for key strategies, tools, and skills to support facilitation to be developed. This recommendation stems from the amplified conceptualisation of facilitation as having both internal and external aspects shared by all co-researchers, coupled with the promotion of facilitation as an essential third dimension of participation. Due to the central place of facilitation promoted in realising the epistemological and political dimensions of participation, it is crucial that strategies and skills are developed to ensure optimal facilitation – both its internal and external materialisations. It seems imperative to minimise any potential barriers and optimise the effectiveness of facilitation, through the availability and application of strategies and skills. One such strategy suggested in the literature is the creation of a ‘participatory space’ (Ayar, 2010; Cornwall, 2008; Gaventa, 2004) or ‘communicative space’ (Cook, 2009; Wicks & Reason, 2009) for the inquiry. Wicks and Reason (2009) propose that opening a communicative space for an action research inquiry involves moving through different phases: (i) inclusion phase, which commences at the initial contact and seeks to support people to contribute and engage with the meaning of the inquiry; (ii) control phase, which safely assists participants to express and investigate differences; and (iii) intimacy phase, which enables participants to claim their own power and influence alongside that of others. These participatory spaces need to consider political, social, cultural and historical dynamics to enable participants to progress through each phase of the communicative space (Cornwall, 2002). In essence, a safe place is created where individuals can reflect, create and innovate (Wade, 2004).

Other strategies that co-researchers may draw on to hone their facilitation skills are described in a theory of action proposed by Arieli et al. (2009). They suggest employing the following action strategies – all of which are facilitative in nature and could be adapted for use by all co-researchers: test assumptions that community members are willing and able to participate as researchers; be willing to share resources; be prepared to prioritise action over inquiry; facilitate the ability to discuss power and cultural differences; ensure time for collaborative reflection that is based on documentation; establish explicit reasoning; admit mistakes; and avoid overt or covert coercion. As highlighted through this proposition, the importance of making the former strategies explicit rather than remaining solely internal to the co-researchers is paramount. Others stress the importance of relationship-building as a facilitative skill (Brown, Bammer, Batiwala, & Kunreuther, 2003; Reason & Bradbury, 2008b). This may include learning more about each other, nurturing informal relationships, and maintaining open channels of communication in relation to expectations. In addition, facilitative skills have been compared to competencies in ‘working energy’ – attending to,

understanding, and responding to the energies of a particular context (Wadsworth, 2006), and in each stage of the research process (McArdle, 2008). The fundamental skill of being adaptable is needed to navigate and choreograph the contradictions that emerge and the shifting objectives, group culture and other factors (Heft, 2014; Mackewn, 2008). Tools to support optimal facilitation are also implicated as necessary. For instance, tools to manage complexity that may emerge in an action research study through raising facilitative questions have been previously described - Validation, Order and Chaos, and Causal Dynamics (Chevalier et al., 2015). The Validation tool invites co-researchers to critically evaluate the results of the research, the Order and Chaos tool poses questions in relation to chances of success and perceptions of certainty, while the Causal Dynamics tool asks questions in relation to the reasons behind change and potential for wider systemic changes. Additional tools referenced that can be employed to maximise internal and external manifestations of facilitation include inquiry circles, World Café, focused conversations, journaling, and mind maps (Heft, 2014).

However, a potential challenge of developing and refining strategies, skills, and tools of facilitation is the possibility of such proficiencies being misused. Researchers may need to take heed of the caveats previously described in detail (Section 3.4) that suggest a possible type of 'tyranny' whereby action researchers, in their strong and genuine attempts to facilitate participation, may actually end up reinforcing inequalities of power (Cooke & Kothari, 2001). Thus, co-researchers need to remain reflective and reflexive in their facilitative endeavours and in the implementation of facilitation skills, strategies and tools.

The fourth implication from this proposition is the need for further research and analysis of the concept of facilitation. If, as I suggest, facilitation is critical 'oil' in a participatory 'machine', paving the way for the epistemological and political dimensions of participation to be attained, then supplementary scrutiny of facilitation is required. This may, in turn, lead to recognition of facilitation as an essential dimension of participation. In this study, there were a plethora of concrete examples of how facilitation revealed itself externally in the transcribed data (e.g., questions, declarations, statements to maintain the flow of conversation, motivating comments for co-researchers, and attempts to verbally resolve conflict that arose). Due to the relatively small scale of this study, I am conscious that this list of manifestations of facilitation is not exhaustive. In addition, skills, strategies and tools outlined in the literature that may support optimal facilitation have been described above. Further examination and study of facilitation could add to the illustrative, concrete examples of explicit facilitation, and the skills and strategies to support it. As a result, a more comprehensive array of examples, methods, strategies, and approaches for action researchers to choose from would be available. A variety of research methods may need to

be employed to explore facilitation in more depth from the perspective of each co-researcher, and how it is being enacted internally and externally. Consequently, the important place of facilitation may be extrapolated further, the quality of facilitation may be increased, and therefore the nature of participation may be improved, leading to more authentic outcomes from a participatory inquiry.

7.4 Proposition 3: Degrees of participation may fluctuate

Considering the repeated assertion that participation is a distinctive characteristic of action research (Brydon-Miller et al., 2003; Reason & Bradbury, 2008a) and the suggestion of possible tyrannies if not enacted appropriately (Arieli et al., 2009; Cooke & Kothari, 2001), it is imperative that the degree of participation in an action research study is comprehensively examined and portrayed. Participation can be realised in many guises. Numerous continuums and typologies have been put forward in the literature to describe the various possible degrees of participation, as discussed previously in Section 6.3.2 (Thematic analysis and participation). The typologies proposed by Arnstein (1969), Cornwall (1996) and Pretty (1995) do not describe fluctuations or movements between degrees of participation. Instead, it is assumed in these frameworks that the level of participation in a study is a fixed phenomenon, arising from how the research agenda is set and how action is decided upon. However, the existence of a set degree of participation was not the finding of this action research inquiry. The thematic analyses conducted provide a transparent audit trail for appraising the levels of participation that took place, and for plotting it on the typologies and continuums described. This detailed investigation clearly demonstrated that the degree of participation was not consistent for the duration of this study. Thus, the third proposition was deduced: *Degrees of participation may fluctuate.*

The interrogation of the data from the perspective of participation using thematic analysis established that the extent of participation shifted from cycle to cycle. First, the number of incidences of problem-posing and problem-solving per co-researcher fluctuated over time (Figure 6.6, Table 6.13). Second, in the investigation of the patterns of interaction between co-researchers, there was similar variability (Figure 6.9, Table 6.19). The pattern of interaction that predominated in the very initial and later stages of the study suggests lesser degrees of participation, resting more on Cornwall's (1996) 'cooperation' rung of the ladder or an earlier stage of Pretty's (1995) continuum 'functional participation'. However, higher degrees of participation were apparent mid-way through the study that correspond more to Arnstein's (1969) 'citizen power', Cornwall's (1996) 'co-learning' and Pretty's (1995) 'interactive participation'. Therefore, the findings of this action research study indicate that the degree of participation occurring throughout this inquiry was not static. That is, on the

participation frameworks, the inquiry could not be considered as remaining consistently in one position throughout the duration of the inquiry.

Consequently, instead of an explanatory model that uses a ladder to rank levels of participation and places an inquiry firmly on one its participatory rungs, this study suggests a more accurate representation of the degrees of participation would be an escalator. This depiction of participation as an escalator demonstrates that the extent of participation is constantly moving up or down during the inquiry process. An escalator may transport its passengers to higher levels or lower levels, and is in constant motion. Likewise, levels of participation may move higher or lower on existing frameworks, and hence degrees of participation may fluctuate.

There are many possible explanations for this fluidity in the levels of participation. For instance, lesser degrees of participation at the very beginning and ending of the study may simply reflect the stage of the research process at those times, when the research inquiry was being established and wrapped-up. Alternatively, it could relate to the content of the action research cycle. The initial cycle concentrated on evaluating current classroom practices with the help of a checklist that was unfamiliar to the co-researchers, and so possibly corresponded more with functional participation. Also, the final cycle aimed to establish a means of sharing the learning from the inquiry with colleagues and was led very much by the co-researchers - so it may have lent itself more to clarifying questions from R1. Conversely, when the content of the action research cycles was focused on 'action' through changing classroom practices and building parental involvement, the patterns of interaction 'co-researcher poses problem-R1 responds', and 'co-researcher poses problem-co-researcher responds' were more prevalent, indicating greater degrees of participation were occurring. Perhaps the co-researchers' greater attachment to the focus of change and its practical relevance to their work, could have been a catalyst for increased intensity of participation. The importance of such a connection has been linked to sustained participation (Passy & Giugni, 2000). Another possible explanation for variability in the extent of participation may relate to *Proposition 2* that was described in the previous section: *Facilitation is an essential dimension of participation, shared by all co-researchers*. Maybe the fluctuations in participation relate to the ebbs and flows of facilitation that were provided. Some conceptualisations and theories of groups and group dynamics may add further insight into the fluidity of participation. If groups typically go through numerous stages of development (e.g., forming, storming, norming, performing) (Tuckman, 1965), then it can be implied that co-researchers in an action research study are no different. Therefore, participation may fluctuate because the stage of development of the group is never fixed. Moreover, power dynamics in research relations have been identified as an influencing factor

on participation (Arnstein, 1969; Cornwall, 2008; White, 1996; Wilcox, 1994). For example, different agendas or roles of co-researchers may dominate at various time points through the exertion of power or control, and subsequently may be responsible for supporting greater or lesser degrees of participation at different times. Participation, too, may mean different things to co-researchers (Kristiansen & Bloch-Poulsen, 2013). As well as the impact of implicit power differentials or paradigms, tacit constructs held by co-researchers about a research inquiry or about practice (i.e., ‘theories in use’) may have inadvertently informed their participation (Argyris & Schon, 1996). So while our ‘espoused theories’ might have leaned towards maximal participation, our ‘theories in use’ may have resulted in much lesser degrees as different intervals. For example, I may have unconsciously minimised my own voice at times in order to ensure a democratic process for decisions relating to changes in practice.

There are four key implications from *Proposition 3: Degrees of participation may fluctuate*. First, existing theoretical typologies of participation may need to be updated to capture the fact that participation may fluctuate throughout an inquiry. As outlined earlier, a bi-directional moving escalator may be a more accurate representation for capturing possible degrees of participation rather than immobile rungs of a ladder or fixed rows on a table. A potential way to portray this fluctuation is depicted in Figure 7.2.

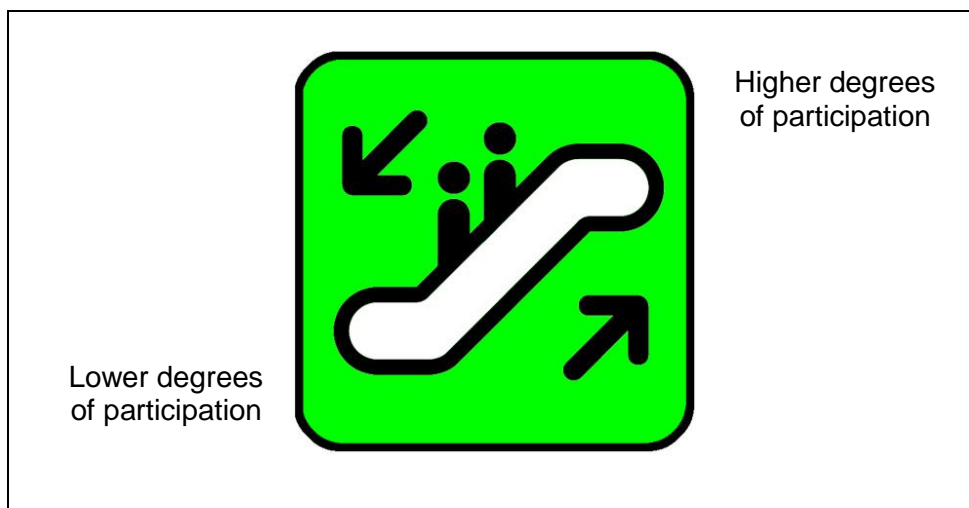


Figure 7.2: Potential representation of participation, reflecting the proposition ‘Degrees of participation may fluctuate’

Second, if contemporary theoretical frameworks of participation reflect the ebb and flow of levels of participation within an individual inquiry, then a researcher may be more aware of the need to continually assess in practice where on the ‘escalator of participation’ an inquiry is positioned at any given time. Consequently, the implication is that improved methods of evaluating degrees of participation that have maximum sensitivity and specificity may be

required. Thematic analysis of the transcript data in this study proved to be very useful in providing a credible audit trail for appraising the fluctuating degrees of participation that took place. An analysis of the frequency of problem-posing and problem-solving incidences; an analysis of the roles of individuals with regard to the content of problem-posing and problem-solving; and an analysis of the patterns of interaction between co-researchers, helped to determine shifts in degrees of participation within a particular context. However, thematic analysis can be a time-consuming and labour-intensive method, especially if there is a large volume of data to analyse. Therefore, it would be beneficial to have additional evaluative methods of degrees of participation available for action researchers that may be more efficient and economical. For instance, assessment methods could take the form of objective checklists or appraisal forms that provide more thorough indicators for each level of participation. If validated appropriately, detailed appraisal tools may allow action researchers to objectively evaluate degrees of participation more confidently at various time points.

Alternatively, evaluative methods of levels of participation may rely more on critical researcher reflexivity. One technique for perceiving what is happening, without prejudice and without evading what may be unfolding and therefore falling into a possible trap of reinforcing power dynamics, is mindfulness (Langer, 1997). 'Mindsight' is a comparable concept as a method of mindful observation (Siegel, 2010). Both mindfulness and mindsight appear to resonate with a focus on taking an attitude of inquiry in an action research study (Marshall & Reason, 2007). I suggest that this inquiry approach could be applied to evaluating degrees of participation. For example, dialogue with self, with co-researchers, and with research supervisors may be intentionally crafted to support mindful reflexivity to appraise a study's location on the 'escalator of participation' and to critically appraise the possible reasons underlying a given position.

Reliable evaluation of the degree of participation within an inquiry at any one time precedes the third implication of this proposition – action researchers will need to respond and adapt to variations in levels of participation, to support the best possible outcomes of the inquiry to be achieved. The fundamental role of the strategies, skills and tools of facilitation, described in *Proposition 2* may be useful to employ to respond to peaks and troughs of participation. For instance, systematic shared reflection amongst co-researchers may be an appropriate facilitative skill to collaboratively discuss the existing extent of participation and openly negotiate the desired level of participation of the inquiry group (Arieli et al., 2009). A common language and mutual understanding have been attributed to more collective decision-making and power-sharing (Friedman, 2001; Israel et al., 2003). Hence, they may be important facilitative skills to adopt in constructing a shared action plan of how to achieve the desired

degrees of participation – an action plan that addresses any barriers that have been acknowledged and capitalises on any facilitative factors that were highlighted.

Fourth, additional research and analysis is required to support the evaluation of degrees of participation within an action research inquiry, provide rationales for fluctuations in participative levels, and develop comprehensive guidelines and supports for responding and adapting proficiently, to ensure optimum outcomes of the inquiry. One possible research method may be meta-action research cycles focused solely on fluctuations of degrees of participation, that occur in parallel to action research cycles focused on an inquiry's aims. Supplementary analytical approaches may also be necessary for a more comprehensive exploration of *Proposition 3: Degrees of participation may fluctuate*. Ultimately, significant dips in participation may jeopardise the quality of an action research inquiry and prevent the best possible outcomes of the collaboration from being achieved. Therefore, careful attention to this characteristic is essential.

7.5 Proposition 4: Practical knowing is a critical element in models of change

As highlighted previously, a defining characteristic of action research is the explicit focus on achieving change as part of the research process (Bradbury-Huang, 2010; Kemmis, 2009), and there is widespread consensus that a key indicator of quality in an action research inquiry is the ability to demonstrate change (Brydon-Miller et al., 2003; Coghlan & Brannick, 2010; Gomm et al., 2000; Herr & Anderson, 2015; Somekh, 1993). Numerous theories, models, frameworks, and taxonomies of change have been described earlier in Section 6.4.2: Conceptualisations of Change. Together, they enable a deeper understanding of a change process and confirm that change is a complex activity that involves multiple mechanisms (Michie et al., 2011). Three main classifications of models of change were discussed in that section:

1. Frameworks of change that place their emphasis on the individual person who is required to change a behaviour or practice (Ajzen, 1991; Bandura, 1997; Prochaska & DiClemente, 1983; Prochaska et al., 1992; Skinner, 1963).
2. Taxonomies of change that focus on the actual practices and strategies employed to implement the new practices (Colquhoun et al., 2014; EPOC, 2010; Leeman et al., 2007; Michie et al., 2005; Rogers, 2003).
3. Theories of change that consider diverse factors in the change context (Chaudoir et al., 2013; Fixen et al., 2005; Lewin, 1951; Michie et al., 2011).

Based on the findings of this action research study, *Proposition 4* is indicated: *Practical knowing is a critical element in models of change*. The rationale behind this proposition will now be explained.

Within the thesis action research study, or meta-cycle of this inquiry, a thematic analysis of the processes that occurred in this study was completed (Section 6.2). One of the global themes that was deduced was 'Change is a Process' (Figure 6.2). Following this phase, the data was re-interrogated from the perspective of change using thematic analysis (5.2.4 Phase Three: Thematic Analysis of 'Change'). One conceptualisation of change applied to the 'change-talk' in the transcripts was way of knowing (i.e., experiential knowing, presentational knowing, practical knowing, or propositional knowing). When the number of incidents of each way of knowing across the 'change-talk' was examined, there were almost five times more incidents of practical knowing than propositional knowing. The dominance of practical knowing (i.e., 64% of incidents compared to 13% of propositional knowing incidents and 23% of experiential knowing incidents, as outlined in Table 6.24) signifies that the change discussed, reported and presented in the data of this study related most frequently to skills and competencies, rather than perceptions or theoretical arguments (Heron & Reason, 2008).

The distinction between multiple ways of knowing, including Aristotle's classification as to whether the known is internal or external to the knower, was discussed in Section 2.2 (Epistemology and Multiple Ways of Knowing). Within this typology, practical knowing corresponds to a known that is internal to the knower, such as practitioner knowledge or insider knowledge, generated through doing, practising or reflecting (Eikeland, 2015). It is contrasted with knowing that is external to the knower, in which the knower relates to the known as an observer, sufferer, user or maker. Similarly, Heron and Reason's (2008) extended epistemology describes practical knowing as knowing how to do something; it is associated with skills, knacks and competencies. They differentiate it from knowing intellectually (propositional knowing), knowing through experience (experiential knowing), and knowing through symbolism (presentational knowing). Other authorities too have distinguished between 'knowing how', and 'knowing that' (Bonderup-Dohn, 2014; Ryle, 1968) or 'knowing how' and 'knowing what' (Polanyi, 1966). In addition, almost 60 years ago, Polanyi introduced the related term 'tacit knowledge' to signify embodied knowledge that is implicit to a task, a situation, or a perspective, and gained through experience (Hiles, 2014). He distinguished this from objective, scientific knowledge.

Practical knowing and theory propose different ways in which to consider objects. As Coghlan (2010, p. 294) exemplifies: "in the world of practical knowing, we can refer validly to sunrise and sunset, while in terms of scientific theory the sun neither rises nor sets". According to Shani, Coghlan, and Cirella (2012), practical knowing is particular, contextual, and spontaneous, while scientific knowing tries to be universal, exhaustive, methodical and precise. In summary, practical knowing has four main characteristics: it is focused on

common concerns of human living; socially derived and generated; requires attentiveness to its individuality in each context; and its action is ethical and operated by values (Coghlan, 2016). Moreover, in the field of professional practice, practical knowing is frequently described as clinical expertise, and is distinguished from knowing from scientific research by its concentration on practitioner's knowledge, skills and judgement (Justice, 2010; Sackett et al., 1996). Clinical expertise includes practical knowledge of how to apply professional assertions with speed and fluency (Higgs & Titchen, 2000; Rycroft-Malone et al., 2004; Wolter et al., 2011), reasoning skills to competently address complex cases and scenarios (Haynes et al., 2002; Iwarsson, 2015; Overholser, 2010; Schlosser & Sigafos, 2009; Wolter et al., 2011), and judgement to appraise the available evidence and respond to uncertainty (Biesta, 2010; Eaude, 2014; King et al., 2008; McCracken & Marsh, 2008; Sackett et al., 1996).

The predominance of practical knowing in this action research study did not only surface in the thematic analyses that were completed in phase one and phase three. It appeared repeatedly in the core action research cycles, when the story of the inquiry was described (Chapter 5). For instance, the SETT framework (Walsh, 2006) was adapted into the Classroom Practices Checklist based primarily on reflections on practice and personal competencies and skills. Of the ten items we added to the SETT framework, eight were derived from our practical knowing and two emerged from the findings of a research report (i.e., propositional knowing). In addition, the teachers criticised the NCCA's research report on the most effective practices for supporting language development of children, "Oral Language in Early Childhood and Primary Education (3-8 years)" (Shiel et al., 2012), as being too technical, theoretical and inaccessible – that is, too dense in propositional knowing. Equally they demonstrated minimal interest in reading the findings of a review of evidence supporting vocabulary instruction (Steele & Mills, 2011), another reading material heavy in propositional knowing. Instead, the factors that they pinpointed as being responsible for change fell into five broad themes (Table 5.4), which were predominantly related to practical knowing:

- i. 'what you do' – drawing on a curricular topic, teaching language in an integrated approach across curricular subjects, building pupils' word consciousness, extending pupils' utterance rather than only echoing and praising
- ii. 'plans/structures' – administering pupil assessments, reviewing progress at staff meetings, integrating objectives into monthly teaching plans, receiving strong leadership from principal
- iii. 'help from others' – using resources, capitalising on relevant topics, planning activities, resources pre-made, drawing on list of methodologies, feeling rewarded by pupils' achievements

- iv. 'observation and reflection' – watching video clips of self and peers, observing someone else, learning from experience
- v. 'repetition and review' – consistency and repetition

Thus, it appeared that their explanations for changes implemented to classroom practices were related to *developing* (e.g., 'observing someone else', 'receiving support from other teachers', 'learning from experience', 'watching video clips', 'trying out different methods', 'drawing on list of methodologies', 'putting ideas into practice', 'planning activities') or *mastering* (e.g., 'integrating objectives into monthly teaching plans', 'using resources', 'teaching language in an integrated approach across curricular subjects', 'drawing on a curricular topic', 'extending pupil's utterance rather than only echoing and praising', 'consistency and repetition') the skills, knacks and competencies inherent in practical knowing. Furthermore, in their personal reflections on what it was like being involved in the action research study, the factors that emerged from co-researchers as being facilitative of change reinforced the above five themes identified. The factors included peer discussion, trialling new strategies, and using practical resources.

The importance of practical knowing was echoed in the co-researchers' assertions on what should be shared with other staff members at the end of the school year in the 'exposé'. There was an explicit focus on simplifying the explanation (i.e., brief, no jargon, bullet points, 1 page handout, show short video) and simplifying how to implement the classroom practices (i.e., provide copies of ready-made resources such as pupil record sheet). There was a definite objection to including any theoretical concepts (i.e., propositional knowing):

R1: ...what about some of these ones that, that we looked at from September to December? What about that? You know what you're talking about teacher echo or extension or...?

R3: If you go with words like that to a staff meeting then they'll switch off....Leave them out, don't go there

In addition, a full twelve months later, when I followed up with the co-researchers and inquired about their opinions on factors responsible for changes that were implemented, not one co-researcher mentioned the theoretical assertions or propositions from research studies that was shared. On the contrary, their reflections emphasised change was due to their growth in practical knowing, through observing their practice on video, reviewing and reflecting on their observations, and subsequently making incremental changes to their practice. Also, the realisation that their developing skills and competencies were having a positive impact on pupils' learning was influential.

A greater emphasis on practical knowing to influence change, as indicated by this study, resonates with the philosophy of action research (Coghlan, 2011). Some argue that action

research is “a form of science in the realm of practical knowing” (Coghlan, 2011, p. 53). Action researchers assert that practical knowing is a fundamental feature of their inquiries that adds significant benefit to the process (Coghlan, 2011; Eikeland, 2015; Hathcoat & Nicholas, 2014; Heron & Reason, 2008). The objective is “to take knowledge production beyond the gate-keeping of professional knowledge makers” (Bradbury-Huang, 2010, p. 93) and instead embrace the concept of socially constructed knowledge through practice (Brydon-Miller et al., 2003).

Moreover, the findings of this study re-stress previous calls for professional expertise, in the form of practical knowing, to be prominent in the delivery of evidence-based practice (Dollaghan, 2007; Haynes et al., 2002; Higgs & Jones, 2000; McIntyre, 2005; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Sexton & van Dam, 2010). Indeed, a recurring theme of studies within educational and health contexts investigating the implementation of professional practices supports the findings of this study, that practitioners appear to be guided more by experience of peers (i.e., practical knowing) than scientific evidence (i.e., propositional knowing) (Gitlin, Barlow, Burbank, Kauchak, & Stevens, 1999; Zipoli & Kennedy, 2005). For example, a survey of two hundred and fifty SLTs by Zipoli and Kennedy (2005) reported that 99.6% of participants relied on clinical expertise as the most common source of information. In addition, the Better Communication Research Programme’s exploration of SLT practice, commissioned by the UK government, found that 21% of respondents employed a locally developed programme when providing intervention to children and young people with speech and language needs (Roulstone, 2015). Teachers also have demonstrated their propensity to draw heavily on practical knowing (Biesta, 2015; Eaude, 2014; Elliott, Stemler, Sternberg, Grigorenko, & Hoffman, 2011; Eraut, 2000; Hiebert et al., 2002). For instance, in a survey of eighty five pre-service teachers and one hundred and forty seven practising teachers in the US and Australia by Gore and Gitlin (2004), there was an overwhelming majority of teachers who valued non-academic research, such as professional expertise, over that derived from research studies. Hence, choosing to apply practical knowing (individual expertise or the expertise of a colleague) appears to be an established practice within speech and language therapy and education (Gore & Gitlin, 2004; Nail-Chiwetalu & Bernstein Ratner, 2007).

In summary, the articulated importance of practical knowing has been established within: (a) an action research paradigm; (b) professional practice in health and educational contexts; and (c) factors responsible for change in this action research inquiry. Moreover, the value and crucial role of practical knowing was highlighted in *Collaboratively designing activities central to changing classroom practices to support effective language enrichment (Proposition 1)*. Therefore, it seems imperative that the merit of practical knowing is

recognised and valued in general, universal models of change. Thus, *Proposition 4* was deduced: *Practical knowing is a critical element in models of change.*

The models of change described previously that concentrate on the *individual* who will be/is making a behavioural change include the Transtheoretical Model of Change (Prochaska & DiClemente, 1983; Prochaska et al., 1992), Operant Learning Theory (Skinner, 1963), Social Cognitive Theory (Bandura, 1997), and the Theory of Planned Behaviour (Ajzen, 1991). The Theory of Planned Behaviour (Ajzen, 1991) alludes to practical knowing. This theory proposes three factors believed to determine an individual's intention or motivation to make changes. One of the three factors is 'perceived behavioural control of how easy or difficult the behaviour will be to perform'. This element overlaps with the skills, knacks and competencies encompassed in practical knowing, and I suggest it is a critical component of the theory. One of the other models of change that centres on the individual who will be/is making a behavioural change places its emphasis on sequential progression through a number of steps (Prochaska & DiClemente, 1983; Prochaska et al., 1992). That is, the Transtheoretical Model of Change (Prochaska and DiClemente, 1983, Prochaska et al., 1992) proposes that an individual progresses through five stages of behavioural change (i.e., Precontemplation, Contemplation, Preparation, Action, and Maintenance). The descriptions of the stages do not explicitly reference the potential importance of practical knowing in this theory of change, but may be implied in the 'Action' and 'Maintenance' stages as individuals are doing something differently in the short-term and long-term: the individual's skills and competencies have developed and altered, not just their thoughts. Therefore, practical knowing is also a critical element in this theory. Similarly, Operant Learning Theory (Skinner, 1963) and Social Cognitive Theory (Bandura, 1997) are broad enough to encompass practical knowing in their focus on change, and I suggest an application of these theories benefits from the inclusion of practical knowing. From Skinner's and Bandura's perspectives, new skills and competencies may be reinforced through the provision of rewards, and undesired skills and competencies may be discouraged through punishments (Skinner, 1963; Bandura, 1997). As Eikeland (2015) argued, practical knowing may be generated through doing, practising or reflecting. Therefore, there are ample opportunities when applying the former theories to draw on and generate practical knowing, as they both place a strong emphasis on doing, practising and reflecting when developing the intention, implementation, or maintenance of change.

The models of change discussed that centre on the *actual practices and strategies* employed to implement the practices included:

- Cochrane Effective Practice and Organisation of Care Review Group (EPOC) framework (EPOC, 2010)

- Taxonomy of Implementation Methods (Leeman et al., 2007).
- Theoretical Domains Framework (Michie et al., 2005)
- Diffusions of Innovations Theory (Rogers, 2003)
- Framework described by Colquhoun et al. (2014)

While the importance of practical knowing is absent from the current iterations of the EPOC framework (EPOC, 2010) and the Taxonomy of Implementation Methods (Leeman et al., 2007), the central place of practical knowing is evident within the latter three models (i.e., Theoretical Domains Framework (Michie et al., 2005); Diffusions of Innovations Theory (Rogers, 2003); and the framework described by Colquhoun et al. (2014)). For example, one quarter of the theoretical domains in Michie et al.'s (2015) framework can be deemed to be related to practitioner knowledge and practical knowing (i.e., 'knowledge'; 'skills'; and 'beliefs about capabilities'). Thus, practical knowing is recognised as influential in this model of change. Moreover, Rogers' (2003) seminal Diffusions of Innovations Theory pinpoints five attributes of innovations that he considers will determine their rate of adoption. Three of the attributes relate to advantages of the new innovation, compatibility with needs and values, and simplicity to adopt. The remaining two attributes suggest the value of practical knowing - the ability to trial the new practices and the ability to observe the innovations being used by others. Consequently, practical knowing can be recognised as a critical element of this model of change. Likewise, Colquhoun et al.'s (2014) framework appears to acknowledge practical knowing's worth. The international working group suggests four elements that will influence change. One of these elements cites the need to build skills, and therefore evokes the importance of practical knowing as a critical factor in this model of change.

Lastly, the models of change outlined earlier that consider diverse factors in the change *context* were the Behavioural Change Wheel (Michie et al., 2011), the Implementation Drivers Model (Fixen et al., 2005), Lewin's (1951) stages of change, and a framework described by Chaudior et al. (2013). The merit of practical knowing is explicit or can be implied from these models of change through the constructs they put forward as influential. For instance, practical knowing, can be seen to be prominent in the Behavioural Change Wheel (Michie et al., 2011) and the Implementation Drivers Model (Fixen et al., 2005). At the core of the Behavioural Change Wheel (Michie et al., 2011) are three essential conditions for change: capability; opportunity; and motivation. The essential condition of 'capability' may be aligned with practical knowing, as its focus is on physical and psychological competency. In addition, surrounding these three essential conditions of change in the Behavioural Change Wheel are nine intervention functions, whose objective is to address any deficits in the core conditions. The nine intervention functions include education, persuasion, incentivisation, coercion, training, restriction, environmental restructuring, modelling, and enablement. Almost half of the former intervention functions may be affiliated with skills, knacks and

competencies of practical knowing, such as intervention functions of education, training, modelling, and enablement, thereby confirming that practical knowing is a critical element in this model of change. Furthermore, the Implementation Drivers Model (Fixen et al., 2005) also incorporates practical knowing as a central aspect of change, albeit not using that term. Their synthesis of the literature in implementation research recognised three core implementation components ('implementation drivers') to create and support practitioner behaviour that is rooted in evidence-based practices. The implementation drivers consist of organisation drivers (i.e., decision support data systems, facilitative administration and systems intervention), leadership drivers (i.e., technical leadership and adaptive leadership) and competency drivers (i.e., staff selection, training and coaching). The latter competency drivers appear to overlap with practical knowing, denoting it as a key element of change.

The remaining two models of change reviewed that consider aspects of the change context were Lewin's (1951) stages of change and Chaudior et al.'s (2013) multi-level framework. Lewin's (1951) unfreezing-moving-refreezing stages can embrace practical knowing as a key component of a model of change. In particular, the 'moving' stage can embrace the importance of practical knowing, by emphasising the requirement to be able to "do" something in a different way. Chaudoir et al (2013) describe the factors that influence the successful implementation of evidence-based health practices. This framework describes structural level factors, organisational level factors, provider-level factors, patient-level factors, and innovation-level factors. The former provider-level factors and innovation factors can be associated with practical knowing, with their emphasis on 'know how'. As a result, further support for practical knowing being a critical element in models of change is provided.

Thus, to summarise, thirteen universal models of change were reviewed in the course of this action research inquiry. The models spanned the spectrum of theories of change focussed on the *individual* who will be/is making a behavioural change, to frameworks of change centred on the *actual practices and strategies* employed to implement the practices, to taxonomies of change that consider various factors in the change *context*. While not an exhaustive review, this diverse array of models of change, and the central place of practical knowing explicit or implied in each one, supports *Proposition 4's* assertion that *practical knowing is a critical element in models of change*. The verification of the vital position of practical knowing within models of change contrasts with recurring positivist outlooks that seek to eliminate bias by creating a divide between subjects and objects and focus on ensuring internal and external validity (Hathcoat & Nicholas, 2014; Ospina & Anderson, 2014). In many paradigms, thinking is considered the superlative way of knowing (and method of change), and practical knowing can be overlooked (Cochran-Smith & Lytle, 1998; Seeley, 2014). Yet, this was not the case in the models of change reviewed.

There are two key implications based on the proposition that practical knowing is a critical element in models of change. Firstly, different formats for sharing what, and how, changes are to be implemented may need to be employed to effectively include a focus on practical knowing. For example, when providing professional development on new practices to be adopted, it may be important to employ case studies and examples of genuine experiences that demonstrate the implementation of those principles in real-life settings (Joram, 2007). In this study, the co-researchers opted to show a video of the new classroom practices in action to their colleagues to support the adoption of the relevant skills and strategies, which may be helpful in other settings too. In addition, they chose to provide resource templates to their peers, as they believed they would support ease of implementation of the new classroom practices. Moreover, research findings and practical suggestions may be synthesised (Hammersley, 2002), and research evidence accompanied by practical commentary may be published (Kent, 2006), in formats such as practice guidelines (Zipoli & Kennedy, 2005). However, it has been shown that practice guidelines without appropriate implementation plans may be ineffective (Gray, Soukaloun, Soumphonphakdy, & Duke, 2015). Criticisms of “learn then apply” models have stressed the need to embrace application as one of the key principals of sharing new knowledge (McCartney & Ellis, 2013). To that end, coaching and mentoring for practitioners may be beneficial through the provision of feedback on observed performance, guiding reflective practice, and sustaining a focus on actual practice (King, 2009). For instance, significant improvements in objective measures of literacy environments were reported when practitioners received coaching in addition to coursework (Neuman & Wright, 2010). Other recommendations involve engaging in a local consensus process to establish agreement on an intervention approach, and its practical dimensions, before widespread dissemination (Grimshaw, 1993). For example, the recent multinational and multidisciplinary study to identify language impairments in children successfully employed the Delphi technique as a means of consensus-building amongst an expert panel on a variety of relevant statements in relation to referral, assessment and identification of additional factors applicable to children with language impairments (Bishop, 2016). This technique could be applied more widely.

The second implication of this proposition relates to the direction of the flow of practical knowing within the models of change. It is paramount to note that although the importance of practical knowing is overt or inferred in the above models of change, the emphasis is always on a uni-directional flow of practical knowing. The repeated message in these theories of change is that individuals who designed and decided on the practices have the necessary competencies to implement them, and must transfer such skills to practitioners who don't yet have the necessary capacity. This is the opposite of Kurt Lewin's assertion to start with

actions aimed at solving problems, which will in turn lead to the generation of relevant knowledge more aligned to individual's needs and realities (Lewin, 1951). There is little scope in the models of change reviewed for practitioners to share their insider knowledge in the support of change. Therefore, the potential to generate high-quality knowledge from action and for action through participation of practitioners (Ospina & Anderson, 2014) is overlooked. The potential risk is that the so-called 'innovative practices' to be implemented may be unreliable if they lack the interpretations and understandings of the practitioners central to the change process (Greenwood, 2015). After all, changing complex systems often necessitates engaging elements that cannot be regulated by traditional research methods alone (Schein, 2010). Therefore, without the bi-directional flow of practical knowing, a model of change may consequently lack the flexibility needed to adapt to the ever-changing nature of modern practice and uniqueness of settings, and make necessary modifications as the need arises (Coghlan, 2009, 2016). In addition, the absence of a two-way exchange of practical knowing within a model of change may obstruct the effective application of theory to practice and the ability to fine-tune interventions to meet the specific needs and circumstances of individuals and contexts (Epstein, 2011; Haynes et al., 2002; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Smith et al., 2003). Furthermore, practitioners, with little or no input into new practices, may become reluctant or resistant implementers (Ospina & Anderson, 2014).

Hence, based on the rationale outlined, the second key implication of *Proposition 4* is that although many contemporary models of change incorporate and value practical knowing as one of its critical elements, there is a requirement for models of change to enable a bi-directional exchange of knowledge between the individuals promoting the new practice and the practitioners expected to implement it. Appeals to integrate practical knowing (clinical expertise) with propositional knowing (scientific research) have been met with widespread consensus within evidence-based practice (Dollaghan, 2007; Haynes et al., 2002; Higgs & Jones, 2000; McIntyre, 2005; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Sexton & van Dam, 2010) and within the action research paradigm (Anderson & Jones, 2000; Coghlan, 2016; Hathcoat & Nicholas, 2014; Heron & Reason, 2008). Therefore, it seems timely for models of change championed in the literature by a plethora of leading scholars from diverse fields to recognise the significance of two-way transfer of practical knowing, and incorporate this exchange in revised or new versions of their models of change.

To help achieve that objective, practitioners could play a greater role in determining what practices need to be explored, changed or introduced, based on their own experiences. Many of the existing models of change are labelled and described in a manner that espouses a 'top-down' approach – behaviours have to be 'changed' or new and better practices exist

that have to be 'driven', 'diffused', or 'implemented'. The direction of change in the majority of the present models of change moves from expert to practitioner. Balancing this 'top-down' approach with a more 'bottom-up' approach would facilitate the critical element of practical knowing in taxonomies of change to be more bi-directional. This may require greater communication and interaction between researchers and practitioners in the design, implementation, review, and modification of practices. For example, research methods such as focus groups, surveys, questionnaires or interviews may assist practitioners to become more actively involved in determining what, and how, changes may be implemented. Also, it may be helpful for practitioners to be invited to participate in studies that endeavour to extract their unique and invaluable practical knowledge to support the implementation of changes in a particular context. 'Deliberative dialogues' have been suggested to support the integration of research findings with contextual issues (Ellen, Panisset, de Carvalho, Goodwin, & Beard, 2017). This recommendation has been echoed by others, who describe the phenomenon as "backward design", "user-pull", or "exchange efforts" (El-Jardali & Fadlallah, 2015; Grimshaw et al., 2012). For instance, many recent cases where this has been achieved have been described within the action research literature (Cova, Rodríguez Monroy, & Arzola, 2015; McKeown, Fortune, & Dupuis, 2016; Paltved et al., 2016; Vaughan & Burnaford, 2016). Such authentic participation from practitioners may support the producers of empirical evidence and authors of mandates for change to remain actively connected with the realities of practitioners' daily work and develop greater links with professional knowledge (Gore & Gitlin, 2004; Hiebert et al., 2002). As a result, changes promoted may be a better fit with existing perspectives and practices, possibility preventing reluctance or resistance to change (Gagliardi, Berta, Kothari, Boyko, & Urquhart, 2016; Lau et al., 2016). Moreover, this may allow interventions to be tailored for individuals and contexts. Of course, a key challenge to overcome in achieving this objective of practitioner participation would be securing dedicated time and support from senior management, when there are so many other competing demands on practitioners, services and resources (Hall et al., 2006; Scott et al., 2012). It has been suggested that the necessary time and resources to implement and change practice is often not factored into practitioners' workloads (Bowen & Snow, 2017). Organisational factors such as leadership support, conducive environments, facilitative structures, and enabling processes have been evaluated as major influencers of how changes are successfully implemented (Davies, Powell, & Rushmer, 2007; Yost et al., 2015).

To conclude, my argument within this proposition is not to create a dichotomy between practical knowing and other central elements within a model of change, nor to lead to a rejection of scientific evidence that may underlie the promotion of new practices. Rather, my recommendation is to assume a more integrated approach, whereby the value of practical knowing is recognised in its own right as an important element to consider in any model of

change, and a bi-directional exchange of practical knowing is supported. Following this, I propose that practical knowing is amalgamated with other crucial elements in models of change for optimum outcomes. After all, there are a number of limitations of over reliance on practice-based evidence. A chief drawback that has been expressed in the literature is the significant potential for bias (Elstein & Schwartz, 2002; Kamhi, 2011; Paley, 2006; Proly & Murza, 2009; Tonelli, 2006). Practice could end up being restricted to what professionals or their peers find plausible, which may or not be accurate (Paley, 2006; Tonelli, 2006). Such personal and professional outlooks based on anecdotal experience, can be highly resistant to change, even in the face of empirical evidence that directly challenges them (Cicerone, 2005; Kamhi, 2011; Petty, 2015). Consequently, Lefstein (2005, p. 347) warns that practitioners may be confined to “the horizons of their own experience”. Another limitation of leaning mostly on practical knowing, such as clinical expertise, is that it can be idiosyncratic, resulting in marked variation in practices (Justice, 2010; Rycroft-Malone et al., 2004). Furthermore, of great concern is the possibility that practices that draw on practical knowing more than propositional knowing may not be as effective, as they may not have not been subjected to the same rigorous evaluation, critique or quality controls (Dollaghan, 2007; Hiebert et al., 2002; Proly & Murza, 2009). Therefore, as *Proposition 4* asserts, *practical knowing is a critical element in many models of change* – it is not the only element to be considered, and needs to be blended with the other relevant factors in a specific framework, theory, or typology of change. As will be discussed in the next section, a major challenge that may arise for this recommendation to assimilate ways of knowing is power.

7.6 Proposition 5: Power plays a role in the interface between practical knowing and propositional knowing

The former proposition asserted the importance of recognising practical knowing as a critical element in models of change, and recommended a two-way exchange of practical knowing between ‘expert’ and ‘practitioner’. In addition, it stressed the need to amalgamate practical knowing with propositional knowing - to facilitate the application of theory to practice, fine-tune interventions to meet the specific needs of individuals and contexts, and increase levels of adoption of new practices. However, when practical knowing is integrated with propositional knowing, how are the boundaries between both forms of knowing dissolved, traversed or negotiated? The findings of this action research inquiry led me to answer this question with *Proposition 5: Power plays a role in the interface between practical knowing and propositional knowing*. The rationale will be explained below.

This action research inquiry could be considered to fit under the umbrella of inter-professional practice (IPP) due to the involvement of two professions (i.e., speech and

language therapist and teachers) exchanging knowledge and skills for a shared task (Ray, 2002; Wright, 2001). A range of benefits have been documented when the knowledge and skills of teachers and SLTs are integrated, such as more creative solutions of shared problems, a more holistic approach to addressing pupils' needs, and an increased sense of personal and professional support (Korth et al., 2010; Wright & Kersner, 2001; Wright & Kresner, 2004; Wright et al., 2008). However, what appears in theory to be a simple amalgamation of knowledge leading to a plethora of benefits, in practice can be difficult to achieve. It has been shown that within inter-professional practice, practitioners may attempt to guard their knowledge base in order to protect their status in relation to other groups (Cameron, 2011; Milbourne et al., 2003; Rafferty et al., 2001). Relatedly, other professionals' ways of knowing that may be alien to their discipline may be rejected (Duke, 2004; Forbes, 2008; Lawson, 2004; Robinson & Cottrell, 2005; WHO, 2010). Additional reported barriers to the recommendation to blend each discipline's knowledge are practitioners' fears of losing their expertise, having their decisions interrogated, or their 'territory' invaded (Hartas, 2004; Wright et al., 2008).

In this action research inquiry, I frequently promoted the knowledge of experts (i.e., propositional knowing) for consideration by the co-researchers. For example, I introduced the SETT framework (Walsh, 2006) in Cycle One to support the evaluation of classroom practices. By spending time teaching and clarifying the framework's terms that were unfamiliar to the teachers (e.g., 'referential questions', 'extended teacher turn' and 'form-focused feedback'), I endorsed the validity of the theoretical jargon.

Sept 86. R1: So she hasn't extended on anything he has said. 'oh you'd knock on the door', she hasn't said 'oh you'd knock heavily on the door' or "I'd tip toe", she hasn't said "oh you'd tip toe really quietly". She is just echoing back what they are saying

In addition, I actively encouraged the co-researchers to apply the findings of empirical evidence to their classroom practices through sharing the findings of three academic publications: NCCA's research report "Oral Language in Early Childhood and Primary Education (3-8 years) (Shiel et al., 2012); a review of the evidence relating to vocabulary instruction (Steele & Mills, 2011); and a framework for selecting vocabulary to teach (Beck et al., 2002).

Nov 756. R1: Yeah, and I suppose what we were saying last time, like, there are research papers written about how to make sure kids learn words, like the one I summarised for you is a perfect example of, these are all the things from research that we know will help and these are all the things we're trying to do, like examples, non-examples, student definitions, organisers, rich instruction, repetition, review.

It could be suggested that I capitalised on my power in raising the status of such propositional knowing. I was the co-researcher who initiated the inquiry, the only co-

researcher pursuing a PhD qualification alongside the inquiry into practice, and the only co-researcher who had a qualification specifically focused on language enrichment (i.e., speech and language therapy) – all potential attributes that could be perceived as being more powerful. However, in parallel and often intermingled, the co-researchers elevated the status of practical knowing through asserting their power as experienced and qualified teachers who had in-depth knowledge and expertise of the curriculum, their pupils, competing pedagogical demands that teachers face, and the educational system.

Nov 610. R3: ...I wouldn't think about it either [how to teach vocabulary to pupils]. How do we teach these words? We teach them because it's our job and because it's coming up in everything we do every day

For example, Walsh's (2006) SETT framework was adapted to include classroom practices that the co-researchers felt were necessary to include, following reflection on their own practice and considering what they believed 'worked' when teaching a classroom lesson. The practices they added to the checklist based on their practical knowing were: tone of voice; deep/rich instruction; modelling; gestures; use of resources; involvement of pupils; praise; and different organisational settings. Also, the new, extended list of classroom practices was grouped under headings that the co-researchers felt were more useable - 'teacher says', 'teacher does', 'teacher uses', 'class setting' and 'pupil does' (Table 5.1). Likewise, the value of the findings of academic publications that were shared was often degraded by the co-researchers in favour of their revelations from watching the videos of their own practice, or from mulling over their existing knowledge and skills (i.e., practical knowing).

Oct 124. R2: ... before we had the picture and the focus words. That was just a chat, and to kind of get them into it, it was kind of 'oh what are we wearing? ... You could have gone anywhere so I found it kind of hard to get into the whole 'costume' thing. I should have started off myself with dressing up and tried to introduce it that way I think.

Mar 231. R3: ... that would be my worry that you'd have the 4 words they did the first week and they wouldn't remember them and then you're kind of like, the problem isn't the teaching then, it's the retention

Furthermore, the terminology, format, and theoretical arguments of the research papers were rejected by co-researchers when deciding how to share the learning with their colleagues for the 'exposé'. They asserted their power in being more expert in their peers' preferences and stressed the need to share the learning using familiar, jargon-free terms and to simplify the process (i.e., pick a word, teach it, give it for homework, test it). Therefore, we agreed on a concise A4 double-sided handout that would summarise the key information to be shared with the school principal and other staff members (Figure 5.7).

May 391. R3: It's friendly looking[A4 handout collaboratively designed for the staff exposé], you'd want to pick it up and have a look at it as opposed to those bloody black and white things [research reports], that were...oh Jesus....

Hence, the co-researcher's individual enactment of power prevented certain forms of propositional knowing from coming to the fore. The opposite also occurred –through the medium of power, practical knowing was at times prevented from gaining traction. When the teachers only shared knowledge and expertise with me relating to the curriculum, pedagogy, or pupils that was anecdotal and personal, I did not always accept it due to my view that professional expertise should not dominate over the findings of empirical research when making clinical decisions. For instance, one of the co-researchers promoted a practice of predominantly relying on dictionaries to support vocabulary development, which is not supported by the empirical evidence and which I contested by offering an alternative practice that was evidence-based (i.e., pupils generating their own definition of target vocabulary).

Nov 432. R1: Yeah, so it might be something we'll do it again, because if that's what the research is saying HELPS them, their OWN definition, not us saying 'look up the dictionary', their own words, that's what they're saying works.

Therefore, individual assertions of power influenced whether or not proclamations of propositional knowing or practical knowing were accepted or rejected. In addition to possessing the power to accept or reject different ways of knowing verbally presented, each co-researcher had the power to accept or reject proposed changes to their practice in their respective classrooms (i.e., practical knowing).

It has been argued before that power is embedded in the production of knowledge and in the acceptance of what constitutes knowledge. Two renowned theories of the influence of power on knowledge are Gramsci's concept of hegemony (Gramsci, 1992) and Freire's 'Pedagogy of the Oppressed' (Freire, 1972). They both point to the notion of particular knowledge being privileged and viewed as valid, such as knowledge of experts or the ruling classes, at the expense of the silencing of other forms of knowledge, including knowledge of lay people or less dominant social groups. Bearing such theories in mind, it may be appropriate to consider that I assumed the role of 'expert' in this study when introducing and discussing empirical evidence from the literature, thus feasibly silencing the co-researchers' opinions. Meanwhile, the co-researchers may have occupied the role of 'expert' when discussing the realities of classroom life or the preferences of their colleagues, and thereby possibly curbing my potential input.

Bachrach and Baratz (1970) propose an alternative perspective of power that suggests that power is not only exercised by the more dominant groups, but also enacted by preventing individuals and issues from getting to the discussion table in the first place. Even if the marginalised are included, they may be forced to echo the language and constructs of the powerful in order to be listened to (Gaventa & Cornwall, 2015). Lukes' (2005) seminal

analysis of power resonates with this perspective. For him, power has a 'public face' (i.e., power to make decisions), a 'hidden face' (i.e., preventing certain topics reaching the public agenda), and an 'insidious face' (i.e., shaping the beliefs and values considered acceptable). Such 'regimes of truth' held by the powerful can serve to disqualify individual and local rules and methods held by the less powerful (Hewett, 2004). From this theoretical perspective, perhaps power prevented certain propositional or practical knowledge from ever being discussed in this study. However, this is difficult to determine when the thematic analyses were conducted on the verbatim transcriptions of what the co-researchers expressed, and not their hidden thoughts and ideas.

One of the most influential theorists on the theme of knowledge and power is Michel Foucault. Foucault was a philosopher in the mid-20th century whose published essays and books spanned topics that included medicine, clinical education, public health, mental health, law, schools and examinations, sexuality, and ethics (Hodges, Martimianakis, McNaughton, & Whitehead, 2014; Kearney, 1994). In contrast to the former conceptualisations of knowledge and power, where power is viewed as something exercised over someone, for Foucault, knowledge and power are entwined in all social relations resulting in his use of the term 'power/knowledge' as a title for a collection of essays (Foucault, 1980). He stated "power and knowledge directly imply one another" and maintained that there is no "knowledge that does not presuppose and constitute at the same time power relations" (Foucault, 1979, p. 27). He provides numerous examples throughout history of how certain forms of knowledge and practices were characterised as 'official' or 'normal', and others classified as 'deviant' or 'abnormal', through a series of repeated statements that were founded on the workings of power (Downing, 2008; Hodges et al., 2014; Kearney, 1994). For instance, in *Madness and Civilisation* (Foucault, 1965), Foucault analyses the historical premises of categories of the 'insane'. The historical presuppositions of confining the 'criminal' in enclosed institutions are explored in *Discipline and Punish* (Foucault, 1979) and the construct of the 'perverse' in relation to homosexuality is analysed in his final work on the *History of Sexuality* (Foucault, 1978). Through an examination of these common constructs, Foucault maintains that rules which impose meaning and order, and separate 'natural' from 'unnatural', are not neutral claims or capable of being validated as 'true', but are merely historically and socially constructed through the operation of power (Downing, 2008; Foucault, 1980).

The consequences of the interrelationship between knowledge and power in Foucault's analyses are similar to former theories of knowledge – that is, a dichotomy between knowledge that is considered legitimate and knowledge that is deemed inadequate (Hartman, 2000; Nicholls, Giles, & Sethna, 2010). Foucault labelled these privileged

knowledges as 'erudite knowledges' and their exiled and marginalised counterparts as 'subjugated knowledges' (Gigengack, 2014). For Foucault, subjugated knowledges refer to two things. Firstly, they signify historical facts that have been hidden or masked by a hegemonic discourse (Foucault, 1980). Secondly, they denote knowledges that have been disqualified by a hegemonic discourse: "naïve knowledge, hierarchically inferior knowledges, knowledges that are below the required level of erudition of scientificity" (Foucault, 1980, p. 82). Therefore, it would appear that Foucault's subjugated knowledges correspond most often to practical knowing, clinical expertise within an EBP framework, and knowledge of the less dominant discipline within inter-professional practice. Likewise, Foucault's erudite knowledges seem to be more frequently compatible with propositional knowing, systematic research within an EBP framework, and the knowledge of the most dominant discipline within inter-professional practice.

Unlike familiar theories of power, such as Gramsci's hegemony and Friere's pedagogy of the oppressed outlined above, where the attention is on who is exercising power and who benefits and loses, Foucault's theory of power argues that power does not rest with an individual or group but is distributed and dispersed widely (Hewett, 2004). For Foucault, power 'circulates' or is carried through a multiplicity of discourses, institutions and practices and is exercised through numerous relation forms of power, that he likens to chains or capillary-like connections (Foucault, 1980, 1988, 2000; Gaventa & Cornwall, 2015). Relating this to the interface of practical knowing and propositional knowing in this study, the dominance of one form of knowing over another at specific times would not simply be explained by the notion that I was exercising more power at a certain time, and one or more of the co-researchers were exercising more power at other times. Instead, the supremacy of practical/propositional knowing at specific time points in this inquiry would be deemed by Foucault to be the result of numerous interrelated interactions of power within our discussions, practices, and respective organisations.

It is important to stress that my proposition '*Power plays a role in the interface between practical knowing and propositional knowing*' is not suggesting that commonly subjugated knowledges (i.e., practical knowing) are resurrected and transformed into the new dominant form of knowledge or an alternative hegemony (Hewett, 2004; Hodges et al., 2014). I also made this argument in the former proposition '*Practical knowing is a critical element in models of change*'. Instead, I am suggesting that the same circulation and distribution of power that infiltrates discussions between co-researchers and may advance some forms of knowing over others, has to be employed to endorse and ratify claims that are being made in the interface between practical knowing and propositional knowing. In this study there were numerous instances of attempts to substantiate claims that were made through propositional

knowing or practical knowing. They were deduced in the thematic analyses through themes such as ‘polite challenge of opinion’, ‘polite challenge to proposed action’, or ‘challenging proposed action’ (Table 7.8). Foucault is also clear in his assertion that subjugated knowledges should compete or “struggle” with other forms of knowing and only emerge as valid through “interrogation” or critical consideration (Foucault, 1972).

Table 7.8: Examples of themes related to attempts to substantiate claims made through propositional or practical knowing

Transcript	Theme
<i>Mar 380. R2: To be honest with you. I just think it is wasting my time [providing oral language homework], because for, if there’s half of them doing it, they’re the half that are bright that will pick it up from me anyway</i>	Polite challenge to proposed action
<i>May 26. R1: But is it though? [up to the principal to decide whether Talk Time continues or not]. Like that’s something we have to-, like (name of principal) might say ‘two other classes-’</i>	Challenging proposed action

There were also times during this action research inquiry, after subjugated knowledges were exposed to scrutiny, when attempts were made to amalgamate subjugated knowledges with erudite knowledges. This was only achieved by relinquishing individual power-fuelled statements in favour of the establishment of common ground. An example of an attempt to power-share and fuse erudite knowledges and subjugated knowledges in this study was when the ‘Text Talk’ lesson plan for the storybook ‘Ruby the Copycat’ (Moses, 2005) was distributed and discussed. This lesson plan was based on the theoretical assertions of what constitutes effective and robust vocabulary instruction (Beck et al., 2002), but was presented through numerous activities and practical classroom ideas for integrating repetition and review of targeted vocabulary using a common children’s storybook. Therefore, it blended different forms of knowing to achieve the mutual objective of enhancing language development in the classroom. The co-researchers and I responded very positively to its format and collaboratively selected eight different activities and practices from it to help reach our goal of explicit repetition and review of targeted vocabulary. It was also chosen as one of the few resources to share with colleagues at the exposé.

The exposé itself, provided to the principal and staff at the end of the year and in Cycle Five (embedding the changes locally and nationally), provides a further example of how co-researchers’ practical and propositional knowledge was assimilated through power-sharing and the establishment of common ground. For instance, handouts, resources, descriptions, and exemplars of Talk Time were collaboratively designed, produced and shared (e.g., A4 handout for staff, Talk Time word wall, Talk Time pupil record sheet, 4 square template, excerpt for the new Primary Language Curriculum Toolkit). Foucault, too, in his conceptualisation of ‘geneology’ advocates for the fusion of erudite knowledges with

subjugated knowledges, once they have been 'insurrected' and critically appraised using the same rigorous evaluations that erudite knowledges are exposed to (Foucault, 1980; Hewett, 2004).

Thus, examples from this action research inquiry have been provided that led to the proposition '*Power plays a role in the interface between practical knowing and propositional knowing*'. Many of the arguments within the proposition are reinforced by Foucault's solid foundation for examining how knowledge is constructed through the operation of power, how different knowledges can be distinguished from one another, the need to validate subjugated knowledge claims, and the importance of fusing the best of substantiated knowledges for the ultimate gains.

Considering the proposition more broadly, there are a number of implications for evidence-based practice (EBP) and inter-professional practice (IPP). Within EBP, systematic research (i.e., propositional knowing) is often regarded as being more legitimate than knowledge of practitioners (i.e., practical knowing) because it is created by more 'powerful' individuals. Similarly, knowledge held by more authoritative disciplines in an IPP context can be frequently deemed more valid. The first implication of this proposition and the discussions above is that the dominance of systematic research over clinical expertise within an EBP framework, or of one profession's opinions over another within IPP, may not be simply and bluntly explained as certain knowledge has been deemed more valid because it was created by individuals with a higher status in society. Rather, this dominance may be regarded from a Foucauldian perspective in a more nuanced manner, as the result of the circulation of power through a multiplicity of interrelated connections. Consequently, an appreciation of a Foucauldian viewpoint of knowledge and power may open up possibilities and support for further investigation of the discourses, practices, and institutions in which EBP and IPP are embedded, and in which power is circulating. This, in turn, may enable the complex flow of power in specific EBP and IPP contexts to be explored and understood in more depth. Therefore, greater direction may be provided on practical ways to promote power-sharing within EBP and IPP, or to address situations that arise where there is an imbalance of power.

The second implication for EBP and IPP is that subjugated knowledges of certain disciplines in inter-professional practice and subjugated knowledges incumbent in the knowledge, skills and judgement of clinical expertise within evidence-based practice, need to be made available for validation before their claims are substantiated. According to Foucault,

We must entertain the claims to attention of local, discontinuous, disqualified, illegitimate knowledges against the claims of a unitary body of theory which would filter, hierarchise and order them in the name of some true knowledge and some arbitrary idea of what constitutes a science and its objects (Foucault, 1980, p. 83)

This caution is endorsed by some authors discussing EBP, who have expressed concerns relating to potential bias (Elstein & Schwartz, 2002; Kamhi, 2011; Paley, 2006; Proly & Murza, 2009; Tonelli, 2006), inaccuracies (Paley, 2006; Tonelli, 2006), or less effective practices (Dollaghan, 2007; Hiebert et al., 2002; Proly & Murza, 2009; Rycroft-Malone et al., 2004). Relatedly, there have been concerns expressed within inter-professional practice that if practitioners accept others' knowledge without validation, they may lose some of their discipline-specific expertise, autonomy and practices which have been proven to lead to effective outcomes (Dunsmuir et al., 2006; Hartas, 2004; Laidler, 1991). These potential shortcomings reinforce the implication that subjugated knowledges within EBP and IPP need to be exposed to the same scrutiny as erudite knowledges. A possible challenge may be that subjugated knowledges within EBP or IPP may be more implicit, tacit, and nebulous, and therefore it may be difficult to find reliable tools to comprehensively extract, evaluate, and critique them. Perhaps broader evaluative methods, such as case studies, phenomenology, or critical self-reflection, may be required alongside more traditional cause-and-effect assessment techniques.

The third implication of the proposition for EBP and IPP relates to previous recommendations from numerous scholars, that different forms of knowing are complimentary and therefore should be given the opportunity to interact and integrate with each other (Bonderup-Dohn, 2014; Dollaghan, 2007; Haynes et al., 2002; Heron & Reason, 2008; Higgs & Jones, 2000; McIntyre, 2005; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Seeley, 2014; Sexton & van Dam, 2010). For instance, practitioners debating EBP have maintained that the tendency to denigrate clinical expertise disavows the important value of practitioners' knowledge and skills, which it is argued, is needed to effectively apply theory to practice (Epstein, 2011; Smith et al., 2003). Similarly, researchers of IPP have advocated that each discipline's knowledge, regardless of its professional status, can contribute and facilitate effective inter-professional practice (Duke, 2004; Friend et al., 2010; Hartas, 2004; Henneman et al., 1995). WHO allude to this desirable integration of knowing when they promote the creation of "a shared understanding that none had previously possessed or could have come to on their own...something is there that was not there before" (WHO, 2010, p.36). Seeley (2014, p. 329) calls for "epistemological equity where diversity in knowledge construction is acknowledged and valued". Similarly, a concept of "knowledge democracy" has been promoted (Hall, 2014). Thus, amalgamating practical and propositional knowing is commonly advocated.

Therefore, in order for the strongly reinforced assertion - that different forms of knowing are complimentary and should be assimilated - to become reflected more in EBP and IPP, this

proposition suggests that the potential influence of power in preventing or enabling this amalgamation needs to be considered and addressed. For instance, even though power-sharing is listed as a core attribute and key facilitator of genuine and effective IPP (Duke, 2004; Friend et al., 2010; Hartas, 2004; Henneman et al., 1995), a conceivable challenge may be lack of awareness or acceptance of this affirmation from all relevant stakeholders, including policy-makers, researchers, managers, practitioners, and clients. Accordingly, a number of preliminary actions may be needed before the fusion of different knowledges becomes embedded in practice and policy. Some possible precursory steps may include developing greater awareness and self-reflection about what forms of knowing are currently contributing to EBP and IPP in a particular context, and whether or not there are any imbalances. Then, fostering greater insight into why, and how, certain forms of knowing are being approved or precluded, while remaining mindful of the potential role of power in helping or hindering the incorporation of other ways of knowing.

If, as suggested in this proposition, power-sharing is achieved through epistemological give and take - leading to epistemological common ground, then potential barriers and enablers to this end need to be established. Some possible threats to power-sharing required to fuse different ways of knowing have been outlined in the literature, but there may be many more that have not yet been unearthed and require further exploration. For instance, it has been previously indicated that the early 'us-and-them' socialisation process of professional education may surface later on as an absence of trust, or practitioners may attempt to guard their knowledge base in order to protect their status in relation to other groups (Cameron, 2011; Milbourne et al., 2003; Rafferty et al., 2001). Within IPP between SLTs and teachers, it has been highlighted that the disciplines are trained separately and practise within different 'cultures' (Paradice et al., 2007). Moreover, schools, where teachers are employed, and health services, where SLTs are employed, have distinguishable frameworks of operation, practices, priorities and expectations (Baxter et al., 2009; Law, Lindsay, et al., 2000; McCartney, 1999; Tollerfield, 2003), that may hinder power-sharing. Reinforcing these documented challenges, other barriers to power-sharing within IPP that have been previously reported include: fears of losing expertise; having decisions interrogated; and 'territory' invaded (Hartas, 2004; Wright et al., 2008). Additional potential obstacles to power-sharing within EBP and IPP, in terms of Argyris and Schön's (1996) theory of action, may be a discrepancy between practitioners' 'espoused theories' and their 'theories-in-use'. Professionals' 'espoused theories' may indicate they believe in the importance of power-sharing within EBP and IPP and promote it in policies and procedures, but in reality their 'theories-in-use' inferred from their actual behaviour may suggest the opposite. Therefore, it would appear necessary to investigate further, and critically reflect on, the existing

implementation and underlying assumptions of EBP and IPP, so that the potential barriers of power-sharing can be established and addressed.

In tandem to determining the barriers, plausible enablers of power-sharing to blend distinct ways of knowing, need to be highlighted and capitalised upon. Possible facilitators were outlined previously, such as synthesising research findings and practical suggestions (Hammersley, 2002) or attaching practical commentary to research evidence (Kent, 2006), in formats such as practice guidelines (Zipoli & Kennedy, 2005). Other enablers may be engagement in a consensus process (Bishop, 2016; Grimshaw, 1993) or coaching and mentoring processes (King, 2009; Neuman & Wright, 2010). Within explorations of SLT and teacher collaboration, factors that are claimed to facilitate power-sharing are frequently epistemological in nature, including mutual respect for each individual's contribution, exchanging expertise, and embracing different points of view (Hartas, 2004; Tollerfield, 2003; Miller, 1999; Wilson et al., 2015; Dunsmuir et al., 2006). Further research and support is required to establish practical methods to achieve those general objectives – what specific steps will support practitioners to develop “mutual respect”, “exchange expertise”, or “embrace different points of view”? Currently, it seems that many recommendations to safeguard power-sharing necessary for epistemological common ground are too vague and elusive to translate easily into practice, without more specific guidance and direction.

A possible solution within IPP, that seems to marshal widespread consensus across professional, national and international policies, is inter-professional education (IPEC, 2011; WHO, 2010; D'Amour & Oandasan, 2005). Inter-professional education advocates claim its effectiveness stems from early exposure to other disciplines, widening perspectives, establishing shared knowledge and skills, increasing understanding of roles, and reducing stereotypes (Barr, 2002; WHO, 2010). Within the fields of SLT and teaching, recommendations to introduce inter-professional education are echoed (DES, 2011; Goldberg, 2015; Law et al., 2001; Wilson et al., 2015). It is suggested that inter-professional education may result in supporting SLTs and teachers to engage in intervention models that incorporate exchanging of ideas and blending of professional roles (Wilson et al., 2015) – both power-sharing activities. If power can be shaped by discourse, as Foucault suggests, then inter-professional education would seem to fit that requirement. However, caveats are plentiful about whether a causal link between inter-professional education and improved inter-professional competence actually exists, due to the limited available evidence (Masterson, 2002; Zwarenstein & Reeves, 2006). Masterson (2002, p. 336) describes the correlation as only a “working hypothesis”, and one that requires additional evaluation and confirmation.

The fourth implication of the proposition '*Power plays a role in the interface between practical knowing and propositional knowing*' corresponds more to IPP than EBP. After all, IPP has an added component to consider. In addition to different types of knowledge inherent in IPP, there are also different individuals/professionals to consider. This may add an extra dimension to the interface between practical knowing and propositional knowing and the integral power relations. So in theory, what may be simplified as severing the power differential between different knowledges and assimilating validated knowledge claims, in practice may be difficult to achieve and fraught with epistemological challenges in the context of the human relationships characteristic of IPP. Hence, the fourth implication is that when deliberating the role of power in the interface between practical and propositional knowing within IPP, personal and interpersonal factors may also need to be considered.

Many personal and interpersonal factors that have been described in former models of change, are relevant to objectives of increased power-sharing, include incentives, individual expectations of outcomes, perceived behavioural control, beliefs about capabilities, compatibility with values subjective norms, and social approval. Additionally, practitioners may need to remain cognisant of their colleagues' personal epistemological preferences. As outlined earlier, studies indicate that some practitioners favour specific, personal and practical knowledge over generalised, abstract and theoretical knowledge (Gore & Gitlin, 2004; Labaree, 2003; McIntyre, 2005). The opposite is also true (Hoffman, 2014; Iwarsson, 2015; Roulstone, 2015). If such personal factors are ignored, the possibility of an epistemological impasse is likely, whereby no new knowledge is accepted from the other profession, because it does not fit with a personal epistemological stance. As a result, there is a continuous risk that the benefits of inter-professional practice may not be realised or inter-professional practice may cease altogether. Hofer's (2000) description of personal epistemology, through the categories of nature of knowledge (i.e., certainty of knowledge, simplicity of knowledge) and nature of knowing (i.e., source of knowledge, justification of knowledge) (section 2.1), omits the potential influence of power on how individuals come to know what they believe they know. Thus, future iterations of this model or other conceptualisations of personal epistemology may benefit from considering the role of power.

7.7 Summary of Key Propositions Identified Through this Inquiry

The five key propositions identified through this inquiry have been discussed and implications of each proposition for practice, theory and research have been outlined. The propositions provide a contribution to practice, and theoretical contributions to the themes of participation, change, and epistemology:

- (i) Practice

- *Proposition 1: collaboratively designed activities are central to changing classroom practices to support effective language enrichment.*
- (ii) Participation
- *Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers*
 - *Proposition 3: Degrees of participation may fluctuate*
- (iii) Change
- *Proposition 4: Practical knowing is a critical element in models of change*
- (iv) Epistemology
- *Proposition 5: Power plays a role in the interface between practical knowing and propositional knowing*

Proposition 1 is the base from which the other propositions stem (Figure 6.15). Two key aspects of *Proposition 1* (i.e., tangible activities, and the collaboratively designed manner in which the activities are created) are the foundations of this inquiry's findings in relation to change, participation, and epistemology. Exemplified through the Classroom Practices Checklist and 'Talk Time', the concrete activities were shown to provide solid prompts and assistance to translate theoretical assertions into skills, knacks and competencies – propositional knowing into practical knowing. This conclusion established the groundwork for the proposition about change (i.e., *Proposition 4: Practical knowing is a critical element in models of change*). Explanations shared by the co-researchers about how and why changes were implemented to classroom practices related to developing or mastering the skills, knacks and competencies inherent in practical knowing. The overwhelming prominence of practical knowing deduced from the 'change-talk' verified the position of practical knowing as a central change agent, and confirmed its important status in universal models of change.

In addition, the other processes by which the tangible activities were collaboratively designed ascertained the basis for the propositions in relation to participation and epistemology. With regard to participation, the core and thesis action research analyses revealed that participation is not static (i.e., *Proposition 3: Degrees of participation may fluctuate*). Fluctuations in co-researchers' participation in efforts to change classroom practices through collaboratively designed activities may have been influenced by the stage of the research process, the focus of the action research cycle, group dynamics, power differentials, personal constructs, or variability in facilitation provided. The latter factor, facilitation, ascended from the analyses of this inquiry as central to participation (i.e., *Proposition 2: Facilitation is an essential third dimension of participation, shared by all co-researchers*). Facilitation was deemed to be the 'oil' in the participatory process, smoothing the way for the epistemological and political dimensions of participation to be attained. It encompasses a

multitude of externalised skills, tactics and methods to optimise participation, employed by all co-researchers, with the aim of sustaining the focus on the inquiry's objective.

With regard to epistemology, the analyses of the core and thesis action research studies uncovered the role of power in the process of collaboratively designing the activities (i.e., *Proposition 5: Power plays a role in the interface between practical knowing and propositional knowing*). Through individual assumptions of power by co-researchers, certain forms of knowing were promoted or demoted in the creation of the activities. From a Foucauldian perspective, numerous interrelated, interactions of power within our discussions, practices, and respective organisations influenced the collaboration. For instance, expressions of power led to attempts to substantiate claims that were made through propositional knowing or practical knowing. Likewise, demonstrations of power-sharing resulted in the fusion of different ways of knowing and the establishment of epistemological common ground.

Although the five propositions have been deduced following a rigorous process of analysis, adhering to the quality markers of an action research inquiry, there are a number of limitations to the potential contribution of this inquiry. The limitations are discussed in the next section.

7.8 Limitations of this Contribution

Some of the limitations of this action research inquiry relate directly to the chosen methodology (i.e., action research) and a central method of data analysis employed (i.e., thematic analysis), while other limitations stem from constraints inherent in my positionality and the focus of the inquiry.

7.8.1 Limitations of the methodology: Action research

As described previously in section 3.5, two main limitations of action research methodology outlined in the literature are a potential lack of objectivity and a difficulty in generalising findings (Cain, 2011; Carson, 2009; Pine, 2009; Riggall, 2009). As the inquiry was undertaken by three primary school teachers and me in our typical work environment (i.e., the classroom), our previous experiences and personal constructs may have removed an element of objectivity when planning and reviewing changes. While some may argue that subjectivity facilitates an in-depth generation of context-rich data and tailored action plans that are more likely to be sustained because of their fit with individual perspectives (Brydon-Miller et al., 2003), others criticise subjectivity for its introduction of bias (Greenwood, 2015; Levin, 2012). After all, each co-researcher may bring her own philosophy, experience and

understanding to the research (Dickson & Green, 2001). Furthermore, co-researchers may hold different perspectives and experiences of the systems they are part of, the boundaries that surround that system, and the nature of the relationships within that system (Checkland & Scholes, 2004). However, through the meta-cycle within the thesis action research analyses, I engaged with critical subjectivity via three distinct types of reflection as promoted by Coghlan and Brannick (2010) - content reflection, process reflection and premise reflection. First, this supported me to challenge my assumptions and interpretations in the analyses of the story of the core action research. Multiple reflection boxes within Chapter 5 outline alternative explanations for conclusions drawn during Cycles One to Five, and help to make the choices made by the co-researchers and me more explicit and transparent for the reader (Levin, 2012; Reason, 2006). Second, in the thesis action research of this inquiry (Chapter 6), thematic analysis was applied to the raw data of the transcriptions of the discussions that took place between co-researchers on three separate occasions. Therefore, a layer of objectivity and transparency is added, supporting process and premise reflection, and enabling interpretations to be available for audit, inspection, and scrutiny.

Another limitation arising from this methodology relates to generalisability. While the small number of co-researchers involved (i.e., 4) may have assisted the facilitation of each participant's perspective being heard, it may also prevent the findings and the propositions from being generalised more widely (Brydon-Miller et al., 2003). The low number of co-researchers participating may have prevented a broader representation of views being gathered in relation to the research question. Also, the specificity of the context in which the inquiry was conducted (i.e., a single primary school) may mean that the outcomes produced are narrow and unique to the particular setting, and thus preclude them from being repeated (Baskerville & Wood-Harper, 1996). Conversely, it is argued that efforts to increase generalisability within action research may jeopardise partnerships with practitioners (Bradbury-Huang, 2010). Also, Winter (1998, p. 60) asserts:

to say that the inquiries and developments of action research have only a local validity (rather than a universal validity) is quite compatible with claiming that our judgements about what to do, how to do it, and how far the work is satisfactory are guided by general moral and political criteria.

Others claim that many important ways of general learning stem from unique and specific experiences (Greenwood, 2015), and that the results of an action research inquiry have a higher likelihood of being generalised because the findings are founded on the optimum amalgamation of research knowledge and local knowledge (Brydon-Miller et al., 2003). Indeed, as Cycle Five demonstrated, many changes to practice planned, implemented and reviewed by the three co-researchers and me transferred widely to other teachers in the same school, teachers in eight other schools in the community, and were approved by the NCCA and DES for inclusion in the support material for the national Primary Language

Curriculum. The transfer of learning to other teachers and schools may have been assisted by the presence of a large-scale community organisation in the area (outlined in Section 4.1) that was working collaboratively with teachers and school principals in the geographical region to improve the language and literacy abilities of school-aged children. As recommended previously, further research and scrutiny will be required to evaluate the theoretical propositions of this study to establish their generalisability and validity (Waterman et al., 2001).

7.8.2 Limitations related to the core method of data analysis employed within the thesis action research: Thematic analysis

Within the thesis action research, I applied thematic analysis over three phases to the transcribed data of meetings with the co-researchers, to help identify, analyse and report themes that related to the process of how classroom practices can be changed to support effective language enrichment (Chapter 6). In phase one, the thematic analysis was of the processes that occurred during the inquiry. In phase two and three, the thematic analyses were of two key processes deduced from phase one: participation and change. A limitation is that reliability measures of themes assigned were only completed in phase one. A further possible limitation is that I conducted the thematic analyses independently, without the input of the co-researchers. This was because the thematic analyses were applied to help me complete the meta-cycle of the inquiry. Thematic analysis was not essential for achieving the inquiry's objective of changing classroom practices to support effective language enrichment – an objective that the co-researchers were unreservedly involved in accomplishing.

The application of thematic analysis to add a layer of objectivity in drawing conclusions about the inquiry may be considered by some purists to be at odds with the epistemological preferences and contextual approaches of many forms of action research. For example, action researchers have asserted that objectivity as the only process of understanding is “fundamentally wrong” (Greenwood, 2015). However, that is not to say that all objective measures have been disregarded by action researchers. For instance, the well-established concept of ‘extended epistemology’ proposed by Heron and Reason (2008) clearly articulates the central place and the value of multiple ways of knowing within an action research paradigm. As outlined earlier, they place propositional knowing that relates to facts and objective measures, side by side with practical knowing, experiential knowing and presentational knowing. They assert the benefits of drawing on all four forms of knowing within action research, because of their congruence and their ability to “elevate and consummate each other, and to deepen the complementary way they are grounded in each other” (Heron & Reason, 1997, p. 8). Thus, the implication is that more objective data analysis tools, such as thematic analysis and quantitative analysis of themes employed in

this inquiry, can have mutually enhancing effects with other subjective forms of reflection encompassed in an analysis of an action research study. Also, in order to add to the general body of knowledge it is recommended that action researchers abide by relevant practices, norms and values (Levin, 2012). I argue that by substituting the more commonly reported application of thematic analysis in an action research study to the content of what happened, with a thematic analysis of the processes of how it happened, additional valuable information was made available and contributed to the findings and propositions concluded from this inquiry. As Levin (2012, p.137) asserted, high degrees of relevance typical of action research “cannot be obfuscated by a dull and missing precision in rigorous analytical work”.

Due to the volume of audio-recorded data collected (i.e., 13 hours, 59 minutes over twenty-eight meetings), I decided to systematically transcribe verbatim every 4th audio recording. The transcribed data included six of the twenty-eight meetings and represented almost 30% of the total data set (i.e., 3 hours, 50 minutes). Therefore, the thematic analyses were not applied to the entire data collected. Even though the meetings that were transcribed spanned the action research cycles that were completed and were considered to be representative of the changes planned, implemented and reviewed, it is possible that the findings of the thematic analyses may have led to different conclusions if applied to the complete data set. Moreover, the thematic analyses drew heavily on what was explicit in the data and did not capture every nuance of the context or every single subtle activity or process that the data were couched in. In Phase One (‘Thematic Analysis of the Processes that Occurred’) and Phase Two (‘Thematic Analysis of Participation’), the processes involved and the degrees of participation were more explicit and easier to mine from the transcriptions. Conversely, in Phase Three (‘Thematic Analysis of Change’) actual changes in knowledge, attitudes or practices were not always equally explicit in the verbatim transcripts of meetings. Instead, the thematic analysis in phase three was of all incidents of ‘change-talk’ that appeared in the data (i.e., when co-researchers discussed plans for change, reported changes they had or had not implemented, and proposed changes they believed were necessary). However, this thematic analysis of the ‘change-talk’ provides valuable insights on the various dimensions of change that were reported in co-researchers’ contributions. Other methods of data analysis may have proved beneficial to employ in addition to thematic analysis. For example, Foucauldian discourse analysis may have supported critical examination of the data, especially in relation to the concept of power (Springer & Clinton, 2015). However, there are only so many lenses that can be applied to the data in a given timeframe, and instead other forms of data analysis could be the focus of future research. Nevertheless, rigour was added as conclusions drawn from this inquiry were triangulated with other sources of data (Baskerville, 2014), such as copious field notes, almost six hours of video-recordings of

classroom practices over twelve occasions, and the analysis of the story of the core action research study.

A further possible limitation of the use of thematic analysis within this inquiry was the timing of when it was completed. The three phases of thematic analyses were applied at the end of the study, when all of the data had been collected. It is also possible that if thematic analyses were employed during the time span of the study, as activities and changes unfolded, important insights gleaned may have helped to inform the design, shape, aims, and ultimately outcomes of the action research cycles within the study. However, such scrutiny, analysis and explicit surfacing of dynamics and processes may have altered the role each co-researcher instinctively and authentically assumed and overly interfered with how the inquiry naturally evolved.

7.8.3 Limitations of my positionality

Co-researchers in an action research study may vary in terms of positionality, which may strengthen or weaken the construction of new knowledge (Burgess, 2006). Positionality may demarcate the degree of commonality between co-researchers and influence what is conceived and comprehended as knowledge (Rowe, 2014). Herr and Anderson (2015) assert that determining a researcher's positionality involves considering who the researcher is in relation to the participants and the setting of the study. They propose a continuum of positionality that has six categories between the outer points of insider and outsider: (i) insider; (ii) insider in collaboration with other insiders; (iii) insider(s) in collaboration with outsider(s); (iv) reciprocal collaboration; (v) outsider(s) in collaboration with insiders(s); and (vi) outsider(s) studies insiders. My position shifted throughout the inquiry. As will be described below, the insider and outsider positions I donned both have their limitations.

I am a speech and language therapist who does not have a teaching qualification and is not employed by the school where the inquiry was located. Hence, on the surface, the positionality I assumed from the outset could be placed on the fifth point of Herr and Anderson's (2015) continuum: outsider in collaboration with insiders. However, as Herr and Anderson (2015) caution, positionality does not always fit neatly into categories and may shift as the study progresses. For example, although I have different professional qualifications to the co-researchers, we all worked in the same community where the study took place for comparable amounts of time (i.e., approximately seven years) and we had similar amounts of contact with pupils and families who live in the community. Thus, on the dimension of knowledge of the community and its residents, we could be placed on point two of Herr and Anderson's (2015) continuum (i.e., insiders in collaboration with other insiders). The boundaries between outsider and insider were further blurred by the fact that I had an

existing working relationship with this primary school since 2007, and had previously been involved in school-based initiatives to assess and support language development of infant pupils, that were appraised positively by the school principal. I also had regular contact with the school, but not the individual co-researchers, about specific pupils who were attending speech and language therapy services in the local health centre where I was working. In 2009, my post changed and I was appointed to a new position with a community organisation. My new role involved a transition from working directly with pupils with identified speech and language difficulties to a more preventive and universal focus on supporting the language development of all pupils within the educational, family and community settings. This new role involved frequent contact with the co-researchers before the action research inquiry commenced (i.e., between 2009 and 2011) including delivery of professional development that they attended, presenting training inputs at their staff meetings, and providing in-class support for implementing language and literacy development initiatives. Through this regular contact with the school and the co-researchers I gleaned some insider knowledge of the school, routine practices and broad political issues, albeit nowhere near the level of being considered 'native'. Possible limitations of this insider position relate to concerns around potential bias, prejudice, distortion of co-researchers' contributions, and un-interrogated assumptions (Anderson & Jones, 2000). However, methods employed within this study to address potential bias and subjectivity were described above. Also, benefits of insider knowledge and positionality have been reported to include the ability to draw on internal jargon, awareness of micropolitics and legitimate concerns, reducing potential suspicion, and increasing credibility and trust from co-researchers (Coghlan & Brannick, 2010).

Conversely, being the professional tasked with coming in to the school to support the staff to improve language and literacy skills of pupils, I could also be perceived as an outsider who had a possible defined raised status on a hierarchy of knowledge and expertise for supporting language enrichment. In parallel, I had a lower status on a hierarchy of knowledge and expertise of the primary school curriculum and teaching pedagogies. This outsider position may have been reinforced by the fact that I was the only co-researcher conducting a formal PhD study alongside the focus of the inquiry. Therefore, it could be construed that I had an additional agenda, not shared by the co-researchers, in relation to pursuing an academic qualification and independently writing a formal PhD thesis. A potential limitation of the position: 'outsider in collaboration with insiders', stems from distinctions in power, status, and resources that may have created challenges to democratic collaboration (Herr & Anderson, 2015). Yet, as the thematic analysis of participation verified, genuine participation was a feature of this study on both an epistemological and political dimension. In addition, a possible advantage of the outsider position may have been that I was removed from the

school hierarchy, and so discussions with co-researchers may have been more authentic and honest without fear of reproach or recrimination from school management.

7.8.4 Limitations from the constraints of the focus of the inquiry

Many of the remaining limitations of this study originate from constraints of the focus of the inquiry. First, this study aimed to address the research question: 'How can classroom practices be changed to support effective language enrichment?' A limitation may be that the inquiry almost exclusively considered the perspectives of the co-researchers (i.e., three primary school teachers and one speech and language therapist). While the inquiry centred on classroom practices, the changes in classroom practices were intended for the *pupils'* benefit, individual teaching objectives are typically overseen by the *principal* through submission of monthly plans, and oral language homework was intended for the pupils and *parents*. Thus, a degree of inter-relationship between these additional stakeholders and the co-researchers is indicated. Only fleeting references are made in the analysis of the core action research study to pupils', parents' and principal's perspectives. A lack of exploration of the voices of the children receiving language interventions, including their preferences and opinions, was also a finding of the systematic review I conducted (Section 1.5.2). Arguably, by minimally referencing such relevant voices, valuable insights about the focus of the inquiry may have been excluded (Lyons & Roulstone, 2016; McCormack, McLeod, McAllister, & Harrison, 2010; Merrick & Roulstone, 2011). However, expanding the inquiry to include more detailed and comprehensive perspectives of pupils, parents, and principals was beyond the scope of this inquiry, but would be valuable and important to consider for future research (DCYA, 2014).

Second, the effectiveness of the language enrichment strategies and activities introduced (e.g., 4 squares, word walls, oral language homework, etc.) was not robustly and objectively measured. The aim of this inquiry was not to test effectiveness of language interventions, rather explore how changes could be implemented in classroom settings. Nonetheless, comprehensive outcome measures of strategies and activities would have been interesting and useful to gather. Formal, standardised assessments are commonly administered to evaluate outcomes of language interventions for children (Gillam et al., 2012; Pollard-Durodola et al., 2011; Zipoli et al., 2011). Other studies have employed self-evaluation of word knowledge as way of assessing the incremental nature of vocabulary development (Beck et al., 2002; Nagy & Scott, 2000). Most recently, Spencer, Clegg, Lowe, et al. (2017) describe the Word Knowledge Profile, which was designed to evaluate children's phonological and semantic knowledge about targeted words. This outcome measure asks the child to

repeat the word, generate a rhyming word or non-word, rate their own knowledge of the word, provided a verbal definition of the word, to use the word in a sentence, and relate the word to their own experiences (p. 7).

However, in this inquiry it was not possible to compare pre- and post- measures of the pupils' language abilities on the former, comprehensive instruments - as such assessments were not administered. The time and resources that would have been required to administer, score, interpret and analyse a formal language assessment with each pupil across the three included classrooms prohibited their use in this inquiry. Instead, the effectiveness of language enrichment strategies introduced through changes in classroom practices was evaluated through co-researchers' feedback and reflection. In addition, informal measures of pupils' acquisition of the targeted vocabulary were administered weekly and termly, and were presented in Table 5.2 and Table 5.5. While such non-standardised assessments may not as be as valid as their standardised counterparts, or as informative as self-evaluation assessments, the use of proximal measures of language outcomes is a common practice in efficacy studies (Coyne et al., 2007; Duff et al., 2014; Zipoli et al., 2011; Zucker et al., 2013). Also, repeated support for proximal measures of vocabulary stems from arguments that they assess the specific words aimed to be acquired instead of general vocabulary, can demonstrate changes over time, and may avoid potential bias of standardised assessments (Stockman, 2000; Townsend et al., 2012).

Third, this inquiry and the findings are based on a relatively short time span: a detailed analysis of the core and thesis action research cycles over one primary school year (i.e., August 2012 – June 2013), and follow-up documentation of the sustainability of changes up to three years later (i.e. September 2013 – June 2016). A longitudinal investigation would assist in shedding light on the long-term sustainability of changes, including an exploration of enabling and prohibitive factors of change at an individual level, organisational level, and broader systemic level. Indeed, Bowman, Sobo, Asch, and Gifford (2008) suggest that sustainability of changes should be investigated as a separate and dynamic phenomenon. A longitudinal exploration may consider factors that influence sustainability outlined in Wiltsey Stirman et al. (2012) systematic review, such as context (e.g., policy changes, culture, workplace structure), the innovation itself (e.g., adaptability, effectiveness), processes (e.g., alignment with the context, fidelity), and the capacity to sustain (e.g., resources, staffing, interpersonal processes).

7.8.5 Conclusion of limitations

The limitations of this action research inquiry have been outlined in relation to the methodology employed (i.e., action research) and the chief method of analysis applied to the data (i.e., thematic analysis). Additional possible limitations have been described which

originate from my positionality and the focus of the inquiry. Bearing such limitations in mind, there are a number of important implications of this inquiry, which are discussed in the next chapter.

8 Implications

This chapter sets out the implications from this action research inquiry for practice and policy, implications for theory, and implications for research.

8.1 Implications for Practice and Policy

The implications for practice and policy centre on language enrichment interventions for school-aged children, inter-professional practice, and facilitation.

8.1.1 Evidence-based practice: Language enrichment interventions for school-aged children

The systematic review I completed confirms previous reviews that language enrichment interventions for school-aged children can be effective. Following the appraisal of the quality of the included studies, based on the evaluative method described by Reichow et al. (2008), an established EBP and a promising EBP were identified. The established EBP is extended instruction within the context of story reading to teach vocabulary. The promising EBP is explicit instruction in the structural elements of a story to improve oral narrative skills. Hence, these interventions would prove beneficial to implement with school-aged children.

Furthermore, the systematic review highlights a lack of distinction in the potential effectiveness of the interventions, whether delivered by SLTs or educational professionals. The length of the school day and school year can provide ample opportunities for implementing what this systematic review and previous reports have suggested are effective durations, frequencies and intensities of interventions. Therefore, greater collaboration between teachers and SLTs in delivering evidence-based practices is warranted to support school-aged children to reach their linguistic potential. This is especially relevant for pupils growing up in areas of low SES, whose risk of presenting with language difficulties is increased (Law & Harris, 2006).

However, this action research inquiry suggests that theoretical assertions central to the evidence-based practices described in the systematic review will need to be integrated and fit with the structures and processes of classroom practices, in order to be accepted and implemented. The implication from this inquiry is that effective strategies such as the importance of increasing exposure to the target vocabulary, highlighting semantic relationships with other known words, demonstrating the wider application of the target vocabulary in a variety of different contexts, discrimination and generalisation tasks, and

scaffolding opportunities to practise using the target vocabulary (Coyne et al., 2007, Duff et al., 2014, Pollard-Durodola et al., 2011, Zipoli et al., 2011, Zucker et al., 2013) may be translated into classroom practices through the use of collaboratively designed activities. Collaboratively designed activities in this inquiry were exemplified through the Classroom Practices Checklist and 'Talk Time'. Consequently, they may be useful resources to support the implementation of EBP in an educational context. For example, the description of 'Talk Time' in the Toolkit for the new national Primary Language Curriculum for Junior Infants to 2nd class pupils (Appendix H) synthesises research findings with practical suggestions, and provides examples of genuine experiences that demonstrate 'Talk Time's implementation in real classroom settings - factors reported to facilitate the adoption of new practices (Hammersley, 2002; Joram, 2007; Kent, 2006; Wilcox, Gray, Guimon & Lafferty, 2011).

The findings in relation to language enrichment interventions for school-aged children also have potential implications for one of the Department of Education and Skills' leading national policies - *National Strategy: Literacy and Numeracy for Learning and Life 2011-2020* (DES, 2011). This strategy sets out the Department of Education and Skills' vision for raising standards in literacy and numeracy in early years, primary, and post-primary settings. It recognises the role of language skills in supporting literacy development, but retains a focus on the importance of oral language development in the early years. The strategy fails to give the same emphasis to language development at primary and post-primary level, despite the evidence to suggest that oral language development requires ongoing focus throughout the lifecycle of children and competency in verbal language skills is directly linked to competency in literacy and numeracy skills (Myers & Botting, 2008). Attainment of the agreed targets of the national strategy is evaluated by results of standardised assessments of pupils' reading comprehension and numeracy skills. The targets vary considerably, depending on whether a pupil attends a school in an area of low SES or not (i.e., DEIS school or non-DEIS school). For example, with regard to literacy, the target is for 50% of all 2nd class primary pupils to score at or above level 3 on a standardised reading assessment by 2020. For pupils attending DEIS schools, the target is exactly halved: 25% of all 2nd class primary pupils attending DEIS schools will score at or above level 3 on a standardised reading assessment by 2020 (DES, 2017b). There are no assessments of oral language skills included in the strategy's targets. Therefore, the possible facilitative or preventative influence of language abilities on literacy and numeracy attainment may be overlooked, leading to a potential failure to adequately address language development or a neglect of the importance of implementing effective language enrichment interventions in the classroom. Moreover, the interim review of this strategy, published in March 2017 (DES, 2017b), clearly states that a stronger focus on numeracy is now warranted to meet the revised 2020 targets. The strategy does not recognise or reference the role of oral language in development of numeracy skills,

even though numerous linguistic concepts (e.g., 'same', 'different' etc.) underpin numeracy skills (Boyle, McCartney, Forbes, & O'Hare, 2007). Once again, the potential support of language enrichment interventions to scaffold and enhance numeracy skills may be disregarded, as it is not explicit in the strategy. Hence, based on the points outlined, the implications for future planned revisions of the *National Strategy: Literacy and Numeracy for Learning and Life* are: explicit recognition of the role of language skills in the development of literacy and numeracy abilities across the educational stages, not just in the early years, and inclusion of targets that evaluate oral language abilities of pupils. I suggest that ambitious targets for oral language abilities should remain the same for all of our younger citizens, regardless of whether they attend a DEIS school or not. These recommendations may help to recognise the need for, and benefits of, language enrichment interventions, such as those gleaned from the systematic review and this action research inquiry, to support literacy and numeracy skills for all pupils.

The second key implication for policy relates to the *HSE's National Speech and Language Therapy Service Improvement Initiative* (IASLT, 2016). Through this initiative, under the leadership of the HSE National Directors of Primary Care and Social Care, Ireland's SLT waiting lists have been reviewed using a standardised methodology, and targets have been set to reduce waiting times (particularly for those children waiting more than 12 months for SLT services). Since 2016, targeted government investment has led to the employment of 83 additional SLT posts to help reduce the time children are waiting for an initial speech and language therapy assessment or speech and language therapy (IASLT, 2016). The emphasis from HSE SLT managers, HSE Primary Care managers, and HSE National Directors is exclusively on quantity (e.g., "how long was the child waiting before they were seen for assessment?", "how many assessment appointments were provided in a specific month?", "how many therapy appointments were provided in a specific month?"). Targets for service improvement are set based on activity, such as an SLT providing 4 assessments per day or 7 therapy appointments per day. There is no reference within this initiative to service improvement in relation to quality, or effectiveness of interventions provided. Therefore, the implication for the *HSE SLT Service Improvement Initiative*, based on this action research inquiry, is to augment the direct focus of the initiative on quantity with an explicit concentration on quality. Perhaps if an equal amount of time and energy was devoted to supporting the implementation of effective language enrichment interventions in educational settings - more likely to lead to improved outcomes, possible earlier discharge, and maybe preventing the need to be referred to SLT services in the first instance - waiting lists would also be positively affected. Moreover, 12 Senior HSE managers who are members of the project management group meet monthly, and 9 SLT/General Managers representing all HSE Community Healthcare Organisations meet weekly, to report and appraise waiting time

statistics. If the focus of these regular management meetings was extended to include a focus on the implementation of evidence-based practices that have demonstrated effectiveness, support and resources may be garnered to ensure the implementation of language enrichment interventions by SLTs at universal and targeted levels as well as specialist levels.

8.1.2 Inter-professional practice

As outlined above, the findings of the systematic review draw attention to the importance of inter-professional practice (IPP) between speech and language therapists and teachers, as teacher-implemented language interventions were found to be as effective as SLT-implemented language interventions. Therefore, the potential for improving pupils' language abilities may be enhanced through collaborative efforts.

Moreover, this action research study provides direction on *how* to achieve successful IPP between SLTs and teachers. Currently, there are numerous national policies that promote IPP, specifically IPP between teachers and SLTs. For example, the *Action Plan for Education 2016-2019* (DES, 2016) outlines a plan to introduce a new in-school speech and language service, creating stronger linkages between parents, teachers and SLTs. This is repeated in the *DEIS Plan 2017: Delivering Equality of Opportunities in Schools* (DES, 2017a), that sets out the DES' vision for education for those in communities at risk of social disadvantage (640 Primary and 185 Post Primary, serving 170,000 pupils, participate in the DEIS programme). Also, one of the *DEIS Plan's* five goals is interagency collaboration to improve services to schools. In addition, the aforementioned *National Strategy: Literacy and Numeracy for Learning and Life* (DES 2011, p. 67), advocates for "closer interaction" between SLTs and teachers. Moreover, the DCYA's *National Policy Framework for Children and Young People 2014-2020: Better Outcomes, Brighter Futures* (DCYA, 2014, p. 38) specifies the need for "active involvement of the professionals themselves, working across professional boundaries" to ensure optimum outcomes for children and young people. Similarly, *Healthy Ireland: A Framework for Improved Health and Wellbeing 2013-2025* (DOH, 2013) promotes inter-professional practice between health professionals and educational professionals. However, while there is repeated endorsement of the need for, and benefits of, IPP between SLTs and teachers documented in national policies, there is a consistent lack of detail in these policies on how this collaboration may be achieved in practice. Therefore, the findings of this action research inquiry have implications for how the objectives of national policies may be realised at the coal face.

A common mode of IPP between teachers and SLTs currently applied in the Irish context, and replicated internationally, entails an educational meeting to share knowledge - resulting

in consistent, non-significant effects (Scott et al., 2012). Frequently, a speech and language therapist will attend a school staff meeting and provide a power-point presentation on theoretical ways to support language development, resulting in minimal alterations to classroom practices. Then, teachers may share their knowledge in relation to educational activities that support pupils' learning or overlapping curriculum objectives, resulting in minimal alterations to SLTs' practices. The analyses of this action research inquiry suggest that IPP may be more authentic and effective if SLTs' and teachers' ways of knowing and priorities were assimilated, rather than each profession taking turns to impart their respective expertise with little follow-through from their audience. This call to amalgamate different forms of knowing is supported by the literature (Bonderup-Dohn, 2014; Dollaghan, 2007; Haynes et al., 2002; Heron & Reason, 2008; Higgs & Jones, 2000; McIntyre, 2005; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Seeley, 2014; Sexton & van Dam, 2010). The implication is to need to safeguard power-sharing within IPP to facilitate the blending of ways of knowing. This may involve the development of greater awareness and self-reflection about what forms of knowing are currently contributing to collaborative practice, and whether or not there are any imbalances. Then, fostering deeper insight into why, and how, certain forms of knowing are being approved or precluded, while remaining mindful of the potential role of power in helping or hindering the incorporation of the other discipline's ways of knowing. Possible strategies may include addressing colleagues' fears around status, losing expertise, or having their professional decisions interrogated and in parallel, embracing different points of view by promoting mutual respect for each professional's contribution (Cameron, 2011; Dunsmuir et al., 2006; Hartas, 2004; Milbourne et al., 2003; Rafferty et al., 2001; Wilson et al., 2015; Wright et al., 2008). Additionally, SLTs and teachers may need to remain cognisant of their colleagues' personal epistemological preferences. Studies suggest that some practitioners prefer specific, personal and practical knowledge to generalised, abstract and theoretical knowledge (Gore & Gitlin, 2004; Labaree, 2003; McIntyre, 2005). The opposite is also true (Hoffman, 2014; Iwarsson, 2015; Roulstone, 2015). There were numerous examples in this inquiry, described previously, where co-researchers' epistemological preferences had to be considered and assimilated in order to make progress towards change. When such personal factors are acknowledged and embraced, the possibility of an epistemological gridlock may be prevented, whereby members of one profession do not accept new knowledge offered by another profession because it does not fit with their personal epistemological standpoint.

Ultimately, the implication is to agree on an objective of reaching epistemological common ground within IPP between teachers and SLTs. For example, in this action research inquiry the research findings of what constitutes effective language enrichment were translated into a format aligned with established, familiar, and preferred teaching methods (e.g., asking

pupils to complete a specific worksheet that focuses on a learning objective, provision of homework, assessing pupils' learning). It has been demonstrated that strategies to translate research to practice are more successful when they are tailored to the priorities and preferences of the users (La Rocca et al., 2012). The abstraction, and subsequent fusion of SLT knowledge and teacher knowledge – both their propositional knowing and practical knowing - facilitated the design of this format for changing classroom practices to support effective language enrichment.

Achieving epistemological common ground through IPP may require challenges related to motivation, time, and support from management to be surmounted. One of the most frequently cited barriers to SLT/teacher IPP is competing demands and the lack of time for discussion, planning and reviewing (Bauer, Nathani Iver, Boon, & Fore, 2010; Glover et al., 2015; Hartas, 2004; McCartney, Ellis, Boyle, Turnbull, & Kerr, 2010; Wren, Roulstone, Parkhouse, & Hall, 2001; Wright & Kresner, 2004). In this inquiry I had the luxury of meeting with three teachers, who volunteered to participate, 28 times over the school year - and we were supported by the school principal to do so. Hence, appropriate infrastructures for IPP (e.g., organisational, technological, instrumental) may be required that facilitate access, exchange, and utilisation of relevant evidence (Grimshaw et al., 2012). A potential infrastructure that may incorporate the former elements supportive of IPP between SLTs and teachers is the forthcoming Schools Excellence Fund. The *DEIS Plan 2017* (DES, 2017a) describes its aim to establish a School Excellence Fund in 2017, which will provide funding to implement innovative programmes that are context-specific and aimed at improving learning outcomes. The plan encourages the development of “communities of good practice” and “effective networks and partnerships which will support teacher collaboration within sectors and cross-sectoral” (p. 29). Research and evaluation will be a core component, and participants will be supported to document, appraise and disseminate their efforts. Thus, the imminent School Excellence Fund has the potential to provide the necessary infrastructures to support effective IPP between SLTs and teachers to support effective language enrichment, on condition that support from line managers to engage in the process is secured.

Furthermore, structures and processes that may champion epistemological power-sharing could also be applied to address other theory-to-practice gaps relevant to IPP between SLTs and teachers (e.g., supporting school-aged children who stutter, school-aged children with speech sound disorders, school-aged children with autism spectrum disorder etc.). Also, the implications for IPP between teachers and SLTs may be relevant for collaborative practices between other disciplines. As a result, empirical evidence may be moulded to align with established professional practices and priorities of diverse colleagues, potentially leading to

better outcomes for children. Thus, the case for inter-professional education is strengthened, whereby early exposure to other disciplines is secured, perspectives are widened, knowledge and skills are shared, understanding of roles is increased, stereotypes are reduced, and intervention models that incorporate exchanging of ideas and blending of professional roles are promoted (Barr, 2002; WHO, 2010; Wilson et al., 2015). All of the former aspects of inter-professional education encompass epistemological power-sharing.

As well as having implications for collaborative working between different professions, the findings of this inquiry are relevant for working with parents/carers.

Potential epistemological clashes described above between professionals from two different fields of practice may be mirrored in collaborative work with parents of school-aged children. Hence, a commitment to epistemological power-sharing with parents may also prove advantageous. For instance, it may be useful to investigate whether collaboratively designed activities between SLTs and parents may also emerge as central to supporting effective language enrichment in the home environment. The fusion of evidence of what works, with parents' perspectives of what will fit with typical home routines and practices, may create collaboratively designed activities central to changing *home practices* to support effective language enrichment.

The implications for practice and policy above in relation to language enrichment interventions for school-aged children and inter-professional practice have a core underlying emphasis on participation – one or more groups coming together with different perspectives and knowledges to participate in epistemological power-sharing. The findings of this inquiry indicate that facilitation is an essential dimension of participation, and therefore final implications for practice and policy are placed under this theme.

8.1.3 Facilitation

Due to the central place of facilitation promoted in this inquiry to attain the epistemological and political dimensions of participation, the implication for practice is for professionals to remain attentive of the importance of facilitation and develop strategies and skills to ensure optimal facilitation. As discussed previously, facilitative processes may be overlooked as time-wasting or as an unattainable luxury in a demanding work day, where the focus is often on demonstrable outputs within a limited timeframe. This action research inquiry suggests the opposite – facilitative processes are not an optional extravagance, but are crucial to obtaining the epistemological and political dimensions of participation. This inquiry drew attention to the internal and external manifestations of facilitation. Therefore, the implication is that practitioners need to develop fluency in the use of both aspects of facilitation in order to maximise participation when working with other disciplines or parents. For example,

creating a 'participatory space' (Ayar, 2010; Cornwall, 2008; Gaventa, 2004) or 'communicative space' (Cook, 2009; Wicks & Reason, 2009) for collaboration, in which it is safe for participants to reflect, create and innovate (Wade, 2004). This requires securing explicit time and energy to learn more about each other, build relationships, create open communication, and attend and respond to the energies of a particular context (Brown et al., 2003; Reason & Bradbury, 2008b; Wadsworth, 2006). Moreover, developing skills in adaptability may be necessary to manage shifting priorities or contradictions that may surface in the participatory effort (Heft, 2014; Mackewn, 2008). It may also prove useful to draw on established tools and methodologies that encompass high quality facilitative skills and strategies, such as inquiry circles, World Café, focused conversations, journaling, or mind mapping (Heft, 2014). Thus, a further implication is that the former national policies promoting inter-professional practice (i.e., *National Strategy: Literacy and Numeracy for Learning and Life* (DES, 2011); *Healthy Ireland: A Framework for Improved Health and Wellbeing 2013-2025* (DOH, 2013); *Better Outcomes, Brighter Futures* (DCYA, 2014); *Action Plan for Education 2016-2019* (DES, 2016); *DEIS Plan 2017* (DES, 2017a)) may be enhanced by including a focus on developing practitioners' facilitative skills and competencies to achieve authentic inter-professional practice.

8.2 Implications for Theory

The implications of this action research inquiry for theory fall under three categories: conceptualisations of participation, conceptualisations of facilitation, and conceptualisations of change.

8.2.1 Conceptualisations of participation

There are two main implications for conceptualisations of participation. The first implication centres on expanding how degrees of participation are considered. Existing typologies of participation tend to represent degrees of participation as immobile rungs of a ladder or fixed rows on a table (e.g., Arnstein, 1969, Cornwall, 1996; Pretty, 1995). Conversely, this inquiry suggests that participation may fluctuate, for various possible reasons. Hence, a bi-directional moving escalator may be a more accurate representation for describing levels of participation (Figure 7.2.). Reflecting the ebb and flow movement in theoretical frameworks of participation may assist novice and experienced action researchers to remain alert to where on the 'escalator of participation' an inquiry is positioned at any given time. As a result, a scaffold may be established to critically appraise the possible reasons underlying a given position on the 'escalator of participation'. Consequently, appropriate responses and adaptations may be implemented to support the best possible outcomes of an inquiry to be achieved.

The second implication for conceptualisations of participation centres on the value of broadening constructs of participation to encompass facilitation as a key aspect. The findings of this inquiry indicate that it would be useful to expand the well-established notion of participation within action research from a two-dimensional concept (i.e., epistemological and political dimensions) (Reason and Bradbury, 2008a), to a three-dimensional concept (i.e., epistemological, political, and facilitation dimensions). Data analyses of this action research inquiry suggest that facilitation is an enabling factor that harnesses multiple perspectives and supports democratic power sharing inherent in participation – as stated previously, I suggest that facilitation is the critical ‘oil’ in a participatory ‘machine’, paving the way for the epistemological and political dimensions of participation to be attained. Therefore, facilitation is too important to remain tacit or implied. Making the role of facilitation explicit in constructs of participation may emphasise its fundamental function in achieving genuine participation. This, in turn, may support greater consideration of facilitation in participatory practice, leading to efforts to optimise facilitative processes.

8.2.2 Conceptualisations of facilitation

The core and thesis action research analyses of this inquiry demonstrate that facilitation does not refer to a single method, but rather a multitude of internal and external skills, tactics, and methods to optimise participation (e.g., questions, statements, proposals, illustrations, motivators), shared by co-researchers. Hence, an implication for theory is that it may be advantageous for certain conceptualisations of facilitation (e.g., Heft, 2014; McKewn, 2008; McArdle’s, 2008) to expand from a perspective of facilitation as purely an internal, ‘meta-skill’ of the initiating researcher, to a broader understanding of facilitation that includes external manifestations and that can be enacted by all co-researchers. Constructs of facilitation as unspoken deliberations, voiceless thoughts, or internal choices may benefit from incorporating spoken problem-posing and/or problem-solving, voiced statements, or external verbal statements of how decisions were made. In addition, a narrow lens that only sees the initiating researcher as an agent of facilitation may need to be replaced with a more panoramic lens that recognises the potential of all co-researchers to be agents of facilitation. Embracing external aspects of facilitation within a theoretical conceptualisation of facilitation may help to explicitly and directly sustain engagement with a mutual concern, bring together different strands of discussions, boost contributions from all participants, and enhance the process of collective meaning making (Chevalier et al., 2015; Hunt & Thompson, 2002). With this augmented theoretical perspective of facilitation, co-researchers may be provided with a more supportive framework for their participatory attempts in practice.

8.2.3 Conceptualisations of change

When the number of incidents of each way of knowing across the 'change-talk' in this inquiry was examined, there were almost five times more incidents of practical knowing than propositional knowing. The dominance of practical knowing (i.e., 64% of incidents compared to 13% of propositional knowing incidents) signifies that the change discussed, reported and presented in this inquiry related most frequently to skills and competencies, rather than perceptions or theoretical arguments (Heron & Reason, 2008). The importance of practical knowing as a critical element in universal models of change is frequently recognised, explicitly or implicitly (e.g., Ajzen, 1991; Bandura, 1997; Chaudior et al., 2013; Colquhoun et al., 2004; EPOC, 2010; Fixen et al., 2005; Leeman et al., 2007; Lewin, 1951; Michie et al., 2005; Prochaska et al., 1992; Rogers, 2003; Skinner, 1963). However, the emphasis seems to remain on a uni-directional flow of practical knowing within such conceptualisations of change. The message appears to be: experts who designed/chose the practices have the required knowledge, skills and expertise, and they must impart these competencies to practitioners for implementation. Hence, many existing conceptualisations of change may provide minimal opportunities for practitioners to share their insider knowledge to support change. The potential pitfalls of such models of change in their current manifestations are threefold: (i) practices promoted through these models of change may be unreliable if they lack the interpretations and understandings of the practitioners central to the change process; (ii) resulting in practitioners becoming reluctant or resistant implementers (Greenwood, 2015; Ospina & Anderson, 2014); and (iii) the models may prevent the necessary flexibility to adapt, modify and fine-tune interventions to meet the specific needs of individuals in unique settings (Coghlan, 2009, 2016; Epstein, 2011; Haynes et al., 2002; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Smith et al., 2003). Therefore, the implication for theory is that models of change may be enhanced by enabling and promoting a bi-directional exchange of knowledge between the individuals promoting the new practice and the practitioners expected to implement it.

Following this exchange of practical knowing within a model of change, a further implication from this inquiry is that the knowledge imparted needs to be made available for validation and scrutiny before claims can be substantiated. This is necessary to prevent bias, inaccuracies, idiosyncrasies, or less effective practices (Dollaghan, 2007; Foucault, 1980; Justice, 2010; Kamhi, 2011; Paley, 2006; Proly and Murza, 2009). Reliable tools to comprehensively evaluate and critique the practical knowing may be necessary, especially if the knowledge shared is more implicit or tacit. Traditional cause-and-effect assessment techniques alongside more extensive evaluative methods may be needed, such as methods recommended previously (e.g., case studies, phenomenology, consensus studies, or critical self-reflection). When the practical knowing exchanged is validated, it is crucial that the

practical knowing is amalgamated with the other relevant factors in a specific framework, theory, or typology of change for optimum outcomes.

8.3 Implications for Research

The implications for research relate to the method of data analysis applied in this inquiry (i.e., thematic analysis) and opportunities for wider application of action research within speech and language therapy. In addition, recommendations for future research are outlined.

8.3.1 Thematic analysis and quality in action research

Within the domain of action research, thematic analysis has been referenced as the method of data analysis in many recently published studies (Duenkel & Pratt, 2013; Hanson & Hanson, 2010; Jacobs, 2010; Paltved, Mette Morcke, & Musaeus, 2016). However, thematic analysis is typically employed as a way of capturing and analysing the *content* of change that occurred, but not the *processes* inherent in how change was planned, implemented and evaluated, or as a tool for appraising quality.

Striving for quality is a crucial objective of every action researcher. This helps to ensure the action research inquiry can deliver knowledge that is both useful for practitioners and robust for scholars (Coghlan, 2011). However, in order to realise the enormous potential of the usefulness and robustness inherent in action research there are at least three key methodological issues in relation to quality that require focussed attention. First, if action research is to demonstrate its value and robustness to a wider audience of practitioners, policy makers and the public, it is imperative that there are transparent rigorous standards of quality for analysing, reporting and sharing the work. The importance of rigor and quality is especially relevant in the prevailing discourse of evidence-based practice and the strong focus on quality assurance (Ivankova, 2015). Second, within the context of providing evidence of the quality of an action research study, a recurring problem is how to practically and explicitly demonstrate quality attributes for the reader. The dilemma is that some of the most important characteristics of action research can be hardest to objectively demonstrate and measure. For example, how does an action researcher know and provide evidence to the reader that genuine participation took place? Existing published studies of action research do not always make visible how standards of quality were reached and consequently quality can be difficult to appraise. Therefore, an implication for research is that it is important to have a framework that makes explicit the processes involved to enable the reader to make a judgement about rigour and quality. Third, any lack of visibility of practical and transparent quality trails in published studies can create difficulties for action researchers

attempting to repeat the processes that were employed by others to ensure quality. Equally, challenges arise in providing evidence that attests to that quality.

This action research inquiry describes the application of a systematic data analysis framework, using thematic analysis, as one approach to support the demonstration and appraisal of standards of quality, in a manner that can be replicated by other researchers (Chapter 6). It is possible that other analytical tools, such as discourse analysis, may have also been equally useful in the analysis of raw data and appraising quality markers - but thematic analysis was the chosen data analysis method for this inquiry. Within the thesis action research, the copious amount of 'talk' that was audio-recorded and transcribed was explored through thematic analyses over three phases to help construct and evaluate this dimension of the research cycle and to explore, measure and appraise key quality attributes of the study. Thus, this systematic data analysis framework using thematic analysis presents an opportunity for action researchers to augment their analysis of what happened (thematic analysis of the content) with an analysis of how it happened (thematic analysis of the process). While the processes of participation were more mineable within the data (i.e., verbatim transcripts of meetings), actual change in knowledge, beliefs, practices, attitudes, culture etc. is less explicit in the transcript. However, I argue that change is implicit in the utterances of the co-researchers as all incidents of 'change-talk' that appeared in the data were considered, that is, all incidents when co-researchers talked about plans for change, talked about change that they reported had happened, talked about change that they reported had not happened, or talked about changes they believed were necessary. Indeed, it has been suggested that much of what is achieved in an action research study in the co-production of knowledge and power is conducted through conversation, discussion and negotiation (i.e., 'talk') (Olesen & Nordentoft, 2013). As thematic analysis can be applied to the raw data of the transcriptions of the 'talk' that occurred in the study, it offers an additional layer of objectivity and transparency and makes interpretations available for audit, inspection and scrutiny. In addition, a critical lens on the processes involved in an action research study can be extrapolated through thematic analysis, resulting in an explicit, transparent appraisal of key quality attributes. Moreover, when combined with a content reflection of the action research cycles, a comprehensive and robust evaluation of the study is made accessible.

As discussed earlier, for some purists, the application of thematic analysis to add a layer of objectivity in drawing conclusions about the inquiry may be considered to be at odds with the epistemological preferences and contextual approaches of many forms of action research. However, it is important to point out that objective measures have not been disregarded by action researchers. Heron and Reason's (2008) 'extended epistemology' promotes the mutually enhancing effects of placing propositional knowing that relates to facts and objective

measures, side by side with practical knowing, experiential knowing and presentational knowing. Also, others insist that meticulous and rigorous analysis of an action research inquiry increases the relevance, clarity, and potential acceptance of its contribution to the general body of knowledge (Levin, 2012).

8.3.2 Action research for the speech and language therapy profession

This inquiry highlights the potential of action research to be a valuable research methodology for the SLT profession. Even though the use of action research methodology is prevalent in diverse fields such as education, health, business, community engagement, and rural development, amongst others (Dick, 2011), its application by SLTs appears to be extremely limited to date. As discussed previously (Section 3.3), my search of nine international databases for the employment of action research methodology in the context of speech and language therapy only yielded six published studies (Chandler et al., 2002; Duivesteyn & Gerlach, 2011; Horton et al., 1998; Lyons et al., 2010; McMenamin et al., 2015a, 2015b). Based on the appropriate fit, and the benefits reaped from using action research in this inquiry, an implication for research is that the wider application of action research within the SLT profession may be equally advantageous.

For instance, the fundamental aim of SLT is to help individuals achieve their communication potential – which may require making changes to personal or environmental factors (Westby, 2007). Change is a core element of action research (Coghlan & Brannick, 2014), thus reinforcing its suitability to the profession's constant aspirations. Moreover, government and local health services policies encourage SLTs to increase communication from, participation, and empowerment of the clients we offer services to (DCYA, 2014). Likewise, SLTs are encouraged to work collaboratively to improve the effectiveness and efficiency of their interventions (HSE, 2008). Participation of service users and other practitioners is a key feature of action research (Arieli et al., 2009; Reason, 2006; Riggall, 2009), and therefore employing action research within SLT could help support the profession to meet the objectives of relevant policies. Furthermore, action research could prove useful as a way of extracting SLTs' clinical expertise, thereby contributing to evidence-based practice (Dollaghan, 2007). A central focus of action research is practical knowing, and embracing the socially constructed knowledge through practice (Brydon-Miller et al., 2003; Coghlan, 2011; Eikeland, 2015; Heron and Reason, 2008). In this manner, action research within SLT could be a major contributor to the extraction, evaluation, and modification of the profession's clinical expertise, supporting the creators of empirical evidence and authors of mandates for change to remain actively connected with the realities of practitioners' daily work (Gore & Gitlin, 2004; Hiebert et al., 2002)

However, in order for action research to be accepted and utilised more widely by SLTs, professional development and capacity building in this methodology, including its strengths and limitations, will be required at under-graduate and post-graduate levels.

8.3.3 Further research

This inquiry also provides direction for a number of potential areas for further research, drawing on the propositions outlined:

- **Explore methods of evaluating degrees of participation that have maximum sensitivity and specificity.** This exploration may help in the assessment of levels of participation and provide rationales for fluctuations in participative levels. As a result, comprehensive guidelines and supports for responding and adapting proficiently may be developed to ensure optimum outcomes of the inquiry.
- **Explore the concept of facilitation.** Further scrutiny of the concept of facilitation may help to extrapolate a more comprehensive account of the internal and external manifestations of facilitation from the perspectives of multiple stakeholders. Therefore, more direction may be provided in improving the quality of facilitation in participatory endeavours, and ensuring the epistemological and political dimensions of participation are attained.
- **Explore evidence-based practice and inter-professional practice from a Foucauldian perspective.** An exploration of the nuanced circulation of power through a multiplicity of interrelated connections may help provide deeper understanding as to why certain forms of knowledge are considered more legitimate than others within EBP and IPP. As a consequence, greater direction may be provided on practical ways to promote power-sharing within EBP and IPP, or address situations that arise where there is an imbalance of power.
- **Explore the effectiveness of the collaboratively designed activities.** The objective of this inquiry was not to test effectiveness of language interventions, rather to explore how changes could be implemented in classroom settings. Nevertheless, robust and objective pre- and post- measures of pupils' language abilities, following the implementation of changes to classroom practices to support language enrichment, may help to inform necessary modifications and adjustments to increase quality, and ultimately increase pupil outcomes.

- **Explore the voices of pupils, parents, and principals.** This inquiry considered the perspectives of the practitioners involved in the change process almost exclusively (i.e., three primary school teachers and one speech and language therapist). Additional potential valuable contributions from pupils, parents, and principals were not comprehensively captured. It would be extremely worthwhile and informative to gather their perspectives through further inquiry – both in terms of the content of the changes and the process of how changes were implemented.
- **Explore sustainability of changes implemented.** This inquiry took place over a relatively short time span. A longitudinal investigation would help illuminate the long-term sustainability of changes, including an exploration of enabling and prohibitive factors of change across multiple dimensions. Factors that influence sustainability, outlined by Wiltsey Stirman et al. (2012), may provide a useful framework for exploration (i.e., context, the innovation itself, processes, and the capacity to sustain).

9 Conclusion

This action research inquiry collaboratively explored how classroom practices may be changed to support effective language enrichment. The inquiry is set in the context of language development amongst primary school-aged children, including children growing up in areas of low SES, and the possible impact of language difficulties if left unaddressed. The potential of the educational environment to support language development, and in particular the effectiveness of language enrichment interventions implemented in the educational environment, is contrasted with reported difficulties implementing a focus on language development in primary schools. This challenge arises in spite of explicit support within school curricula and educational policies for promoting the key role of language development for school-aged children.

Thus, in brief, the foundations of this inquiry are: (i) the verified positive influence of well-developed language skills on children's academic achievement, social skills, emotional regulation, and behavioural skills (Myers & Botting, 2008; Paradice et al., 2007); (ii) the repeated finding that children from lower SES backgrounds are at a greater risk of language difficulties, and therefore more vulnerable to associated problems in school and at home, more likely leading to negative trajectories at a personal, societal and economical level (Clegg et al., 2012; Law & Harris, 2006); (iii) the substantiated facilitative impact of the environment, including the educational environment, on children's language development (Howe, 2008); (iv) the documented effectiveness of a range of language enrichment interventions provided to school-aged children that may address language difficulties that arise (Cirrin & Gillam, 2008; Cirrin et al., 2010; Cleave et al., 2015; Fey et al., 2011; Kan & Windsor, 2010; Law et al., 2004; Marulis & Neuman, 2013; Marulis & Neuman, 2010; Murphy & Schochat, 2013; Petersen, 2011; Pickstone et al., 2009; Roberts & Kaiser, 2011; Strong et al., 2011); (v) the explicit focus in educational curricula and policy on the importance of language development (DES, 1999; NCCA, 2015); and (vi) the reports from national evaluations that highlight difficulties in successfully implementing a focus on language development in the classroom, especially in designated disadvantaged schools (Cregan, 2010; Eivers et al., 2004; Lewis & Archer, 2003; Weir et al., 2002).

Consequently, an epistemological lens on this issue was considered helpful in illuminating more clearly the discrepancy between effective language enrichment interventions reported in the literature and common classroom practices. Multiple ways of knowing embraced within the field of epistemology, such as knowing external to the knower and knowing internal to the knower (Eikeland, 2015; Heron & Reason, 2008), were deemed to assist in exploring and articulating the apparent gap between theory and practice in the context of supporting

school-aged children's language development. In addition, two key constructs that have the interaction of multiple ways of knowing at their core, and that are central to the exploration of how classroom practices can be changed to support effective language enrichment are: evidence-based practice and inter-professional practice. Evidence-based practice is pertinent as the focus of this inquiry was effective language enrichment. Three diverse forms of knowing are typically included in every concept of evidence-based practice: knowing from systematic research; knowing from clinical practice and expertise; and knowing from client preferences (Dollaghan, 2007; Justice, 2006; Spencer, Detrich, et al., 2012). Inter-professional practice is relevant as this inquiry involved two distinct professions as co-researchers (i.e., SLTs and teachers). Similarly, interaction of diverse knowledge from different disciplines is fundamental to inter-professional practice (D'Amour & Oandasan, 2005; Hammick et al., 2009; Nancarrow et al., 2013). Therefore, multiple ways of knowing inherent in evidence-based practice and inter-professional practice underpinned attempts to make changes to classroom practices to support effective language enrichment.

Through this inquiry, I, a speech and language therapist, sought to work collaboratively with teachers to change the status quo in relation to supporting language development in mainstream classrooms. My research question was "*How can classroom practices be changed to support effective language enrichment?*". The objective of achieving change as an integral part of the research process, coupled with the participation of SLTs and teachers, confirms the suitability of employing action research as the methodology for this inquiry. Action research can be both robust for scholars and useful for practitioners (Coghlan, 2011), supporting its appropriateness for conducting a quality PhD study while generating practical relevance for teaching and speech and language therapy professionals. Action researchers share the production of knowledge with participants, are embedded in the specific setting, and act as an agent in the inquiry (Coghlan, 2011). Hence, action research has the potential to embrace multiple ways of knowing, and construct knowledge that is inclusive and socially and democratically sound (Gaventa & Cornwall, 2015; Greenwood & Levin, 2007; Reason & Bradbury, 2008a).

In all action research studies there are two action research projects running in tandem, the core action research project and the thesis action research project (Zuber-Skerritt & Fletcher, 2007). In this study, the core action research inquiry focused on changing classroom practices to support effective language enrichment. It involved four co-researchers: myself, and three teachers who taught in the same primary school in an area of low socio-economic status. Data were gathered primarily through weekly group meetings after-school hours with the co-researchers during the school year 2012-2013. In addition, I collected copious notes in a research journal, video-recorded classroom practices on a number of occasions, and

gathered other data such as edited classroom practice checklists, collaboratively designed templates, assessment results of class tests, and photos of word walls. The core action research inquiry entailed explicit attention from the co-researchers and I on iterative cycles of planning, implementing, evaluating and revising classroom practices. Five action research cycles emerged: Cycle One focused on evaluating current classroom practices; Cycle Two concentrated on changing classroom practices; Cycle Three explored building parental involvement; Cycle Four focused on sharing the learning with the school principal and other staff members; and Cycle Five encompassed embedding and sustaining changes within the school where the study was located, and extending the learning from the changes to other schools in the area, and to a national context.

Occurring in parallel to the core action research inquiry, the thesis action research inquiry explored the processes involved in supporting changes to classroom practices, concentrating and reflecting on the experiences of the core study. While the analysis of the core action research study was a collaborative inquiry between the co-researchers and I, the analysis of the thesis action research study was completed by me independently as a form of meta-analysis on the action research inquiry. To enable the data to be interrogated, meanings to be surfaced, and interpretations to be gleaned within the thesis action research analysis, I applied thematic analysis to the transcribed data over three phases: a thematic analysis of the processes that occurred; a thematic analysis of one of the key processes deduced from phase one, participation; and a thematic analysis of the second key process deduced from phase one, change. The core action research and the thesis action research of this inquiry overlapped and are essentially interwoven. They informed and were informed by each other. In addition, they enabled the completion of content reflection, process reflection, and premise reflection, to support assumptions and interpretations to be challenged and critically appraised (Coghlan and Brannick, 2014). Through the core action research and thesis action research, the process and methods of data analysis employed are clearly articulated and illustrated, which is a key requirement of a quality action research inquiry for many authorities (Bradbury, 2015).

The integration of three voices of action and inquiry is characteristic of an action research inquiry: first, second, and third persons (Reason & Bradbury, 2008a; Reason & Torbert, 2001). First person action and inquiry relates to individual inquiry into assumptions, goals, strategies, behaviours, and philosophy of life (Coghlan & Brannick, 2010). Second person action and inquiry centres around democratic collaboration on an issue of shared concern (Coghlan & Brannick, 2010). Third person action and inquiry typically produces ideas that can be generalised and shared (Reason & Torbert, 2001). Hence, “all good research is for *me*, for *us*, and for *them*” (Reason & Marshall, 1987, p. 112). To conclude this thesis, I

summarise the findings of this inquiry through these three voices, with an understanding that the amalgamation of the three voices is essential for a complete representation of the contribution of this inquiry. The presence of additional criteria that constitute quality in action research are also made explicit.

9.1 “For *Me*”: First Person Conclusions

When embarking on this action research study, I did not set out to complete an exhaustive first-person inquiry. My intention from the outset was to conduct a participatory inquiry with primary school teachers and place the emphasis on second person action and inquiry. On the contrary, while this study was a participatory inquiry between four practitioners, contributions to discussions were frequently based on each co-researcher’s personal reflections on their own distinct practice. Also, the teachers returned to their individual classrooms every week and made changes to their specific professional practice. The former two occurrences are indicative of first person action and inquiry. Each co-researcher shared personal opinions, knowledge, skills and expertise. For example, in the thematic analysis of the processes that occurred during action research Cycles One to Four, ‘sharing knowledge’, ‘sharing expertise’, ‘sharing practice’, ‘sharing opinions’, and ‘reflecting on change’ were deduced as Organising Themes. All of these themes were constructed from combining single personal contributions from co-researchers. Likewise, each co-researcher had individual objectives for changes they wanted to implement in their own classroom practices that existed in parallel to the collective objective of exploring how classroom practices may be changed to support effective language enrichment (e.g., in Cycle Two R3’s aim was to extend pupils’ contributions, which was different to R2’s goal of implementing rich vocabulary instruction). Moreover, in the thematic analysis of the phenomenon of change as it occurred in the data, every individual instance of ‘change-talk’ in the transcripts was categorised as to whether it fell within a personal, professional or political dimension. Over one third of all incidences of ‘change-talk’ fell within the personal dimension (35%). This figure confirms the strong presence of first-person action and inquiry – there were almost twice as many incidences of ‘change-talk’ within the personal dimension as there were of ‘change-talk’ within the political dimension (19%); and incidences of ‘change-talk’ within the personal dimension were not majorly disparate from incidences of ‘change-talk’ within the dominant professional dimension (46%).

Additional first-person action and inquiry can be located in the thesis action research (i.e., meta-analysis of the inquiry), which was completed by me, independent of the co-researchers. This exploration, primarily through three phases of thematic analyses, of the strategies that were used, how action was decided upon, and how co-researchers were encouraged to participate, led me to extrapolate five key propositions. The propositions,

which will be summarised again in second person and third person conclusions below, articulate how I perceive the findings of this inquiry may be applied to a wider context in relation to participation, change and epistemology, across theoretical, practical, and research levels.

Furthermore, the process of participating in this inquiry, and my repeated reflective engagement with the data, led me to challenge some of my own personal assumptions and attitudes and increase my understanding of myself as a change agent (i.e., first person action and inquiry). For instance, I kept a research journal throughout the study, and wrote into it immediately after each meeting with the co-researchers. I entered my experiences, observations, choices, thoughts, reflections, emotions, and interpretations into the journal. The journal served as a personal reflective tool that supplemented other forms of data analysis, enabling the events and my interpretations of the events to be explored and analysed. Many of my research journal entries are contained in the reflection boxes within the core action research. They highlight key first-person deductions in terms of content, process and premise reflection (Coghlan & Brannick, 2014). The subject matter of the reflection boxes indicate a number of lessons I learned from this inquiry and how my awareness increased in relation to certain phenomena, such as:

- educational professionals in this inquiry were less familiar with the technical terms and jargon surrounding language enrichment and theory of language development
- the co-researchers' disdain for the formal and theoretical writing style of published reports or research articles, and their preference for relying on evidence from their personal practice
- concrete templates, structures and resources supported the successful implementation of 'Talk Time'
- co-researchers' previous negative experiences of poor parental involvement resulted in a motivation to 'do' something to address the issue juxtaposed with an inclination to avoid doing anything as it may only lead to similar disappointing outcomes
- the importance of considering numerous possible interpretations when a criticism was raised in relation to the frequency of our meetings, rather than jumping to conclusions, and the importance of not shying away from difficult topics such as conflicting viewpoints
- synthesising factors responsible for change into three categories – making the task of reaching curriculum objectives and fulfilling teacher responsibilities easier, creating a sense of competency and confidence, and focusing on what is most effective for positive pupil outcomes
- recognising that the sustainability of changes needs strong foundations in evaluating and reflecting on practice

Following additional reflection outside of the journal entries, I am conscious of changes to my outlook on evidence-based practice and inter-professional practice. In relation to evidence-based practice, I am aware that before this action research inquiry I tended to privilege empirical evidence over clinical expertise when attempting to address a clinical problem or concern (i.e., privileging propositional knowing over practical knowing). From this action research experience, I believe I have become more receptive to considering, evaluating and prioritising ways of knowing other than propositional knowing. I am more sensitive to, and conscious of, the value of the knowledge, skills and judgement inherent in clinical expertise. In essence, I have greater admiration and respect for epistemological diversity within evidence-based practice. With regard to inter-professional practice, my perspective has changed from a view of inter-professional practice being primarily knowledge exchange to a belief that inter-professional practice requires knowledge assimilation through epistemological power-sharing. An analogy put forward by Cain (2011) in relation to teaching, sticks with me as an appropriate way to now consider collaborative working. That is, inter-professional practice is not a swimming lesson, in which practitioners conduct the practice from the edge of the pool, shouting in words of advice and direction. Rather, inter-professional practice is more like a canoeing lesson: practitioners from different disciplines “are in the sea, already moving, the wash from one canoe affecting the movement of the others, all moved by the sea’s currents, and there are no edges to cling to” (p. 8). Mahatma Gandhi said “our ability to reach unity in diversity will be the beauty and the test of our civilisation”. As a result of this action research inquiry, I now believe that the ability to reach unity, in the diversity of each practitioner’s practice, could be the splendour and measure of effective inter-professional practice.

Thus, evidence of reflexivity, a core quality marker of an action research study (Bradbury, 2015), is provided through first person action and inquiry.

9.2 “For Us”: Second Person Conclusions

Research *with* people, rather than *on* them, is a central value of action research (Coleman, 2014). Within this inquiry two disciplines met regularly, face-to-face over a school year and collaborated on an issue of mutual concern (i.e., second person inquiry) (Coghlan & Brannick, 2014). A participatory space was created that provided protective time away from the demands of daily school life to design, review, and adapt changes. Through the internal and external dimensions of facilitation central to participation, there is evidence that we formed working relationships, exchanged information, planned cooperatively, shared evaluations, theorised collectively, questioned our assumptions and learned together. The thematic analysis of the data from the perspective of participation provides objective

evidence that genuine participation occurred in this action research study, on both an epistemological and a political dimension. The thematic analysis also verifies the representation of the multiple voices of co-researchers. No single pattern of interaction dominated across the time span of this study. These features, confirming the presence of authentic participation and second-person inquiry, are important in validating the quality of an action research study (Coghlan & Brannick, 2010; Herr & Anderson, 2005; Koch & Kralik, 2006). Moreover, the thematic analysis of the data from the perspective of change confirms that change was an integral part of the second-person inquiry - another criteria fundamental in an appraisal of the quality of an action research study (Brydon-Miller et al., 2003; Herr and Anderson, 2005; Kemmis, 2009; Lewis et al., 2009; Coghlan and Brannick, 2010). Bradbury (2015, p. 8) specifies that quality within action research requires actionability - "the extent to which the action research provides new ideas that guide action in response to need". The content of the "action" in this inquiry is documented in the five overlapping action research cycles that emerged through the core action research and is encapsulated in *Proposition 1: Collaboratively designed activities are central to changing classroom practices to support effective language enrichment.*

There are two key aspects to *Proposition 1* and its inherent contribution to practice: (i) concrete and tangible activities and (ii) the manner in which the activities are created, that is, collaboratively designed. The collaboratively designed activities in this inquiry were exemplified through the Classroom Practices Checklist and 'Talk Time'. The collaborative design was facilitated by processes such as creating a participatory space described above, facilitation, grounding the activities in co-researchers' practical knowing, and re-evaluating what knowledge is considered legitimate or not. Consequently, an implication for 'us' is that theoretical assertions central to the evidence-based practices for enriching language skills may be integrated and fit with the structures and processes of classroom practices through the use of collaboratively designed activities. Therefore, it would be beneficial to support regular opportunities for SLTs and teachers to collaboratively design tangible activities, and for these concrete activities to become integral to inter-professional practice. In addition, this inquiry suggests that inter-professional practice would be more authentic and effective if SLTs' and teachers' ways of knowing and priorities were assimilated through epistemological power-sharing leading to epistemological common ground, rather than each profession taking turns to impart their respective expertise. The importance of the amalgamation of different forms of knowing is reinforced by others (Bonderup-Dohn, 2014; Dollaghan, 2007; Haynes et al., 2002; Heron & Reason, 2008; Higgs & Jones, 2000; McIntyre, 2005; Paley, 2006; Rycroft-Malone et al., 2004; Schön, 1991; Seeley, 2014; Sexton & van Dam, 2010). Facilitation, and strategies and skills to ensure optimal facilitation, may be a key factor in realising this participatory endeavour. Challenges related to time, competency, and support

from management may need to be surmounted. For example, keeping up to date with contemporary research, support to establish participatory spaces and develop facilitative skills necessary to develop collaborative activities, and resources to establish the efficacy and effectiveness of the activities constructed. Knowledge elicitation techniques to draw out and assimilate practitioner knowledge and expertise may be helpful, such as discussion groups, case analysis, interviews, or Delphi consensus methods (D. Bishop et al., 2016; Roulstone, 2001). Hence, appropriate infrastructures for inter-professional practice (e.g., organisational, technological, instrumental) may be required that facilitate access, exchange, and utilisation of relevant evidence (Grimshaw et al., 2012).

9.3 “For *Them*”: Third Person Conclusions

Third person action and inquiry typically results in ideas that can be generalised and shared (Reason & Torbert, 2001). Unique to action research, the formal expression of the ideas to be shared can be linked directly to observable behaviour: behavioural understandings gleaned from first person and second person inquiries can be converted into third person assertions (Gustavsen, 2014). The thematic analysis of change highlighted that almost one fifth of all incidents of ‘change-talk’ were related to organisational and policy reform (i.e., 19% of incidents of political dimensions of change). The prevalence of political dimensions of change in the co-researchers’ discussions highlights our consideration of the broader environment such as colleagues, culture, and policies. It has been suggested that if changes are embedded within organisational and structural elements, they are more likely to be sustained and generalised (Chaudoir et al., 2013). There are some initial indicators of the potential sustainability of changes implemented. For example, ‘Talk Time’ was extended to the whole staff of the school where it was designed, whole staff of eight schools in the community, and incorporated into schools’ policies for curriculum planning and implementation through including it in their ‘Whole School Plans for English and Literacy Across the Curriculum’. In addition, ‘Talk Time’ was selected by the NCCA to support effective language enrichment nationally through its acceptance and inclusion into the Toolkit for the new Primary Language Curriculum for Junior Infants to 2nd class pupils. Rigour is added when an action researcher can demonstrate that its learning will be dependable into the future and develop into embedded, operating solutions (Baskerville, 2014), and the ability to sustain changes is considered a quality standard in an action research study (Reason & Bradbury, 2001). A challenge will be whether changes inherent in the collaboratively designed activities of ‘Talk Time’ will be maintained long-term without sustaining an ongoing participatory space to facilitate the review, adaptation, integration and enhancement of the activities as necessary.

Another prominent quality marker within action research, pertinent to third person action and inquiry, is that insights of an action research study have relevance beyond the immediate setting (Bradbury, 2015). Five propositions were determined from the analyses of the core action research and thesis action research analyses. As discussed above, *Proposition 1* states that *collaboratively designed activities are central to changing classroom practices to support effective language enrichment*. *Proposition 2* asserts that *facilitation is an essential third dimension of participation, shared by all co-researchers*. *Proposition 3* contends that *degrees of participation may fluctuate*. *Proposition 4* affirms that *practical knowing is a critical element in models of change*. *Proposition 5* claims that *power plays a role in the interface between practical knowing and propositional knowing*. All five propositions extrapolated from this inquiry provide possible generalizable ideas rooted in observable behaviour that may have meaning and relevance in other contexts, such as practice, policy, theory and research. Thereby, the propositions help to attain the latter quality marker.

First, in relation to practice, while the proposition that *collaboratively designed activities are central to changing classroom practices to support effective language enrichment* contributes directly to SLT/teacher inter-professional practice, other possible implications extend beyond this perspective. For example, applying the learning to investigate whether collaboratively designed activities that incorporate multiple ways of knowing between SLTs and parents may also emerge as central to supporting effective language enrichment in the home. Likewise, exploring whether collaboratively designed activities that fuse propositional and practical knowing between SLTs and a variety of other professionals involved in children's lives may surface as pivotal to supporting effective language enrichment in a range of other contexts and practices (e.g., sports coaches, music teachers, or youth workers). More broadly, other professionals in diverse fields may discover benefits to investigating time and resources in translating theory into practice within inter-professional practice through designing and implementing jointly created activities that reflect the three elements of evidence-based practice - scientific research, clinical expertise, and client preferences (Dollaghan, 2007). Moreover, the proposition that *practical knowing is a critical element in models of change* has potential generalizable ideas for the nature of inter-professional practice. For instance, to effectively include a focus on practical knowing as well as research findings within inter-professional practice, it may be useful to share case studies, videos, templates, or instances of genuine experiences that demonstrate the implementation and effectiveness of professional expertise and principles in real-life settings (Joram, 2007). In addition, the proposition that declares *power plays a role in the interface between practical knowing and propositional knowing* emphasises the need within inter-professional practice to develop greater awareness about what forms of knowing are currently contributing to collaborative practice, assess whether or not there are any imbalances, embrace different points of view,

followed by the requirement to scrutinise and validate claims before they are substantiated. This may help to avoid potential bias, inaccuracies or less effective practices (Kamhi, 2011; Paley, 2006; Rycroft-Malone et al., 2004). However, broader evaluative methods may be necessary to extract and appraise practical knowing that is more implicit and tacit, before it can be assimilated with other forms of knowing through epistemological power-sharing. The case for inter-professional education (IPEC, 2011; WHO, 2010; D'Amour & Oandasan, 2005) is strengthened to explore such possibilities and enable the issues raised to be addressed.

Second, the five propositions extrapolated from this inquiry provide possible generalizable ideas for numerous national policies. Within education, a recommendation from this inquiry is that the *National Strategy: Literacy and Numeracy for Learning and Life* (DES, 2011) explicitly recognises the role of language skills in the development of literacy and numeracy abilities across the primary school years and includes targets that evaluate oral language abilities of pupils. Within health, a suggestion from this inquiry is that the *HSE's National Speech and Language Therapy Service Improvement Initiative* (IASLT, 2016) augments the focus of the initiative on quantity with an explicit concentration on quality. Across health and education, the advice for national policies that promote inter-professional practice (e.g., *Healthy Ireland: A Framework for Improved Health and Wellbeing 2013-2025* (DOH, 2013); *Better Outcomes, Brighter Futures* (DCYA, 2014); *Action Plan for Education 2016-2019* (DES, 2016)) is to provide greater detail and direction on how the collaboration may be achieved in practice such as developing practitioners' facilitative skills and competencies to achieve authentic inter-professional practice.

Third, the propositions deduced from this inquiry provide possible generalizable ideas for theory. One proposition suggests expanding how degrees of participation are considered to accept a bi-directional moving escalator as an accurate representation of levels of participation (Figure 7.2). This contrasts with frequently cited typologies of participation that portray the level of participation in the study as a fixed phenomenon, stemming from how the research agenda is set and how action is decided upon (Arnstein, 1969; Cornwall, 1996; Pretty, 1995). Another proposition advocates that facilitation is the critical 'oil' in a participatory 'machine', paving the way for the epistemological and political dimensions of participation to be attained. Therefore, the implication is that theoretical constructs of participation would be enhanced by encompassing facilitation as a key aspect and recognising its non-static nature. Furthermore, there are possible ideas that may be generalised regarding conceptualisations of facilitation. That is, based on this inquiry, facilitation does not refer to a single method or only a 'meta-skill', but rather a multitude of internal and external skills, tactics, and methods to optimise participation (e.g., questions, statements, proposals, illustrations, motivators), shared by co-researchers. Hence,

theoretical constructs of facilitation may consider this wider perspective. Also, the propositions regarding practical knowing and power offer opinions that may be potentially generalised in relation to conceptualisations of change. For instance, enabling a bi-directional exchange of knowledge, so that there are opportunities for practitioners' insider knowledge to be shared and valued within models of change. This practical knowing may then be assimilated through power-sharing with the other relevant factors in a theory of change.

Fourth, the propositions determined from this inquiry provide possible generalizable ideas for research. For example, it may be valuable for action research to be applied more widely in the field of speech and language therapy because of the suitability highlighted in terms of common overlapping professional and policy objectives and the potential of action research to extract and appraise SLTs' expertise for the benefit of evidence-based practice and inter-professional practice. Other areas for additional research, based on the propositions, relate to exploring methods of evaluating degrees of participation that have maximum sensitivity and specificity, exploring the concept of facilitation further, exploring evidence-based practice and inter-professional practice from a Foucauldian perspective, exploring the effectiveness of the collaboratively designed activities, exploring the voices of pupils, parents, and principals, and exploring sustainability of changes implemented.

The final conclusion in relation to third-person action and inquiry stems from the method of data analysis employed in the thesis action research study: a systematic data analysis framework, using thematic analysis. Thematic analysis is typically employed as a way of capturing and analysing the *content* of change that occurred, but not the *processes* inherent in how change was planned, implemented and evaluated, or as a tool for appraising quality. Therefore, a potential new approach to support the demonstration and appraisal of standards of quality, in a manner that can be replicated by other researchers, is presented. Contribution to action research theory or practice is considered by many to be a further standard of quality (Bradbury, 2015). The data analysis framework described in this thesis helps to attain this quality criterion, by offering a means to other action researchers to demonstrate the value and robustness of an inquiry to a wider audience, through making the quality attributes more transparent, auditable, and available for evaluation. In addition, a critical lens on the processes involved in an action research study is made available, and when combined with a content reflection of the action research cycles, a comprehensive and robust evaluation of the study may be made more accessible. Thus, the relevance, clarity, and potential acceptance of its contribution to the general body of knowledge may be increased (Levin, 2012).

9.4 Close

To close this concluding chapter, it is important to repeat that the integration of first-person, second-person, and third-person voices is necessary for a comprehensive account of the potential contribution of this action research inquiry. When coupled with an acknowledgement of the limitations of this study, the possible consequences of this inquiry for personal, professional, and political dimensions may be more apparent.

It is also worth noting that all endings can be conceived as simply new beginnings - "there will come a time when you believe everything is finished; that will be the beginning" (L'Amour, 1980, p. 1).

10 Epilogue

“Will I show you how I hug my brain?!”

This is a question my six year old niece, Anna, asked me recently at a family gathering. My initial, silent thoughts jumped quickly to “that’s just ridiculous talk” and I dismissed the question as childish naivety, albeit cute and highly entertaining naivety. I was aware of the anatomical position of the brain, enclosed in the tough and solid structure of the skull. I recognised what seemed like a physical impossibility of hugging something that you can’t touch or hold. I was certain this was a feat an adult could not have taught her or demonstrated for her. Therefore, in a split second I judged the probability of being able to hug your brain as being unattainable.

Following my abrupt conclusion to Anna’s question, and as a direct result of my learning through this action research inquiry, I subsequently paused and allowed myself to leave my own familiar world and enter into her world. I was more acutely mindful that there is no single truth and became consciously open to seeing this phenomenon from her perspective. I was explicitly interested in her offer to “show” me how she could hug her brain. I asked for a demonstration of her unique skill and competency – her practical knowing. She obliged, and it was absolutely marvellous!

This simple anecdote is one of countless examples of how the completion of this action research PhD has led to changes in my worldview. I have become more receptive to alternative viewpoints, more amenable to considering ways of knowing other than propositional knowing, more sensitive to human tacit knowledge, more in awe of diversity, and more reflective in the judgements I make. For those lessons alone, the journey has been worthwhile.

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Bibliography

All theses are written to comply with the academic regulations of the discipline and the university with which they are associated. However, a challenge unique to a PhD action research thesis can be adhering to traditional academic writing structures while capturing and reflecting the in-depth experience of being an active co-researcher in the inquiry (Levin, 2012). While it is agreed that there can never be a single 'right way' of completing and reporting action research (Reason and Bradbury, 2008a), PhD students who have employed action research have recognised somewhat limited literature to guide the corresponding academic writing process (Klocker, 2012). As part of my exploration of the best way to structure this thesis, I read a number of books and articles (e.g., Bradbury, 2015; Coghlan and Brannick, 2010; Herr and Anderson, 2005; 2015). In addition, I consulted the following action research PhD theses:

Brady, V. (2012). *Using Participatory Action Research to Develop Antenatal Education in Preparation for Motherhood*. (Unpublished doctoral thesis). Trinity College, Dublin.

Claus, J. (2002). *Understanding Stakeholders: Towards a Theory of Responsiveness in Organisations*. (Unpublished doctoral thesis). Trinity College, Dublin.

Graham Cagney, A. (2011). *Finding the Red Thread: The Role of the Learning Space in Transformative Learning in Executive Education* (Unpublished doctoral thesis). Trinity College, Dublin. [I consulted the Table of Contents and Chapters 5 and 6].

Hynes, G. (2010). *Dying to Breathe: A Conversation at the Crossroads of Respiratory and Palliative Nursing Care – An Action Research Project*. (Unpublished doctoral thesis). Trinity College, Dublin.

Appendices

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Appendix A: Table A: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Allen & Marshall, 2011 Level 1 evidence	UK	16	8 – 9:6 years	SLI SES: NR	Syntax/ Morphology/ Narrative	SLT	1:1 Parent-child interaction therapy (parent responsiveness, parent directiveness, turn-taking, semantic contingency, semantic and syntactic complexity and reinforcement)	Duration: 4 weeks and 6 weeks consolidation Frequency: 1 per week Intensity: NR	Video analysis of 15 min activity/play for: - no of verbal initiations - no of verbal responses - no of non-verbal responses - MLU - proportion of child-to-parent utterances	Significant increase in treatment group but not control group post-therapy (p=.003) and final (p=.002) No significant difference between treatment group and control group No significant difference between treatment group and control group Significant increase in treatment group but not control group post-therapy (p<.001) and final (p<.001) Significant increase in treatment group but not control group post-therapy (p=.001) and final (p=.002)
Apel & Diehm, 2013 Level 2 evidence	US	75 (but only 48 meet inclusion criteria)	Mean age: 6:11 – 7:11years	Low SES	Syntax/ Morphology/ Narrative	Teachers/ teaching assistants	Small groups Morphological awareness intervention: inflectional and derivational affixes – modelling and pupil response	Duration: 8 weeks Frequency: 4 per week Intensity: 25 mins	Experimenter-designed tasks: Relatives task Rehit task Affix identification task Spelling Multimorphemic Words task Test of Reading Efficiency-sight word efficiency subtest and phonetic decoding efficiency subtest	1 st grade students: No significant differences between treatment and comparison group (small effect size d=0.41) 2 nd grade students: Significant differences between treatment and comparison group (p<.001), (large effect size d=1.07) 1 st grade students : Significant differences between treatment and comparison group (p<.005) (medium effect size d=0.67) 2 nd grade students: Significant differences between treatment and comparison group (p<.001) (large effect size d=0.86) 1 st grade students : Significant differences between treatment and comparison group (p<.001) (large effect size d=2.54) 2 nd grade students: Significant differences between treatment and comparison group (p<.005) (large effect size d=1.52) 1 st grade students : Significant differences between treatment and comparison group (p<.01) (large effect size d=0.82) 2 nd grade students: No significant differences between treatment and comparison group (negative effect size d=-0.03) 1 st grade and 2 nd grade: No significant differences between treatment and comparison group

Appendix A continued p. 2: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Apel, Brimo, Diehm & Apel, 2013 Level 2 evidence	US	61 (but only 42 meet inclusion criteria)	Mean age: 6:7 – 7:8 years	Low SES	Syntax/ Morphology/ Narrative	Teachers/ student teachers	Small groups Morphological awareness intervention: inflectional and derivational affixes – modelling and pupil response	Duration: 9 weeks Frequency: 4 per week Intensity: 25 mins	CELF-4 Concepts and Following Directions subtest Test of Reading Efficiency Comprehension Test of Phonological Processing (CTOPP) – elision subtest Experimenter-designed tasks: Relatives task Rehit task Affix identification task Spelling Multimorphemic Words task	1 st grade students: No significant differences between pre- and post- intervention test scores (small effect size d=0.32) 2 nd grade students: No significant differences between pre- and post- intervention test scores (minimal effect size d=.17) 1 st grade students: No significant differences between pre- and post- intervention test scores 2 nd grade students: No significant differences between pre- and post- intervention test scores 1 st grade students: Significant differences between pre- and post- intervention test scores (p<.005) (medium effect size d=0.61) 2 nd grade students: Significant differences between pre- and post- intervention test scores (p<.005) (small effect size d=0.3) 1 st grade students: Significant differences between pre- and post- intervention test scores (p<.005) (large effect size d=1.33) 2 nd grade students: Significant differences between pre- and post- intervention test scores (p<.005) (medium effect size d=0.74) 1 st grade students: Significant differences between pre- and post- intervention test scores (p<.005) (large effect size d=1.72) 2 nd grade students: Significant differences between pre- and post- intervention test scores (p<.005) (large effect size d=1.11) 1 st grade students: Significant differences between pre- and post- intervention test scores (p<.005) (large effect size d=2.91) 2 nd grade students: Significant differences between pre- and post- intervention test scores (p<.005) (large effect size d=2.96) 1 st grade students: Significant differences between pre- and post- intervention test scores (p<.005) (large effect size d=2.34) 2 nd grade students: Significant differences between pre- and post- intervention test scores (p<.005) (large effect size d=1.14)
Bellon-Harn, Byers & Lappi, 2014 Level 2 evidence	US	12	4:0 – 5:11 years	SLI Low SES	Syntax/ Morphology/ Narrative	SLT Students	1:1 Storybooks, modelling of coordinating and subordinating clauses	<u>Intervention condition 1:</u> Duration: 14 weeks Frequency: 3 per week Intensity: 20 mins <u>Intervention condition 2:</u> Duration: 6 weeks Frequency: 4 per week Intensity: 20 mins	Language samples analysed for t-units and presence of subordinating or coordinating clauses	Significant difference between pre- and post-test for words per t-unit, coordinating clauses and subordinating clauses (p<.05) Large effect sizes on all measures (1.65, 2.03) No differences between the two intensity conditions.

Appendix A continued p. 3: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Best, 2005 Level 3 evidence	UK	5	6:10 – 10:7 years	Word-finding difficulties greater than other language difficulties SES: NR	Semantics	SLT	1:1 Selection of appropriate word set for each child Computerised aid	Duration: 6 weeks Frequency: 1 per week Intensity: 60 minutes	Informal Picture Naming task BPVS / CELF Test of Word Finding in Discourse	Significant improvement in naming the intervention items for all children but only for items that child showed comprehension of No significant changes on BPVS or CELF 2 children showed reduction in the no. of word-finding behaviours on Test of Word Finding in Discourse
Bishop, Adams & Rosen, 2006 Level 1 evidence	UK	31	8-13 years	Specific and non-specific language impairment SES: NR	Syntax/ Morphology/ Narrative	Computer-based supervised by school staff	1:1 Use of a computer programme to train grammatical comprehension to be more automatic and error-free. Speech heard was either: Modified speech (Fast ForWord algorithm used) or Slow speech	Duration: 4 weeks Frequency: 5 per week Intensity: 15 mins.	Non-verbal auditory assessments Speech discrimination assessment TROG-2	Accuracy did not differ significantly between the 2 treatment groups Significant improvements obtained for passives, but not over/under, above/below or actives No significant gains on response time No significant gains on TROG for any group (p=.147)
Bolderson, Dosanjh, Milligan, Pring & Chiat, 2011 Level 2 evidence	UK	6	5:3 – 6:6 years	Expressive language difficulties 5 EAL	Syntax/ Morphology/ Narrative	SLT	1:1 Colourful semantics (two sets of verbs – treated and untreated)	Duration: 8 weeks Frequency: 2 per week Intensity: 30-45 mins	Informal verb test RAPT Bus Story TROG	Significant improvement in treated verbs (p=.01) Significant improvement in both treated and untreated verb arguments (p<.01 and p=.02) Significant improvement in information scores (p<.001) and grammar scores (p<.01) Significant improvement in information scores (p<.001) and mean sentence length (p<.05) No significant improvement
Bowyer-Crane, Snowling, Duff, Fieldsend, Carroll, Miles, Gotz & Hulme, 2008 Level 1 evidence	UK	152	Age range: NR Mean age: 4:9 years	Poor oral language SES: mixed	Syntax/ Morphology/ Narrative	Teaching assistant	Alternated 1:1 and small groups Phonology with Reading: Jolly Phonics, blending, segmenting, multi-sensory techniques, books, Oral Language: Rhodes to Language, Time to Talk, Black Sheep, narrative work,	Duration: 20 weeks Frequency: daily Intensity: 20-30 minutes	Sound Isolation Task PAT RAPT Bus Story Picture-naming Neale Analysis of Reading Ability II Letter identification Early Word Recognition Test Non-word Reading Test	P & R group showed advantages over the OL group in: - letter knowledge (p<.001) and small effect size (0.4) - spelling (p<.05) and small effect size (0.4) - prose reading accuracy (p<.01) and small effect size (0.4) - segmenting/blending/deletion (p>.001) and medium effect size (0.7) OL group showed advantages over the P & R group in: - vocabulary (p<.001) and large effect size (1.0) - grammar (p<.05) and small effect size (0.2)

Appendix A continued p. 4: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Boyle, McCartney, O'Hare & Forbes, 2009 Level 1 evidence	UK	161	6-11 years	161 SLI SES: NR	Syntax/ Morphology/ Narrative	SLTs/ SLT assistants	1:1 and Small groups Instructional methods: NR	Duration: 15 weeks Frequency: 3 per week Intensity: 30-40 mins.	CELF-3	No significant difference between direct/indirect or individual/group ($p > .05$) Those with higher rec. language scores at T1 made greater progress at T2 but not at 12 month follow-up (minimal effect size: $d < 0.2$)
Brown, Garzarek & Donegan, 2014 Level 3 evidence	US	3	4:9 – 4:11 years	Low SES	Syntax/ Morphology/ Narrative	SLTs/ SLT students	Small groups Story time books and picture icon cards of five story grammar components (character, initiating event, internal response/emotion, action and consequences)	Duration: 1-4 weeks Frequency: 3 per week Intensity: 15-20 mins	Test of Narrative Retell School Age	Participant 1: immediacy of intervention effect and maintained post-intervention (baseline of 1 to 4.94 to 7.67 respectively) Participant 2: immediacy of intervention effect and maintained post-intervention (baseline of .67 to 4.56 to 7.33 respectively) Participant 3: immediacy of intervention effect and maintained post-intervention (baseline of .4 to 4.19 to 9.33 respectively)
Buysse, Peisner-Feinberg, Soukakou, Fetting, Schaaf & Burhcinal, 2016 Level 2 evidence	US	Study 1: 174 Study 2: 213	Study 1: 4 – 5:2 years Study 2: 4:1 – 5:1 years	Delayed language Study 1: 47% Low SES Study 2: 100% Low SES	Semantics	Teachers	Small groups Recognition and Response model (curriculum-based intervention – various language and literacy curricula, including a focus on phonological awareness, letter knowledge & vocabulary – organised around book reading) Study 1: Read It Again Pre-K! Study 2: Imagine It!	Study 1 & Study 2: Duration: 8 weeks Frequency: 4 per week Intensity: 15 mins	Study 1: Peabody Picture Vocabulary Test – IV Receptive Language TOPEL Phonological Awareness TOPEL Print Knowledge Study 2: Peabody Picture Vocabulary Test – IV Receptive Language TOPEL Phonological Awareness TOPEL Print Knowledge	No statistically significant difference between the treatment and comparison group No statistically significant difference between the treatment and comparison group Statistically significant difference between the treatment and comparison group, small effect size ($d = .36$) Statistically significant difference between the treatment and comparison group ($p < .05$) Statistically significant difference between the treatment and comparison group ($p > .05$) No statistically significant difference between the treatment and comparison group

Appendix A continued p. 5: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Colmar, 2014 Level 2 evidence	Australia	36	4:3 – 5:7 years	Language delay and TD Low SES	Syntax/ Morphology/ Narrative	NR	1:1 Parent training to use the strategies of pausing and open questioning during interactive joint reading	Duration: 16 weeks Frequency: 7 per week Intensity: 5-15 mins	TELD-3 PPVT-3	Significant differences for treatment group (p=.001) and large effects size (1.50 and 1.67) Significant differences for treatment group (p=.001) and large effects size (0.8 and 1.73)
Coyne, McCoach & Kapp, 2007 Level 2 evidence	US	31	5:3 – 6:6 years	Low SES	Semantics	NR	Small groups Incidental exposure vs. Extended instruction Extended instruction vs. Embedded Instruction	Duration: 1 week Frequency: 3 per week Intensity: 20-30 mins.	Informal vocabulary tests of targeted words: Expressive measures of story word definitions (expressive definitions), Receptive measure of story word definitions (receptive definitions), Receptive measure of understanding story words in context (context)	Significant difference on words that received extended instruction than words that received incidental exposure (p<.001) Significant difference on words that received extended instruction than words that received embedded instruction (p<.001) Significant difference on words that received extended instruction than words that received incidental exposure (p<.001) Significant difference on words that received extended instruction than words that received embedded instruction (p,<.001) Significant difference on words that received extended instruction than words that received incidental exposure (p,.001) Significant difference on words that received extended instruction than words that received embedded instruction (p,.001)
Davies, Shanks, & Davies, 2004 Level 2 evidence	UK	34	4:5-7:5 years	Low SES	Syntax/ Morphology/ Narrative	SLT	Small groups Narrative skills program based on Mathes et al. (1997) and Catherall (1998)	Duration: 8 weeks Frequency: 1 per week Intensity: NR	RAPT Bus Story	Significant improvement on RAPT information and grammar and large effect sizes (info d=1.32 and grammar d =.94) Significant improvement on Bus Story (p<.008) and medium to large effect sizes (d=.66 to .92)

Appendix A continued p. 6: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Duff, Fieldsend, Bowyer-Crane, Hulme, Smith, Gibbs & Snowling, 2008 Level 3 evidence	UK	12	Age Range: NR 8 year olds	Reading and language difficulties Low SES	Semantics	Teaching assistants	1:1 Reading with Vocabulary Intervention Session A = reading easy book, reading at instructional level, 5 mins of rich vocab instruction, narrative writing task Session B = review, phonological awareness training, sight words and encouraging in various written contexts, reading at instructional level)	Duration: 9 weeks Frequency: 5 per week Intensity: 2 x 15 mins.	Letter-sound knowledge British Abilities Scale II Word Reading Test Sound Linkage Test of Phonological Awareness Informal target vocabulary test RAPT	Significant gains (p<.05) Significant gains (p<.001) Significant gains (p<.01) Significant gains (p<.001). Large effect size (d=2.99) Significant gains (p<.001) Effect sizes ranging from small to large (d=0.44 to d= 1.23)
Duff, Hulme, Grainger, Hardwick, Miles & Snowling, 2014 Level 1 evidence	UK	145	6 years	SLI At risk of dyslexia	Semantics & Syntax/ Morphology/ Narrative	Teaching Assistants	Small groups Programme devised by research team 'Reading and Language Intervention (RALI)': reading strand = abbreviated version of Reading Intervention and language strand = vocabulary and narrative skills using storybooks	Duration: 18 weeks Frequency: 3 1:1 sessions and 2 groups sessions per week Intensity: 20 mins (1:1), 30 mins (small groups)	YARC: letter-sound knowledge YARC: sound deletion YARC: early word reading YARC: single word reading YARC: passage reading Graded Nonword Reading Test CELF-4: expressive vocab Sound Linkage Test of Phonological Awareness Informal test of spelling Informal test of words taught Informal test of listening comprehension	After 9 weeks treatment, experimental vs control group: small effect size of .33 After 9 weeks treatment, experimental vs control group: negative effect size of -.12 After 9 weeks treatment, experimental vs control group: minimal effect size of .13 After 9 weeks treatment, experimental vs control group: minimal effect size of .05 After 9 weeks treatment, experimental vs control group: minimal effect size of .19 After 9 weeks treatment, experimental vs control group: minimal effect size of .03 After 9 weeks treatment, experimental vs control group: negative effect size of -0.05 After 9 weeks treatment, experimental vs control group: medium effect size of .57 After 9 weeks treatment, experimental vs control group: negative effect size of -0.11 After 9 weeks treatment, experimental vs control group: medium effect size of .46 After 9 weeks treatment, experimental vs control group: negative effect size of -.01

Appendix A continued p. 7: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Ebbels, Nicoll, Clark, Eachus, Gallagher, Horniman, Jennings, McEvoy, Nimmo & Turner, 2012 Level 1 evidence	UK	15	9:11-15:11 years	Language impairments and word-finding difficulties SES: NR	Semantics	SLT	1:1 semantic categories, sorting by semantic category, discussing semantic attributes,	Duration: 8 weeks Frequency: 2 per week Intensity: 15 mins	TAWF TWFD Semantic fluency	Significant difference between treatment and control group and large effects size (p=.04, d=1.00) No significant difference between treatment and control group but medium effects size (p>.05, d=0.76) No significant difference between treatment and control group but minimal effects size (p>.05, d=0.18)
Fey, Finestack, Gajewski, Popescu & Lewine, 2010 Level 2 evidence	US	23	6-8 years	12 SLI 11 non-specific language impairment SES: mixed	Language Processing	Computer-based supervised by SLT	1:1 Fast ForWord (computer-based intervention using acoustically enhance speech stimuli) Vs. narrative-based language intervention Vs. wait /NBLI	Duration: 5 weeks Frequency: 7 per week Intensity: 100 mins.	NLAI Test of Narrative Language	Group gains in both treatment groups were significantly greater than wait/NBLI group (p=.04) and large effect size (d=.89). Individual gains for each group did not differ significantly on NLAI. Combined treatment groups significantly outperformed wait/NBLI group in narrative comprehension (p=.01) with large effect size (d=1.1) but not in oral narration (p=.83) and negative effect size (d=-.09) Children who received NBLI before FFW significantly improved story telling than children who received NBLI after FFW as measured on NLAI (p<.05) and large effect size (d=1.21) No significant differences between groups in the improvements gained from time 1 to time 3 on TNL
Fricke, Bowyer-Crane, Haley, Hulme & Snowling, 2012 Level 1 evidence	UK	180	3:6 - 6:2 years	Children attending mainstream early education/primary school SES: NR	Syntax/ Morphology/ Narrative & Semantics	Teaching assistants	Small groups & 1:1 Manual with modified version of programme by Bowyer-Crane et al. (2008)	Duration: 30 weeks Frequency: 3 per week (group), 2 per week 1:1 Intensity: 15 mins for first 10 weeks, 30 mins for following 20 weeks plus 15 mins (1:1)	CELF- Expressive Vocabulary CELF- Sentence Structure RAPT Information RAPT grammar YARC Sound Isolation YARC Early Word Reading Narrative Story re-telling task (Squirrel story) Informal Listening Comprehension test Informal assessment of alliteration, segmentation, blending, deletion and spelling	Medium effect (d = .68 post-intervention and .63 at 6 months follow-up) Minimal effect (d = .15 post-intervention) Small effect (d= .36 post-intervention & .48 at 6 months follow-up) Large effect (d = .92 post-intervention & 1.1 at 6 months follow-up) Minimal effect (d = .13 post-intervention) Minimal effect (d = .16 post-intervention and .05 at 6 months follow-up) Small effect on MLU (d = .27 post-intervention and .15 at 6 months follow-up). Medium effect on Number of words (d = .62 post-intervention and .48 at 6 months follow-up). Medium effect on Number of different words (d= .55 post-intervention and .53 at 6 months follow-up) Small/medium effect (d = .33 post-intervention and .57 at 6 months follow-up) Medium effect on alliteration matching (d = .52 post-intervention) Minimal effect on sound isolation (d = .13 post-intervention) Medium effect on letter knowledge (d = .54 post-intervention and .51 at 6 months follow-up) Large/small effect on spelling (d = .82 post-intervention and .35 at 6 months follow-up) Significant effects on language (p<.001), narrative (p=.003 and p=.041) & phoneme awareness (p=.031 and p=.01)

Appendix A continued p. 8: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Gill, Klecan-Aker, Roberts & Fredenburg, 2003 Level 2 evidence	US	30	8:4 – 8:9 years	SLI SES: NR	Language Processing	SLT	Small groups Traditional therapy Rehearsal strategy training Rehearsal/visualisation strategy training	Duration: 5 weeks Frequency: 2 per week Intensity: 30 mins.	Oral Directions subtest of the DTLA-2	Significant difference ($p < .001$) between pre- and post-testing but not between post- and delayed for both RST and RVST groups No significant difference comparing RST and RSVT No significant differences in the traditional therapy group Only RSVT group retained significance difference from traditional therapy at delayed testing period
Gillam, Gillam & Reece, 2012 Level 1 evidence	US	24	6:0 - 9:0 years	SLI SES: NR	Syntax/ Morphology/ Narrative	SLT	Small groups Contextualised (literature-based, narrative intervention taught in curriculum-related discourse activities) Decontextualised (No Glamour grammar, social language and category cards with focused stimulation, explanations, recasts)	Duration: 6 weeks Frequency: 3 per week Intensity: 50 mins	CELF-4 Recalling Sentences CELF-4 Formulated Sentences Test of Narrative Language – narrative language index Test of Narrative Language - narrative comprehension subscale Progress monitoring tool: Monitoring Indicators of Scholarly Language (MISL) – macrostructure and microstructure	Significant differences and large effects size for contextualised vs control group ($p = .004$, $d = 3.08$) No significant differences but large effects size for decontextualised vs control group ($p = .054$, $d = 1.48$) Significant differences and large effects size for contextualised vs control group ($p = .013$, $d = .99$) Significant differences and large effects size for decontextualised vs control group ($p = .042$, $d = .76$) Significant differences and small effects size for contextualised vs control group ($p = .021$, $d = .43$) No significant differences but negative effects size for decontextualised vs control group ($p = .257$, $d = -0.04$) Significant differences and large effects size for contextualised vs control group ($p = .015$, $d = .93$) No significant differences but small effects size for decontextualised vs control group ($p = .265$, $d = -0.3$) Macrostructure: No significant differences and small effects size for contextualised vs control group ($p = .27$, $d = .45$). No significant differences and negative effects size for decontextualised vs control group ($p = .525$, $d = -0.24$) Microstructure: Significant differences and large effects size for contextualised vs control group ($p = .003$, $d = 1.19$). Significant differences and large effects size for decontextualised vs control group ($p = .012$, $d = -0.97$)

Appendix A continued p. 9: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Gillam, Olszewski, Fargo & Gillam, 2014 Level 2 evidence	US	43	6:6 – 7:4 years	Language difficulties Low SES (75%)	Syntax/ Morphology/ Narrative & Semantics	SLT	Whole class Narrative instruction (story modelling, story retelling, story generation and comprehension instruction) and embedded vocabulary instruction (defining target vocabulary and encouragement to use in discussion, pictures)	Duration: 6 weeks Frequency: 3 per week Intensity: 30 mins	MISL – macrostructure and microstructure Researcher-designed vocabulary probe	Large effect size for treatment group (d=0.82) and small effect size for control group (d=0.21) Large effect size for treatment group (d=1.02) and small effect size for control group (d= -0.22)
Green & Klecan-Aker, 2012 Level 3 evidence	US	24	6:3 – 9:6 years	SLI SES: NR	Syntax/ Morphology/ Narrative	SLT students	Small groups Teaching story grammar components and story organisation	Duration: 13 weeks Frequency: 2 per week Intensity: 30 mins	Narrative sample analysed for t-units, words per t-units, words per clause, and clauses per t-unit	Significant difference between pre- and post-test (p<.001) and medium effect size (d=.747) for t-unit means No significant difference between pre- and post-test for words per t-units, words per clause, and clauses per t-unit
Harris, Schumaker & Deshler, 2011 Level 2 evidence	US	206	NR Second level	Students with disabilities & Students without disabilities Low SES	Semantics	Teacher	Large groups Word Mapping strategy Vocabulary Strategy (LINCS)	Duration: 10 weeks Frequency: 1 per week Intensity: 45 mins.	Strategy-Use test Word Knowledge test of the 20 target words Morphological Analysis Test	Significant difference (p<.001) for treatment groups and large effect size: partial $\eta^2=0.925$ Significant difference (p<.05) for treatment groups. No significant difference in outcomes for students with disabilities or without disabilities. Large effect sizes (d=4.264 and d=8.259) Significant difference (p<.001) for treatment groups. Significant difference in outcomes for students with disabilities and without disabilities. SWDs performed poorer on learning the meaning of word parts and how to predict word meaning of unknown words.

Appendix A continued p. 10: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Hsu & Bishop, 2014 Level 2 evidence	UK	56	6-11 years	28 SLI 28 typically developing SES: NR	Syntax/ Morphology/ Narrative	Computerised training programme Person supervising NR	1:1 Computerised training programme (sentences containing before/after or above/below – select two pictures from an array of 4 pictures and match the meaning)	Duration: 4 - 6 days Frequency: 1 per day Intensity: 5-7 mins	NEPSY Word span task TROG-E	No significant differences for treatment group No significant differences for treatment group No significant differences for treatment group. Treatment group showed a trend for worsening performance.
Hutchinson & Clegg, 2011 Level 2 evidence	UK	12	Mean age 6:9 years	Language difficulties Low SES	Syntax/ Morphology/ Narrative & Semantics	Teacher teaching assistant	Small group Let's Talk (staff awareness and training of strategies to facilitate and increase opportunities, activities and resources for developing language – attention and listening, vocabulary, syntax, narrative)	Duration: 8 weeks Frequency: 1 per week Intensity: 30 mins	Bus Story - Sentence Length Bus Story – information Bus Story - subordinate clause	Significant difference for treatment but not comparison group (p=.019) Significant difference for treatment but not comparison group (p=.043) Significant difference for treatment but not comparison group (p=.019)
Joffe, Cain & Maric, 2007 Level 2 evidence	UK	25	Age range: NR Mean age: 9:6 years	9 SLI 16 TD SES: NR	Language Processing	SLT	Small groups Mental imagery (using materials of between one and five sentences in length, literal and inferential questioning)	Duration: 3 weeks Frequency: 1-2 per week Intensity: 30 mins.	Stories from Bishop & Adams (1992)	Significantly higher scores obtained in the post-therapy SLI group (p<.001) than no intervention group and large effect size (partial n2=.242) Greater improvement for literal questions than inferential questions (p<.001)
Justice, Meier & Walpole, 2005 Level 2 evidence	US	57	5:0 – 6:5 years	Low SES who scored below median score on the Phonological Awareness Literacy Screening- Kindergarten	Semantics	Graduate students education	Small groups Book reading intervention with 10 storybooks 6 target words selected from each book – 3 were elaborated (explicitly defined and use of word in contexts)	Duration: 10 weeks Frequency: 1 per week Intensity: 20 mins.	Informal assessment of the 60 target words	Significant difference (p<.001) for elaborated words but not non-elaborated words; large effect size (d=1.22) for elaborated words and medium effect size for non-elaborated words (d=0.53) Significant difference (p<.05) for treatment group as compared to control group

Appendix A continued p.11: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Lee & Pring, 2016 Level 2 evidence	UK	180	4-7 years	Language delays, including children for whom EAL (22%). Low SES	Syntax/ Morphology/ Narrative	Teachers and teaching assistants	Small groups & whole class activities Talk Boost (receptive and expressive language programme)	Duration: 10 weeks Frequency: 3 per week Intensity: 30 mins	Bus Story Test RAPT	Significant differences between intervention group and comparison group (p=.001) Information: Significant differences between intervention group and comparison group (p=.001) Grammar: Significant differences between intervention group and comparison group (p<.001)
Lever & Senechal, 2011 Level 2 evidence	Canada	40	5-6 years	Low SES 25% EAL	Syntax/ Morphology/ Narrative	NR	Small groups Dialogic reading group (Read Together, Talk Together Kit) Vs. Phoneme awareness program	Duration: 8 weeks Frequency: 2 per week Intensity: 20 mins.	ENNI Number of words, type/token ratio, MLU, cohesion	Dialogic reading group significantly higher story grammar scores than alternative group (p<.05). Small effect size (d=.28 – d=.38) No significant differences between groups (p>.05)
Maul & Ambler, 2014 Level 3 evidence	US	3	5:7 – 6:8 years	SLI SES: NR	Syntax/ Morphology/ Narrative	SLT	1:1 Dialogic storybook reading to evoke production of specific bound morphemes	Duration: 6 weeks Frequency: 4 per week Intensity: 40 mins	Probes of target behaviours Language sample	Participant B reached the criterion of 90% accuracy across 3 consecutive sessions, requiring only 7 treatment sessions Participant A and C reached 89.2% accuracy and 85.1% accuracy Percentage of non overlapping data 100%
McCartney, Boyle, Ellis, Bannatyne & Turnbull, 2011 Level 2 evidence	UK	38	6-11 years	SLI SES NR	Syntax/ Morphology/ Narrative	Teachers/ classroom assistant	1:1 and small group Consultancy model: Therapy manual specifying language learning activities	Duration: 13-21 weeks Frequency: 1-2 per week Intensity: NR	CELF-3	No statistically significant differences between pre- and post-intervention receptive or expressive scores (p>.132)
McLeod & Apel, 2015 Level 4 evidence	US	1	6:7 years	SLI SES: NR	Syntax/ Morphology/ Narrative	SLT students	1:1 Morphological Awareness Intervention (affixes)	Duration: 7 weeks Frequency: 3-4 per week Intensity: 35 mins	Experimenter developed tasks of morphological awareness (affix identification, relatives task, rehit task) Test of Word Reading Efficiency – sight word efficiency subtest and phonetic decoding efficiency subtest Test of Silent Reading Efficiency and Comprehension	21% gain on rehit task, 66% gain on relatives task and 4,500% gain on affix identification task SWE – no overlap PDE – overlap Overlap

Appendix A continued p. 12: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Mecrow, Beckwith & Klee, 2010 Level 2 evidence	UK	35	4:2 – 6:10 years	Language difficulties SES: mixed	Syntax/ Morphology/ Narrative	Teaching assistants	1:1 Commercially available programmes, resources and activities created by TAs	Duration: 10 weeks Frequency: 4 per week Intensity: 45-60 mins.	Probe tasks for target and control behaviours CELF-P	Both target and control groups showed significant gains – average increase for targets larger than controls (p<.0005) Significant difference but minimal effect size on CELF-P (d=0.12 and d=0.08)
Munro, Lee & Baker, 2008 Level 2 evidence	Australia	17	4:8 – 6:5 years	SLI SES: NR	Syntax/ Morphology/ Narrative	SLT	1:1 Hybrid Intervention (scripted oral narrative contextualised within a picture-based story scripted narrative), follow-up home activities	Duration: 6 weeks Frequency: 1 per week Intensity: 60 minutes	The Token Test for Children Hundred Picture Naming Test The Bus Story Preschool and Primary Inventory of Phonological Awareness Developmental Test of Visual-Motor Integration	Significant difference (p<.05) on all assessments of semantics and phonological awareness, with the exception of semantic association Large effect sizes ranging from e2=0.27-57
Nash & Snowling, 2006 Level 2 evidence	UK	24	7:11 -8:10 years	Poor language skills Low SES	Semantics	Teacher	1:1 and Small groups Teaching new vocabulary using definitions vs teaching new vocabulary from written context	Duration: 6 weeks Frequency: 2 per week Intensity: 30 mins.	Informal test of 24 nouns and 24 verbs (selected from Bird et al. (2001)) Neale Analysis of Reading Ability II	No significant difference on receptive vocab. measure for both groups (p>.05) No significant difference on expressive vocab measure for both groups (p>.05) Significant difference (p<.05)for context group post-intervention in expressing meanings , carried primarily by nouns rather than verbs Expressive: large effect size for definitions group (d=1.22 and 2.07) and context group (d=2.84 and 3.35) No significant difference on reading comprehension or reading accuracy for both groups (p>.05)
Neuman & Dwyer, 2011 Level 2 evidence	US	12	4:2 – 4:3 years	Low SES	Semantics	Teachers	Small groups Phase 1: World of Words – multimedia programme to foster vocabulary and conceptual knowledge Phase 2: World of Words adapted to include review of hard words and more review and practice across topics (and adapted to make category properties more explicit	Duration: 16 weeks Frequency: 5 per week Intensity: 12 mins	World of Words expressive vocabulary test World of Words word organisation test World of Words 'tell me' task	Phase 1: Increase of 28% of easy words and 9% of hard words learned for treatment group Phase 2: Significant difference between treatment and comparison group on post-intervention scores (p<.001) and medium effect size (d=.64). Increase of 8% of easy words and 22% of hard words learned for treatment group Phase 1: No improvement for treatment group Phase 2: Significant difference between treatment and comparison group on post-intervention scores (p<.001) (large effect size d=0.84) Phase 1: No improvement for treatment group Phase 2: No significant difference between treatment and comparison group on post-intervention scores (minimal effect size d=0.16)

Appendix A continued p.13: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Parsons, Law & Gascoigne, 2005 Level 3 evidence	UK	2	8:10 – 9:5 years	Language Difficulties SES: NR	Semantics	SLT	1:1 18 treatment words from 4 numeracy curriculum topics (semantic and phonological methods with repetition) Home involvement encouraged	Duration: 6 weeks Frequency: 2 per week Intensity: 25-35 mins.	Informal assessment of target words BPVS & Test of Word Finding Error Analysis	Significant difference (p<.001 and p<.01) for both children No change on BPVS or Test of Word Finding Total no. of errors decreased.
Pollard-Durodola, Gonzalez, Simmons, Kwok, Taylor, Davis, Kim & Simmons, 2011 Level 2 evidence	US	125	4:0 – 5:3 years	Delayed language Low SES	Semantics	Teachers	Whole class WORLD shared book reading (introduce, review and integrate new words and science concepts; before, during and after-book reading routines)	Duration: 12 weeks Frequency: 5 per week Intensity: 20 mins	Peabody Picture Vocabulary Test – III Expressive One Word Picture Vocabulary Test Researcher-Developed Receptive Vocabulary Test Researcher-Developed Expressive Picture Vocabulary Test	No significant differences between treatment and control group (p=.802) No significant differences between treatment and control group (p=.802) Significant effects for treatment group (p<.001). No significant difference between treatment and control group. Mean of treatment group had improved to 73%, comparison group had improved to 58%. No significant difference between treatment and control group.
Popescu, Fey, Lewine, Finestack, Popescu, 2009 Level 2 evidence	US	18	Age range: NR Mean age= 7:9 years	9 SLI 9 TD SES: NR	Syntax/ Morphology/ Narrative	NR	1:1 Narrative-based language intervention (specifically created story which contained high concentration of grammatical targets)	Duration: 5 weeks Frequency: 2 per week Intensity: 15 mins.	Event-related potentials (EPRs) Narrative Language Ability Index form the Test of Narrative Language	Significant changes of SLI cohort in their brain responses, leading to the presence of typical incongruous-congruous difference (p=.02) No significant gains in grammatical measures (p<0.4)

Appendix A continued p.14: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Puhalla, 2011 Level 1 evidence	US	66	Mean age: 6:5 – 6:8 years	44 Language difficulties, at risk of reading failure 22 TD SES: mixed	Semantics	Teachers	Small groups Read Aloud curriculum (promote vocabulary and comprehension skills through read alouds on the theme of animals)	Duration: 1 week Frequency: 5 per week Intensity: 20 mins	Storybook vocabulary assessment of the Read Aloud curriculum	Statistically significant difference between treatment and comparison group ($p < .001$), small effect size (0.46)
Ramirez, Walton & Roberts, 2013 Level 2 evidence	Canada	108	5:0 – 6:8 years	Low SES	Syntax/ Morphology/ Narrative	Kindergarten teachers	Whole class Picture books and strategies for teaching morphological awareness and explicitly teaching vocabulary (e.g. focusing attention on compound words, eliciting other compound words, emphasising target words, flash cards)	Duration: 12 weeks Frequency: 2 per week Intensity: 30 mins	Experimental measure – Making Words (make a new word by combining two or three words) Expressive Vocabulary Test – Second edition	Significant differences between pre and post-test ($p < .001$) Significant differences between pre and post-test ($p < .001$)
Silverman & Hines, 2009 Level 2 evidence	US	85	4:6 – 8: 6 years	Low SES 32% ELL	Semantics	Teacher	Small groups Multi-media (video clips) vs. non-multimedia using a scripted intervention on a science topic, targeting 100 words	Duration: 12 weeks Frequency: 3 per week Intensity: 45 mins.	Informal assessment of knowledge of target words Peabody Picture Vocabulary Test Informal science concepts knowledge test	Significant difference ($p < .05$) for the multimedia intervention for ELLs but not non-ELLs Significant difference ($p < .05$) for the multimedia intervention for ELLs. Large effect size ($d = .97$) All children gained at the same rate. No effects for condition or language background.
Smith-Lock, 2015 Level 2 evidence	US	5	Mean age: 5:2 years	SLI	Syntax/ Morphology/ Narrative	SLT/ Teacher/ Teaching Assistant	Small groups Rule-based learning of regular past tense (77 not in test) – play-based activities and feedback	Duration: 8 weeks Frequency: 1 per week Intensity: 60 mins	Grammar Elicitation Test	Significant difference between pre- and post-intervention scores ($p = 0.35$ to $p = 0.002$) No significance improvement in non-targeted grammatical form

Appendix A continued p.15: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Smith-Lock, Leitao, Lambert & Nickels, 2013	Australia	34	Mean age: 5:1 years	SLI SES: NR	Syntax/ Morphology/ Narrative	SLT/ Teacher/ Teaching Assistant	Small groups Expressive grammar programme for individual grammar targets (focused stimulation, recasting, imitation)	Duration: 8 weeks Frequency: 1 per week Intensity: 60 mins	Grammar Elicitation Test	Significant improvement between pre- and post-intervention scores for treatment group ($p < .001$), but not for control group Large effect size for treatment group ($d = 1.24$) Performance on untreated grammatical goals did not change
Smith-Lock, Leitao, Prior & Nickels, 2015 Level 1 evidence	Australia	31	5 years	SLI SES: mixed	Syntax/ Morphology/ Narrative	SLTs/ Teachers/ Teaching assistants	Whole class and small group Cueing approach (hierarchy of cues to elicit correct answer) vs Recasting (correct answer provided to child after an error)	Duration: 8 weeks Frequency: 1 per week Intensity: 60 mins	Grammar Elicitation Test	Cueing group made significantly more progress than the recasting group (large effect size of 1.49 vs 0.85) No significant difference between the groups at post-treatment maintenance
Spencer-Kelley, Goldstein, Spencer & Sherman, 2015 Level 3 evidence	US	18	4:0 – 4:11 years	Language delay Low SES	Syntax/ Morphology/ Narrative & Semantics	Teachers	Small groups Story Friends (brief instructional lessons embedded in prerecorded storybooks)	Duration: 14 weeks Frequency: 5 per week Intensity: NR	Informal vocabulary unit test ASC PPVT-4 CELF-Preschool Mastery monitoring probes	Significant difference between treatment and comparison group and large effects size ($p < .01$, $d = 1.37 - 2.62$) No significant difference between treatment and comparison group ($p = 0.01$, $d = 1.37 - 2.62$) No significant difference between treatment and comparison group ($p = 0.74$) and small effect size ($d = 0.22$) No significant difference between treatment and comparison group ($p = 0.39$) and small effect size ($d = 0.23$)
Spooner, 2002 Level 3 evidence	UK	2	6:3 & 9:9 years	SLI SES: NR	Syntax/ Morphology/ Narrative	SLT	1:1 Verbal questions, written questions cards, sentence segmentation and reassembling	Duration: 20 weeks Frequency: 2 per week Intensity: 30 mins.	STASS RAPT CELF-R CELF-Preschool	No statistical analysis completed Increases in RAPT, STASS and CELF scores on some subtests

Appendix A continued p.16: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Stiegler & Hoffman, 2001 Level 3 evidence	US	3	9: 2 – 9:10 years	Word-finding difficulties SES: NR	Semantics	SLT	1:1 Provision of on-line word finding processing via immediate, appropriate feedback, request for associative information, request for clarification, confirmation, phonemic cueing or provision of target word	Duration: 5 weeks Frequency: 1 per week Intensity: 15 mins.	Average percentages of overt word-finding behaviours relative to total words produced	All 3 subjects demonstrated a decrease in the level of occurrence of overt word-finding behaviours No statistical analysis completed
Swanson, Fey, Mills & Hood, 2005 Level 3 evidence	US	10	6:11-8:9 years	SLI SES: NR	Syntax/ Morphology/ Narrative	SLT	1:1 Narrative-based language intervention (2 grammatical and narrative goals for every 2 weeks), using 26 novel stories (story-retell, story generation, repeated retellings)	Duration: 6 weeks Frequency: 3 per week Intensity: 50 mins.	Narrative Quality Number of different words DSS	8 of the 10 children made clinically significant gains (p<.05) for narrative quality, but not on Number of different words or DSS.
Wake, Levickis, Tobin, Gold, Ukoumunne, Goldfeld, Zens, MHEcon, Law & Reilly, 2015 Level 1 evidence	Australia	172	6 years	Language difficulties SES: mixed	Syntax/ Morphology/ Narrative & Semantics	Language assistants (psychology and sociology graduates)	1:1 Language for Learning (home visiting, activities with language assistant, activities for parent and child, activities for home practice – based on programme in Boyle et al., 2007)	Duration: 18 weeks (6 weeks x 3 blocks) Frequency: 1 per week Intensity: 1 hour	CELF-Preschool II Comprehensive Test of Phonological Processing Children's Communication Checklist, 2 nd edition Peabody Picture Vocabulary Test Bus Story	No significant difference between treatment and control group in expressive language (p=0.49) No significant difference between treatment and control group in receptive language (p=0.2) Significant difference between treatment and control group and small effect size (p=0.1, d=0.36) No significant difference between treatment and control group No significant difference between treatment and control group No significant difference between treatment and control group

Appendix A continued p.17: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Wake, Tobin, Levickis, Gold, Ukoumunne, Zens, Goldfeld, MHEcon, Law & Reilly, 2013 Level 1 evidence	Australia	187	Mean age: 4-1 – 4.2 years	Language difficulties SES: mixed	Syntax/ Morphology/ Narrative & Semantics	Language assistants (psychology and sociology graduates)	1:1 Language for Learning (home visiting, activities with language assistant, activities for parent and child, activities for home practice – based on programme in Boyle et al., 2007)	Duration: 18 weeks (6 weeks x 3 blocks) Frequency: 1 per week Intensity: 1 hour	CELF-Preschool II Comprehensive Test of Phonological Processing Letter knowledge task Children's Communication Checklist, 2 nd edition	No significant difference in expressive language and small effect size (p=0.12, d=0.2) No significant difference in receptive language and minimal effect size (p=0.69, d=0.05) Significant difference and medium effect size (p<.001, d=0.6) Significant difference and small effect size (p=.03, d=0.3) No significant difference and negative effect size (p=.45, d=-0.1)
Wener & Archibald, 2011 Level 2 evidence	Canada	9	8:8 – 9:7 years	3 SLI 2 Specific working memory impairment without language impairment 4 mixed language and working memory impairments SES: NR	Syntax/ Morphology/ Narrative & Semantics	SLT students / Teaching assistants	1:1 Verbal/ linguistic strategies (modelling, connecting, coding stimuli verbally) or memory/ visuospatial strategies (represent concepts and ideas in mental or drawn pictures)	Duration: 8 weeks (2 x4 weeks) Frequency: 1 per day Intensity: 45 mins	Probe Task (pictures of common objects, sentence formulation) CELF-4 – Concepts and following directions and Word Structure subtests AWMA – listening recall, counting recall, odd-one-out, and spatial span subtests	Significant differences in picture recall following verbal/linguistic intervention (p=0.51) No significant differences in picture recall following visuospatial /memory intervention (p>0.05) Significant differences in sentence formulation following visuospatial /memory intervention (p=0.36) No significant differences in sentence formulation following verbal/linguistic intervention (p>0.05) More children improved after the verbal/linguistic intervention than the visuospatial/memory intervention on word structure. Equivocal outcomes on concepts and following directions. More children improved after the verbal/linguistic intervention than the visuospatial/memory intervention on verbal working memory test. Equivocal outcomes on visuospatial working memory.
Westerveld & Gillon, 2008 Level 2 evidence	NZ	20	7:11- 9:2 years	10 Reading disability 10 TD SES: mixed	Syntax/ Morphology/ Narrative	SLT	Small groups Narrative intervention (increase knowledge of story structure orally) via use of stories, meta-narrative awareness, scaffolding, and graphic organisers	Duration: 6 weeks Frequency: 2 per week Intensity: 60 mins.	Oral narrative production: re-tell an unfamiliar story Oral narrative comprehension: ask child 10 questions based on above Reading ability : NARA	No significant gains for treatment group for no of utterance, number of different words or grammatical competence. Significant gains for verbal fluency(p<.05) and large effect size (d=1.65) Significant gains for treatment group (p<.05) and large effect sizes (d=1.55 – d=1.89) No significant gains for treatment group (p=.571)

Appendix A continued p.18: Summary of the characteristics of studies included in the systematic review

Study / Level of Evidence	Country	Sample Size	Age range	Sample Characteristics	Primary Focus of Intervention	Person delivering instruction	Instructional methods specified	Dosage	Assessments used to measure outcomes	Intervention outcomes
Zens, Gillon & Moran, 2009 Level 2 evidence	NZ	38	6:3 – 8:2 years	19 SLI 19 TD SES: mixed	Semantics	SLT	Small groups Phonological awareness Training Programme Followed by Semantic intervention based on familiar topics and vocabulary using clipart – generation, association and transfer And reverse order	Duration: 6 weeks Frequency: 2 per week Intensity: 60 mins.	Phonological awareness probes and semantic probes Word-learning probes (fast-mapping, word-learning, word-learning test)	Significant difference (p<.001) for treatment groups, once both had received phonological awareness intervention No significant difference in outcomes Group who received phonological awareness intervention first, displayed significant improvement (p<.001) and medium effect sizes (f=.3) Group who received semantic intervention first, displayed significant improvement (p<.001) and large effect size (f=.82)
Zipoli, Coyne & McCoach, 2011 Level 2 evidence	US	80	4:11 – 6:2 years	Low SES At risk for reading difficulties	Semantics	School Graduate interns of special education / kindergarten teachers Schools 2 & 3: Kindergarten teachers	1: School 1: small groups School 2 & 3: whole class Storybook readings and extended instruction (no review vs. embedded review vs. semantically related review)	Duration: 18 weeks Frequency: 2 readings per week Intensity: 10 mins (no review group); 13 mins (embedded review group); 20 mins (semantically related review group)	Researcher-developed TWK measure (provide a definition for a target word in the absence of and within a context) – score of 2, 1 or 0 assigned The Peabody Picture Vocabulary Test III Expressive One-Word Picture Vocabulary Test	Significant difference between the no-review group vs an average of embedded review group and semantically related review group (p<.001 and d = .88) Medium effect size of no review vs. embedded review (d = .69) Large effect size of no review vs. semantically related review (d= of 1.03) Significant difference between embedded review composite score and semantically related review composite score (p<.001, small effect size of .35) Statistically significant difference pre- to posttest (p<.001) – differences between groups NR No statistically significant difference pre- to posttest (p >.05)
Zucker, Solari, Landry & Swank, 2013 Level 1 evidence	US	614	4 years	Low SES (5% EAL)	Semantics	Teachers	Small groups Tier 2 book review and extended vocabulary instruction	Duration: 4 weeks Frequency: 20 per week Intensity: 15 mins	CIRCLE- C-PALLS: Rapid Vocabulary Naming Test Proximal measure of receptive vocab Proximal measure of expressive vocab Proximal measure of listening comprehension	No significant difference between treatment and comparison group Significant difference between pre- and post-intervention scores (p<.001) and large effect size (d=.081) No significant difference between pre- and post-intervention scores No significant difference between pre- and post-intervention scores

Appendix B: Ethical approval



COLÁISTE NA TRÍONÓIDE, BAILE ÁTHA CLIATH | TRINITY COLLEGE DUBLIN
Ollscoil Átha Cliath | The University of Dublin

19/06/2012

Application HT 35 Academic Year 2011/12

Applicant: Duana Quigley

Title of Research: How can classroom practices be changed to support effective language enrichment?

Dear Duana,

Your submission for ethics approval for the research project above was considered by the Research Ethics Committee, School of Linguistic, Speech and Communication Sciences, Trinity College Dublin, on Tuesday, 19 June 2012, and has been approved in full. We wish you the very best in your research activities.

Best wishes,

Dr Lorna Carson
Chair, Research Ethics Committee
School of Linguistic, Speech and Communication Sciences
Trinity College Dublin



An Léaráid Léinn Teanga agus Cumarsáide,
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Appendix C: Participant information leaflet

Participant Information Leaflet: Classroom Teacher

Teacher Information Leaflet

Research Project: "How can classroom practices be changed to support effective language enrichment?"

Duana Quigley M.Sc., Clinical Speech & Language Studies, Trinity College, Dublin.

What is this research study about?

In areas of low socio-economic status (SES), it has been documented that a large proportion of children have reduced language competence. This negatively impacts upon academic achievement and is associated with social, emotional and behavioural difficulties that can have pervasive consequences. Environmental factors can have a facilitative or impeding impact on language development. In particular for school-aged children, the school environment, classroom practices and the interactions that occur in the educational context are central to language enrichment. This environment can support children to achieve their potential linguistically, academically and in their participation in society.

As part of the PhD research programme I am undertaking in Trinity College, I am completing a research project. The aim of this research project is to help improve children's oral language abilities, by identifying and evaluating a variety of different classroom practices that may support effective language enrichment.

Where will the research study take place?

The study will take place in your classroom in your school.

Who will be involved in the research study?

I hope to recruit 2 to 3 teachers from your school staff to participate. Consent will be sought from parents for their children to participate in the classroom lessons and to complete anonymous evaluation forms. In addition, I plan to recruit a number of parents to participate in parent focus groups. The research study will be led by Duana Quigley, a speech and language therapist, with experience of working in the educational context.

What will the research study involve if I agree to participate?

The chosen methodology for this research study is action research. Action research is characterised by active participation and collaboration with practitioners, in this case, primary school teachers. In collaboration with the participating teachers, we will complete the hallmark cycles of change of action research, namely, planning a change, acting and observing the process and outcomes of change, reflecting on and revising the plan, acting and observing, reflecting, and so on. Feedback and reflection from pupils and parents, in addition to that of the teachers and researcher will be incorporated into each cycle of change.

Therefore, participating teachers will be asked to take part in planning, implementing, reflecting and revising classroom practices to support effective language enrichment for the pupils in their class. The classroom lessons will be video recorded and the reflection/planning sessions will be audio recorded.

Participant Information Leaflet: Classroom Teacher

Are there any benefits for me?

As outlined, action research is characterised by active involvement of the participants so by agreeing to participate you will have a genuine voice in any changes planned and implemented, and in how the research progresses. In addition, the process may provide: experience in conducting research; support in trying out new pedagogical practices; help further develop reflective practice; and provide continuous professional development in a natural school context where you do not have to remove yourself from your class. Furthermore, you may positively influence teaching and learning, leading to better pupil outcomes.

How much time will be involved if I agree to participate?

The exact time required will be based on need, may vary across the project and will be negotiated with participating teachers and the school principal. I suggest weekly classroom lessons of approximately 60 minutes duration, and weekly reflective/planning sessions of 60 minutes duration, for a school year (September 2012 – June 2013).

How will the data collected be used?

I hope that this research study will help us to identify, design and evaluate a variety of different classroom practices that may support effective language enrichment. All information about participating teachers, pupils and parents will be kept confidential. The identities of participants in this study will be anonymised so that they can not be recognised in any written materials. The findings of the study may be published or presented at national or international meetings, but no identifying information will be included. The school will not be named and number codes will be used instead of teachers', pupils' and parents' names.

Videos of class lessons will only be viewed by the researcher and participating teachers, unless consent is obtained to segments with others. Similarly, audio recordings of reflective/planning sessions will only be heard by the researcher and participating teachers, unless consent is obtained to share segments with others. All equipment used and data collected will be stored on a password protected computer in a secure locked storeroom. If you wish, a copy may also be stored in your school.

What do I do now?

If you are interested in participating in this research study please fill out the consent form and return it to your school principal. If you think you might be interested, but have further questions, please contact: Duana Quigley (087 2616793 / quigledu@tcd.ie), or contact my supervisor, Dr Martine Smith (087 2886766 / mmsmith@tcd.ie).

Thank you. You can keep this information leaflet for your own records.

Appendix D: Gatekeeper information leaflet

Gatekeeper Information Leaflet: School Principal

School Principal Information Leaflet

Research Project: "How can classroom practices be changed to support effective language enrichment?"

Duana Quigley M.Sc, Clinical Speech & Language Studies, Trinity College, Dublin.

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In areas of low socio-economic status (SES), it has been documented that a large proportion of children have reduced language competence. This negatively impacts upon academic achievement and is associated with social, emotional and behavioural difficulties that can have pervasive consequences. Environmental factors can have a facilitative or impeding impact on language development. In particular for school-aged children, the school environment, classroom practices and the interactions that occur in the educational context are central to language enrichment. This environment can support children to achieve their potential linguistically, academically and in their participation in society.

As part of the PhD research programme I am undertaking in Trinity College, I am completing a research project. The aim of this research project is to help improve children's oral language abilities, by identifying and evaluating a variety of different classroom practices that may support effective language enrichment.

Who will be involved in the research study?

I hope to recruit 2 to 3 teachers from your school staff to participate. Consent will be sought from parents for their children to participate in the classroom lessons and to complete anonymous evaluation forms. In addition, I plan to recruit a number of parents to participate in parent focus groups. The research study will be led by Duana Quigley, a speech and language therapist, with experience of working in the educational context.

As school principal, you are invited to act as gatekeeper for recruitment of child participants, parent participants and teacher participants for this research study.

Where will the research study take place?

The study will take place in your school. The classroom lessons, reflective/planning sessions, and completion of child evaluation forms will take place in the participating teachers' classrooms. The parent focus groups will take place in the parents' room of your school.

What will the research study involve if I agree to participate?

The chosen methodology for this research study is action research. Action research is characterised by active participation and collaboration with practitioners, in this case, primary school teachers. In collaboration with the participating teachers from your school, we will complete the hallmark cycles of change of action research, namely, planning a change, acting and observing the

Gatekeeper Information Leaflet: School Principal

process and outcomes of change, reflecting on and revising the plan, acting and observing, reflecting, and so on. Feedback and reflection from pupils and parents, in addition to that of the teachers and researcher will be incorporated into each cycle of change.

Therefore, participating teachers will be asked to take part in planning, implementing, reflecting and revising classroom practices to support effective language enrichment for the pupils in their class. The classroom lessons will be video recorded and the teacher reflection/planning sessions and parent focus groups will be audio recorded.

As gatekeeper, you will be required to:

- o distribute information leaflets and consent letters to your staff
- o distribute information leaflets and consent letters to parents of children whose teachers agree to participate
- o hold returned consent forms from teachers and parents in a secure location for Duana Quigley
- o provide permission for Duana Quigley to be on-site for classroom lessons, reflective/planning sessions and parent focus groups
- o facilitate access to the parents' room for parent focus groups

Are there any benefits for me?

As outlined, action research is characterised by active involvement of the participants so by agreeing to participate your staff will have a genuine voice in any changes planned and implemented, and in how the research progresses. In addition, the process may provide: experience in conducting research; support in trying out new pedagogical practices; help further develop reflective practice; and provide continuous professional development in a natural school context where teachers do not have to remove themselves from their class. Furthermore, the study seeks parental input and may positively influence teaching and learning, leading to better pupil outcomes.

How much time will be involved if teachers agree to participate?

The exact time required from participating teachers will be based on need, may vary across the project and will be negotiated with the teachers and the school principal. I suggest weekly classroom lessons of approximately 60 minutes duration, and weekly reflective/planning sessions of 60 minutes duration, for a school year (September 2012 - June 2013).

Parent focus groups will take place during school time, one or two times a term (3 to 6 times from September 2012 to June 2013). The exact time will be decided based on parents preferred time. The discussion groups will last approx. 1 hour.

How will the data collected be used?

I hope that this research study will help to identify, design and evaluate a variety of different classroom practices that may support effective language enrichment. All information about participating teachers, pupils and parents will be kept confidential. The identities of participants in this study will be anonymised so

Gatekeeper Information Leaflet: School Principal

that they can not be recognised in any written materials. The findings of the study may be published or presented at national or international meetings, but no identifying information will be included. The school will not be named and number codes will be used instead of teachers', pupils' and parents' names.

Videos of class lessons will only be viewed by the researcher and participating teachers, unless consent is obtained to share segments with others. Similarly, audio recordings of reflective/planning sessions and parent focus groups will only be heard by the researcher and participating teachers, unless consent is obtained to share segments with others. All equipment used and data collected will be stored on a password protected computer in a secure locked storeroom. If consent is obtained, a copy may also be stored in your school.

What do I do now?

If you agree to act as gatekeeper in this research study please fill out the consent form and return it to Duana Quigley. If you think you might be interested, but have further questions, please contact me (087 2616793 / quigledu@tcd.ie), or contact my supervisor, Dr Martine Smith (087 2886766 / mmsmith@tcd.ie).

Thank you. You can keep this information leaflet for your own records.

Appendix E: Parent information leaflet

What do I do now?

If you are interested in your child taking part in this project please fill out the consent form and return it to Ms. XXXXXXX.



If you think you might be interested, but have more questions, please contact: Duana Quigley (087 2616793 / quigledu@tcd.ie).

Thank you. This leaflet is for you to keep.

Research Project Information Leaflet

How can classroom practices be changed to support effective language enrichment?

September 2012 – June 2013



Ms. XXXXX's class
XXXXXXXXXXXX N.S.

Project Lead:

Duana Quigley, M.Sc., Trinity College, Dublin

What is this research project about?

Good talking abilities help children express themselves, understand what others say, read better, have better social skills and do better in school. The aim of this research project is to help improve children's talking abilities, by adapting and changing what happens in the classroom.

Where will the project take place?

The project will take place in your child's classroom during school time, when Ms. XXXXX is present.

Who will be involved in the project?

All children in the class are invited to take part. The project will be led by, Duana Quigley, a speech and language therapist who is a part-time Ph.D student in Trinity College. Ms. XXXXX will be actively involved in all stages of the project. We will also be seeking feedback from the children and a group of parents.

What will the project involve?

Children who participate will take part in a weekly classroom lesson throughout the school year from September 2012 to June 2013. All lessons will be video recorded, and to protect confidentiality will only be viewed by your child's class teacher and the researcher.

How will this information be used?

We hope this study will help us to design more effective classroom practices to help further develop children's talking abilities. All information about the children who take part will be kept confidential. We may present findings from the project at national or international meetings but no identifying information will be included. The school will not be named and number codes will be used instead of children's names. All data will be stored on password protected computers in a secure locked storeroom.

Appendix F: Transcribed Meetings

Transcript: 25th September 2012

[video clip and each researcher has the adapted teacher checklist]

1. R1: So this basically is the woman, do you remember the haunted house and she had the little kids come up? And you can see its year 2 literacy em, extract lesson and that comes from the UK Department of Education really. So what would be the best way to do this? Should we watch it and tally at the end or keep pausing as we go along?
2. R2: Or will we break it up? And I do so many and you do so many and you do so many? It's hard to figure out if they're all...
3. R1: Yeah, it is hard to figure out if they're all there.
4. R2: Or pause it is nearly better, is it? I don't know.
5. R1: Sometimes it's nearly better to do it together, because sometimes I'm there thinking, is it this one or that one?
6. R3: Yeah
7. R4: Yeah
8. R3: I still do get confused with the old referential and display questions like
9. R1: Right, so we will do it all together
10. R3: Referential means you do not know the answer
11. R1: Can you see it there? Can you see it [name of R4]?

[video clip from Ofsted Year 1 exemplary lesson played for 62 seconds before pausing]

12. R1: OK, so far?
13. R3: Using resources
14. R1: Yeah, resources. So I will give that a little tick under tally. And the resources then is?
15. R3: Picture
16. R1: Picture yeah, and whiteboard maybe?
17. R2: mmmhmmm
18. R1: She hasn't asked any questions yet. Sure she is just really, in fairness to her, setting it up.
19. R3: Yip
20. R1: Picture, whiteboard

[video clip resumed and played for 4 seconds before pausing]

21. R3: Display question
22. R1: Yeah, you know 'what can you actually see in that picture?' so that's asking questions to which the teacher actually knows the answer. Tally one. 'What can you see?'

[video clip resumed and played for 12 seconds before pausing]

23. R1: OK, so what is that there? What is she doing?
24. R3: She's connecting
25. R4: Connecting, yeah
26. R1: Connecting...deep rich instruction? Making connections
27. R3: Yeah, that's it or...
28. R1: Or? Yeah? [3 seconds] So she's linking back, remember you said that, prior knowledge, giving examples?
29. R4: Yeah
30. R1: 'Do you remember?' I love her accent
31. R2: Yeah it's even like 'look at iT!' Like, ok!

[video clip resumed and played for 2 seconds before pausing]

32. R3: It's her use of body language
33. R1: Yeah, that's a good one actually. She does use her body language. She jumps in there when she steps it when she
34. R2: gestures or actions or?
35. R1: Yeah, eh 's', gestures and actions [gestures and actions are 's' on the teacher checklist]
36. R3: And is that tone of voice there as well or is that just her voice?
37. R2: I'd say tone of voice, she's kind of getting a bit animated about it, isn't she?
38. R3: Excited
39. R1: Yeah, tone of voice about the stepping in

[video clip resumed and played for 3 seconds before pausing]

40. R3: And is that extended teacher turn?
41. R1: There is a bit of extended teacher turn there alright. I know she is explaining it but 'teacher turn of more than one clause', yeah she is talking, explaining
[video clip resumed and played for 24 seconds before pausing]
42. R2: Referential
43. R1: Yeah, she doesn't know how they'd be feeling, sure she doesn't? Some of them might be thinking 'I'm so excited to get in here', some of them might be thinking 'I am so scared'. So I think that is a referential. What do ye think?
44. R3: Referential
45. R1: [writing into checklist and speaking aloud what she is writing] How would you be feeling? To me as well, her voice is definitely intriguing there, 'I want you to think' [said with animated voice]
46. R2: Yeah
47. R1: Like she does do that well I think
48. R3: Tone of voice
49. R1: Tone of voice. Like she's kind of whispering it there. Again, resources? She went up to the board
50. R2: She drew it in
51. R1: She drew it in. Like it's kind of a prop really. Prop like, she drew in some of the steps. When I'm looking at resources, I see motivating topic. Like do you think it is a motivating topic?
52. R3: If it's Halloween, maybe
53. R1: Yeah, she's really just introducing it, we don't know, like it's not as if somebody said 'Oh I was at a haunted house at the weekend' and then she said 'ok let's talk about it'. We don't know if it is following their interest but they look fairly engaged to me
54. R3: What about the organisational setting?
55. R1: Yeah, the organisational setting. It's a whole class there isn't it?
56. R3: mmmmm
57. R1: So we will give it a 4
58. R2: She has the talk partners as well though
59. R1: Yeah, the talk partners, eh pairs, so a 2 as well. I know she does involve the pupils, but she hasn't yet
[video clip resumed and played for 4 seconds before pausing]
60. R3: That's another referential
61. R1: Yeah, 'how would you act?'. She doesn't differentiate, sure she doesn't? She just asks the one question. She's not changing it for little Johnny in the corner yet
[video clip resumed and played for 4 seconds before pausing]
62. R3: Is that a display question, 'what does scared look like?'
63. R1: Yeah, she knows what does scared look like, doesn't she? Shaking in your boots and going pale and whatever [writes in checklist]. Yeah, 'what does scared look like?' It's a nice question actually isn't it?
64. R4: Yeah
[video clip resumed and played for 2 seconds before pausing]
65. R1: So he says "I tip toe" and she says "you tip toe"
66. R2: Teacher echo
67. R1: Teacher echo. Teacher repeats a learner's contribution. So 'L'. There's not much space for writing in the examples, is there? Do we need to sort that out?
68. R2: And then she praises, she says excellent
69. R1: Oh excellent, she does yeah. Excellent observation (name of R2)!
70. R2: Thank you! Fantastic if I do say myself, fantastic
71. R3: What was that one there?
72. R1: She said praise was eh, 'O'
73. R3: And what did we say for teacher echo?
74. R2: Tip toe
75. R1: The little fella says "I tip toe" and she says "Oh you tip toe"
76. R3: OK
[video clip resumed and played for 6 seconds before pausing]
77. R2: That's a display question, isn't it?
78. R1: Yeah, 'what would you do?' So she says 'what would you do?'
79. R2: I'd run away!
80. R3: That's a referential question then because she does not know his answer
81. R2: Oh sorry, you're right
82. R1: Referential
83. R2: And then she repeats what he says so that is teacher echo

84. R1: That's teacher echo yeah, and it is repeating, not herself, repeating him
85. R3: So that's two
86. R1: So she hasn't extended on anything he has said. 'oh you'd knock on the door', she hasn't said 'oh you'd knock heavily on the door' or "I'd tip toe", she hasn't said "oh you'd tip toe really quietly". She is just echoing back what they are saying.
- [video clip resumed and played for 2 seconds before pausing]
87. R1: But there, she is asking a question 'what if it creaked open though?'
88. R3: Referential and extended, is it?
89. R1: I think she is extending it there, isn't it? Like she is trying to get him to give a bit more. I know it's a question, but like he is saying em 'I'd knock on the door' but 'what if it creaked open?'
90. R3: Is that extended teacher turn? No it's not
91. R1: Would it be scaffolding?
92. R3: Extending a learner's contribution maybe
93. R1: Yeah, I think so. Extending a learner's contribution so A2.
94. R3: Yeah
95. R1: Like in the form of a question but she is extending his learning, 'what if it creaked open?' Like she is giving him the door opened. He's say 'I knocked on the door' and she'd say 'oh it would creak'
96. R4: Yeah
97. R1: So that's one
98. R3: I guess that's something we do a lot of, just to try and coax more information
99. R1: Creaked open
- [video clip resumed and played for 2 seconds before pausing]
100. R1: mmmm. What the hell is that? Tone of voice? Yeah?
101. R3: Maybe she's just hungry
102. R1: [laughs] mmmm
103. R3: Even just look at her paused. She's really animated. It's her body language
104. R2: She knows she is being videoed. She never teaches like that normally. Would you tick 'involvement of pupils' there because she is questioning them?
105. R1: Yes, well done. So they are in pairs and she is questioning them.
106. R3: You are so good at this [directed at R2]
107. R2: I'm telling you. I am getting ready for Friday already
108. R1: She didn't prompt yet. She didn't complete a turn. No. She didn't interrupt. Confirmation checks. No, she hasn't had to do that yet. Seeking clarification, no. Has she extended learner turn? No, not really, they are only saying one sentence, aren't they?
109. R3: Yeah
110. R1: Extended wait time
111. R2: She doesn't really need to
112. R1: Not really, no, they are ok. Feedback on the words. No. Feedback on what they are saying. No. There are no errors to correct. OK.
- [video clip resumed and played for 9 seconds before pausing]
113. R1: 'Shall we have a go at acting?'
114. R3: Well like that could be just a referential. They could just go 'ah no, we're sound'
115. R2: Thanks, but I'm good
116. R1: So I think that's just a teacher turn isn't it? Like she is moving the lesson along. She is not actually asking the question. She is saying 'we will have a go at acting'
117. R2: Get to it
118. R1: So extended teacher turn, you know, act it out or whatever
- [video clip resumed and played for 5 seconds before pausing]
119. R3: That's your organisation
120. R1: Organisation, so it's back to the whole class now, isn't she. Back to 4
121. R3: That was your praise
122. R1: Yeah, praise again
123. R4: Again
124. R3: Extended teacher turn
125. R1: So that's 'polite', 'excuse me', 'teacher turn'. So she is kind of organising them, isn't she? She is trying to set them up
126. R3: She has an SNA, does she? Or TA?
127. R1: Oh she does?
128. R3: Never saw her before
129. R2: She was trying to be in the video
130. R2: You can guarantee, [name of teacher] or [name of teacher] wouldn't be sitting there

131. R4: I'd be outside the classroom door
132. R2: Over the intercom, 'now, if everyone would like to get into a circle please'
133. R1: [laughs] Or I'd have these walkie talkies in my ear, 'teacher says to get into a circle now'
- [video clip resumed and played for 13 seconds before pausing]
134. R3: That's the voice at the end
135. R1: Tone of voice and extended teacher turn I think. Well she is explaining
136. R2: She's explaining, yeah
137. R1: So there's a lot of talk of her, when she's talking more, it's really her explaining to the kids 'this is what we have to do now. It's going to be this. You need to be in the big circle. You need to be polite to each other' or whatever
138. R3: But she is very clear at her instructions
139. R2: And she doesn't keep repeating them. We'd say them about 17 times. 'We're getting into a circle. We're getting into a circle. Get into a circle'
140. R3: 'Make a circle. Get into a circle. That's not a circle' (laughs)
141. R4: Yeah
142. R2: She says them once and she is not getting a child to repeat them but they're listening to her like
143. R1: This was probably 'take 25!' (laughs)
144. R2: Yeah, those children are really 15!
145. R4: Yeah, pause for 20 mins. 'Get into a circle NOW!' [angry voice]
146. R3: Four of them would go 'wha?', 'wha?'
147. R1: 'We never go into a circle!'
148. R3: If they say that on Friday, it's all lies!
149. R2: They will be getting into a circle tomorrow 'till Friday!
- [video clip resumed and played for 2 seconds before pausing]
150. R1: 'How would you act?' which is a ...
151. R3: Displa- no referential
152. R1: Referential, yeah. 'How would you act?'...and then... What did she say? They said tip toe, and what did she say?
153. R2: Body language
154. R1: Yeah, she's good at that, isn't she?
155. R4: =Yeah, she is
156. R3: =Yeah
157. R1: And it's only that you said that. I wouldn't have picked up on that the first time we watched it, but she is doing a lot of that [gestures], 'would you crouch down or stand up?' Body language. What number is that one?
158. R3: You kind of have to be like a TV presenter
159. R1: Yeah. Where is body language?
160. R3: It's there. Gestures and actions
161. R1: Oh thank you. 'Crouch down' (3 seconds). And was there another one there we said?
162. R2: Crouch down or stand up. It's kind of...
163. R1: Oh, it's the same, ok
164. R2: So are they display questions as well? No. Referential. 'Would you crouch down or stand up?' Or is it all just kind of part of her body language?
165. R1: I think...
166. R3: Referential questions
167. R1: Yeah, I think it's referential qu-. She doesn't know what they are going to say.
- [video clip resumed and played for 3 seconds before pausing]
168. R1: 'Standing still'. And she teacher echoed, didn't she? 'You'd be standing still'. She is not extending. She is just completely echoing.
- [video clip resumed and played for 3 seconds before pausing]
169. R2: 'What if they heard a noise?'
170. R1: 'What would could they do if they heard a noise?'
171. R3: Referential again
172. R1: Yeah
173. R2: The auld referential box is a bit big!
174. R1: I know! I'm going to have to make that bigger, aren't I?
175. R3: So is this the first like, proper checklist for oral language?
176. R1: mmmm
177. R3: Wow!
178. R1: Well we started off with that one. Yer man's book there, Steve Walsh... but we added all these ones, didn't we? From praise down. From 'O' down.

179. R3: And that's where most of the ticks are, I hate to say
180. R1: Really? Well 'involvement of pupils', we don't have yet. Organisational setting. Resources. Yeah. Gestures. Deep rich instruction. Tone of voice. Praise.
181. R2: And the ones that we're not using, like 'extended wait time' or 'praise' or we'll say 'prompt'. They're the ones you kind of do automatically if the child is not getting it, d'you know?
182. R1: mmm
- [video clip resumed and played for 3 seconds before pausing]
183. R1: I think she is extending their thinking there. I know she's asking a question, but they are saying something, and she is saying 'oh what if it came from behind them?'
184. R3: So would you say that's 'extending a learner's contribution'?
185. R1: But then it's not really, is it? Like they're saying 'come behind them' and she is not saying 'oh they could come behind you real sneakily!'. You know, she's not adding on to what they're saying
186. R3: Ok
187. R1: She's extending the IDEA. So maybe this is a question then. She's just asking them another question
188. R3: That's all referential, 'what would you do?'
189. R1: Yeah (3 seconds). She's back to pairs actually now, isn't she? The two little, the boy and the girl doing their-
190. R4: The boy and the girl. Yeah.
- [video clip resumed and played for 4 seconds before pausing]
191. R3: It's your body language and your tone of voice
192. R1: Yeah. (5 seconds)
193. R2: And referential question, isn't it?
194. R3: Yeah
195. R1: Yeah. (6 seconds). Ok, I think we'll stop it there. I mean, that basically gives us the idea. So, what do you think having now looked at the checklist?
196. R3: (4 seconds) Tone of voice very important.
197. R1: Tone of voice very important?
198. R4: Yeah
199. R2: And the body lan-, the gestures and the body language
200. R4: Definitely, yeah
201. R1: [writes down what teachers are saying]
202. R2: The resource. I mean, she could do as much as she could, but without the picture of the haunted house or a picture from the book or something, she is kind of, she has no setting. She has nothing to start off with. So I know it's only one picture, yet the whole lesson is based on that one picture, and her questions.
203. R1: mmmm
204. R3: And I bet it's a motivating topic. They all seem engaged.
205. R1: Yeah, I wouldn't feel bad ticking that box to be honest. They do, they're not bored
206. R4: No, they're not
207. R1: No. No. (2 seconds). What about this whole notion-? When I'm looking at mine, I'm seeing 'H', there, referential questions. To me that's the one that I've ticked the tally box the most
208. R3: mmm
209. R4: Yeah
210. R1: It's the one that's squashed out completely with examples, and they are actually genuine questions, to which she doesn't know the answer. Do you think they're working for her?
211. R3: It's making them think
212. R1: Yeah
213. R3: emm...
214. R1: I suppose what I notice there, remember I kept asking 'is that an extension or not?' Like some times she is asking a question out front, like 'what does scared look like?' and then the next time a child is saying something and then she's asking a question to bring it on a level, 'Oh you'd open the door. Do you think it would creak?' or 'you'd tip toe. What if someone came behind ya?', you know, so in some ways they are genuine questions and other times she actually doesn't know the answer but she is extending their thinking I think. What do ye think?
215. R3: Yes, I definitely think so.
216. R1: She didn't differentiate. I didn't see any, did ye?
217. R4: No
218. R3: No
219. R4: I didn't notice, no.

220. R1: She didn't rephrase anything or ask it a different way.
221. R3: No
222. R1: So, this checklist, in terms of something that we are going to be looking at, are ye happy with it at the moment or is there something we need to change around or...?
223. R2: I think it's alright. I think it's got everything.
224. R4: Yeah
225. R1: Yeah. There was nothing there that she did, that we couldn't put into a box?
226. R2: No
227. R3: I think that we came up with some really important ones. I really do.
228. R4: Mmmm. I think so as well
229. R2: And I do think that the ones we haven't ticked are the ones that do, kinda, em, extend into differentiation as well, you know, the prompt and the extended wait time. Like if you have a bright child, you won't give them all that time to answer a question, you're like, 'you know it. C'mon, quick, spit it out!'
230. R1: Yeah
231. R2: You know, where if it's a child that is that slight wee bit weaker, you do give them the little bit more time, so like even the director pair, the feedback, they kind of are the weaker child, the prompt, the waiting, time, things like that
232. R1: So they would be more 'B' to 'F' say?
233. R2: Yeah
234. R1: And you might interrupt as well, 'M' there, you know if they're not getting it, interrupt to say you're on the total wrong course
235. R2: Yeah
236. R3: I'd actually interrupt and give them the answer sometimes, you know, if they're, if it's interrupting the flow of the thing
237. R1: Yeah, and we don't know what kind of school that was, what kind of class
238. R2: Yeah
239. R1: We see maybe one SNA, but we don't know why. Ok, so hopefully we're happy enough with the checklist. Let's see if it fits with what we do. Like we see all that fits with that clip, but let's see if it fits based on what we do on 10 minutes each. So next week we'll look at, maybe we'll take 5 minutes each, so maybe if we take 5 minutes from each class and see what we get
240. R2: And do you want us to focus on, like do you want us to focus on one type of question, like obviously display questions if you're looking at the picture, but do you want us to see if we can-, or just do it any way at all?
241. R1: I think any way at all. I think as normal as possible
242. R2: Yeah
243. R1: Yeah, it really is a snapshot
244. R2: As fantastic as much as possible!
245. R1: As fantastic as much as possible, as much as you fantastically can!
246. R2: I like that talk partner thing
247. R1: Yeah, it looks good, doesn't it?
248. R2: Yeah, like you'd have it when they're sitting in their groups as in 'turn to your neighbour now and tell your neighbour the 4 things you like to eat for your breakfast'
249. R1: Yeah
250. R2: Whereas if they're sitting in a circle, I'd never use it in a circle
251. R1: Yeah, but she uses it to good effect...
252. R3: You'd nearly have those methodologies, or that organisational setting separate in your head, wouldn't you? You're either in a circle or you're in pairs or you're in a small group or a whole group, you're not -. I'd be like 'no, you can't be getting that complicated'
253. R2: That's too much cross-curricular activity going on there!
254. R3: (laughs)
255. R1: And again you can see when she was talking at the beginning, her focus wasn't language development, her focus was narrative setting, and she was looking at the five senses. We're not doing her justice really in that her objective was not language development, her objective was the setting of a narrative, and we were just looking at, you know, the talk that goes around that. Like she was trying to use the senses, so how they feel and touch
256. R2: And what did you hear?
257. R1: What did you hear, exactly. Ok, so what I'll do, we'll come in, so Friday we have the times. I don't know how I-, even though I'd like those example boxes to be bigger, I don't know where we're going to get the space on this one page. I like it on one page
258. R2: Yeah
259. R4: Yeah, the one page is

260. R1:	I just hate turning over pages, d'you know? It's not too small to read, is it?
261. R3:	No
262. R4:	No
263. R1:	No. it's ok. Mmm, yeah, so is that ok so Friday.
264. R2:	Yeah.
265. R1:	Yeah?. Lovin' it?
266. R4:	I'm lovin' it!

Transcript: 22nd October 2012

1. R3: I don't know if, like if I'm just doing an aul' geography lesson or something I mightn't think about it, but when I'm doing an oral language lesson specifically, or when I'm doing a prolonged, you know a chat that has gone on-
2. R1: Yeah, a discussion or something. OK. What about yourself (name of R2)?
3. R2: Emm...I don't know, I'm trying to... let's say we have been more focusing on more words, like 'prickly' and things like that. We've extended those during the week, if they've found anything prickly or if I've found anything prickly or whatever the word is, like costume or, it was prickly and insect, was it?
4. R1: Yeah
5. R2: So just to, kind of, more so to bring in the words during the week in a different context as oppose to-
6. R3: Well that's your deep, rich instruction
7. R1: So you're doing lots of repetition and review
8. R2: Yeah
9. R1: Yeah, that's grand. And (name of R4), I know on Friday I sprung it on you there about maybe yourself to fill in the checklist, was there anything that -?
10. R4: Yeah, look, (name of R1), I'm not going to lie to you, Friday was a-
11. R1: Crazy!
12. R4: Well it was a waste of a day for me anyway because I had the paired reading, over there for the breakfast, and it was just we had to get a competition done
13. R1: So funny, seeing them all in their pyjamas watching it back! Gas!
14. R4: I know. I know going by this anyway, I know, say, for myself it would be an awful lot of display questions that I would ask a lot of the time, emmm, but then...a lot of praise but there is probably no need for it though. Yeah, praise, but this whole, the scaffolding thing, like I've been watching you, you know, extending and all that-
15. R1: Is there one that you think you'd like to focus on? Is there one that you think-? Like we don't have to video it, but is there one that you think-
16. R4: Well like, even from what you've been doing, I have actually, you know, during the week then, I will try and, y'know -
17. R1: To just try and bring it in. Like the girls were great at cooperating, like (name of R4)'s class are little-, aren't they?
18. R4: They are SO good, like, honestly
19. R1: Yeah, not that yours aren't, but they are particularly-
20. R4: Yeah, they're, they're great, honestly
21. R3: They are awful cute, aren't they?
22. R1: Yeah, they are awful cute. So I suppose I'm saying they are the kind of kids who would respond well, like they're that eager age where they're like 'oh please, please let me answer', you know, they really are an eager age, aren't they?
23. R4: Oh, they are
24. R2: What are they now? 4th is it? They're a nice little class anyway though, aren't they?
25. R1: They're a lovely little class
26. R4: I swear, that class is just lovely
27. R1: Yeah, they're very nice. So I suppose it's just, no more than ourselves, picking one that you think 'I'm going to focus on that for 5 or 10 minutes' and then see if you can extend it. So, for you, if you think that it's all display questions, you might want to focus on the open questions
28. R4: Yeah
29. R1: Or if you want to focus on the scaffolding
30. R4: The scaffolding, yeah.
31. R1: Which one do you think would-, you'd like to focus on?
32. R4: You were doing more kind of, extension and reformulation, weren't you?
33. R1: Yeah. I did a good bit of that with them. Not so much this week now. I was looking back thinking "not so much of that going on this week!"
34. R4: Yeah, emmm
35. R3: The only thing about this is you need to prepare, the referential questions you need to prepare
36. R1: It's hard to think of it-
37. R3: Oh my God, it's so hard to think about those 'what do you think?', 'why do you think?'
38. R1: Scaffolding is an interesting one to try out. I know, it's what I tried out with your class, I know I went a bit crazy with 'caucasian' but, like it does make you think about how you could say that a different way. It does make you think about it. It's up to you, it doesn't matter,

there's no right or wrong one

39. R4: Yeah (3 seconds), I'm just thinking...and it's the teacher who comes up with the, the new word

40. R1: Yeah, exactly, you know when they say said 'oh their skin, it's normal' and I was like 'Oh yeah' and she said 'it's pale' and I was like 'yeah, it's caucasian'

41. R4: Yeah, maybe I'll try, and yeah maybe kind of, because I did think, I thought that was really good when you did it with them

42. R1: They kind of responded to it so it might be

43. R4: They did, yeah

44. R1: And I'm only in there once a week, so it might be something for you-. Ok, so extending?

45. R4: Yeah

46. R1: Perfect. (3 seconds). Ok, well speaking of extending, I actually think that, em, [name of R3], there's loads of examples in yours, so we might go to you first if that's ok...

[video clip of R3 played for 30 seconds]

47. R1: So they're saying 'they're singing' and (name of R3) says 'they're performing'

[video clip of R3 played for 150 seconds]

48. R1: Ok, so I was just writing them down there. So the child said 'singing' and you said 'yeah they're singing, they're performing'. They said one of them, 'Harry is his name' and you said 'yeah, he's the lead singer'. They said 'microphone' and you said 'speakers'. They said some other lad and you said 'he's a member of the band'. They said 'guitar' and you said it was an 'instrument'. They said, my personal favourite, 'the lights are shining', 'yes, they're illuminating the stage'. They said 'steps', you said 'stairs'. They said 'stage', you said 'raised platform'. She said 'happy', you said 'cheerful', 'delighted', 'enjoying themselves'. So there's loads-

49. R2: Fair play (name of R3)

50. R1: Loads of examples of adding on, and that was just 3 minutes, I think it's 3 minutes 20 seconds, you know -

51. R3: I think you're right though, you kind of nearly underestimate them, I would automatically think they wouldn't give it to me good enough, that I wouldn't be able to find anything to add, but then they give you some really good words and you're like 'oh..'

52. R1: Yeah, I suppose again...What do you think when you hear that?

53. R3: I think I speak too fast. Every time-, that was definitely too fast

54. R1: I can still understand everything you're saying

55. R2: They can understand you, so, they can understand what you're saying

56. R4: I wouldn't have thought that was too fast

57. R1: No

58. R3: At the start, you couldn't understand what I was saying, it was all 'buddlebubbleiddleooh'

59. R2: You just got really excited because the camera was on you I'd say

60. R3: [laughs] You know me (name of R2), looking for the nearest camera at all times

61. R1: What about the extension of the language?

62. R2: I thought it was good

63. R3: Do I sound like an awful eejit though? Like did they get anything out of it?

64. R2: But should we be doing that automatically though?

Should we be doing that ALL the time?

65. R1: Well that's what the, well we know for kids, basically, this is the thing right? It hasn't been studied in kids over the age of 5. Most of the studies, like millions of pounds, hundreds and thousands of kids have been, all the studies have been in the 0-5s, and we know that extension DOES work for the 0-5s, it just hasn't been studied in the overs, 5s and overs

66. R2: emm

67. R1: All the interventions, all the research is usually on those early kids, that's to help them talk and talk a bit better, there is not as much done on the over 5s. So once they get talking it's more the studies are done on the kids that have problems

68. R2: Right

69. R1: Like language disorders, or whatever. So there isn't a whole lot done on extension

70. R3: I did the same thing there that I did last week. I repeated what they said in a bid to give myself a bit of time to come up with the scaffolding or the extension

71. R1: It sounded natural

72. R2: They don't always hear, you know, if they were saying 'singing' and you were saying 'performing' so they would see the correlation between 'singing' and 'performing' as well, so I don't think there is any harm. It's not like you were 'teacher echoing'. You were saying it and then saying something, extending it

73. R1: Extending it, yeah, you're reformulating it. I suppose it's an interesting question, 'should we be doing that all of the time?'. What do you think?
74. R3: Should we be echoing all the time?
75. R1: Yeah, or extending all the time
76. R2: Extending all the time. Well I do think, you do extend with the smaller ones because sometimes they look at you and they have no idea, like the other day with the 'tray', it's like a big plate, you know, and it will be the ones that have a huge, extensive vocab will know it, whereas it's the ones that don't have an extensive vocab will go on 'what's that?', you know, a 'web', web was the other one, until I showed them what a web, like a spider web, they didn't know what a web was, and when they saw it they knew what it was and they were like 'oh, that's a web', but you know, I thought that was a very basic one that they would know like
77. R1: And that's one where you need loads of different examples, it's a big plate, you carry things on it, you might see it in a restaurant, you know, it's that type of thing
78. R2: Yeah, I think it's age group, I do think with the smaller ones I do it, but it's to explain a word more so than me saying 'oh I better extend it so they understand'. You're looking at the blank faces and you go 'em...' I don't know, whatever you were talking about, like
79. R1: So I suppose the research for their age range says that will help them, if you extended, it just hasn't been STUDIED in the older group
80. R3: You see if I had done that lesson, like not with the video camera in my face, I would have been 'great verb' and I would have written down, 'great adjective' and I would have written it down. I don't think I would have looked for anything else
81. R2: Yeah, I don't think it's something you do second nature for the older ones, unless they don't understand it, and then you put it into a different context so that they do get what it means
82. R3: mmmm
83. R1: mmmm, yeah, and if you're putting it into a different context, is that because you want to help them understand it as opposed to, you want to give them something extra?
84. R2: mmmmm, yeah
85. R1: Do you know, like, tray, you put it into a different context, it's a big plate
86. R2: Yeah
87. R1: As opposed to tray, oh God, I don't know what I'd say for that
88. R3: You know, I did a piece of reading this week, and it's a recount, the biography of Mother Teresa's life, and when we went through it, there were so many words that were so difficult, and I just didn't go into any of it because I thought 'what am I trying to do here?'. Like I'm trying to get them to be fluent and to understand the words. So I just said 'we will focus on the words today and then like talk about the meanings tomorrow'
89. R1: Yeah
90. R3: Like what do you do? What's the right practice in that situation?
91. R1: I think you can do both. If you're, if you're objective is reading fluency, you'd give them the word and then they'd move on.
92. R3: But what about the two, you see, I want both
93. R1: I think, sometimes you can't focus on the two at the one time
94. R2: You'd nearly need an easier passage if you want to focus on fluency, do you?
95. R1: Exactly.
96. R3: There you go, I suppose yeah. But that doesn't mean we compromise fluency for, should we compromise fluency for the words
97. R1: I suppose you'd build up to it, don't you? Like if that's the case, it's too hard for them, I can't focus on fluency now. I'll focus on the words, then I'll focus on reading comprehension. If they know the words and can understand it, they more likely they are to be fluent. You know, so there might be more of a step process
98. R3: It's frustrating though, when it's in your plan and you need to get it done by the end of the week though
99. R1: Yeah, that is frustrating, yeah. (2 seconds). So do you think this is something you could, like we've got one, what did you say, three more days in school, four more days, let's discount Friday, three more days of school. Is it something you could focus on doing over the next three days?
100. R3: Discount tomorrow as well
101. R1: Discount tomorrow. So Wednesday and Thursday? And see how it goes?
102. R3: Yeah. So to practice that again, is it?
103. R1: Yeah, without the video camera
104. R3: It would be interesting
105. R1: And see what you think, do you notice anything? I suppose you're looking to notice two things. You are noticing yourself, 'is this awkward? Is it becoming more automatic?' and

then you're noticing the kids 'are they picking it up?', 'are they repeating me?', 'is it going over their head?', 'are they looking out the window?', you know, 'are they even listening?'. We don't know. So it might be good to focus on you as a teacher and to focus on the kids, how they're responding. And the same would go for you then (name of R4) again, if you're the same as (name of R3), if you do the two days, Wednesday and Thursday, think about it, focus on yourself 'is this awkward or am I, is this actually ok? Is this a bit of fun?' and then focus on the kids 'are they picking it up?'. Like we know the kids, like some of the girls, we tested it out, they were picking some of it out

106. R4: Yeah

107. R1: Ok, focus on you and focus on the kids. (3 seconds). Alright (name of R2), you were doing...

108. R3: What were you doing?

109. R2: Halloween.

110. R1: Halloween. Ah yeah, costume

111. R3: And what was it? Was it extension or what was it?

112. R1: Rich vocabulary

113. R2: Yeah, we wanted to see if they could remember the words from last week. Remember we had hedgehog and prickly and insect. I forgot totally about insects. I was thrown with my Cheerio's breakfast. I threw it in in the end, but we were going to talk about Halloween and see if they could come up with costume, lantern and decorations

114. R3: Cool. Okey dokey.

115. R2: Yeah

116. R1: And we focused mostly on the costume

117. R2: Yeah

118. R1: And it worked really well actually...emmm

119. R2: It was nearly harder to get into because it was so...broad anyway

[played video clip of R2 in the classroom for 235 seconds]

[off topic about class numbers for 25 seconds]

120. R1: So you were focusing on 'costume'. How do you feel about it looking back on it and listening to it?

121. R2: Horrendous

122. R1: I don't think it was horrendous at all. I thought it was brilliant

123. R3: I thought it was really brilliant

124. R2: I wasn't as comfortable doing that one I have to say, because before we had the picture and the focus words. That was just a chat, and to kind of get them into it, it was kind of 'oh what are we wearing? What are you dressing up as? What's your favourite thing?' You could have gone anywhere so I found it kind of hard to get into the whole costume thing. I should have started off myself with dressing up and tried to introduce it that way I think.

125. R1: Ok

126. R2: emm....because I didn't even get to decorations or try and get to lantern or anything

127. R1: And it's ok, because I was literally-, like it's only 10 minutes, like, it's not that you couldn't get them, it's just within that time frame, that was fine

128. R2: Yeah

129. R1: Like, what I've written down is, all the different ways, if your focus is rich instruction, I've written down things you said: 'different clothes', 'not your normal clothes', 'dress up', 'handbags, scarves, hats and dresses', 'witch costume', 'ghost costume'-

130. R3: Like you're totally connecting it to everything they would know you see

131. R4: mmmm

132. R1: And then you're getting one kid to say it back: 'so what were you wearing?'. Like you didn't have to do that

133. R2: Yeah

134. R1: You know she said 'I dress up as a dinosaur' and 'what were you wearing?' and then you were getting her to say it back 'costume', and then asking again. So to me there's loads of instruction and loads of connections

135. R2: Yeah

136. R3: I think you're definitely, you're activating their prior knowledge and you're making connections and that must work because-

137. R1: And you're giving examples

138. R3: But that's how (name of child) knew 'costume', because she applied it to herself. 'I made a dinosaur costume'

139. R2: Yeah, but she even said it, she said it, I didn't hear her saying it originally, when she went about the big spiel about the dinosaurs, she said costume and I didn't even hear that, did you hear her the first time?

140. R1: I didn't hear, I didn't hear it real, but on the video I heard it
141. R2: Yeah. Oh she's saying it, I didn't even hear it
142. R4: awwwww
143. R2: Such a big spiel about the dinosaur
144. R1: No I didn't hear it in real life
145. R2: [unintelligible]
146. R1: But basically, for rich instruction, we know we have to give them examples, which you did give loads of examples, you have to say what it's like, 'different clothes, hats and scarves', and you say what it's not like, 'not my normal clothes', 'different clothes'. So you did those 3 basic things, which was great, and then getting 'insects' back was nice, wasn't it, after doing all that?
147. R2: Ok, yeah
148. R1: So what about yourself then, is that something-? One of the questions we ask is 'should we do it all the time?' or 'could we do it all the time?'
149. R2: Well I find myself doing it more now. Now I would say you would do a certain amount of it yourself, when you know, they are looking at you blankly and you're kind of going 'oh...ok'. Like hot water bottle, there was a hot bottle there last week. Not a clue, I think (name of child) was the only one who knew what a hot water bottle was, and what it was for, you know, so if they don't know a thing, you definitely use it, but I probably could use it more, like if they say something and then I extend it out, whereas I kind of only extend if they don't understand what the thing is
150. R1: Yeah
151. R3: Neither would I
152. R1: So, only if they don't understand
153. R3: You really have to show it to them, don't you? It's the only way
154. R1: Pictures are great. Well that's what's great about the interactive whiteboard, isn't it?
155. R3: It's fantastic if it's a noun, but if it's a verb, how do you show somebody?
156. R1: Yeah
157. R3: Dedication and devotion were words we were doing today
158. R1: Yeah, you have to give examples then. So basically, that's what I always think, if a word comes up that a child doesn't know, I say words that also mean the same, words that mean the opposite and give loads of examples. You know even thinking about that (2 seconds). I suppose, there's two things, isn't there? It's doing what we said we were going to do, either extend or ask questions or rich instruction, and it's thinking about 'how can I remind myself to do that more?'
159. R3: mmmm
160. R4: mmmm
161. R1: And then, focusing on YOU, and then the same as (name of R3) and (name of R4), focusing on you, like 'what am I doing?' and then focusing on the kids 'is it actually making any difference?'
162. R2: Yeah
163. R1: So that could be something for the two of ye, for the three of ye, what did we say? Wednesdays and Thursdays, wasn't it? Wednesday and Thursday, to try it out for a little bit longer than we were doing. So we were doing, I'd say 10 minutes, so trying maybe doing it for 15 minutes, Wednesdays and Thursdays
164. R3: Yeah, ok
165. R1: Just trying to extend it a bit
166. R3: But like, we'll say, they knew insects, well (name of child) knew insects, but how do you assess how many the rest of them knew? Like she'll know it every week, she'll know prickly, she'll know insect, she'll know costume. (name of child) probably as well
- [off topic discussing child and her siblings for 45 seconds]
167. R1: How are we doing for time? Right, I'm going to show you my bit, emm-
168. R3: What were you doing?
169. R1: What was I doing? I am all the time trying to use...visual organisers or activities, that the research shows are useful
170. R2: Ok
171. R1: So we have the venn diagram, then we did that semantic feature analysis, you know the one with plus minus, plus minus
172. R2: mmmm
173. R1: With the features, so this one-
174. R3: It's called semantic feature, is it?
175. R1: Semantic feature analysis
176. R3: Because I showed it to a friend of mine last night, we were having a very boring

dinner,

177. R1: You need to get out more (name of R3)
178. R3: No sure, I was out, that's the sad thing... semantic...
179. R1: Semantic feature analysis. Like they enjoyed it, you know the one with the plus minus
180. R2: Yeah
181. R3: yeah
182. R4: What did you do on Friday?
183. R1: Friday I did the word lines, scared, so I did the word line. Even before I show it, how did you think, compared to the three of them now, we had the venn diagram, the plus and minus, semantic feature and then the word line
184. R4: Yeah, well I think out of the two that would have caught me, and the two of them were the venn diagram and the, and Friday's one
185. R1: This one?
186. R4: Yeah, the line.
187. R1: The line?. Yeah. The semantic feature takes a bit more time.
188. R4: Yeah
189. R1: The only thing I would say is that I think I got the most talk out of the venn diagram, out of the three of them
190. R4: Yeah
191. R1: I did get a bit more talk-
192. R4: Yeah, the venn diagram
193. R1: I did get a lot more chat out of them, didn't I? and that was my fault. Like it wasn't as if they kids were any less chatty, I actually got less chat out of them, I thought last week, but they might have got a better understanding of 'animated'. So this is me doing a line, sure I'll just press play

[played video clip of R1 in R4's classroom for 40 seconds]

194. R1: So you can see I put up all the words they gave me, 'scared, afraid, terrified, frightened, what's this..? Freaked out, horrified, spooked'
195. R3: Oh we did it with the ladder before, didn't we?
196. R1: Yeah, you can do it up

197. R4: Oh the ladder

198. R1: You can do it up or down or I just did it across this time

[played video clip of R1 in R4's classroom for 175 seconds]

199. R1: And that is right, there is no right answer. The reason why we do this is that it gets the kids thinking about all these words. Like they know the words, they came out of their own heads, so the idea behind this is, that, if they can talk about them and give examples and say what you do in those, and when you would be or what that's associated with. Like you might associate afraid with a spider but terrified with ghost, or whatever. It helps them to get a really good understanding of the words, so they would know if they are writing a story then, and somebody em...the door bell rang, they wouldn't be horrified, they might be a bit scared

200. R3: mmm

201. R1: So it helps them see it in context

[played video clip of R1 in R4's classroom for 25 seconds]

202. R1: A bit like you (name of R3), I was repeating back what she said
203. R3: And trying to come up with the next one
204. R1: Yeah, trying to come up with more of the words.
205. R3: Yeah, you need your stall tactic
206. R1: Exactly, so it's, so maybe that's something that's realistic, repeating back and extending, that's ok....
so from watching that, what did you think (name of R4), you know your class well? From watching that with the kids, whatever, you think the venn diagram got more out of them?
207. R4: I do, yeah, I do think the venn diagram did
208. R1: I think so as well
209. R4: Now, I still think that was very good (name of R1), because even at the end when you trying to get them to put it into a sentence, and like you said you were extending
210. R1: Yeah
211. R4: I thought that was, that was really good
212. R1: That was probably the best bit of it, in that they were using it
213. R4: Yeah, they were using it
214. R1: Maybe if I picked better words, maybe if they were words they didn't know. I was debating, because I knew we only had a bit minutes, I was thinking, like 'petrified', should I introduce this new word for them?

215. R3: Yeah
216. R1: And I didn't, I just used what they had
217. R3: But I suppose work with their own words first, before you start-
218. R1: Yeah, and then maybe if a new scary word, if I was reading a book and a new word came up, like petrified, if you had that word line on the...interactive whiteboard, you could come back and say 'now where would we put this one?'. D'you know? Like a living chart, you're always going to come back to it
219. R3: You know, these are the type of things that are really going to help with the auld, eh, the auld Micra-T's, I think
220. R1: Yeah
221. R3: All this new vocabulary
222. R1: Yeah
223. R3: Like should we be making word walls and things that we do in these lessons?
224. R1: Well they say that that really helps, but as long as the words come from them. Like there would be no point in me, making the most magnificent chart and sticking it on the wall. What they say is that it needs to come from the kids, and then keep adding to it, it's living, like I could easily go to my thesaurus and come up with scary words, like I could have-
225. R3: But if it doesn't come from them, it means nothing
226. R1: Yeah, exactly...I was probably doing a mixture of a bit of rich instruction and extension, like I only extended that last little chunk there
227. R3: You were making connections as well though.
228. R1: Making connections?
229. R3: Yeah, you were.
230. R1: With the spider maybe?
231. R3: Yeah, you were, like, I think you do, yeah
232. R1: Ok, making connections...again my aim was to extend and I felt was that that word line didn't really allow me to extend until I was getting them to use it
233. R3: mmmm
234. R4: Yeah, until they were using
235. R1: Yeah, for the first part, I was kind of talking about the words, so it was harder for me
236. R4: Yeah
237. R1: So maybe it shows us as well that there are certain things that we do that will HELP us extend or ask certain questions and there's other things that don't actually help as much
238. R3: I suppose, you nearly need to pick each of these, and then pick an activity that goes with each
239. R1: Yeah, we could do that, yeah, yeah...so what I'm going to do, I'll be in different schools and different classes, I'm going to be focusing, it won't be, it won't be in this school, I'm going to be focussing on extending the kids answers myself in the different classes, and again, I'll think about if any kids repeats, I'm still waiting for somebody to repeat back what I said. That hasn't happened yet. It still might be going in, so I am going to think and see. Again I'll be focusing on me, am I remembering to do it all the time, because I wasn't doing it all the time, but then the activity didn't lend itself so well and I'm going to be focusing on the kids 'are they taking it in?' 'are they listening to me?' 'are they picking it up?'
240. R3: Is it going in?
241. R1: Yeah, is it going in? exactly. Ok....very good. Anything else that comes to mind when we're thinking about this? Do you think it would make a difference?
242. R2: (6 seconds) I do and I don't, d'you see, with mine, they didn't know what prickly was and now they know what it is. But that's one word and it was a week, so...
243. R1: Yeah
244. R3: It's all relative too
245. R2: Yeah
246. R3: If I went back into my class after that lesson, I don't think I would get 'illuminating' back, I don't think I'd get...
247. R2: Platform
248. R3: Raised platform, you know, I'd just..
249. R1: And we know that we need repetition
250. R3: Yeah, we do, and it has to be, like those words, d'you know when you came in, and we had just done recurrent and vacant and stuff?
251. R1: Yeah, they were great words
252. R3: They knew them by Friday but I'd say if I asked them today they wouldn't know, I'd have to go back over them again
253. R1: Yeah, so maybe that's part of this as well? Maybe that's something for us to think

- about?
254. R3: Oh do you know what, sorry to cut across, but when I was teaching those words last week, do you know what I did? I connected them all to them and we had sentences with each of them so I think that does help
255. R1: Yeah, so making it...
256. R3: And connecting it to themselves
257. R1: And they say, kids making up their own definitions, like, you know, 'prickly is something that I touch and it hurts me', you know, as opposed to 'this is a sharp object that may cause injury' or whatever, you know....well I suppose what we all have said is that review and repetition is needed, so what's the best way to do that? And maybe something like extension or asking questions would help with review or maybe we need to do something else? Like how do you keep 'recurrent' keep recurring?!
258. R3: I've no clue
259. R1: Yeah, it's like how to bring it in
260. R3: Unless you were talking about the weather, like 'this is terrible weather, it's recurrent' or...
261. R1: Yeah, so I suppose for us, it's becoming aware of it
262. R3: Yeah
263. R1: And that's ultimately what we're trying to teach the kids as well
264. R3: You really notice the deficit coming from home, don't ya?
265. R1: mmmm. And for some kids, they have different terms for it maybe. You know, I remember we were doing 'fast' and 'slow' in (name of R2)'s class and one of the little one's said, she didn't say fast, but she said 'he's bombing it' and that was her fast, like, she knew it
266. R4: That's it, like, they're hearing those words at home and there's only so much we can do in school from 9 to half 2, and it's the parents that spend most of the time
267. R1: Yeah. Definitely, if you take a day
268. R4: Like you don't, when you hear people saying 'oh their language is so bad', but sure no wonder their language is so poor, like, sure their parents can't talk properly
269. R1: So if they're not hearing it at home, they're not going to use it in school
270. R3: Like (name of parent) said to me one day 'Oh your handbag is massive' and I was like 'oh my God', no wonder the child, if that's what she thinks massive is
271. R4: mmm
272. R3: Like (name of pupil) said to me something is 'lethal'. Well it's not really, 'lethal' means it will KILL you
273. R1: mmm
274. R3: She's like 'wha'?'
275. R1: Yeah, it's like all those slang words
276. R4: You see (name of R1), it does annoy me, I think that, especially for young children, as in before primary school, who are in crèches, people working in them
277. R1: mmm
278. R2: They can't speak properly
279. R4: Sure it's no wonder when you go in, like to junior infants, and they're coming in, like if they are going to a crèche you would expect them, because to be involved in activities, you would expect them to have a lot more language
280. R2: Yeah
281. R4: Sure like (name of pupil)'s mother, working in a crèche, doesn't she work in the community centre or some of those?
282. R1: And they're trying to up-skill, professionalise that group, aren't they? Like that's something they are trying to do. I think like the whole reason, you know, like Aistear and everything? They're trying to bring that in so that there will be an evidence-based curriculum framework
283. R4: Yeah. How can people like that be qualified-? And I know I told you this before (name of R3), when my daughter was in crèche, she was probably about 2, and she was in with the crèche and it was in with, and maybe she wasn't just two yet, right, but it would be things like this...if you said to her 'what's that?' and if she didn't know, she use to say 'I not know'
284. R3: Oh my God
285. R4: And I mean, I was like, (name of daughter) you don't say 'I not know', 'I don't know'. And she use to get all upset 'my teacher said it's 'I not know''
286. R3: Oh Jesus, and then maybe was getting all upset
287. R4: Well holy...
288. R3: That's a wholly fair point. Wouldn't you be freaking out?
289. R4: Like the thing is, like when she's say 'I not know', I'd say 'oh you don't know, that's ok' but like, the amount of times she use to say it

290. R1: So if they're not hearing it, that makes a difference
291. R3: Well obviously she is picking up what the other woman is saying like
292. R4: You see, that's it. They're picking it up...
293. R3: And then if you're saying it wrong. Well it's like crisps
294. R4: Crips
295. R2: None of them say 'crisps' because they all say 'crisps' because their parents say
'crisps', everyone says 'crisps'

[discussion ended abruptly as R3 had to leave]

Transcript: 29th November 2012

1. R1: So they're own level does make a difference.
2. R2: Yeah
3. R1: We're talking about literacy level, really, aren't we?
4. R2: Yeah
5. R1: Or even language level, like, all the, if there's going to be really big words
6. R4: Well that's it, yeah
7. R2: And you see it's probably easier with the likes of junior infants because they've only started in school, and like a lot of them are new parents that don't have older brothers and sisters, you know, and like a lot of them would be taking-, you know the sheets for the language games that we do on a Monday. Some of them, you'd know the ones that have the older children, they just don't give a shit, like, they just 'ah yeah, give me that, give me that, give me that'. D'you know, it would be interesting to ask them 'how many people actually do that at home?'
8. R1: mmm. So if they're new to the school it's all fresh and new
9. R2: Yeah, they like helping
10. R4: They'd help, yeah
11. R1: So where does it go wrong then? (3 seconds). Like if they're so eager in junior infants right and senior infants?
12. R2: Probably
13. R4: They're small. But (name of R1) it would be the same ones though. Like I'd say if you did that now with 4th or 5th, you'd have, have somebody like (name of pupil)'s mam
14. R2: She'd do it, yeah
15. R4: Maybe (name of pupil)'s mam. But you'd have those ones
16. R2: Yeah
17. R4: You could nearly pick
18. R2: You could nearly pick who'd do it like
19. R1: And are there, the ones who volunteer also be the ones who-, I suppose I'm thinking of, specifically now we're thinking about language and vocabulary and their words. Are the ones who come in and volunteer, would they also be the parents who would more likely then to explain words to them? Or teach them new words or?
20. R2: Well I'm trying to think of who is in your class now? [R4's class]. Did I have them? I never had them...Yeah, I'm trying to think
21. R4: Like I don't know. Just think of my class. I wouldn't be gone on the parents, like I'm just thinking of (name of parent)
22. R2: Oh hello
23. R4: She's a B
24. R2: She'd only be coming in to find out what she could find out about you
25. R4: She's nasty like. And I wouldn't, that's the thing, I wouldn't want her coming in. (name of parent), (name of pupil)'s mother, I'd have nothing to do with
26. R2: She's another one
27. R4: Like, she is a, I just don't like them as a-
28. R2: Sure then like, (name of pupil)'s mammy, lovely, but I asked her last year and the year before to volunteer for things and I know
29. R4: She is shocking (unintelligible)
30. R2: She is and she isn't. When they used to go home at half one like, I would wait outside with the lot of them and I would be talking to them, you know, talking to the mummies and that, but you know, (name of pupil)'s mammy now, like, she's-
31. R4: I know her
32. R2: But like, great at having the chat and well able to talk and articulate themselves but then when it came to helping with an auld game, and I know that they weren't working and they were just dropping them to school and they wouldn't stay on for another half an hour
33. R4: They're too busy though
34. R2: D'you know? They wouldn't stay like
35. R1: So are they thinking-, too busy, I suppose I'm trying to think about that. Too busy, as in 'do you know what? That's boring' or is it too busy?
36. R4: Couldn't be bothered
37. R1: Couldn't be bothered. Or is it too busy, 'oh my God, I probably won't know the words. I'm not going there'
38. R4: You see, I think there could be that fear as well
39. R1: Yeah
40. R4: Like 'what would they be doing?'

41. R2: You see, you'd nearly want to explain in-depth
42. R4: Yeah, I'll pass on that
43. R2: Yeah, like I mean if you-
44. R4: Like I don't know
45. R2: If you explained to them, 'you literally have to play a game of bingo with them. I just need another pair of hands'. That's better than saying 'it's literacy week. Let's all play a load of language games' and they're probably going 'what the fuck is a language game?' Whereas, if you said 'it was bingo', they're in then
46. R4: It's only bingo
47. R2: And then give them the easiest game
48. R1: Yeah, 'cause we would always call them 'talking games'
49. R2: Yeah..yeah
50. R1: But, I suppose one thing, right, and I'm thinking of my own parents, my mum didn't come into the school and help out. That wasn't encouraged or whatever, but she would of always done the homework so, I thinking about, even if I'm as a parent, just say for example, I'm one of those parents who thinks 'do you know what? I mightn't be able for that. I'm not going to do it' but at HOME, what does it look like if the parent is helping them at home?
51. R2: Well you probably, at your stage now [R4's class] you can probably pick who is helping, check, who does the homework, who's helping at home like
52. R1: But how do you know if they are? So check their homework? I suppose I'm trying to find out 'how do we know if they're helping their language development at home?' They might be doing their homework with them
53. R2: Well you could, you can easily see who is doing the homework and who is not doing it with them because they have it rubbed out and done again, or they've had written down little words
54. R1: Ok
55. R2: But you could probably pick who is and who isn't. But then when they get to your stage [R4's 4th class], they just leave them off like? Like mine were first and second last year, a lot of them, they would have signed it or they would have rubbed it out, you know, corrected words-
56. R4: Like I know, I'm pretty certain that there's nobody in my class who sits at home with mam or dad, or brother or sister and does their reading
57. R2: Yeah
58. R4: No way. And I do say to them 'I want those readers signed every night' and sure they're at the stage now where they just get their mam to sign them. And I'll say 'did you read it? Honestly now did you read it? Yeah? How many times', because I just say 'you might have to read it 3 times', you know
59. R1: Of course
60. R2: It's only 2 pages
61. R4: It's only 2 pages. It's nothing (name of R1), and eh 'how many times?'...'5', 'no, no, don't lie'
62. R2: You see!
63. R4: "Tell me the truth. Did you actually read that?' because it's so obvious that they're only after looking at it now and em, eventually then 'no, I didn't do it'.
64. R2: You see!
65. R4: You see a lot of them don't do it.
66. R2: But sure then the parents just sign it like, so you're kind of-
67. R1: So which comes first? Sure Mammy doesn't want me to do it or, you know
68. R2: Mammy doesn't care
69. R1: So if we're thinking about-
70. R2: Like (name of pupil)'s mother
71. R1: If we're thinking about changing children's language development. We want them to have more vocabulary, more sentences, we want them to be better able for language, then they'll be better able for their reading and their writing, what would that look like? If parents were totally on board and we knew that by the end of the year, their language is going to be brilliant, one, because of what we're doing but part of that is because the parents are totally on board. What would that? What would they be doing if they were totally on board for language development?
72. R2: Ah Jesus, sure we're hard pushed to try and figure out what we're doing to kind of keep the whole language thing going, never mind what they can do. I don't know, like, would you give them the list of words to stick them up on the fridge?
73. R1: Ok
74. R2: You know, sure what difference does it make if the child still, it's still very much child

- centred, if the child isn't going to say 'I must say these words and put them in a sentence for you Mammy', unless Mammy is listening, it's falling back on the child again
75. R4: It is
76. R2: And you know, if the mother is not too bothered, the child, no matter how much she gives, 'ok, the words, the words, the new words, let's go, we have our list, la, la, la', it makes no difference. They do it in here for you, but they won't do it when they go home
77. R1: So basic things, like listening to your child, maybe they're just basic things
78. R2: Yeah
79. R1: Like listen to your child when they're talking to you
80. R2: Yeah
81. R1: They're going to come home with words, you need to kind of ask them what those words are
82. R2: Yeah
83. R1: Like not even going into extend or-
84. R2: But even would you get the child to explain them to the parent, I know it sounds-, but you're, you'd be reversing it then. Like if the child knows what the word 'experiment' means and they're explaining it to the mother, they're explaining it to them as best they can
85. R1: With their student definition
86. R2: She either knows it or if she doesn't know it, she's learning it now if she's willing to listen to it. It gives a bit of more focus on the child, and the mother's like 'oh right, that's what an experiment is', like obviously I know they will know a lot of the words but maybe they won't like?
87. R1: Photosynthesis or whatever?
88. R2: Yeah, but still you're putting the focus on the child there, not the parent, you see, so...
89. R1: So are you saying though that maybe we need to make it work, if we're saying one of the issues is, not really listening to their child?, not really that interested? Just signing the homework without doing it?. What we're saying is 'ok, maybe a way to get around that, a back door entrance, is 'right I want you to go home tonight and explain to your mam what these 3 words mean?'
90. R2: Yeah...as part of their homework. But do you see, how do you know if they did it or if they didn't?
91. R4: How do you know that they're doing it? Sure that's it
92. R1: mmmm
93. R2: It is, I know we sound very negative-
94. R4: Nooooo
95. R2: But that's from years of it. It's not
96. R1: Well this is your experience, and that's the whole thing
97. R4: Its sounds bad like
98. R2: It does sound bad but that's the reality of it, as well you know with the language games and that, trying to get a few fecking parents in, is, it doesn't work
99. R1: Or if they do come in, it's trying to keep them coming back
100. R2: mmmm
101. R1: Like we had 6 parents last week and we had 4 this week
102. R2: Yeah
103. R1: Now some people were sick and some people, you know-
104. R2: But a lot of them can't commit to anything, can't commit to doing something for 3 or 4 weeks, like
105. R1: mmm
106. R2: Because they're so busy
107. R4: You could try that (name of R1), you know, as you say, three new words
108. R2: Yeah
109. R4: And just see how it goes
110. R2: Yeah
111. R4: I suppose more for myself and (name of R3), with the older ones
112. R2: Yeah, like even 'you're going to be the teacher now, and you're going to explain to your big brother or daddy or mammy or any grown up that's going to listen, you're going to say 'ok, I'm going to teach you what these 3 words mean now, I learnt them in school' and even if it's three words for the same, for the week like, or one word a night or something or I don't know
113. R4: Yeah
114. R1: And would we have to kind of send home some kind of, very short flyer saying 'we are going to be-, your child is going to be teaching new words every day this week.

- Please can you ask them-', you know, so that they're even prepared for it
115. R2: Yeah, and even give them out like a little sheet? And like you could have the word, Monday's word, Tuesday's word, and just ask the parent to sign it, like, you can't, as I say, you can't guarantee that they're going to sign it, but if you sent a note and asked them to sign it 'would you like to part in this?', and then if you hype it up to the child, they'll be like 'oh Ma, yeah, sign it like'
116. R1: mmmm
117. R2: I don't know, but like you can only try
118. R1: Like the paired reading, a bit
119. R2: A bit like the paired reading, yeah
120. R1: mmm, yeah...em, I was wondering as well, would parents have a different view of how their kids learn words, than what we have a view of. So when I go to 'how will I teach these words?', I go to what does the evidence tell me? I look at what does these reports tell me, 'oh you have to give rich instructions, give examples, give them another words that means the same, give them another word that means the opposite. And if I just think of that square, that's what I think of: 'this is how a child will learn a word'
121. R2: Yeah
122. R1: And I'm informed by evidence or research, no more than yourselves. This is what we've been taught to do. But I'm wondering would parents come up with something different? Would they say 'well if you did it like this, they'd love it' or 'if you did it around Moshi Monsters, they'd love it' or if you, you know, I'm wondering, would they come up with anything from what we think is the right way?
123. R2: I'd say you'd be lucky!
124. R1: Yeah
125. R4: (laughs)
126. R2: I could just-
127. R4: (name of parent) would
128. R2: Oh she'd be great, Morocco, Morrocan, they'd be one of the words there, football, soccer player or whatever, 5 months pregnant, not knowing
129. R4: Not knowing
130. R1: mmm
131. R2: Cleanliness, cleanliness would want to be a good one for her maybe
132. R1: So maybe they wouldn't. Maybe they would, maybe they wouldn't. But maybe they would have ideas 'well this is how I could help them', not necessarily 'oh I would extend and I would clap out the syllables'
133. R2: Well there might be a few who would say, like if they are going to go with the opposites to it, words the same as it, putting it into a sentence, d'you know?
134. R1: Yeah
135. R2: I don't know
136. R1: I don't know, maybe they'd come up with 'well if you stuck them on the fridge' or maybe it would be something as simple as 'well if I even knew the words' like what you're saying or maybe it would be something like 'well I'd... we go on the internet a lot' or I don't know, what would they-? Would they come up with anything? Maybe they would come up with absolutely nothing, maybe they would come up with loads. I don't know
137. R2: Yeah
138. R1: emmm...so that's the only thing I was thinking of. Would they have other suggestions that would fit into 'this is what it's like to live in Ballymun, this is what it's like to live in a Ballymun house, so therefore, what we need to do is...', or whatever, I don't know, I don't live in a Ballymun house so I don't know
139. R2: Yeah, neither do we
140. R4: Thank God
141. R1: Yeah, I know
142. R2: (laughs)
143. R1: So I suppose, what have I written down here? Em...I've listed, we know that parents have a, do have an important role because as we said, you know, you said before (name of R4), there's only so much you can do in a school. Parents need to meet us, and parents need to be on board, and we know that they have an important role. We are concerned, because we know that, we see that the kids aren't being listened to or maybe the kids are just, the parents are just signing the homework and not even doing it with them. Em... and the other thing is that they mightn't have the language skills themselves so how they can explain what Caucasian means if they don't know what it means, like?
144. R2: Yeah
145. R1: So then we'd say, if parents were involved, maybe the parents would be

- aware we are trying to focus on developing their words, this is the words we're actually focusing on, maybe the child will explain it to them and teach them, em...maybe they will just actually do their homework with them, make sure they actually do it, em... read with with them, commit to it, so come to the 4 weeks, not just come to one week and then go off again, and if, if the, if the games, I know the games don't happen in every class, em...some parents DO volunteer, some parents, maybe the ones who are more educated, or at a higher level are more HAPPY to do that, em...junior infant parents definitely more likely to do it just because they're new to the school and especially if they don't have older brothers and sisters
146. R4: Yeah
147. R2: Yeah
148. R1: But from what we're saying, it's all very negative. So how do we actually keep the issues at bay? How do we cope with this? On a daily basis, we know that parents have a very important role, they're the primary educator, if we don't have their back up, we're not going to get the same results. Yet, we know we're not getting their back up 100% of the time, so how do we cope with this? Like how do we actually-? What do we do to keep this issue at bay? Or how do we cope with this on a daily basis?
149. R2: But sure all you do, you try, you tell them things, you involve them in things, and they either come back to you or they don't and more often than not they don't, because you're going to do it anyway or some other parent is going to do it anyway. So, why should they be worried about it?
150. R1: And what about the homework? How do you cope with that? Like they're not doing the homework? What do you do (name of R4)?
151. R4: Oh (name of R1), you are looking at-
152. R2: Banging your head off a wall I'd say
153. R4: I just make them. And there at the beginning of the year, there was (name of pupils) coming in with their homework not done, and I'd, I'd eat her
154. R1: Yeah
155. R4: I would give out stink to her
156. R1: So this is like a discipline issue?
157. R4: Discipline, yeah
158. R1: Yeah
159. R4: But they do their homework. They'd be all, oh they'd all come in-
160. R2: But they're old enough (name of R4), like
161. R4: They'd have, their attempt with the homework made, it wouldn't really be great. Now it wouldn't, by any standards, it's, it's you know, it's their 5 spellings into sentence, it's so little, it really is so little
162. R1: So the rule in your class, it is unacceptable to come in here without your homework done. So you ensure it's done?
163. R4: So I know the written part of the homework is always done, but as regards the rest...
164. R2: Whether they're doing their spellings
165. R4: Tables...
166. R1: Yeah, yeah
167. R2: Like you don't have time to examine tables every day and spellings every day, like you don't
168. R4: No you do not
169. R1: And would they write it in their homework journal? They have a homework journal?
170. R4: Yeah, homework journal
171. R1: So if they, if I'm their parent I could be able to see 'you're suppose to do your 6 times tables tonight' ok
172. R2: But it wouldn't be, it wouldn't be, like signing it wouldn't be a thing across the board, like some of mine, when they signed it last year, some wouldn't
173. R4: Some don't, yeah.
174. R2: The reading, I use to make them sign it. But then they were younger and they would want to do it, which is different. Yours are that bit older, they're kind of 'oh whatever', you know, it's attitude as well, like.
175. R1: And what about the policy of the school? If I don't do my homework and my mammy doesn't sign it for a week, what would happen to me?
176. R2: You see, you don't have to have it signed is the thing.
177. R1: So is that an issue?
178. R2: Well, mine use to sign it last year. Sometimes parents would sign it and sometimes parents wouldn't

179. R4: But sure all I have to do is go up to you at home 'Ma, will you sign that?' 'Have you got it finished?', 'yeah I have, just sign that thanks', and then into the bag
180. R1: mmm
181. R4: Which I'd say, and you see the thing is, like for some of them, like they probably wouldn't get it signed, you know you think of some of those ones, you know (name of pupil), you know like the likes of her
182. R2: Yeah
183. R4: Her mam and dad...
184. R2: Sure her mam I don't think can even read or write or anything like
185. R4: That's not going to happen. She's not going to be coming in with her journal signed, and other kids like that
186. R2: Yeah, you see, that's the thing
187. R4: You'll have all the good ones
188. R2: Like all the ones that go to the (name of afterschool project), it will be done with them, somebody will do it there but I don't think they sign
189. R4: But stop (name of R2), who did I have? Went to the (name of same afterschool project), (name of pupil) still wasn't doing it there. Who did I have last year? (name of pupil), she never...
190. R1: It's probably the same thing with the (name of afterschool project)'s leader, isn't it as well like? Like if you're the (name of afterschool project) leader, I could say 'oh will you just sign it there?'
191. R2: Well that's a homework club and after school activities, so if they're supplying the people to do the homework with them they should be able to say 'well you've 8 sums, you've 5, you've 5 spellings and you've this. Let me see it!'
192. R4: Yeah
193. R2: Like they don't have 100 children over there, like, do you know what I mean?
194. R4: No
195. R2: They only have a few, a small enough ratio because it's hard to get into it, so I don't see why they can't sign it if they are actually doing it like
196. R4: They should be
197. R1: ...Ok signing the homework
198. R2: Well then it depends. Like I personally had 2nd last year, and woe be tide you if you came in without your homework, you were ate like, and if we were doing anything fun that day, you were doing you're fucking homework while we were doing the fun stuff
199. R4: (laughs)
200. R2: And if you didn't do it right, you did it again...but I'd be a bitch about it. No, I would.
201. R4: I'd be the same
202. R1: So it sounds like zero tolerance
203. R2: Like I would, well WE would obviously have zero tolerance (laughs)
204. R4: (laughs)
205. R2: With homework like
206. R4: You know then, when you come in to...who was it? One of my kids, one of the parents,somebody, it was (name of a different teacher) who told me this, she came in and told me this...one of the parents, she said to (name of different teacher), 'oh yeah, they were all saying it last year that you're the teacher that gives no homework!'
207. R2: Fuck off!
208. R4: You know (name of teacher), she's as quiet as a mouse, and if you came in with the homework not done sure, (name of teacher) thinks she's giving out. 'Have that homework in to me tomorrow!'. That would be (name of teacher) giving out whereas if that was me it would be 'DON'T YOU DARE COME INTO THIS CLASSROOM TO ME TOMORROW...', so-
209. R2: That class would have had me last year, like, hello?! (laughs)
210. R4: You know, you'd have to so like the whole thing there about the homework like, you're coming from one teacher to the next
211. R2: Yeah, one extreme to the other
212. R4: One extreme to the other. So they might kind of think 'that teacher doesn't give a hoot about the homework, I'll do it tonight. I won't bother tomorrow'. You know?
213. R2: Yeah
214. R1: The consequences are not that big
215. R2: There'd be a note. I'd have to write a note. If I..., you'd get away with it and have it in the following day and then if it wasn't then, there was a note and your mammy had to sign it, and if she didn't sign it, I was ringing her and she was coming to see me

216. R1: Ok. I'm even scared talking about it now!
217. R4: I know (laughs)
218. R2: This is (name of pupil)'s mammy now like.
219. R4: You'd nearly be hoping that they'd just bring it in. You didn't want to bring her in
220. R2: Well sure that's it like. You don't want to ring the parents but...
221. R4: You did not want to ring
222. R2: Ah, I'm telling ya!
223. R1: But I think-
224. R2: It would be different if you gave them too much and they couldn't do it. They were always able to do it and it wasn't all that much so it wasn't a big deal like. Half an hour, max., everything would be done like
225. R1: What about? And I can definitely see the whole homework thing...but what about beyond homework, because like if, say for example I'm focusing on reading, I have to do novel, and I have to do my reader and I have to read my history, but then as a parent I want to encourage reading, so maybe I'll buy a magazine or maybe we'll read the recipe together or 'look I got a text message, can you read it out?' or 'will you read the teletext?'. So I'm going to do additional things to help my child with reading, but when it comes to language development, how do we instil in parents, to support their children's language development?
226. R4: Well..
227. R1: Apart from the homework, because homework is obviously very structured-
228. R2: Yeah
229. R1: And specific, so I suppose I'm moving beyond homework to, how do we get them to, to...
230. R2: I don't know (name of R1), because a lot of them, they don't even talk to them, like you can see it from them in junior infants that they don't talk to them, so like
231. R4: They don't have time for them, so like, 'go over there and play and be quiet'
232. R2: That's it. Even sitting in front of the television, even you see them collecting them, you see them '(name of child), come on' and drag her out by the head or the hand and it's no 'did you have a good day?', 'say bye to your teacher'
233. R4: Yeah, none of that
234. R2: You see the ones that would be like 'say bye to your teacher', 'oh, what do you have there in your hand?' you know, 'oh no homework, give me your folder, we'll pop it in your bag', like you see those parents but then you see the 'C'mon, put on your coat. Give me that', you know, they're just barked at. It obviously, if they're going to bark at them in front of you, they're not going to be anyway nicer to them behind closed doors like
235. R4: Well I can't, well we can't do anything about that like
236. R2: No, you can't like
237. R4: You're going to, you know, ask them to, you know, will you talk to your child more at home, 'oh yeah, yeah, yeah I will, yeah'
238. R2: That's the thing like. That's what you see
239. R4: And then go off
240. R2: Like you see little (name of pupil) there and (names of 2 pupils), they are, they would talk the legs off a pot, like (name of pupil) was there the 2nd week and I sent her over to (name of teacher), to tell her after going to Tayto Park, all about it, and (name of teacher), was like 'well fuck me!', like she was like, it was like having a conversation with an adult
241. R4: Awwh
242. R2: She could tell you everything, when she went, who she went with, what they did, blah, blah, blah, answering the questions, like having a conversation with an adult. And then you see the likes of (name of pupil) whose just like...'what colour crayon are you using?', '....', you know like, but it's lack of conversation like
243. R1: So one of the things would be...if I wanted, really wanted Ballymun parents to improve their children's language, simply can you just talk to your child for a few minutes every night.
244. R2: Yeah
245. R1: Have a conversation
246. R2: Yeah
247. R1: Talk about whatever you want. It can be the salt, the computer, the fridge, the whatever...talk to them...or talk with them
248. R2: But even have a conversation with them about school. 'what did you do at school today?, what was your favourite thing? What was your least favourite thing? What did you like doing? What did you not like doing? Who did you sit beside? Blah, blah, blah, who

- were you in beside in the line', you know?...like...but then again you see, the small ones might do that, half of them, but yours (R4's pupils), aren't going to have 5 minutes conversation, who's going to do that?
249. R1: So maybe one is talk with them, and two is, listen to them
250. R2: Yeah, yeah
251. R1: D'you know? If you're saying the young ones are going to do it.
252. R2: Yeah
253. R1: Listen to your child for 5 minutes, and even if you think this is the most boring thing in the world 'I don't care where you were in the line', 'listen, and ask a question'. D'you know? Maybe that is something from what you're saying?
254. R2: Yeah. But even like those sheets for the language games (name of R1), like unless you're kind of 'oh this what we're doing this week! This is the page and you know yourself, just talk about all the things..', you see the parents who are like 'oh great, thanks very much and like, you know the ones 'it's on the fridge, Teacher' and you know the ones who are like 'whatever, give me...' and you could be giving them a note about anything like, it's just gone into the bin
255. R1: And then it's not fair on the ones that WILL do it, why should they? Why should we not do it? Like if we have, 5 of the kids in your class who will do it, why should they be held back?
256. R2: Yeah, but they're probably the 5 that don't need to do it because they're probably well able to talk about their knuckles and their nails and their ankles and their this and their that like. Like even we were doing about the body, like, and I gave them a body and they drew on all the bits and I was like 'do your two arms, do your hand, do your finger', they were like 'your knuckles, put in your knuckles', you know put in your nails, put in your toenails, put in your eyebrows, put in your eyelashes, but it was the 5 bright ones that were saying 'eyebrows', 'eyelashes', 'cheeks', 'dimples', you know, the other ones were just like 'big head', 'big arms', lucky to get fingers and a thumb out of them, you know, like 'I don't know how to do that'
257. R1: Yeah
258. R2: So a lot of the time it's the parents who will give it a go and give it a chance are the children who don't necessarily need it like
259. R1: mmmm
260. R4: That's it. They're well able
261. R1: So there's something about 'how can we get the ones...?'
262. R2: (laughing) look you're not listening, there's no way, we're trying to tell you!
263. R4: (name of R1) how many times?
264. R2: (laughing) how many times do we have to dress it up in a different conversation?
265. R1: (laughs)
- [off topic for 125 seconds]
266. R2: This is for oral language, come if you like
267. R4: If you want to come, yeah, you're invited
268. R2: You're nearly kind of eh..
269. R1: Oh I like that idea of a class meeting
270. R2: A class meeting and then gear it towards oral language, not but sure (name of R1) would be doing the talking. Sure it's too late in the year for us to be having a class meeting, isn't it?
271. R4: Yeah, we're not-
272. R2: Yeah
273. R1: I'd be doing the class meeting then
274. R4: You'd be doing the class meeting, meet all the parents and-
275. R1: 'As you know, you've all signed up to this little project..'
276. R2: Yeah
277. R1: 'and we're going to have a class meeting to discuss it'
278. R2: Yeah
279. R1: 'So between September and Christmas, myself and your teacher, we've been working on... blah, blah, blah and we've been doing this and we've been doing that' and whatever
280. R2: And we've seen a huge improvement in their literacy
281. R4: You see, I'd say they'd be delighted as well, because the kids would be going home saying '(name of R1) was in today' and they're always going on 'Ah (name of R1)'
282. R1: Because I'm a novelty for ten minutes, it's novelty
283. R4: Yeah, it's great. So they'll be all...

284. R2: And if you say there's been a huge improvement but we're thinking we can improve them even MORE-
285. R4: Even more, yeah
286. R2: -if ye were on board, because we have assessed them all now before Christmas and we're thinking we'll assess them again-
287. R4: So if you could help us over the next few weeks-
288. R1: So then maybe we could bring in, maybe have some ideas, you know, one idea that my supervisor had, was, she was saying 'why don't you say 'here's some words. How would you teach these to your child at home?''
289. R2: Yeah
290. R1: So words that are real words, but how would you, this, yeah, and then maybe we could say 'maybe some examples. It might be an idea to give some examples' or whatever
291. R2: Now there'd be very little interaction
292. R1: I know
293. R2: Just so you know like
294. R4: I don't, in a way you'd nearly be better off...
295. R2: Telling them
296. R4: Just...
297. R2: Like mine were at the welcome ceremony and Steven starting singing a song and he asked them to sing it back at him, and all 11, so that was 22 parents, sat there like this [silence]
298. R4: Like (name of R2), you're not, you'd kind of be thinking...yeah, no
299. R2: They won't answer you back, there's no point in throwing out a question, and then waiting for an answer because you could be-
300. R4: And (name of R1)...
301. R2: Because you could be looking like a big eejit. No offence, but...
302. R4: Yeah
303. R1: Ok (laughs)
304. R2: I wouldn't throw it out to them either...Now, you could say 'if anyone has any other ideas, that's great, I'd love to hear them', but I wouldn't see them throwing back-
305. R1: I was thinking maybe 'talk to the person beside you'
306. R2: Yeah, you could do that
307. R1: You know, rather than, like say if we had a big meeting here of parents, I wouldn't be the first person, you know, like, put up your hand, and give an idea, but if it was me and (name of R2) talking or me and (name of R4) talking...
308. R4: Yeah, maybe, yeah
309. R2: Yeah, maybe that way
310. R4: And at the end, 'well does anybody want to share?'
311. R2: But you'd nearly have to go round to them (name of R1), because I don't think they'd share even
312. R1: Actually, that's a good idea!
313. R2: You go round and say 'so what do ye think?'
314. R1: So 'ye were talking together, did ye come up with anything?'
315. R2: 'It's very hard, I know, like I'm trying to wreck my own brain to think of what's coming up'.ehh
316. R1: Ok
317. R2: Instead of like, I'd say if you opened it up to the floor-
318. R1: And then I could summarise. I could have my little page and say 'well so far the ideas are this, this, this and this'
319. R2: Yeah, and even if you had them written down and they said nothing, 'well you've come up with those. They're great', like, because they kind of need it
320. R1: Get feedback from the parents. Love it!....I think that's a great idea. So basically, what we're doing is there, we're going to bring into that the message 'you need to talk to your child'
321. R2: Yeah
322. R1: 'You need to listen to them and you need to help them know the words we're focusing on'
323. R2: Yeah
324. R4: Yeah
325. R1: And even if we did those 3 things
326. R2: Yeah
327. R1: Talk, listen and these are the words
328. R2: Yeah

329. R1: What would you think of that? Is there anything else we should change? Talk, listen and we're going to be giving you words, they will be in your...homework journal?
330. R4: Well, we could, you know, we can...
331. R2: We can even staple it in to the front page
332. R4: Staple it in
333. R2: Like Monday, whatever, and circle these 3 words, I don't know, next three, I don't know, or even word a day?
334. R1: Word a day maybe?
335. R2: That's 4 words a week, like
336. R4: Yeah, we could do word a day or...
337. R1: Word a day might be more doable
338. R2: Yeah
339. R4: Yeah, rather than, you don't want to have overload, even the kids, you know?
340. R2: Yeah, if they're doing other, as you say, other stuff, like
341. R4: Yeah, one word, and sure they'll have 4 words and we'll see then
342. R2: Yeah
343. R1: Will we have a test on it on Friday? We talked about, remember (name of R3)'s idea, 'how do we actually know if they're learning these words?'
344. R4: Yeah, just to see
345. R1: So the test would be 'ok, tell me the word for white skin'
346. R2: Yeah
347. R4: Yeah
348. R1: 'Right, tell me the word for a cartoon....begins with, you know, A', 'tell me the word for knife and fork and spoon'
349. R2: Yeah
350. R1: 'Tell me the word for...'
351. R4: Yeah, we could (name of R1). We could try it, like why not, we could try it and...after Christmas, as you say...
352. R2: Yeah, like if it's 4 a week, that's 16 a month, like when you think about it, over 2 months, that's 32 words, that's a lot
353. R4: Yeah
354. R1: Plus all the incidental words. We're putting 1 in their homework journal but on that day we could have TAUGHT 6 or 7, you know
355. R2: Yeah
356. R1: Ok, see where that goes?
357. R2: Ah, we're getting somewhere (name of R4). We're not as negative as we were originally
358. R1: No, you're coming on!
359. R4: Parents are great! [sarcastic], honestly (name of R1). I just think they're fantastic here!
360. R1: I suppose...the last question I had here is 'the 3 biggest barriers', I think we talked about those, anything that would facilitate it, and what you're saying is a class meeting, having it as part of the homework because that is an issue that they will have to do, because there's discipline and there's various scary consequences!
361. R4: Very scary, raaaar!
362. R1: The only question that, now this is a real airy fairy question, but anyway, on a scale of 1-10, you'll love this one, where 10 is having this issue resolved, where are you now in relation to parents and language development?
363. R2: I'd say we're about a 1 or a 2, (name of R4) what do you think?
364. R4: I was going to say, I'd say minus one, ah no, look it, a 1 or a 2
365. R2: There's no point in saying we're 5, we're not half way there
366. R4: No, we're not near there
367. R1: So why are you two and not a one?
368. R2: One or two, either or, it depends on your class
369. R1: Ok, it depends on your class
370. R2: I think it depends on your class. If you have good parents, half of them might be involved, if you've shitty parents 4 of them might be involved
371. R1: Depends on the class and depends on the parents.
372. R2: Yeah
373. R1: You could be lucky that you have a bunch there that actually 'these are flying ahead'
374. R2: Yeah
375. R1: And actually you probably DO have a bunch there at the moment. It's hard

for me to know your class [R4 class], but you probably have a few, like the little one with the glasses, I know definitely..

376. R4: Who's that now?

377. R1: Sits up the front...[clarify who child is]. That's brilliant, what I'll do is I'll share, asking (R3) [R3 not at this meeting but R1 meeting her individually the following day], I won't share what we've done, so maybe

378. R2: We'll tell her nothing

379. R1: Well I was just going to say, if you want to tell her nothing

380. R2: She'll come in and she'll be like 'parents are brilliant. Oh I think they'll do this and they'll do this..' (laughs)

381. R4: 'Well all mine are fantastic'

382. R2: She'd have a few good parents though. She'd have a good few

383. R1: Well what I'll do is, I'll ask (name of R3) the exact same questions, see what she comes up with and then I'll share what we talked about, and even our class meeting idea, and see what she says and then next week we'll get a chat to, a chat?!, a chance to chat about it altogether, about what we're going to do. We'll nail down January's plan

384. R2: mmmm

385. R1: Because I'll have to get dates as well and you know, all that kind of stuff, so we'll nail that down next week

386. R2: Ok

387. R1: I'm just going to show you these videos now, for the last few minutes because I don't actually, it will just be me, because I don't wanted to show (name of R3), so it will just be me and (name of R2)

388. R2: Oh the 'address'. Well it goes to show, I was doing the 'address', I was posting a letter and what goes on the address, 'what is an address?' but like she was saying 'go home now and ask your mammy's what is your address?' and blah, blah, blah but at least 5 of them came in the following day and they were like 'oh my address is no. 4....'

389. R4: Aaah

390. R2: La, La, la, you know

391. R4: Well you see, that goes to show

392. R2: They're the ones that asked and they were answered like, and (name of pupil) ran up and asked (name of principal) 'what's the address of the school?' and you know, little things like that

393. R1: And what did (name of principal) say?

394. R2: 'What?', no, she was able to tell her, as obviously she knows the address of the school!

395. R1: Well that's great

396. R2: You see the difference is they're very small and very eager

397. R1: But the fact that there was enough gone on about it, you had talked enough about it (name of R2), that it stuck to ask. They made a connection and they got the right answer

[off topic for 130 seconds]

398. R1: Ok this was me doing the verbal square

399. R2: What did you do it on?

400. R1: I tried to do it on synonym. They found it so hard to come up with the student friendly definition

401. R2: Of a synonym?

402. R1: Yeah

403. R4: Jesus (name of R1), I can't remember this at all

404. R1: Ok, I'll give you a whack of it now

[played video clip of R1 in R4's class for 290 seconds]

405. R1: So then I just gave them a blank one, and the word was 'synonym' because that was what they were a little bit obsessed with last week, and they were great at coming up with examples. They did need a bit of help though still, like, seat and chair, poster and chart, em, even some of the girls, like she was like 'boy and girl', you know

406. R4: Yeah, boy and girl

407. R1: Yeah, like are they the same? Ok, they might be the same in that it's describing a person, but boy and girl are clearly not the same

408. R4: Yeah, mmm

409. R1: Eh, so they still needed a bit of help with synonyms

410. R2: Synonyms are hard though

411. R4: They're hard though (name of R1)

412. R2: It's not like you'd given them
413. R4: And then they only had a few minutes to think as well
414. R2: I would find synonyms hard and I'm an adult like
415. R1: I thought they did well with this bit and this bit
416. R4: They did
417. R1: Yeah, once we said an example is chair and seat, they came up with others, and some of the girls came up with their own like 'top and t-shirt', 'trousers and bottoms', I thought they were good, and the non-examples, they were ok. Once I gave them one, like 'the opposite would be, eh, you know, cold and hot', but the definition, and it was the exact same in (name of R3)'s class
418. R2: But I bet you they would have been much better at putting donation or synonym into a sentence, they don't often do definitions, sure they don't know?
419. R4: No
420. R2: What's the definition of that word? What's the definition of table? They don't often to do that like
421. R1: I know, and the same thing, I think it will need practice and we might do it again on Friday, cause the same thing happened in (name of R3)'s and she's being doing loads on disasters and catastrophes, the kids came up with a million examples of disasters, a million examples of non-examples and only one girl could up with a definition
422. R4: Yeah
423. R2: It's not something that comes-
424. R1: Because most of them said 'a disaster is something that... a disaster is the Titanic' or somebody else was saying 'a disaster is when loads of people die' and like (name of R3) was trying to say 'No, that's an example, when loads of people die' and eventually we came up with 'a disaster is a bad thing that happens'
425. R2: Yeah
426. R1: You know, so that was difficult for them, but then... maybe they need more practice and that's what, maybe I might do it again on Friday
427. R4: mmmmm
428. R1: If they don't do definitions that often then-
429. R2: But I'm just trying to think, you would NEVER do definitions. You'd put it into a sentence, or you'd give them another words for it, but you'd never give them a definition
430. R1: Yeah
431. R2: You know, they wouldn't be use to it I think
432. R1: Yeah, so it might be something we'll do it again, because if that's what the research is saying HELPS them, their OWN definition, not us saying 'look up the dictionary', their own words, that's what they're saying works. Em, same with, like younger kids, like, their own definition of cutlery is 'knife and spoon and fork'
433. R2: mmmm
434. R1: That's their own definition of it. Not a piece of silverware that represents the group of... or whatever
435. R4: Ah yeah, that's....
- [played video clip of R2 in her class for 285 seconds]
436. R1: Very good
437. R2: The fun and the games. I don't know how they listen to me all day!
438. R4: So cute!
439. R2: Ah yeah, they are very cute I have to say
440. R1: What about address there? Are you...? What do you think when you listen back?
441. R2: mmm. I think we were very much focussed on the letter an awful lot and didn't do an enough on the address maybe. No, on saying that, the ones who usually get it, got it by the end of it and came in the following day talking about it
442. R1: They didn't have it there because they would have said it
443. R2: Yeah
444. R1: Like it was clear that they didn't know it.
445. R2: They didn't know it, what the address was. No, but em, I don't know.
446. R1: Well did you give examples?
447. R2: It's kind of hard to give examples though, like everyone's is different.
448. R1: I think...
449. R4: You said that though, mine is different to yours, you know, my house, my friend
450. R1: We had (name of Ballymun address), we had (name of different Ballymun address), we had Ballymun. Like I think there was examples, and then non-examples, I

thought it was quite obvious that it's not our name, you know, it's not the envelope, it's not the stamp, it's this bit here that's written. Do you know, if I was doing that with a 5th class you'd be saying 'it's not the stamp, it's not the envelope, it's not her name'

451. R2: Yeah

452. R1: I thought that was it, because you're doing that all orally, and then, they're own definition, what did you say?

453. R2: It's the name of your house

454. R1: Yeah, name of your house or where you live.

455. R2: Because it's hard enough when you think about it. 'Explain address', 'emmm...', it's where you live, but for them, where you live, you live there but I live here, is it not the same? So the name of your house is...

456. R4: Sure, that's it

457. R1: I thought you did a really good job of it

458. R4: Oh yeah

459. R1: Because I'm thinking of rich instruction, that's the, I'm thinking of the square and other bits. Did you give examples? Yeah. Did you give what it's not? Yes. Did you tell them what it is in their own words?

460. R2: mmmm

461. R1: Yes, it's where you live. You know, I thought all the bits were there, em, does it have a synonym? Address doesn't, but we came up with our own way of saying it. It's where you live or it's the name of your house. Like you did give synonyms and you did say what it's not, so I thought it was really clear

462. R4: Yeah

463. R1: And the fact that they got it at the end, you know...

464. R2: Ok

465. R1: No, I think, I think it was, I'm thinking if the elements that we know work, and did you put it into context? Yes, you put it in an envelope. You had the prop. You know, because we were talking before about not always using a picture

466. R2: Yeah, they're getting a bit sick of the whole picture thing I think, but...

467. R1: No I thought it was perfect

468. R2: Ok

469. R4: Yeah, I definitely think so

470. R1: (Name of R4) did you think the same?

471. R4: Oh yeah

472. R2: You knew what an address was by the end of it. A-DDRESS

[off topic for 145 seconds]

Transcript: 22nd January 2013

1. R1: One of the things that we did before the meeting last week was, we just kind of thought about, what did you think the outcome will be? What would be a really good outcome and what would be a really disappointing outcome? And we were actually quite similar, the three of us, in terms of, we thought that a really good outcome would be if at least half the parents came
2. R2: mmmm
3. R1: And a really disappointing outcome would be, we thought, few, none, like if one or two only came
4. R2: Yeah
5. R1: So we didn't get a really disappointing outcome. We didn't get a really good outcome. I'd say somewhere in between, somewhere in between. But I have to say from the response, we thought a really good outcome would be an enthusiastic response. Of the parents who did show up, there was a good response I thought from, nearly all of them, and I do think they were willing to be involved and help with their child at home....em....
6. R2: Well, your one, (name of pupil)'s Mammy, she works in the (name of a primary school), and she wants to know can they implement it in their school. And I was like, well that's fair enough, but it's actually something (name of R1) is doing herself, it's not to do with (name of R1's employer), or whatever, I said 'she's doing something herself and we're helping her and piloting it in our classroom'. And she was like 'I don't see why they can't do it in the (name of a primary school)?', and I was like, 'lah, lahdy, lahdy, dah, I'm not having this conversation!'
7. R1: Does she have children in the (name of primary school)?
8. R2: No, but she works there, so I'd say she was thinking that obviously if it's anything that we're doing, they can do as well probably
9. R1: Yeah
10. R2: But, I...
11. R4: Is she a cleaner (name of R2)?
12. R2: No, she's the attendance officer, you know, like (name of attendance officer in their school)?
13. R4: We could get her to kind of, blow up about the (name of their school) over there, and then we'd get all their kids sent over here!
14. R2: Exactly
15. R4: 'Oh, how great are they?'
16. R2: They're doing mighty work over there
17. R1: Research-, a centre of excellence
18. R2: Yeah...and is it, is it your PhD?
19. R1: Yeah
20. R2: Yeah, I was trying to think, because I had thesis in my head, but no it's not a thesis, it's a...
21. R1: Yeah, and I suppose what will happen really, is that it's our work and...there's probably two things going on. One would be the 4 of us looking at what works in classroom practice and the 4 of us might write a report or a manual. But parallel to that, I'll be writing a thesis on the THEORY of it all. So, we're probably, it's not just mine, I suppose, it is...a collective thing, in that the 4 of us could write up a report on what we think and recommend it to the staff here and present it and whatever else, but I'll just be writing up the thesis of how it started...you know all that academic stuff, the methodology, the results, all that kind of stuff
22. R2: mmmm
23. R1: But the 4 of us would own what we've done here, you know?
24. R2: Ah to be fair now (name of R1), if you weren't here, I really don't think the three of us would be here (laughs)
25. R3: No
26. R1: But I'm just the catalyst
27. R4: No
28. R1: But you're doing it, in fairness, you're with the kids all day, most of the week so...
29. R2: Are many of your kids doing it? Many of them do it last night? [Talk Time]
30. R3: Well, yeah...most of them
31. R1: Oh really? Ok.
32. R3: A couple of them didn't. 'We couldn't find my book', 'Me da didn't have time', 'me ma didn't have time', fair enough.
33. R2: Sure (name of pupil). 'me ma was in the bath'...'alright! For the whole night!'
34. R3: I did a fucking 40-, sorry just stupid statements like that, I did a 40 minutes maths

lesson explaining these type of sums and (name of pupil) sat down and she said 'Teacher I don't understand these because I went to the toilet'... 'WERE YOU IN THE TOILET FOR THE LAST 40 MINUTES?', and she was like 'no'...'HOW LONG WERE YOU IN THE TOILET FOR?', 'less than 4 minutes'...'SO HOW DO YOU NOT UNDERSTAND YOUR SUMS?'...and I ate her, I reared up on her...I got really cross...I REARED up on her

[off topic for 50 seconds giving other examples of excuses children give for not doing homework or class work]

35. R1: How did you get on telling the girls about the homework? How did the kids react?
36. R3: Grand
37. R1: We told the parents. That was step one. Step two was telling the kids. Did the younger kids get it?
38. R2: The...the brighter ones would have got it
39. R1: Yeah
40. R2: Like even (name of pupil) went home, her mother didn't understand but she said that there was words on the sheet, where it said Monday she had to say what the words were and Mammy had to sign it, and Mammy didn't understand but I thought (name of pupil) was fairly self-explanatory, but the ones that are well able, like (name of pupil)'s mammy was there and (name of pupil)'s mammy was there and (name of pupil)'s-, but she would be well able to relay it back. But it's the ones, it's the ones who are well able, sure the likes of (name of pupil), 'me ma was in the bath', and I was like 'did you tell her what to do?' and 'no, she was in the bath'. So (name of pupil), nothing, no folder, no sheet.
41. R1: And is there-, sure there's no other parent teacher meetings coming up?
42. R2: No, but I do think with the smallies, you could do with having a parent teacher meeting again later on the in the year, like around February time
43. R1: Yeah
44. R2: D'you know? I think I'd take back a lot of what I said there in November if I was given the choice. You know, just with their progress, to a certain degree was fine and then they kind of...
45. R3: They start to slow down
46. R2: They either get it or they don't, do you know? And there are some that are flying with the matching and their this and their that, and then when it comes to doing their letters and things, they're kind of...'oh oh'
47. R1: mmmm
48. R2: So I'd say, not even a quarter of mine did it
49. R1: Yeah, Ok...and it's early days as well. It's only day 2.
50. R2: Yeah
51. R1: And what about telling your girls? Like telling the girls themselves? How did that get on?
52. R4: Well telling them was fine
53. R1: Yeah. Did they get it like?
54. R4: Oh yeah, they did. They got it like
55. R1: That's good
56. R4: They... they're, they're really excited about it
57. R1: Bless them
58. R4: They really are like. It's stapled into their journal, you know, 'oh this is for (name of R1)', you know. I let them now choose their own topic to talk about
59. R1: Oh brilliant. What did they come up with?
60. R4: Well I said to them, well I said 'do you want me to give you a topic for, you know, yesterday?
61. R1: Yeah
62. R4: And they said, and they were like 'oh, can we pick our own?', so I was like 'that's fine'
63. R1: Of course, yeah
64. R4: So, you know, I said 'if you're ever stuck, ask me'
65. R1: Yeah
66. R4: So they came in and...oh, One Direction
67. R1: Lovely!
68. R4: Baking, one of them was baking yesterday so she said 'we talked about that'. There was a lot of One Direction I think
69. R1: That's fine, because we can just say 'oh you did One Direction, so we just won't do it again'. That's fine. Once they've that done
70. R4: Yeah, you can't keep...
71. R1: Yeah, we won't just do One Direction, One Direction, One Direction
72. R4: Yeah...I don't think I said that to mine

73. R1: Oh but sure you can say it for next week
74. R4: Yeah, I'll say it to them tomorrow...just in case One Direction comes up again tomorrow
75. R1: Yeah, exactly, but that's it, it's all teething problems, that's, so that they know 'right if you pick One Direction now, you can't pick it again', but there's ways to get around that isn't there? They might pick Harry Styles, you know?
76. R2: Yeah, pick one of them
77. R1: But we can get them off it and say 'pick something different'
78. R4: Pick a song from One Direction...oh God help me!
79. R1: (laughs) And what about in terms of doing it then (name of R4), how were they in your class?
80. R4: To be honest, I don't really know (name of R1)...they went home yesterday with it stapled in
81. R1: Brilliant
82. R4: You know, and they came in today, and I was like 'I want to see it. Open it up now, your journals. And I just want to have a quick look, just to make sure...'. And you know, everyone had it signed, (name of pupil) had it signed out here on this page. I was like 'this is the date we're on. This is Monday', but em...
83. R1: Well the fact that they-
84. R4: They had it signed
85. R1: Well that's good. That means the kids are opening it anyway
86. R4: Yeah, they had it signed
87. R1: Ok
88. R2: But you know, even at that age, even if their mother is not listening to them and they're rabbiting on about One Direction, at least they're rabbiting on about it like, do you know? Or about the word.
89. R4: Yeah
90. R1: Yeah, and even the kids had to have it opened to have it signed, 'oh that must be the word', and even if they said 'oh I have to talk about this word' or whatever it was...they're talking about it or they're even, it's even making the kids aware 'ok I supposed to know what this word means'
91. R2: mmm
92. R1: You know when we were saying 'making it obvious to them', that's exactly what we're trying to do. I mean I think it's a good step. We don't really know, like we have 9 weeks to try this out, we don't know exactly but, that's a good first step
93. R3: We should test all 36 words at the end of the 9 weeks, wouldn't that be cool?
94. R1: Yeah, that would be cool. That would be fun
95. R4: Like (name of R1), I don't know, I was saying to (name of R3) yesterday, 4th class, we started the novel, 'The Worst Witch'
- [off topic for 35 seconds talking about author of book]
96. R4: We only started reading the first few pages of it yesterday, and there is quite a few...you know, difficult words that, oh Jesus, there's actually a lot in it, but one of the first ones we came across was 'turrets'
97. R1: Turrets?
98. R4: Turrets. You know the kind of, like the...towers, you know on a castle
99. R1: Yeah, yeah
100. R4: Should I use words from this book, do you think?
101. R1: Yeah, I think it's no harm, it's no harm
102. R4: But then I was thinking 'when are they going to use that word again?'
103. R2: Yeah
104. R1: Well that's the only thing I would say is that, you know the way we talk about tiers of words? Tier one, tier two, tier three? That to me would be a tier three word, that would come up in specific situations, probably like-
105. R4: You're not going to be saying that...it's not going to be every day
106. R1: No...no...whereas something like em...I'm just trying to think, something related to turrets, like 'immense' or 'gigantic', maybe that will come up in lots of different situations?
107. R4: Yeah...and it has to be a word that they don't...?
108. R1: Yeah, that they don't really know. But some of them will know it probably
109. R3: I think it's easier to teach nouns than it is to teach adjectives or verbs, to be honest
110. R1: But the only thing is, they need to know nouns and adjectives and verbs, you know

111. R3: Yeah
112. R1: So I think it's nice to have a mixture
113. R3: Yeah
114. R1: But to be honest, if that's turrets...if this is what comes up for you (name of R4)
115. R4: There was two words from that, 'turrets' and 'flitting'
116. R1: Flitting? What was the context?
117. R4: They were on about the witches flitting around like bats
118. R1: Oh, they're, they are difficult words but then it's no harm that they know them...they could bring it into a story
119. R3: But how do you teach them that word?, that's what I'm trying to think. If I had to teach a very specific verb like that, I'd be very stuck. Like I could show them what flitting is
120. R1: Yeah, I'd probably do the 4 square thing, like examples of flitting, like what might flit? Ok... a bee might flit, a witch might flit...it's usually something in the air that flits...it's not, flitting is not really flying because it's going 'doo doo doo', you know, and then in your own words then, what would flitting be? Moving quickly from place to place? Generally up in the air? I don't know
121. R3: Yeah
122. R4: Yeah
123. R1: If you think it's too hard though (name of R4), I wouldn't choose it. Pick a different word from the book
124. R4: Yeah
125. R1: And maybe having a mixture, like the odd 'flitting' and then other ones. But you'll know yourself, if they need to know what flitting means to get the book, then they'll need to know what the word means. If it's just a random word, that you think another one would serve them better
126. R4: No we just went over it, but they did, they picked out...
127. R1: Yeah
128. R4: They were the two that they did pick out
129. R1: But then...you know, it's not 'they shouldn't know that and they should know this one', people just say that those tier two words, those ones that come up a LOT, if they learn those then it's going to help them a LOT. That's the reason why they say pick those ones, it's not that they don't need to know the other words either, you know, it's just that the other ones might be more useful.
130. R4: Yeah...well I see how, this week, see how it goes
131. R1: Yeah, see how it goes and that's what, we're giving ourselves a couple of weeks to look at this so...like don't be too hard-, it's only day 2. (name of R3) did you find? Did they sign it in yours?
132. R3: Yeah, most of them did
133. R1: Ah, that's good
134. R3: Again, they were excited like, and a load of them-, ok not a load of them, I'm exaggerating, but three of them came in to me today and said that their ma or da didn't know the word
135. R1: Ok
136. R3: Last night their word was 'precipitation', and they didn't know it...and they said they taught them. I'm going to stick with the auld weather theme this week because it's kind of a bit topical, and I gave them 'meteorologist' tonight, and I just showed them a video of a meteorologist at work this morning, so...
137. R1: Very good
138. R2: Yeah, I think I'm going to use that one as well!
139. R3: Yeah
140. R1: And it's no harm that the parents don't know it
141. R3: I think that that's better that the parents don't know it, because it means the kids have to explain it to them, and they have to explain it in a way that the parents have to get it. I taught 'precipitation' in terms of, we kind of looked at it briefly as part of the water cycle but we did a 4 square on it yesterday, and that was brilliant, they brought the 4 square home with them then
142. R1: Brilliant
143. R3: And then (name of pupil) said to me this evening 'can I do one of these for meteorologist when I go home', and I looked at it, what was it? It was the 4 square
144. R1: Brilliant
145. R3: So that's kind of cool that she was thinking of using that herself then

146. R1: Yeah, so it's obviously helping them, you know, to understand it
147. R3: Yeah
148. R1: And if that's what they did for every word, that would help them because that's helping them make the connections in their head
149. R3: Yeah, definitely is, the way to go for that one
150. R1: So overall, is it easy or hard to remember to give them the word? I don't know, myself and (name of R2) talked about it, what (name of R2) is going to do, just because of her kids, she can't just write them on the wall, we need pictures, and to get those in advance, (name of R2) is going to base hers on a book, which I think is not a bad idea at all
151. R2: Yeah
152. R1: So you're, what's his name, little Misty? The owl, is it?
153. R2: Spike
154. R1: Spike the owl
155. R2: No, he's not an owl, he's a sparrow
156. R1: Oh, he's a sparrow, sorry
157. R3: That's ridiculous, Spike should be a hedgehog. Why is Spike a sparrow?
158. R2: Look, Spike is a sparrow, ok?
159. R3: Flitty would have been a sparrow
160. R1: (laughs)
161. R2: Look...yeah, so we're going to read from the book and pick the words, we'll say read the book on a Friday and pick the words and write them in, so they just get the sheet on the Monday
162. R1: Yeah, yeah, so (name of R2) will have it all done in advance based on the book, so at least the kids have it on context a little bit and then it gives (name of R2) time with (name of secretary) to get the pictures ready
163. R2: Yeah, and even when they're going home 'now, tonight's word is 'nest', make sure you talk to Mammy about a nest and talk about your favourite toy', blah, blah, blah
164. R1: Yeah, yeah
165. R2: Sure we'll see, but sure as I say, even if you're talking on the way to the car or talking on the way home, you know, while Mammy is cooking the dinner
166. R4: In the bath
167. R2: Yeah, shout in the keyhole there (name of pupil), while your ma is in the bath
168. R1: And moving along...eh...so basically Friday then, the test, what (name of R2) is going to do, she'll have her pictures, so (name of R2) is going to bring the kids up and say 'what's that?, what's that?, what's that?, what's that?'
169. R2: mmmm
170. R1: I think those two words will be enough, 'what's that?' and they'll tell you if it's a nest or not, you know, 'what's that?, what's that?, what's that?'
171. R2: Yeah
172. R1: Now yourselves, you're going to do, the girls here are being very adventurous and for the first three weeks they're going to do one type of test, the next three weeks a different type of test, the next three weeks a different type of test
173. R3: Wait a minute, why do we leave this room and suddenly it's...phhhhh?
174. R4: (name of R1) when did we say that? (laughs)
175. R1: I wrote it down here!
176. R4: Yeah we did!
177. R2: Go back over the tape there now!
178. R3: Well actually (name of R1), don't be misinforming (name of R2), (name of R2), we're actually doing 3 forms of assessment. For the first 3 weeks we're focusing on one type of assessment-
179. R1: Yeah
180. R2: For the second three and then a third one
181. R1: Yes
182. R2: You're making me look really bad girls
183. R4: What's the 3rd one?
184. R2: The third one is the 4 square
185. R1: So week one is, you're going to give the definition and you're going to say, this is the little drops of water that fall from the sky
186. R3: It's not drops, it could be hailstones, it's any kind form of precipitation, any form of moisture that falls from the sky
187. R1: Ok, well that will be it
188. R2: And is that whole class then, or what, will they write down number one
189. R4: So we'll call that out, isn't it?

190. R1: Yeah
191. R2: So it's like a spelling test, except a word test
192. R1: Exactly, and they won't-
193. R4: Couldn't they do it on the back of the spelling test-?
194. R1: Yeah
195. R3: They could
196. R4: Just call, call that out and then they write in the word. It's only 4 like, it's not going to take-
197. R1: And they'll be told before they even start, 'make any attempt, because I don't care how you spell it'
198. R4: Oh, yeah
199. R1: So if they write 'precipitation'-
200. R4: I said that to them
201. R1: Yeah
202. R3: But they have to be very specific about they spell it when they're writing it into their 'Talk Time' homework
203. R1: Yeah, yeah
204. R3: They have to take it down properly
205. R1: Yes, and for the test-
206. R3: Do you know what's deadly? Those sheets that you gave us, because I've mine on the whiteboard now, and it's just up beside the whiteboard for the week so it's in front of them for the whole week
207. R2: Yeah
208. R1: Oh brilliant...and then you'll take that down for the test
209. R3: I'll take it down for the test. It's brilliant because it's always up there
210. R1: Ok, in the spelling book. So the A3 sheets are good...and you were going to put them up for the parents' sake. How's that going?
211. R2: The sheet is outside the door, yeah. I'm like 'and these are the words'
212. R3: That looks great outside the door like that, I'd like to do that but sure...our parents
213. R1: The parents won't see it up there
214. R2: No, sure they don't go up
215. R1: Yeah, yeah....so basically you're just going to call out the definition orally and they're going to write down 'one, two, three, four'
216. R4: Yeah
217. R3: Yeah
218. R1: And you'll obviously mix up the order...because otherwise they'll just...visually remember
219. R3: Any form of water that falls from the sky, yeah.
220. R1: Ok...perfect...em...so basically what we're saying is 'it's going ahead', ye're ok, you're picking your words from a topic like, and you're picking yours from a novel, and you're picking yours from a book and there might be words that come up randomly that we'll add in
221. R2: Yeah
222. R1: So that's, that seems ok?
223. R4: Yeah
224. R1: ...em...and the kids know that they have to do it, like...with their parents?
225. R4: Yeah
226. R1: Yeah, and obviously it's different for the younger ones as well...I suppose I'm just thinking is there anything we can do to make it as smooth as possible
227. R3: Well I told them that they're going home to, their topics, I'm giving it to them this week, it's all about weather
228. R1: Yeah
229. R3: So I told them to go home and watch the news, and find the name of one meteorologist right? And see who can come in tomorrow with the biggest word they can find associated with weather
230. R1: Oh God!
231. R3: It's like a challenge so hopefully someone will come in tomorrow with tsunami or hurricane. I don't think they will, but like, d'you know? Make it into a bit of a game for them
232. R2: And we'll meet them in the corridor and say 'tell (name of R3) that you saw a tsunami or heard it on the news last night!' (laughs)
233. R1: Or a tornado
234. R2: Yeah

235. R1: A cold front...ok...so is there anything that we need to think about? So far, we're going ok, we'll see how we get on with the test on Friday and you're having the sheet that's helping you to remember. That's my thing...that we'll forget to give them word, but...
236. R3: You see ours are lucky enough, because you can write it up on the sheet and then they just have to copy it out, whereas you have to go through them all
237. R2: Well I just take them out on a Friday, I pick the words, I read the story on the Friday, I pick the 4 words then, take all these out of their folders, write the 4 words, the topics and then fire them into their folder
238. R3: So they get the 4 words for the week?
239. R2: Yeah, they get it. Once a week I change the-
240. R1: Yeah, because otherwise you'd be killed doing that on a daily basis. You'd be driven demented.
241. R2: And is there any point in giving them a little sticker or a stamper or-, if you bring it back signed. Now I know they might just come back with it signed and not have done it, but because they are small, it is an incentive and they love any form of a sticker at all
242. R1: I think any form of an incentive is good
243. R2: And like even, d'you know if they sign it, I'll put a sticker on the front of their folder, so 'oh look at all the stickers that (name of pupil) has, and oh come on (name of pupil), you need to get more stickers. You need to talk to Mammy about your Talk Time'
244. R1: Yeah, good idea
245. R2: Just because they like them
246. R1: Yeah, I think that's a good idea
247. R3: I think these are really kid friendly (name of R1), I think you did a great job on these
248. R4: Yeah, they're great
249. R2: And it's not only those, it's the sheet they're looking at
250. R1: I was trying to keep them on one sheet. I mean I thought it was interesting that one, one of the parents said 'will we know how they get on?' so I think the fact that she asked for that, to put in the score, two out of four, one of four, three out of four, four out of four
251. R3: We could just write it here
252. R1: Yeah..she was interested. She might not be as interested if she gets nought out of four, but anyway, but you know
253. R4: Oh but she'll get it though, she will
254. R2: You're just going to put nought out of four every week, aren't you? Just out of spite (laughs)
255. R3: In fairness to (name of parent), I know she's a pain in the hole, but I mean last week, she was really good, you know, she was really asking questions and trying
256. R1: She was really into it really, wasn't she? In fairness
257. R3: She seemed very into it
258. R2: I'm just looking there again, (name of pupil)'s mother came
259. R3: (Name of pupil)'s mum loves reading. (Name of pupil) knows about the Hobbit and the Lord of the Rings. She's the only child I know that knows about those
260. R2: I never saw that mother when I had (name of pupil). Not for parent teacher meetings, I asked her to come in about her behaviour and everything. I never saw her. Did you see her?
261. R4: No, I never saw her
262. R2: Never saw her, ever...I'm just looking at her name there now, I can't believe it
263. R4: I had the older sister as well, (name of pupil)
264. R2: Oh you did yeah
265. R4: Never saw her
266. R3: She came to the parent teacher meetings, she loves, she's mad into reading
267. R1: They were mad into the whole test score as well. I think that was an incentive as well. I know (name of R3), you said to say that
268. R3: Yeah, definitely
269. R3: The report card. I could, we could see them all, eyes open when we were talking about that. And I'd say, I say to the kids every day now, 'this will be on your SIGMA-T. This will be on your MICRA-T', like it does come out, they know, ours are old enough to know they want to improve their scores
270. R1: Yeah
271. R3: And I say, these words are going to help you
272. R1: Yeah
273. R3: Now I hope that didn't go in as you have to use these words in your MICRA-

- T, so if they see a space, they think they have to put one in (laughs)
274. R1: (laughs) 'it must be precipitation!'
275. R2: The creaturs! (laughs)
276. R3: And ones's going 'what's your MICRA-T?'
277. R1: Yeah, what is a micra? That's a car isn't it?!..ok, so but overall...I mean we talked a lot in November and December about getting parents involved. We talked about 'Jesus, how would you do it? Where would you even start? How would you get them involved?'. I think we've done a lot in...you know, a short space of time. In that, we have something in place, it's for a limited amount of time. The parents have been informed, either by us, or by the kids themselves, and then indirectly then, follow-up mop up with them, and now it's about trying it out and looking, we're looking at assessment as well, because didn't we say, if we don't assess it, how will be even know that it's working?...I suppose the thing is, how are things going in the meantime with teaching them the new words? So obviously, precipitation, you're doing a 4 square on it..?
278. R3: And we did the water cycle so it's part of that
279. R1: And flitting like, how's it going, like, teaching them the word?
280. R4: We didn't use that word
281. R1: Oh, we didn't use that word, yeah
282. R4: No, I used turrets, but (name of R1) I didn't, yeah, I was kind of like, they hadn't a clue what it was, they really didn't
283. R1: I'm not surprised
284. R4: In all fairness...but em, I showed them a picture, google image
285. R1: Yeah, that does help I think
286. R2: But even to explain what a turret is. It's hard to explain yourself, as an adult like, isn't it?
287. R3: Yeah, it's like a tower, isn't it?
288. R4: Yeah, a tower, like it is, the picture I showed them had a big building and all these little tower things on it, so they knew, once they saw that
289. R2: Not to be confused with Tourette's, which is a different thing altogether (laughs)
290. R4: (name of pupil), 'my mam knew that word'. 'Oh, that's great. Yeah because there was a guy on eh...Big Brother with that'
291. R3: Was that Pete
292. R1: Yeah
293. R2: Oh God
294. R4: Oh Jesus
295. R3: T.O.U.R.E.T.T.E
296. R1: Yeah
297. R2: I actually wouldn't have known how to spell...
298. R1: Tourette's?
299. R3: You know when I'm giving out about the kids? It's actually just Tourette's!
Don't mind me
300. R4: (laughs)
301. R3: It's just a medical condition when I say 'those fucking bastards'
302. R2: (laughs)
303. R1: So, I mean, but that comes down to the individual child. Another child might have said 'oh no mam, it's not that, it's the thing from the castle'
304. R2: Yeah
305. R1: You know, so, some of that is about that...but I suppose I'm just thinking, would it be worth like? I did show, I did go through this with the parents that were there. I went through 'donation' with them
306. R3: Yeah
307. R1: The kind of thing I said was 'this might be something they do in school' they might do it out loud as the whole class. They might write it down', you know, I kind of went through the kinds of things that we might say, em....what did one of the parents say? I think a lot of the parents, when we were talking about words, it was all about helping them to memorise them, as opposed to what they mean. Like one of the Mam's was talking a lot about, you know, putting it into a song, put it into a rap, it was almost like rote learning. How will I get them to learn...which might help with spelling maybe, you know, M.I.S.S.I, or whatever but actually...
308. R3: You can't do that for every single word
309. R1: No, exactly. And it's not going to help with actual association, or making connections...or comprehension. Em...so I suppose, it's taking off where we left off in us

- continuing on doing what we were doing in the classroom, to help the kids with the words that are in 'Talk Time', and I mean, in other things that come up as well
310. R3: I had to laugh, (name of pupil) who is probably the brightest girl in the whole class was doing a 4 square, you know 'precipitation is moisture that falls from the sky', and they have their examples and their non-examples, and she had 'any substance that something, something, something', but it was really, she didn't do it at home, she did it in class. I was like 'dear Jesus, isn't this very complicated (name of pupil)? Like what is it? Just be very simple', and I didn't want to tell her not to be writing it, but if you went home and tried to understand that, you wouldn't
311. R1: Yeah, yeah, it's good attempt. She's obviously thinking, which is great.
312. R3: She's come to me all day. The child has come to me about 8 times today going 'do you know?, do you know?', and I don't want to stifle her creativity
313. R4: No I DON'T!
314. R3: Thanks very much. 'Do you know that?', 'Do you know that?', 'Do you know that?'
315. R2: I know it all. Sit down. (laughs)
316. R1: Ok.
317. R2: I'll trade you (name of pupil). You can have (name of pupil) for a while. 'Is Betty coming? Is Betty coming in 2 minutes? Is Betty coming back in 2 minutes?'
318. R1: Who's Betty?
319. R2: Betty's her aunty
320. R1: Oh
321. R2: 'Is Betty coming back? When is Betty coming back? I think I hear her. I'll look out the window now. Is that Betty. Oh, I see her'
322. R3: Oh Jesus
323. R2: Oh My God
324. R4: Sit down
325. R2: 'I know you're very small and very sad and very fragile, BUT my hands are getting very close to you' (laughs)
326. R3: That child is going to have separation issues, isn't she?
327. R2: She is, the auld creatur. Ah she is just such a little...
328. R1: Is this your newbie?
329. R2: Yeah, my heart goes out to her, I have to say
330. R1: She was sad the day you weren't there
331. R2: She didn't stay, she went home. Yeah.
332. R1: Sad girl, she was sad
333. R3: Well she's got worse. It all went down hill after that (laughs), and it's not coming into me she loves, let me tell you, but yeah, the auld creaturín.
- [off topic again talking about stammer of a different pupil for 35 seconds]
334. R1: Ok, so I suppose the next thing to talk about is...well we're getting this up and running, so we're going to take our time with it obviously and it's going to take time with the kids and the parents and get it up and running and assessing it, and see how that goes. Try and overcome any little challenges we may come across, but I suppose it's just thinking about, in terms of, what we're doing in the classroom to help with that. One is, filling in the form, two is, having it up on the sheet, three is telling the kids about it, four is checking it, five is doing a test. Like there is so much that you're doing to make sure it's happening and then I suppose on top of that, it's looking at what are we going to do in terms of our classroom practices, because we already reviewed in December all that we HAVE been doing, and all the, in terms of thinking about it, and extending and rich instruction. I suppose just thinking ourselves, what do you want to work on yourselves, between now and March in your own classroom practices?
335. R2: I just feel we've done enough (name of R1), to be honest [sarcastic tone]
336. R1: (laughs), yeah. You've cured them. They're perfect. [sarcastic tone]
337. R2: Em...what do you mean? Something new, like ploughing on with this and the stuff we were doing already?
338. R1: Yeah
339. R2: Like for the videos and things, and anything else we can add to it, is it?
340. R1: Exactly, yeah. Like I was thinking about, we could look back on the checklist, which is here....em....do people want to review where they're at now? You know, the reason why we, we developed this classroom practice checklist, remember we added on bits to it? And then we looked at ourselves and said 'oh God, I do a lot of that, that, that and that. I'm not doing as much...extending or...I didn't hear myself doing much rich instruction. That's something I'd like to focus on'. So having focused on that, do we want to review it, or....and

then pick something new to work on? Or do we want to keep doing what we're doing and trying it out in different ways?....

341. R2: Janie, I don't know

342. R1: No?... Like you were focusing on rich instruction, you were both focusing on extending and rich instruction.

343. R3: It's kind of happening naturally anyway, I have to say

344. R1: Yeah, so...which is great, because it wasn't at the beginning, you know, so if it is happening more naturally

345. R2: So, should we pick a new one now that we're not, that we don't think we're doing enough of, and try to that as well as one we are doing now, cause we're doing it?

346. R1: Yeah, exactly, so we keep one on the boiler and start cooking one

347. R2: Ok

348. R1: So that would be, that would be...the plan. Unless ye have a different plan? Anything that ye think?

349. R2: So can I just ask...before we do that...we'll say, I have my 4 words now. I'm going to read my story on a Friday. I'll have picked out the words. I might focus on them during the story, because I'll have read the story first. Em...but I don't have to do like a little ten mini-lesson on each of them?

350. R1: No

351. R2: Like some of them, they will kind of have the gist of, like we'll say 'nest'.

We've made a nest. He lives in a nest. He tries out different nests, then he goes back to his own nest....so like we'll say, the ten minute video on a Friday I'm saying, like we don't have to go into that much detail for each of those 4 words Monday to Thursday.

352. R1: No

353. R2: Ok, so it's on a lighter, like a smaller scale, but yet getting your point across

354. R1: Exactly, like you might say 'they're grand with 'nest' and 'owl' and...

355. R2: We did a bit of work on 'tear', we did a bit of work on 'grumpy'

356. R1: Yeah, exactly, yeah

357. R2: Yeah, ok, grand

358. R1: So you know yourselves if they're getting it. No more than the, the..... Jesus I'm calling it Tourette's now, the turrets, no more than that word. It might be that that word actually needs a good bit of help but if em...you're doing something different, they mightn't need as much help with it

359. R2: But I suppose, that's part of your lesson anyway. If there's a word that they don't understand, you explain it there and then anyway

360. R1: Yeah...yeah

361. R2: Ok

362. R1: Same way with 'precipitation'. I assume that would require a bit of work before hand, I mean just even sorting out 'is it hail stones or rain?', like even myself...

[off topic talking about precipitation for 35 seconds]

363. R1: So what do ye think yourselves? It's up to ye really....because remember I was saying? The whole aim of this is that kids will do better with their talking. We're doing lots about that, and the whole aim is, together the 4 of us, could maybe recommend to other teachers in the class, in the school....this is what you should do. This worked, this did not work, I won't bother with that, this really did work

364. R2: mmmm (4 seconds)

365. R1: Or would you like? You know, continue on what you're doing?....

366. R2: Well like, a lot of them, you kind of do already, don't you?

367. R4: You see, that's the thing

368. R2: You're kind of, second nature

369. R1: Yeah, and that was what we talked, that's why we only picked one each

370. R2: And even then, when we said we weren't praising, we were too busy, em...what's the word?

371. R1: Extending

372. R2: Extending and you know, giving deep, rich instruction that we kind of forget to praise

373. R1: Yeah, and then we sorted that out. We did both, yeah

374. R2: You see the scaffolding, you do it, reformulating, extending, modelling, you do it directly, correct, yeah feedback to the message rather than the words. That depends on the situations, so I suppose, giving feedback on the words, extending the message, special time [reading list]

375. R3: You see we do, we definitely do these, confirmation checks

376. R1: Yeah

377. R3: Making sure the teacher has correctly understood learner's contribution
378. R1: Yeah
379. R3: Well, that's teacher echo too
380. R1: Yeah...(7 seconds)
381. R2: Yeah, like the prompt, the tone of voice, you probably would do the....gestures and actions....cues and pictures...[reading list quietly]
382. R1: Is there one?...now I can suggest two other things that aren't there...and this is from when we had our little chat in December, people were saying, there was one about making it explicit for the pupils what we're trying to do. I do think that ticks that box, in that 'here's the word. You need to know it. We're having a test on Friday'. The other thing was...word wall, we're doing that. The other thing that we talked about was the importance of regular repetition and review, which is what she said is a lot of what happens in school in that you do it once and then they forget it, and then we're saying is 'how to build in repetition and review. How do we do that?'. Like if I want to teach the word 'precipitation', I explain it, maybe we do a 4 square, maybe we show a picture, but how can I build in review of that the next day, or four days time?
383. R3: Maybe every time it rains 'oh look at the precipitation'
384. R1: Ok, yeah
385. R3: Incidentally, incidental reinforcement rather than explicit reinforcement
386. R1: Yeah, ok, so that's, and for some things that's, in a country like Ireland, that's going to happen a lot more, but something like 'turrets'-
387. R3: Is it then you kind of get story books and you'd be like 'oh look'
388. R1: Yeah, so you have to CREATE, you have to create incidental learning, if you like
389. R2: Yeah
390. R1: So no more than if I was doing owls, it might be like 'oh look, let's read this book, The Owl Babies'
391. R3: mmmmm
392. R1: You know, that I might be creating opportunities...
393. R3: Yeah
394. R1: For repetition and review...
395. R3: Ok
396. R1: That is ONE possibility. It's just that, I'm just looking at what I've written down, the things that ye said em...was making explicit...I think we're doing that. The word wall...we're doing that. Assessment...we're doing that. Em...the importance of all children benefiting...well we're using that will all children. But that's something that we've talked about over and over again, is repetition and review. So I'm just wondering, is that something that you want to work on, or one of you wants to work on? Or think about?
397. R3: Would we have to make a list of the ways that we're going to instead, create in them, or we going to have to make a list for every single word of how we're going to..create opportunities for learning THAT word?
398. R1: Yeah, you could link it to this. You could just pick those 4 words...and say 'right, if I'm doing precipitation...' I'd say, like some will happen incidentally, like 'oh there's precipitation on the ground!', I don't know
399. R3: Precipitation isn't on the ground!
400. R1: (laughs)...(name of R3) give me an example so of how you're going to put precipitation in a sentence
401. R4: Like we already use the words, I suppose we'll be trying to do that anyway
402. R1: Yeah
403. R4: For Easter, if we're going to test, if we're going to re-test the whole lot
404. R1: Yeah
405. R2: So it's coming up with word wall
406. R4: I think those words will be enough, on top of all the other...
407. R1: Yeah, exactly
408. R2: And a lot of them will be kind of, incidental I'd say, you know like...
409. R3: 'Who's a grumpy?...what's his name?...oh no Moany Michael, sorry
410. R2: I suppose that you're very aware of them, even for yourself to have a list of them up, like the ones you did previously, and if you can use 'grumpy' and if I can use 'tearing' instead of 'rip'. Or, you know, 'there's a tear in your sheet' instead of a hole in your sheet or...
411. R3: Or 'I am as wise as an owl!'
412. R2: Yes, I am as wise as an owl. I'm not as old as one now, but I'm as wise as one
413. R3: Well my head doesn't go 360 degrees unless I'm really fucking angry

414. R2: Well I suppose, some of them, you'd have to think, 'I'm going to bring that up in two weeks time'
415. R1: Yeah
416. R2: You know, we're doing something about...I don't know...a hurricane...I could bring in a few of my weather words into that
417. R1: Yeah. I suppose it's just planning, but ye might say 'd'you know what? We'd be doing that anyway. I don't need to focus on that'. But just because it's something that came up, we had multiple methodologies and review and repetition
418. R2: But I suppose even if you had a list of them, and had them somewhere stuck up behind your table or-
419. R3: Yeah
420. R2: And if they just came up randomly, just give it a tick and just even for...2 weeks, see how many times they came up randomly by themselves and...
421. R3: You could put them on the word wall that (name of R1) gave us
422. R2: Yeah, exactly yeah...I do think you will use them when you're more focused on them, you're trying to focus them on them I think
423. R1: Ok...and...so is that something that, do you...is that something you'd like to try (name of R2), or...everybody want to try? Are people-?
424. R2: Yeah
425. R3: Sure I'll try that as well
426. R1: Yeah?
427. R2: And like, come the end of two weeks, if there's one word that you never mentioned again, you might have to say 'well we're going to have to bring up turret somewhere'
428. R1: Create an opportunity
429. R2: Yeah
430. R4: Picture
431. R2: Yeah, there's a picture there. Can you describe all the different parts of the castle? You know?People with Tourette's live in high turrets
432. R4: (laughs)
433. R1: (laughs)...em....
434. R2: So yeah, and then it's only a tick like, and you mightn't even think about it until they're gone home and then go 'right yeah, we had grumpy today, we were talking about a nest. There was owls there yesterday. We definitely talked about something else the week before'
435. R1: Yeah, so basically, what you're going to use is the word wall, give it a tick if you bring it up incidentally or if you did something-
436. R2: Or if the child brings it up, maybe?
437. R1: Yeah
438. R3: Oh tick it if a child says it, that's better
439. R1: Yeah
440. R3: But then you have to give the child the opportunity to bring it up
441. R1: Yeah
442. R3: So bring it up-
443. R2: If it comes up in the class, whether it's by them-, from you....
444. R1: Or a child
445. R3: Or a child
446. R1: So you bring it up or the child brings it up
447. R2: But it's not a big lesson that you focused on. I think if we can see how often they come up incidentally and then we can kind of say, 'well that never came up again. I tried, but they didn't really.'
448. R1: And I think that's what happens, that there are some words that natural-, say something like grumpy, that naturally will come up in a few other situations and there are going to be words like 'turrets', that actually don't come up incidentally
449. R2: Yeah, it's not very...
450. R1: You know, it's one of those tier 3, so I suppose it's about, in terms of oral language development, we know that repetition and review helps. These are words that aren't going to naturally repeat themselves to allow for review so what can we do, and if we were able to come up with, you know, 3 things or 5 things that we can do to help, whether that's em...a game, whether that's a chat, whether that's a video, a picture, it's whatever...things that we could do to help them come up. Like if you wanted to bring up precipitation, one, your idea related to current affairs, the news, a video, a picture
451. R3: Weather forecast, did you spot any precipitation on the weather last night?

- What was the name of the meteorologist? ...Like not all the weather forecasters are meteorologists, like none of the TG4 are
452. R1: No, they're just models
453. R3: They're just models, they're just TV girls
454. R2: But it's DOCTOR Aidan Nulty, he's definitely one
455. R3: And Jean Byrne definitely is one and Evelyn Cusack
456. R2: Is Evelyn one?
457. R3: She is one, yeah, she surely is
458. R2: Ohhh!
- [off topic talking about meteorologists for 95 seconds]
459. R1: Right so ladies, so the plan is to continue ahead with the Talk Time homework
460. R2: Ok
461. R1: Continue ahead with the word wall
462. R2: mmhhmmm
463. R1: And the test on Friday, and ye are going to spend the week, em...informally observing how much repetition and review is going on
464. R2: And formally observing for these CELF-4 Oral Language reviews as well
- [off topic talking about administering the CELF-4 ORS throughout the school for 170 seconds]
465. R1: So we'll just focus on that so, and we'll chat about it next Tuesday and see if we need to do anything. So I won't be coming in Friday
466. R3: Ok
467. R2: No and are we doing the videos? We're not-
468. R1: No
469. R2: We're not the videos anymore for a while. We're going to belt on with this, see how we go
470. R1: Belt on with this, see how we go and then we might need to...we'll come back next week or the week after and look at how we'll repeat and review. There's only thing that I wanted to show you, and this is it and we're finished now...is Isabel Beck is the guru of vocabulary development and Isabel Beck, how she does help with vocabulary, one of the things that she does, and she works in disadvantaged schools in America, is Text Talk. Not going to give you this, because I know you hate looking at those, but...em, basically, they pick a book, a bit like what you're doing and they...this is a copy, this is a lesson. So they pick a book, the book they picked was Ruby the Copycat and they just do lessons all around the book, but they build in repetition and review
471. R2: mmmm
472. R1: So, for example, they read the book, this is the vocabulary that they're going to have, 'coincidence', 'loyal', 'murmured', 'recited', 'bitter', 'sensitive', some of them are nouns, some of them are adjectives. And then, what they do is, this is all her lessons, you can see the vocabulary that she does and then she introduces the book, reads the book, does a bit of thinking and talking about it. This is how she discusses the words and explains them, and how she repeats them is like, 'if you saw your friend cheering for a team and they lost, what might you say about her and her team?'. So you might say 'she's loyal to her team', you know. Em...they do things like 'What's the word?...em.."'I got a letter from my best friend, right when I was missing her most, which was a nice...?' and they have to come up with the 4 words, so it bit like what you're doing in terms of giving the definition and they have to give the word. What else? They do a word map on it, em...they give you choices, so they might say em...'is snow precipitation or weather?' em...'if a friend said something mean about you for no reason, might you feel bitter or loyal?'
473. R2: mmmm
474. R1: So they give a multiple choice
475. R2: Yeah
476. R1: And then she gives ideas, like just different ways of doing the same thing
477. R3: Different methodologies
478. R2: But even for yours, wouldn't cloze tests? You know the way they have to do cloze tests? Like even if after the end of 2 weeks if you gave them the 8 words and just...
479. R3: Put them in to a cloze test
480. R2: Yeah
481. R1: It's a cloze test
482. R2: I know you'd have to pipe it out, but still random paragraphs about different words
483. R1: Yeah, exactly
484. R2: At least-

485. R3: And at least-
486. R2: It would be a good thing too
487. R3: And at least if your words were all based around a theme, like my words were all weather related
488. R1: Yeah
489. R2: Like, but you might have a bit in your history book or your geography about weather and you could just tippex them out
490. R3: It's another form of assessment
491. R1: Or they might say 'snow is a type of precipitation. What's another type of precipitation?'
492. R3: Yeah
493. R1: You know, so you'd be asking for the examples. Or this one, word association, 'which word does 'sshhh, it's a secret make you think of?'
494. R3: Loyalty
495. R1: Yeah, so these ones, like their words, I never gave you the words, their words are 'excited', 'sensitive', so you know, they have to think of 'shh...'...so murmured or whatever. What word does em... 'said' make you think of?...so it's recited...so there just, she has come up with, in the same way, they do it for a week, they pick a book, they read the book and then for 5 days they do repetition and review using different activities so it might be a word map, might be a word association, might be a multiple choice, might be whatever, and then the em...they, they ask questions like...'who would be sensitive? Someone who hugged you when you're sad or someone who ignored you when you were sad?' It's kind of like multiple choice. Who would be? Who is more loyal? 'a friend who's there when you need them or a friend who doesn't know when you need them?'...so again it's just different ideas that we can use, someone else inventing the wheel before us...and this one is a yes/no, 'a sensitive person understands your feelings?', yes or no
496. R3: Can I get a copy of that please (name of R1)?
497. R4: Yeah
498. R1: Sure, it's nice, isn't it? Well, it's half three now, so if I bring it back next week?
499. R3: That would be great, if you wouldn't mind
500. R1: And we'll look over it, we'll look through it maybe
501. R3: That would be nice, you know rather than just getting the gist of it, to see it properly.
502. R1: Exactly, that's just the gist. I mean there's loads of research to back it up there. I never heard of the book before, Ruby the Copycat, did ye?
503. R3: No

Transcript: 19th March 2013

1. R1: So I suppose just to catch up...even though I missed only one meeting, I know it's three weeks since I was last here, and I know this is the last week of Talk Time...
2. R2: Yeah!
3. R1: Yeah! So how are things going?
4. R3: I have to say it was on the back burner for me when my student was here
5. R1: Ok
6. R3: Hand on heart
7. R2: Well, obviously it's not part of our every day stuff, and she doesn't understand...
8. R3: It was something that I had said to myself that I was going to do
9. R1: Yeah
10. R3: But it just didn't happen
11. R4: We're...we're, (name of R1), I'm the same. It wasn't..it was just the student and everything else that seemed to be going on
12. R1: Yeah, yeah
13. R4: We're like...
14. R2: Last week was Seachtain na Gaeilge, and everything was mad
15. R4: Oh Seachtain na Gaeilge
16. R1: Oh ye had that for Paddy's Day?
17. R4: Yeah, so...
18. R3: And I was absent, sick for the first week, and then I had the wedding so I wasn't there for like, four or five days
19. R1: Ok, so.... Say for example, this week, was there any...
20. R3: Well we only did today, but my kids said to me this morning, they said it to me this morning, they were like 'Teacher, we have to do Talk Time again'. They actually did, (name of pupil) and (name of pupil)
21. R1: Excellent
22. R3: Yeah
23. R2: I did it every week but I'm not doing it this week
24. R1: Yeah
25. R2: I kind of pushed it and I just kind of think that they're nearly saturated at this stage, and the ones that had any bit of interest, they parents aren't signing it or anything anymore...it's gone down hill.
26. R1: Ok
27. R2: So I just said when it's only 3 days this week and I'm testing them anyway, I was just going to test this week because they have a lot of words and the pictures and that. So I'm going to test this week and not give them words this week, but they had them all the other weeks, we'd say
28. R3: That's a really good idea, test all the words we've taught up to now
29. R1: Yeah?
30. R2: I'm just showing them the pictures, do they know what it is or if I give them a clue can they tell me what it is?
31. R3: That's...do you know what, I think I actually really like that idea
32. R1: Ok
33. R2: You see, I have no other way of testing mine because, they're only small
34. R1: Yeah, too small
35. R3: Yeah
36. R4: Too small
37. R1: I wouldn't mind getting a copy of one or even I can take a copy of these
38. R3: Of the kids' ones?
39. R1: Of the words. Do you know what I mean? Say the kids' ones?
40. R2: The kids' one? I'll write one out for you
41. R1: Or photocopy or something
42. R2: Yeah, I might photocopy (name of pupil)'s
43. R1: D'you know like? All I'd need is 3 of them, one from your class, your class, just to see
44. R3: My kids are mad for you to come up and talk to them about it
45. R1: Yeah, and I was, I was planning on doing that because I have a course Thursday and Friday, I was wondering tomorrow, would it be possible to come up?
46. R3: Savage! Come on up, yeah!
47. R1: I wanted to see, just informally, what the kids say and also, it could be a way of me getting just a copy of one of these. Would that be ok with everybody?
48. R2: Yeah, sure even if you just wanted to pop in, 'you've been doing your Talk Time, lah,

- lah, lah and what do you think of it? And who does it? And who doesn't?
49. R1: Yeah
50. R2: You'll see the ones who have nothing to say because they don't do it
51. R3: You'll get their, their..
52. R2: Their opinion
53. R3: Their perspective on it
54. R2: And is it hard? And is not?
55. R1: What time tomorrow? Well if you're thinking of your student doing things or whatever?
56. R3: My student's gone now
57. R1: Oh
58. R3: Come in from nine to half two!
59. R1: (laughs) Nine to half two?
60. R3: Maybe half an hour for lunch
61. R1: (laughs) What about me coffee break?
62. R2: Ten minutes, ten minutes
63. R3: Well 40 minutes, 40 minutes for lunch, ok
64. R4: Now
65. R1: And do I have to do a Croke Park hour as well?
66. R3: Yeah
67. R1: mmmm....so would some time in the morning be better?
68. R2: Yeah
69. R3: That's absolutely fine, we've nothing on tomorrow, so...
70. R1: Grand
71. R3: Just general education
72. R1: General education! What about yourself (name of R3)?
73. R4: I'm not here tomorrow (name of R1)
74. R1: Oh, you're not here at all?
75. R4: No
76. R1: Emmm.....
77. R4: It will have to be after Easter I'm afraid
78. R1: After Easter...ok....emmm....I might get a copy.... Oh you won't be in...I was going to say I'll get a copy of one of the girls
79. R3: But sure I could just get a copy of one of your kids
80. R4: Yeah
81. R3: I'll just ask one of those, could I ask (name of pupil) for hers and photocopy it in the morning and then I'll have it for you when you come in?
82. R1: Yeah..is that ok?
83. R4: Yeah. (name of pupil) would be a good one
84. R1: She might have it with her
85. R4: Yeah, she would
86. R3: Right I'll do that and then when you come in...what time should I expect you in at?
87. R1: Will I say half nine and let them settle in and whatever?
88. R3: Mine, yeah, but sure whatever time you want?
89. R1: Yeah, half nine is good. Half nine is good....Em, I know the last time, that sort of reminded me, we did look at these, that was just to look through, remember we talked about different ideas? [Isabel Beck Text Talk example]
90. R2: I think I have one for you
91. R3: Yeah
92. R1: I was just wondering, did anyone find them useful? Or did you get a chance or did you not? Just go on with what you're always doing?
93. R2: I just ploughed on with my own because it's a bit old for mine, d'you know what I mean? You do the repeating and this and that.
94. R1: Yeah...what's it called, I think it's called Text Talk...it was just ideas that we looked through
95. R3: Yeah, I looked through the ideas but I didn't try out any of them because obviously I had the student there who was doing her own thing
96. R1: Oh yeah, yeah, yeah
97. R4: But the ideas are nice...they're simple but...
98. R2: They're easy though, you know, the repeating it, what's it the same as? What's it opposite to?
99. R3: Give an example...we've really gotten into that habit actually, you know, the same as and opposite to, and what do you think it means. Like I'd often say that now 'well tell me what it means in your own words'

100. R1: Ok, and how are they getting on with it?
101. R3: They're trying, but some things are more abstract
102. R1: Yeah
103. R3: Like I definitely still think, teaching nouns is easier for Talk Time
104. R1: Yeah
105. R3: Do you know? Verb and em, adverbs and verbs, adverbs and verbs are quite difficult
106. R1: Yeah
107. R3: Adverbs particularly, like heavily, but I mean that's an easy one, you know.
108. R1: I suppose if they knew heavy, it might be easier then
109. R3: But you are, you're trying to get them to figure out are there any words in them that they know
110. R1: Mmmm...ok...so basically, from what you're saying, I don't know does everyone agree, but from what you're saying (name of R3), you're finding yourself, because of Talk Time you're talking about similarities and opposites and you're kind of doing a lot more of that..
111. R3: In general
112. R1: Spontaneously?
113. R3: Yeah
114. R1: Ok...but what about (name of R4), what about you? What do you think?...Because do you remember we talked about the 'WHAT', which is this, the words, and it's working for some and not for others. Some are signing it, some aren't. Some kids are definitely doing it, some kids definitely aren't. You were using the book, you were using topics, you were using stuff from the novel I think
115. R4: The novel, yeah
116. R1: And then we talked a lot about the 'HOW', as in what, how are we, like classroom, like the whole idea of this was looking at classroom practices, so how do we talk to kids, how do we help them improve their oral language?
117. R3: I used the, is that 2 weeks ago? I used the, the Pope, the papal stuff
118. R1: Oh yeah
119. R3: Seeing as that was just in the news. It's great, they'll all tell you what conclave is, because it's one of their words, you know? That type of thing, it was topical, they could talk about it at home
120. R1: Yeah, ok
121. R3: I think they like that as well because in that way they can have the same conversations as grown-ups are having then, you know?
122. R1: White smoke and everything
123. R3: Yeah...Oh they were all so excited
124. R1: Yeah
125. R3: About it all, you know?
126. R4: Mine were seriously into it, but I was into it...so...
127. R1: Yeah, it's part of your new religious obsession
128. R3: Yeah, that's me, I'm starting a cult. So you want to be in it?
129. R1: (laughs). I'll let the girls go first....so one of the things I know we said to the parents was 'we're going to do this up to Easter and then see how the kids got on'
130. R2: mmmm
131. R1: Is there any way of seeing how the kids got on?
132. R3: I think, I think what you're doing is savage. I wouldn't mind testing all my words this week
133. R1: And giving them a score?
134. R3: Yeah. Out of the total
135. R4: mmm
136. R3: So say I have...three and five and five and five, fifteen and eighteen...I must have 21 or 22 or 23 words up there
137. R1: Em...how many weeks did we have? We had nine weeks, didn't we? Nine fours, thirty six
138. R2: Like mine....
139. R4: It should be 36 but....
140. R2: Like they got 4 out of 4, or 3 out of 4, and I put an asterisk and they got a sticker and a stamp for four out of four and then just...well like a load of them was absent and that, and nothing out of four, zero out of four like
141. R1: I don't know. It might be useful, it might not be useful like, but would it be one, to do a test on them all, or two, just add up what they got so far? So for most kids it will be

- judged out of nine fours, thirty six, but if you were absent, it might be that mine is only judged out of 29.
142. R2: Yeah, because I didn't make them do it if they were absent because they wouldn't have done the homework and they wouldn't have done it with me
143. R1: Yeah
144. R2: So they might have got two out of two, if they weren't there, were only there for 2 days but absent then for two days
145. R1: Grand
146. R2: But a lot of the time, if they were absent for three or more, I just let them off because they wouldn't have been there for the story or for any little bit of explanation like
147. R1: So for your kids, would it be better to do it, a one test on them all or do you think..?
148. R2: I nearly was going to, I was nearly going to, they can see from the sheet what they got every week
149. R1: Yeah
150. R2: You know but it's just you can even see from the parents, like, you can see them come in on a Friday and like 'you know your words now and lah, lah, lah', it just loses momentum. It's like anything, you know, it's like they're great with their little copies at the beginning and then it's like any old shit, you know, is thrown into the folder kind of thing
151. R1: Yeah....I suppose, I was, the only reason I was talking about the test was, we did say to the parents, I know it was only a few that turned up, but we did say we'd kind of give them feedback as to how they got on..so I don't know, the report at the end of the year, it might be nice to say, 'Talk Time, you know, got 20 out of 39'
152. R3: D'you know, I wonder would it be any harm having another meeting? Now I know we're all sick of meetings right? But I mean all the parents are doing Talk Time now, or they've heard about it. We might get a bigger turn out if we did it after Easter and had a feedback meeting
153. R2: mmmm
154. R1: Yeah
155. R3: Do you think that would be worthwhile or I am just being optimistic?
156. R1: ...What do the rest of ye think?
157. R4: I'm sorry, I just think after that first meeting...
158. R2: Yeah
159. R1: A small turnout
160. R4: You know, the amount of time and effort that (name of R1) put in...
161. R3: Yeah for that
162. R2: And the amount of parents who still, even though they didn't go to the meeting, still didn't bother to do anything about it or find out from anybody or...anything like that
163. R1: Do you think a lot of the push has come from the kids themselves?
164. R2: I...I would, and it would be my good parents. It would be the ones whose kids would be well turned out and their homework would always be done. They're the ones that would be doing it. The ones that are DRAGGED up are the ones that don't have it done
165. R1: I suppose from the way, just from the way you're talking about it, I see it as about 50% of it is probably done in school, 50% you'd hope would be done at home, so the kids who aren't doing it at home, they're probably still getting a fair bit from school alone
166. R2: Yeah, yeah....you see there was weeks when I really pushed it, and I went all out with the words and they were the weeks that they knew them, whether they were the ones who were doing it at home or weren't doing it at home, and there was weeks when I didn't push it at all, I just did the words, I explained it, it was in the story, 'do you remember it?', 'I do', 'what is it? Lah, lah, lah, lah, lah?' Five minutes as opposed to fifteen minutes a day like, you know? And you see them, they're still the ones, I can still pick the week out where I didn't do them an awful lot and they're the ones that they're not great on
167. R1: So those kids who aren't getting the support from home need the 15 minutes
168. R2: Yeah, they do, they need you to go over it
169. R1: Yeah ok, well I mean that's...
170. R2: So essentially, yeah...
171. R1: You know the way we talk about learning? That's one thing to say, you know?
172. R2: Yeah, well parental involvement was weak and it shows that it was weak like
173. R3: I'd say in my class, I'd say 80% did it at home
174. R2: That's good like
175. R3: I really do, yeah

176. R1: That's...that's a...fantastic
177. R2: That is very good, I have to say
178. R1: What about you (name of R4)?
179. R4:I wouldn't say that amount?
180. R3: Again it would be the likes of the (name of parent)...
181. R4: A few (name of R1) did it at home, but like, as (name of R2) says, what's it, whatever is being done in school
182. R1: You think more like (name of R2)'s scenario?
183. R4: Yeah
184. R2: Well then, then on saying that, I probably would be, it mightn't be 80% but...there'd be 9 of them, 8 of them, I suppose, but then it's only 8 out of 12
185. R1: Oh, 8 out of 12, three quarters!
186. R2: D'you know?...maybe less, it depends, some weeks are better than other weeks but you could pick out the top 5 there now who wouldn't
187. R1: So...I suppose there's two issues. One is, is testing them. So what (name of R2) is going to do is do a little test on them based on the words. And I suppose I would just like, I'd be interested to see, out of the 12 kids, how many knew all of them? How many knew none of them? How many knew a few? How many knew...you know?
188. R2: Well there'd be a lot of them will know the majority of them I'd say like, you know, even when I went over them today and I didn't give them any clues or anything and 'what is this picture of?', 'a nest, an owl, outdoors, indoors, snuggly'
189. R1: Brilliant, and would you ever do a class list so you could just say how many they got or..?
190. R2: Oh yeah, I'll write it down, I've been keeping track every week of what they've been getting so I thought I'd bring up all the pictures, lay them out on the table and say 'right, go, go, go, go' and then just turn over the ones they don't know or whatever
191. R1: Ok...so maybe at our next meeting after Easter we'll have a look at the results of yours...so then (name of R3), you can (a), do a test like (name of R2) did on them all, and then (name of R4), you're the same because you did the same kind of test
192. R4: Yeah
193. R1: Or (b), pick up their ones, or do it them themselves, swap with your neighbour, 'how many did you get right?'
194. R3: But you see I don't think that's right, that wouldn't be an accurate reflection because...
195. R1: Ok
196. R3: You don't know what they're retaining, you see
197. R1: That's true and that's part of the whole review and everything
198. R2: Yeah
199. R3: I think I'm going to test them all...so I think what I WILL do, is that I might actually write out however many meanings on a page and get them to fill in the word that I'm talking about
200. R1: Perfect...so you're giving them a kind of general definition...
201. R3: It's just my enthusiastic idea right now that I'll hope I'll do
202. R1: Yeah
203. R2: And were you going to give them the word, or no?
204. R3: Oh no, I'm not going to give them the word, I'm going to let them give me the word
205. R1: But (name of R3), what I would do, if that's a lot of work...
206. R3: Give them the word and let them say what it means?
207. R1: No, just call it out to them
208. R3: Ok
209. R2: And then they write down the word...1-30 or whatever it is and makes your life a lot easier
210. R1: Yeah. So you'll write down, like you'll be saying 'ok, eh, precipitation, 'right this is something that blah, blah, blah'
211. R3: Yeah
212. R1: So if you write down, you'll have basically the correct words...
213. R3: In the right order
214. R1: In the right order
215. R3: Or give them, you know, 'what's the correct word for?'
216. R1: Swap with your partner
217. R3: And then they correct them
218. R1: Yeah. Swap with your partner and correct it

219. R3: I'm going to test them all so
220. R1: What do you? Would that work for your class?
221. R4: Yeah, that would work for my class, how and ever, I won't be doing that until after Easter (name of R1)
222. R1: Oh yeah, after Easter, yeah, yeah
223. R4: And I know that's a big gap for them now, it's going to be more or less three weeks
224. R1: But ultimately (name of R4), that's what...you know...
225. R2: We want to see if they can retain them so...
226. R1: Yeah...I don't think it's a bad thing
227. R4: The first week back, you know, if I spent that first week kind of, just going over them again and then...
228. R1: The Friday or whatever
229. R4: Yeah...maybe that Friday to give them the test
230. R1: Ultimately...because we want them to know them in a year's time, in two year's time, you know, so
231. R3: Yeah, you see I'd be worried, that would be my worry that you'd have the 4 words they did the first week and they wouldn't remember them and then you're kind of like, the problem isn't the teaching then, it's the retention
232. R1: Yeah
233. R3: And what can we do then to...
234. R1: Yeah
235. R3: Help with retention than teach them the words
236. R1: Yeah, and we talked a lot about review and how to do it...ok, so basically (name of R3), is it fair to kids to just do that test on them? Like are you going to tell them tomorrow and do-?
237. R3: Yeah, I could do that
238. R1: You could do that test Friday?
239. R3: I could do that test tomorrow
240. R1: Yeah, so meaning of them all, and you'll give them a score, so you'd have at the end maybe class list, (name of pupil) for this score, (name of pupil) got this score, (name of pupil) got this score
241. R3: Yeah, no problem
242. R1: And (name of R4), you'll do the same? Except the week after Easter
243. R3: You see all of my words are up. All the Talk Time sheets, the big ones are up, they're all up on the blind beside my desk so there, they can see them and they've been looking at them, well I hope they have been
244. R1: Yeah, so it might, so tomorrow I'll collect your words and then next time we meet I'll collect your scores
245. R3: Yeah
246. R1: Ok, so...[writes in diary]...now, I suppose the other thing is then, about the follow up meeting....?
247. R3: If we ye don't think it's worthwhile, then it's hardly even worth my while because I can nearly tell ye the parents that will come but I wonder then
248. R2: Well then do we send home a little note in an envelope with the results of their Talk Time test?
249. R3: That's official then
250. R2: Like they don't have to come in, but this is an envelope sealed, and its for your parents, they're going home, for all the classes that took part in Talk Time and it just has to say '(name of pupil) received lah, lah, lah. She achieved so many words out of forty'
251. R3: Then for maybe the ones who did really well. Thank you for your support and please keep it up
252. R2: Oh yeah, you could like...I'm sure (name of secretary) would do a little template up and you could just fill in the score, and for the ones that did really well....just so that it's gone home then, its official, because you did they say they were going to be assessed, and it's like the ones who sign the spelling test 'oh well done, it's great', they're delighted. The ones who don't give a fuck, if they never saw a spelling notebook in their lives like
253. R1: Well do you want me to do up-, I could just do one up that size and basically get a piece of paper and guillotine them, cut them in half and do up Talk Time homework from...whenever we did it
254. R2: Whatever date to whatever date, whatever
255. R3: We could give them a rubric then

256. R1: Em...21st January...
257. R3: 0 to 10 more work needed, 10 to 20 good, 20 to 30 excellent, well done
258. R2: Yeah, and you could just put a comment then saying 'em she tried really hard and I'm delighted with her'. It wouldn't even have to be...the ones who did well 'I appreciate all your support and your help'
259. R3: But the ones who didn't, would it be any harm saying 'more work needed'?
260. R2: Yeah
261. R1: So tell me what you want on the rubric then. So we know, we know that the maximum is 36, but 36 might not, probably 30 words
262. R3: No, I don't think so. I don't have 30 words
263. R4: No (name of R1), I don't have 30 words
264. R2: 2, 4, 6, 8
265. R1: Eight fours, 32
266. R3: We had the Monday off
267. R4: Thursday (name of R2)
268. R3: For mid term
269. R2: Oh there was only 2 words that week, so 30 words
270. R1: Yeah
271. R2: About 30 is not bad, I suppose
272. R1: But not everyone did 30
273. R3: WE didn't do 30
274. R4: I think I did about...
275. R1: Will I leave the scale blank and you can put it in yourself?
276. R2: I suppose yeah
277. R1: So what will we say? I'll just put it in here, like I mean, basically...
278. R4: Is it 30?
279. R2: I'd say 30 because...
280. R1: So will we say?
281. R2: Oh with your students you mightn't have done that at all you see
282. R4: Oh yeah
283. R1: You see, I was saying 0 to 10, 10 to 20, but if my child got 10 out of 30, I wouldn't be that happy
284. R3: mmmm...well then go 0 to 15, and then 15-25 and then 25 to 30
285. R1: Ok, 0 to 15. Everyone else happy with that?
286. R2: mmmm
287. R4: Yeah
288. R3: Well I don't think I'll have 30 words to be honest, 15 to 25
289. R1: Why don't we say 25 plus?
290. R3: 25 plus. Yeah
291. R4: Yeah, perfect!
292. R1: Then we're not. 0 to 15, 15 to 25, 25 plus. Well 0-15, should we say 0-5, 5-15?
293. R3: That goes messy then though
294. R1: That goes messy, ok...you see there's a gap of 15 there and there's a gap of 10 there
295. R2: Well really they should know more than half like
296. R1: Exactly, so 0 to 15
297. R3: Disappointing. I think that's-
298. R2: Well it is disappointing, considering the amount of work that we put in, there was supposed to be work done at home and they're...
299. R3: 0 to 15, more work needed
300. R1: What do you say in your other ones?
301. R2: You see more work needed means like we're going to do it again and they're going to have to do it again, but we're probably not going to it again so...
302. R3: More work needed
303. R2: Disappointing effort. I'd say disappointing effort because it shagging was...hello? This is me, junior infant teacher...
304. R3: But d'you know, I agree with you
305. R4: But it's for the parents though
306. R2: It IS for the parents, it's not for....
307. R3: Disappointing effort, serious work needed
308. R2: Yeah
309. R1: Can we say ANY positive thing?

310. R2: Well it is what it is like
311. R1: Ok, disappointing effort (laughs). Em...would benefit from reviewing all the words or something like that?
312. R2: Would benefit from more work, more help at home
313. R1: Ok, disappointing effort...
314. R2: I don't know. Does that sound terrible?
315. R3: No, but d'you know what, why not call a shagging spade a spade? If we're killing ourselves doing this-
316. R2: We had the meeting, everything is done, it's a piece of paper, take it out and say 'oh princesses, tell me about princesses'. It's not like you're asking them to do fecking...I don't know what
317. R3: At the end of the day, if you, like if you're not going to spend 10 minutes talking to your child, why are we going to kill ourselves doing it ?
318. R1: Yeah...my only thing is, there are some kids, like what you talk about, who are very weak. So if you say disappointing effort, maybe for that child, it's a big effort
319. R4: I know
320. R2: But they're parents are aware that they have, that they need more work at home and they're not willing to get off their arse and do it either like
321. R1: So instead of, how would you feel about not put disappointing effort in but leaving it at 'would benefit from more work at home'
322. R2: Would benefit HUGELY
323. R1: Would benefit hugely from more work at home
324. R2: Yeah
325. R1: Just in case there's a weak child, would benefit hugely from more....help or work from home?
326. R3: More help from home
327. R1: More help with words at home
328. R2: At home
329. R1: Ok, so 0 to 15, would benefit hugely from more help with words at home
330. R3: Yeah
331. R2: mmmm
332. R1: 15 to 25?
333. R3: Good effort
334. R1: Very good effort? If you got 25 out of 30
335. R3: Alright, very good effort. Very good effort. Keep it up!...Mind you, it's 4 words a week, it's one word a night. Good effort
336. R4: Good effort
337. R1: Good effort...em....
338. R2: Keep it up
339. R1: Keep up the work at...
340. R3: Keep up the work
341. R1: Keep up the work on words at home
342. R3: Keep up the good work at home
343. R2: Yeah, keep up the good work at home
344. R3: Shooting ourselves in the feet now, Mammies coming in... 'It's not my fault if she doesn't do it'
- [off topic about pupil for 30 seconds]
345. R1: 25 plus?
346. R3: Excellent
347. R4: Genius
348. R3: Excellent. Keep up the GREAT work at home
349. R4: Ah yeah, you'd have to...
350. R1: Keep up the good work at home and then you're just moving to keep up the great work at home?
351. R3: Keep up this fantastic work....you are a word champion
352. R1: Ok, 0 to 15, would benefit from more help with words at home. 15 to 25, good effort, keep up the good work at home. 25 plus, excellent, keep up this fantastic work
353. R2: mmmm
354. R3: Would you say something like 'Talk Time Champions'?
355. R2: Just excellent, Talk Time champions or yeah, just excellent, it says enough like
356. R4: Yeah
357. R1: Talk Time champions

358. R3: But do you know the Mammies and Daddies might like that bit of reinforcement that they're really, like we're not getting the credit, they are. So I think it's important, keep up the great work you're doing at home
359. R1: Yeah...so I'll have Talk Time homework, this little bubble, obviously made a bit smaller, pushed up a bit and then saying your child's name, I presume
360. R2: Yeah
361. R1: And then will I just say your class there and your result....and then....we'll just tick then 0 to 15 or whatever
362. R2: Yeah
363. R4: Perfecto
364. R1: Does that seem ok? Do we need 20 for each class? There's no more than 20 is there?
365. R4: I've 14
366. R3: 17
367. R2: 12
368. R1: 12, 14, 17.so that's feedback and it's going to go home to the parents.
369. R2: And I have envelopes if you want them to put them in
370. R3: Oh savage, thank you
371. R1: Have you enough envelopes?
- [off topic about envelopes and chocolate for kids and looking at wedding photo of R3 for 250 seconds]
372. R1: Ok, we said at this meeting we would make a decision about whether you want to continue this into next term or not? Has it run its course or do you think that it's something that you'd like to do after Easter?
373. R3: Well seeing as I haven't done it in the last few weeks, I've no problem in doing it after Easter, and in the run up to the MICRA-T, it can only be a good thing
374. R2: Are you talking about all this, with the homework and everything, doing all at home? Because I don't mind doing it with my book, as in an oral language lesson and every day we talk about a word but I think I'm banging my head off a brick wall sending it home to be honest. I'm only making work for myself
375. R1: Yeah
376. R2: So...
377. R1: I suppose the reason we brought this in was, we thought, let's get the parents involved and if they did half the work they would come on even more, and you've even seen that. Everyone keeps saying the same thing, the ones who are doing it at home are doing better
378. R2: Yeah...so I'd rather plough on and do it myself
379. R1: Grand
380. R2: To be honest with you. I just think it is wasting my time, because for, if there's half of them doing it, they're the half that are bright that will pick it up from me anyway
381. R1: Yeah, grand
382. R2: So that would be me personally
383. R1: (name of R4)?
384. R4: I suppose it's no harm, as you say, coming up to the MICRA and SIGMAS....
385. R2: Kind of topic ones, is it?
386. R4: Topic, yeah
387. R1: Topics
388. R2: I think you do it anyway (name of R4), you know, you're like this word, that word, they don't know it, they do know it, probably can't do them all, you know. So...
389. R1: I suppose, like we know you don't always do oral language homework, the reason for THIS was, getting parents in some way involved, because that was something that we talked about over and over, was the fact that, if the parents were...took a bit more time and effort into it, we'd see better results...so I suppose doing it yourselves, we probably don't need one of these (Talk Time record sheet), but it's no harm to keep up word walls, like we know how useful they are, and the pictures and all that
390. R4: Yeah, well maybe if we go ahead with that
391. R3: I think they kids enjoy it though
392. R1: Do you?
393. R3: Yeah, I do
394. R2: Enjoy the homework aspect of it
395. R3: Yeah, I do. Well I think mine do. Either that or they're very good actors, I don't know, but I think they do enjoy it.
396. R2: They generally are an enthusiastic class about things
397. R3: They are, you see

398. R2: So if YOU'RE enthusiastic, THEY'RE enthusiastic
399. R4: Mine are just...bbbbbbuhhhh
400. R2: And mine are very small. You see you're...like I can be all excited about the new word and some of them will get swept along with you, but some of them...
401. R3: Well why don't we do it that I just do it, and you don't and see what, compare
402. R1: Well we could compare in that, we'd still have the same test at the end and, say for example, em...(name of R3), you sent home the words in a formatted way, most of hers got say, I don't know, 20 out of 36, and maybe (name of R4) who didn't get the same or got less or got more
403. R2: Yeah
404. R1: We could try that, so will I just do up another one of these sheets
405. R2: Will we say compare before Easter to after Easter?
406. R1: Yeah
407. R2: I'm doing the same thing, except it's not going home
408. R1: And so then (name of R4), you're going to the same thing, like (name of R2)?
409. R4: Yeah
410. R1: You're going to do the same thing but you don't want one of these?
411. R4: But I won't, yeah, I won't use that
412. R1: Yeah. Ok, so do it yourself ...so then, I just do up one of these (name of R3) for you for the next term
413. R3: Yeah, if you don't mind
414. R1: Yeah
415. R3: I've no problem doing that. It was just when they actually said it to me today, you know?
416. R1: Yeah...so I suppose what we'll do is....we'll...the next thing we'll do is go ahead with the class tests that everyone is going to do. (Name of R4)'s will be after Easter. When we meet again on the Tuesday we'll, tomorrow I'll get the list of words you got, and then Tuesday we'll look at the test results and we'll kind of chat about, if we think it was worthwhile or not. In the meantime, (name of R3) is going to go ahead and do it. (Name of R2) and (name of R4) are going to do it, in the similar format, they're just not going to send it home
417. R4: Yeah
418. R1: And that's what we're saying?
419. R4: Perfecto
420. R2: Because we're doing it anyway, it's only to....I don't know
421. R1: Yeah, that was to formalise how do we get the parents involved? We're going to have a meeting, we're going to talk to them, we're going to get them to sign it, it's going to be like homework
422. R2: I know it sounds very negative that we don't want parental involvement but....you know, when you don't see it coming back, you're kind of going....
423. R1: Yeah
- [off topic about Easter holidays for 70 seconds]
424. R2: Yeah, that might be no harm that we're doing different things and then you can see
425. R1: Yeah, see what people think. So all the time, we're looking at what we're doing and how we're doing it. So at the end of the day we can talk to the staff about what we did but also how we did it
426. R3: Yeah
427. R1: Because actually what we say to the kids and how we say it and what we use and you know, what we're actually responding to, all those extensions and types of questions, and are we getting them to put things in their own words and all those kinds of things
428. R2: And it will be interesting to see if they do come up in that area of the MICRA-T
429. R3: I bet they won't
430. R2: In comparison to a previous year, d'you know?
431. R1: And that's maybe something we'll look at?

Transcript: 21st May 2013

1. R1: OK, yeah, in terms of the sticky notes reflections, is there anything you'd like to add? You said about picking out resources. Where would I add that under?
2. R3: I don't know if you can put it on the list. It was just an observation more than anything else and it was their observation rather than mine so something is going in
3. R1: So either that's em...I suppose it comes under a few different things. Is it..?
4. R3: Context maybe
5. R1: Context?
6. R3: Because it's about the content
7. R1: Yeah, so you think they're kind of, you know the way we often talk about this 'word consciousness'? Or word awareness?, that kids are more aware that they have to understand the words?
8. R3: Yeah
9. R1: So I'll put that down, word consciousness. To me it comes under the content, but also the methodology. The more you work on words, the more kids are aware of the words
10. R3: Definitely, I think, yeah, I just think it was a cool thing that they wrote down today
11. R1: Word consciousness, that's brilliant. Em....anything else that people would like to add to it? Again we're thinking in terms of sharing this with the staff, you know, in terms of the, our, as (name of principal) calls it, our expose in June. You know, things that we're going to say were useful?
12. R2: She's expecting a lot, isn't she?
13. R3: We have to come out with that theme tune, 'Today on expose...'
- [off topic for 20 seconds]
14. R1: Or are you happy enough with the way it is?
15. R3: I definitely think the thing to do is to not make it sound..
16. R1: No, and this is just to feed in
17. R3: I don't think they know it's coming, you know
18. R2: I don't think they know either
19. R1: Do they not?
20. R2: No. I don't think (name of principal) know it's coming to be fair
21. R1: She just has the date in the diary?
22. R2: I don't even know if she has a date in the diary (name of R1) (laughs)
23. R4: I don't think...I think I heard something else is happening that day
24. R1: The 11th, Talk Time expose, 2:40 for a half an hour, or 20 minutes. I think it was 2:40 to 3
25. R3: No, I think the staff know there's, that we're talking, but I don't think they know it's expected of them that they're going to be doing the same thing as we're doing next year
26. R1: But is it though? Like that's something we have to-, like (name of principal) might say 'two other classes-'
27. R3: Ok, are we just showcasing what could be done rather than what we expect
28. R1: Yeah
29. R3: Well that's different then
30. R1: I think it's informing people of 'this is what we did, this is what we found, this is what worked, this is what didn't work, this is something that we found useful and if anybody wants to try it next year...'
31. R3: So would we be trying-, we wouldn't be trying to implement it in a whole school policy in oral language then or a whole school methodology?
32. R1: It's up to the staff really, isn't it?
33. R2: It's probably up to (name of principal) though, isn't it?
34. R3: Yeah, I think it's up to (name of principal)
35. R2: If she says, 'yeah, you have to do it', then...
36. R3: Everyone has to do it
37. R4: It's not a case of...
38. R2: I don't think she's going to leave it your own devices, to be honest. I think she's either going to say 'we're either doing it or we're not'
39. R1: And I suppose this Expose is for them to hear about it and, including (name of principal) to hear about it, and then make a decision....
40. R3: Yeah
41. R1: Based on what we say
42. R3: Yeah, I think we'll definitely have to do another one if it takes off, we'll have to do another one in September because...
43. R1: Yeah

44. R3: After the summer, you'd have to do
45. R2: Sorry, I won't be here
46. R3: Oh God, we can't do it so. Jesus.
47. R2: Don't be crying now
48. R1: So that's what my understanding is
49. R3: Ok
50. R1: Yeah?
51. R2: I just, I would check with (name of principal), I have to say
52. R1: Will I?
53. R2: She could pull a staff meeting the day before

[off topic for 250 seconds]

54. R1: You're going to have more clout than I would with the staff because you're the ones that have been doing it in the classroom, in the real world, in Ballymun, with the Ballymun kids, in this school, as opposed to me saying 'Oh in America, somebody did a study and found blah, blah, blah'. You know, it's a bit more credible and real, the real world, that kind of thing...em...so this was just, you've already done this, the sticky notes reflection, you stuck the pieces on, this is what you said was most useful and this is what was least useful, so that will just help us when we're planning the presentation
55. R3: Oscar winning screenplay
56. R1: Exactly...at the back of this, this is again what you said based on the classroom checklists, the vocabulary, checklist and video reflections, the changes that you've said you've done. So if I'm a teacher, 'well what do I have to do differently?'. Well it might be to use books, target specific words, you might review them, you might associate, give examples-
57. R3: Well that's the whole point, the whole point is to target specific words, that's our aim...targeting and teaching specific words

[interruption from other staff member for 25 seconds]

58. R1: So this is in terms of changes, that ye identified using the checklist, that you're doing differently...so again it might be if somebody said 'if I'm going to take this on next year, what do I have to change?' and these are things, last time we were here we looked at the checklist. I just, all I did was summarise exactly what ye said: less teacher led, more pupil led, word walls, assessment...you know, they can see all the things there and the other thing we talked about a lot before Christmas, say from the September to the December was this part here. We talked a lot more on how do we talk to kids, extending, questions, connecting words and ideas, less emphasis on praise for the sake of praise, giving pupils more time, more focussed language lessons, scaffolding, repetition, review...so we did 2 things, we looked at HOW we talk to kids and then we looked at specific vocabulary piece with the word walls and whatever. So that's-, this page is one, a summary
59. R3: Yeah, that's what I was thinking
60. R1: It's just a summary of what we did
61. R3: Of the programme, yeah
62. R1: What you found useful, according to these 3 teachers in front of me, what you found useful and not useful. And this is, according to you, what did you change? What did you do differently? What did you build on that you're already doing? That's basically...and that's me just summarising all that notes that I took and putting them onto one page
63. R2: Yeah, ok
64. R1: So I suppose today was just, you see I left a few lines there if there's anything you'd like to add
65. R2: Ok
66. R1: So, if you have a quick look at that and see if there's anything you'd like to add
[teachers read handout]
67. R3: I think that that's definitely it, less emphasis on praise for the sake of praise. You really notice now when you're doing it
68. R2: Yeah, and the-
69. R3: Just repeating what they say
70. R2: Yeah, the teacher echo. Remember when we were doing it at the start and it was echo, echo, echo, every single thing they said, and is it any wonder then that they don't listen when you talk to them because they know you're going to say it another 20 times
71. R3: That's so true
72. R1: I should put that in though, less teacher echo, is that there? I'll put that in. Less teacher echo
73. R3: But like, it's, it's not, it's teacher echo with an extension now rather than just teacher echo for the sake of it
74. R2: Yeah, yeah, if you have to echo you need to do

- something else with it
75. R3: You see that's it, because I asked them a question and I actually answered it with a simple, and I was like 'follow that up quick'. In my brain it was like 'say something else'
76. R2: And we found it really hard in the beginning like
77. R4: mmmm
78. R2: You know, remember when it was like, teacher extension, 'oh, eh... eh...', you could do nothing else only teacher extension like, you couldn't even hear what the child was saying, just fire in a bit more explanation there
79. R3: Do you know that fluency survey? One of the questions was 'how would you feel if you got a book?' and one of the words that we did in em.. in Talk Time was grateful and a rake of them wrote grateful. I was like 'great word'. Isn't that class?
80. R1: Very good, using it
81. R3: Isn't that cool?
82. R4: Ahhhh
83. R2: It is very rewarding when you hear them using it or if they are enthusiastic about it
84. R1: Yeah...I suppose that's, my whole thing all the time is, you could say to someone 'Talk Time, oh that's grand, I throw a few words on the wall and they learn them', but I suppose this shows that it was a lot more than that. Like we've been doing it for a long time, and you know, there was a lot more to it than just putting words on a wall and then learning them and then doing a test. So you know...
85. R3: Yeah
86. R2: Yeah
87. R1: It's how we did it as well as what we did. So is there, apart from the teacher echo, was there anything else, anybody wanted to add?
88. R2: I suppose over time we change, like I know I changed. Remember at the start we were just trying to see if they knew a word and get them to say a word, whereas then we decided we were going to actually PICK the words from a book, or from something to focus it
89. R1: Yeah
90. R2: You know, instead of thinking they might not know that word, let's see if we can get them to say it in a context but...
91. R1: So we started with words into a context and then we moved from context into words
92. R2: Yeah...now obviously with the smallies, that's much easier
93. R1: mmmm
94. R2: With them
95. R3: Do you think you'll take that with you when you go to the other school? Do you think it's something you'll continue?
96. R2: Well there's an awful lot of travellers, I don't know, I don't know
- [off topic about number of travellers in school for 20 seconds]
97. R3: Because I'd say it's completely transferable, but then I-
98. R2: Oh it would be, yeah
99. R3: Whereas in more advantaged schools, you wouldn't be teaching the words because they'd already know them from the environment they come from, you know
100. R1: If I was working in, in Blackrock, you could do something similar, I'd just be using harder words
101. R3: That's it, you know, it's completely malleable, you know
102. R1: I could do this in secondary school with 'photosynthesis' or 'chlorophyll' and whatever
103. R2: I think I would do it and maybe not to the extent that you're doing here with the whole little list and the parents. I think I nearly would do it as a classroom thing. I'd do it now every morning as part of doing their tricky words or whatever
104. R1: Yeah
105. R2: But it would all depend on how much you could cram in, all depends on how, I know as you say you'd be using harder words, but then, if you have a very diverse...ability in your class, it's very difficult then to pick....
- [off topic about individual child for 80 seconds]
106. R2: I use to be so disheartened. But now it's just, you do what you do and, it's rarely reflected. Like this was reflected, it was great when they did their test, and they were able to see it
107. R3: That's the thing you were able to see it here. It's motivating.
108. R2: But it doesn't always work across the board, with your MICRA's and your SIGMA's
109. R1: And I think for those of you who are doing the test again, it's the 20th, at the end of May, isn't it, it's not this, it's two weeks time
110. R3: MICRA is next Thursday
111. R1: And you know the test, the Talk Time test?

112. R3: Oh the one afterwards?
113. R1: Yeah..the whole, the end of year one is not until the end of May, I don't think
114. R3: No
115. R2: And is that every word they've done since the start of the year or is that just the ones they've been doing now since May?
116. R1: What do ye think?
117. R3: Every one since the start of the year I think
118. R2: Well I don't go over them all now, I just, we just have our new ones and we moved from one side over to the other and we don't do all the old ones. Now we could start doing them again I suppose, just to remind them or should I leave them and see how many they can remember having not done them?
119. R1: You see, I think that would be interesting, because ultimately-
120. R2: So test these ones that we do every day and then maybe test these ones the following day because we haven't done them since Easter
121. R1: And get two scores
122. R2: Yeah, and just say 'these are the new ones and these are the old ones that we haven't touched'
123. R3: And do we, do we let the older ones study for the one or do it as a surprise test?
124. R1: I think they should know, shouldn't they?
125. R3: So they can study then
126. R1: Yeah...em this is something that was your idea...you wanted say, if we're going to, for helping the staff, some kind of summary poster...you know, so I've only written down 3 questions there if you had some kind of poster, and people were talking about a poster for the junior end and then a poster for the senior end of the school. And remember we were saying this would be useful for somebody's class to remind them of what to do. So the reason I, I've written down there is 'why', 'what', 'how' as in...what would we put under why?
127. R3: To teach target words
128. R1: To teach target words, ok.
129. R3: That's it like, that's the 'why'. We're done. That's what we're doing
130. R1: Yeah...and I would probably say, you know the bits down here, the general oral language stimulation might be to improve language skills
131. R3: Ok
132. R1: You know like, when you're doing extension, you're helping their language as opposed to one specific word
133. R2: Yeah
134. R3: Teach target words
135. R1: And improve language ability or something. Or oral language ability
136. R3: But isn't it, isn't it to increase their vocabulary
137. R1: Yeah
138. R3: Isn't that what it is?
139. R1: And for some kids, it might be to increase their sentences. You know for some kids, they might have an ok vocabulary, they might say something like 'grateful', but to put it into a big long sentence, you know, 'I was very grateful because of your em, generosity', d'you know that kind of way?
140. R3: What did you write there? Improve...?
141. R4: Improve
142. R1: Language ability
143. R4: Ok
144. R3: Extend vocabulary
145. R1: Extend vocabulary
146. R1: WHAT?...so I'm the teacher next year teaching 5th class-
147. R3: You're doing, you're teaching the target word
148. R1: So target word
149. R3: Same thing again
150. R1: Pick words?
151. R3: Words derived from a context
152. R2: Yeah
153. R4: Yeah
154. R1: Pick words from a context...yeah...and I'm going to use this [summary sheet] to go back and see what we thought was useful. Pick words from a context or book. For the junior end it will be a book, so I'm just-
155. R2: But from a context because ours are gone from a book now you see and they don't have words that they don't understand so I'm picking things like 'cocoon' and 'antennae'

- because we were doing about a butterfly...but they're not from the book, like this week's are not from the book at all, because there was fucking nothing in the book
156. R1: Well maybe we don't need two posters then?
157. R3: I don't think we do
158. R2: I think it's at the discretion of the teacher themselves, like obviously for a junior one, its going to be from books, whereas, it's going to be from novels or it's going to be from...
159. R4: SESE
160. R2: Yeah, it's across the board, but still with the smallies, it's easier to use a book at the start
161. R1: So pick words from a book or topic?
162. R4: Yeah
163. R3: Just context, teach words from a context
164. R2: So just a context alone. It can be a book, it can be a topic, it can be...
165. R3: You can't come in on a random day and teach...
166. R4: Pick a word out of the air....are we doing this today?
167. R3: I don't know, I can't think of one....mechanic. You can't. It has to be from context and that's really important
168. R1: So pick words from a context, e.g. book or topic
169. R2: mmmm
170. R3: Yeah
171. R2: Or even from a child, like em...if they were to say 'what's a such and such?'
172. R3: Yeah
173. R2: D'you know? 'Oh does anyone know what it is? (name of pupil) doesn't know, lah, lah, lah'
174. R1: Yeah
175. R2: Mine would but then they're small, you know, you might say something-
176. R1: Like a pantomime or something?
177. R2: Yeah
178. R1: Ok
179. R3: I think context is the most important one there
180. R2: Yeah, a topic or a child
181. R3: Because they can see connections between what they're doing, you know? Because you're not just going to teach one word from the context, you'll be teaching a few of them
182. R1: Yeah...ok so I've now picked the word and the word is...say I'm doing butterflies and the word is 'cocoon'
183. R3: Tomorrow you might end up doing like, Christmas, I mean not Christmas because obviously that's not similar but you might end up doing caterpillar, you know?
184. R1: Yeah
185. R3: Connecting
186. R1: So what else do I do? I've now picked the word...
187. R3: Teach the word
188. R1: How?
189. R3: Using...different methodologies
190. R1: Such as?...sorry, I'm just thinking of a teacher
191. R3: The 4 square
192. R4: The 4 square would be a good
193. R1: Ok, teach words using different methods so e.g. the 4 square...what did, I know you did it orally
194. R2: It would just be more explanation, putting it into-, what's it like, what's it not like, say it
195. R1: So I'll say examples, eh...non-examples, games
196. R3: Inherit versus not inherit
197. R1: Such a good game that!
198. R3: (name of R1) brilliant, I just love it
199. R1: It's the kind of imagination that goes into it
200. R3: I love it...resources
201. R2: You could play that with the smallies as well...cocoon or not a cocoon?
202. R1: Yeah
203. R2: I'm a caterpillar and I go in there...cocoon. I'm a mouse and I go in there...not a cocoon...d'you know? Like it doesn't have to be...
204. R1: It's ever-eternal game.
205. R2: Actually I might do that actually
206. R1: So we said examples, non-examples, games
- [off topic telling R4 about 'word or not' activity for 30 seconds]

207. R4: That's from the...?
208. R1: Isabel Beck
209. R4: Oh yeah, I liked that
210. R1: Yeah, I think it's really good. Remember they had one for loyalty?
211. R4: Yeah I liked that handout
212. R1: I really like that Isabel Beck stuff. I think it's really good
213. R4: Yeah
214. R1: Yeah, I think it's really good
215. R3: There'd be no harm in handing that out
216. R4: I think so, there'd be no harm in handing that out because they give examples and ideas
217. R2: You could just flick it up and say 'oh I'll do that or I'll do that', you know, I just think sometimes, like it's fair enough we know how to do it now, but it took us a long time to learn how to do it easily
218. R3: We weren't always fantastic?
219. R2: We weren't and I just think if you've something to look at, I just think it makes it an awful lot easier
220. R1: Anything from this list you want to pick here. You see the way you said things that you're changing, I'm just looking here, we have books, topics, contexts, target specific words, that's pick words.
221. R3: Student, student-generated definitions
222. R1: Student-generated definitions, and that would be the same for junior, except you're just not writing them
223. R3: Do you know what I think I'll do next year, is if I'm doing this again, which I probably will do if I continue on, I think that I will do out, like a dictionary of the words that we're doing, you know? Would that be a good idea?
224. R1: Yeah, I think that would be really good
225. R4: Like give them all a copy or?
226. R3: No just one whole class one, like a scrapbook
227. R4: Oh do a whole class, yeah
228. R1: Not a bad idea
229. R3: Would that be an encyclopaedia or a dictionary?
230. R1: Dictionary, I'd say, yeah, yeah...em....
- [off topic for 25 seconds]
231. R1: Ok, if I'm looking at my poster now. I pick a word, grand, 'cocoon', I teach the words using different methods
232. R3: And then test
233. R1: Student generated definitions...something about the word on the wall
234. R2: Visual, it's...
235. R3: Put the word in a visual place...em...word wall, write word wall because it's either a word wall with pictures or a word wall with words, in my case, so word wall
236. R2: Visual aid, more so, isn't it?
237. R1: Now ye did a lot of repetition. How are we going to explain that to the others? Repetition and review. Because it's not just doing it once, pick cocoon, this is what it is, bye bye
238. R3: That's in your methodologies, you're always repeating it
239. R1: Ok, methodologies, repeating
240. R3: It's a discussion on the word, you know
241. R1: Yeah, repetition...em...what about the homework? Do we need to put that in here?
242. R3: Yeah, homework, defo
243. R2: I'd be half and half with the homework. Half of mine are doing it, half of them aren't and an awful lot of them more aren't do it this time around since after Easter, so it will be interesting to see what the results will be, ask (name of pupil), for example, 'did you talk about a cocoon last night?', 'yeah', 'what did you say?', 'eh, (name of sister) didn't know what it was, 'did you tell her?', 'no', 'do you know what it is?', 'yeah', 'why didn't you tell her?', 'I don't know'....so how do you handle that one lads?
244. R4: You see I've stopped giving it to them for homework (name of R1)
245. R1: mmmm...yeah I remember you saying that, because I want to see come the end, because I was convinced they weren't, (name of pupil) I think was the only one from the class, she definitely was. I'd say she drove the parents...
246. R2: Mad
247. R4: Round the bend every day
248. R1: But it will be interesting to see though, won't it? Your classes are similar enough

- having it or not for homework, what's the difference? You know?
249. R4: Yeah
250. R1: If it does make a difference...so I pick the words, teach the words using different methods, student generated definitions, put it on a word wall. Now, we've got homework or testing, so homework....
251. R3: So one word per night homework
252. R1: Homework COULD include one word per night, will I say that?
253. R3: Well that is the homework that they have to learn the word
254. R1: Ok, homework includes
255. R3: One word per night plus talking
256. R2: Do you think they do the topic?
257. R3: Em...I was always dreadful with mine, last week, it was all confirmation and then maths for the SIGMA
258. R4: Yeah
259. R3: Well em, they were, they were always asking do we do one, so?
260. R2: I just think mine are at the stage where mummies are just signing it like
261. R1: And that's not...I mean
262. R2: For a sticker, d'you know?
263. R3: To be honest if I had a 4 year old talking to me all day and then they had to come and talk to me for 10 minutes every night, I wouldn't be feeling that either, like
264. R2: But they're your child and you love them
265. R3: Fair point, I just can't visualise that, that's all
- [off topic for 45 seconds]
266. R3: Homework and then assessment
267. R1: Assessment...what about some of these ones that, that we looked at from September to December? What about that? You know what you're talking about teacher echo or extension or...?
268. R3: If you go with words like that to a staff meeting then they'll switch off
269. R4: Yeah, I'd...
270. R3: If you come in and start talking to me about extension and review and all that-
271. R4: They'd first of all be like 'what the hell is extension?', what?'
272. R2: Yeah, all these new things, like even we were going back over them weeks later and I hadn't a clue, I knew what extension was, what was referential questions
273. R4: Referential questions, what's that?
274. R1: Yeah, I know there was a lot of-
275. R3: Leave them out, don't go there
276. R1: Ok, we'll leave that out. Is there anything about then, add on to children's language or...
277. R2: Extens-, I suppose...
278. R3: Do we have that in the why?
279. R1: I'm thinking of 'add on when they say something to you', like I'm thinking of extension with an easy accessible...
280. R3: Isn't that a different methodology then?
281. R1: Yeah, ok
282. R3: So you extend the children's turn
283. R1: Now you're talking about extend, but you said that's the wrong word to use!
284. R3: Ok...add on to what the kids say
285. R1: Add on...does that sound, is everyone happy with that or do you think it's a bit too much?
286. R4: No add on to what the child says, yeah
287. R3: I think they'll be quite surprised if they look at them, because I'd be like, sure I always add on, but then if they take a minute and look up their own practice, then maybe they'll be surprised, and not just in a very good...
288. R2: Yeah, what is your add on? Is it beneficial for the child?
289. R3: Beneficial add on
290. R2: Is your add-on teacher echo, like is it a teacher echo with an add on or are you just doing an echo, you think you're adding on but you're just repeating what they've said
291. R1: Because sometimes I've seen posters, you know they have speech bubbles, it might be say, you know, eh...pupil says something like 'you're not the biggest' and then teacher says...
292. R3: Who is bigger than me?
293. R1: Yeah...I'm not the biggest PERSON, who know what I mean? Who is bigger than me might just be another question

294. R3: Oh are you saying 'you mean I'm not the biggest person'
295. R1: Yeah, exactly, you're not the biggest HUMAN BEING, or something like that
296. R3: (name of R4) you're dead right, it has to be a visual, it has to be a beneficial add on, it can't just be adding on for the sake of it, shitting on, it has to be beneficial
297. R1: So we could do speech bubbles like that...just showing people what we mean
298. R3: Yeah, I don't think anything too crowded either, like that's not going to get their attention, you know? For me, I like things that are clearly laid out, I can see what I'm supposed to do
299. R1: Because I remember maths, is it Ready, Set, Go Maths or Maths for Fun, they have really nicely done, where they have speech, you say this and the child does it, you know, they actually-, and I remember Martina saying that teachers actually really liked that because it kind of gave you ideas of what you actually say
300. R3: mmm, rather than them-
301. R1: Rather than me saying 'oh teacher extension is very important', you'd say 'you're not the biggest', 'oh I'm not the biggest HUMAN BEING', you know, like it's a bit more...
302. R3: It's a concrete example
303. R1: Yeah, that might be something...anything else, looking at these, that needs to go in the poster, or even looking at the other side either? Have we got the assessment in? Assessment at the end? Every Friday?
304. R3: Weekly assessment
305. R2: You see I don't assess every week now anymore.
306. R1: Ok
307. R2: I changed it just to see if there was a difference because it was parents involved in the homework, I was doing it every morning and they were tested every Friday. So now, there's still homework going home, we still do it every day but there's not testing on a Friday and half my parents are kind of falling off so I want to see if there's a difference, do you need all of these things to have the result that we got before Easter? Now that was just of my own...
308. R1: Yeah, so will I say weekly or regular assessment?
309. R2: Well I ask them every day a word but we don't do the 4 words every Friday anymore
310. R1: Ok, grand
311. R2: So there's a slight deviation
312. R1: So I'll say regular assessment then, you know, so e.g. daily or weekly...because if (name of R2) is only doing it daily
313. R4: Yeah, for the younger ones, yeah
314. R2: Well they probably need it daily anyway, don't they?
315. R4: Yeah
316. R1: em....resources, activities, methodologies, this is our list of methodologies on the poster....eh...cross-curricular, repetition. We could have that as our last thing, repeat and review, regularly
317. R2: mmmm
318. R3: You mean, they have to repeat Talk Time?
319. R1: Yeah, or repeat the words, you know? Or is that a methodology?
320. R3: Methodology
321. R4: I think it's a methodology
322. R1: Methodology, ok...em...that's fine
323. R3: Oh so basically what you're saying is the two most beneficial things in teaching vocabulary is beneficial adding on, beneficial extension and repetition
324. R1: Em..well basically its quality and quantity. If you had to summarise it, it would be quality interaction and lots of it. The more I talk to the children and add on to what they're saying em, you know give them more opportunities, like quantity as in, more words being introduced, more talking, more chances for them to talk back, more chances for them to explain things, that's quantity. Quality would be then, how I'm doing that, you know, I'm giving examples, non-examples and extending, I'm maybe scaffolding, I'm you know, repeating and making associations.
325. R3: That's it exactly
326. R1: Quantity and quality
327. R3: That's it, and that's what, if you want to describe the programme we focussed on the quality of teaching and the quantity of what we're teaching
328. R1: Yeah
329. R3: Quality of teaching and the quantity of it
330. R1: How does, anything else em...speech marks..is there anything else, pictures of the word wall, would that be useful showing them an example of a word wall?
331. R2: mmmm

332. R3: And the video
333. R1: Yeah, a word wall, ok, Talk Time the heading, quality and quantity can go under there, we'll show a picture of a word wall, will we show a picture of the little em...Talk Time words?
334. R3: Yeah
335. R1: And..the homework if people want to do the homework?
336. R3: Yeah...would you like this to be rolled out across the whole school next year? Would you like that?
337. R1: I...well I suppose, when I was starting this off I would have said at the beginning 'I don't know if this is going to make a difference or not'
338. R3: Yeah
339. R1: And from what you're saying, it has made a difference to you and the kids so it that improve the pupil outcomes, then I think that's a good thing
340. R3: Yeah...so I'm just trying to get the aim of this whole thing in my head
341. R1: The aim of this expose as we call it, is to SHARE information, we did this, this is what we found, this is what was useful, if you wanted to do it...
342. R3: Yeah, we're not going in trying to sell this, is what I'm saying
343. R1: No, I think-
344. R3: I just have to get that in my head
345. R1: You know, it's more like 'do you know the way we've been meeting with (name of R1) every week for the last months-
346. R3: Sit back and watch this now, this is what we've been doing
347. R4: Hahaha
348. R1: This is sharing and update and what I think would be good is to show them the results, you know, so that's why if you're doing the assessment at the end of May, we can say that the first assessment we did, at the Easter time, we got 100%, blah, blah, blah; blah, blah, blah. The second assessment, we got this.
349. R3: Hopefully it will still-
350. R1: So I think that would be useful, the results
351. R2: mmmm
352. R4: mmmmm
353. R1: In terms of the video clips, were there video clips that you think would be good to show them? Or that you would be happy to share?
354. R3: I don't mind sharing one that, you know where we did 'wreckage'?
355. R1: Yeah
356. R3: Just will you edit out any bits that were awful?
357. R1: You know the way I always edit out loads, like I go in for 20 minutes-
358. R3: Yeah, like I don't have a problem with that at all
359. R1: Yeah?
360. R3: As long as I don't have to watch myself I don't care
361. R2: Oh you have to watch yourself
362. R3: Oh Jesus, I feel sorry for ye having to watch me...if you think that would be helpful because that was the whole lesson
363. R1: What do other people think?
364. R2: What? About showing a video of them?
365. R1: Yeah
366. R2: Oh yeah, I don't care if you have to show a video
367. R1: I just thinking, would it be useful for the other teachers? And in terms of our expose?
368. R2: Well I suppose it would, I just kind of think, it's like doing the First Steps, you might be thinking you're doing alright until Martina comes along, and you go 'oh yeah.....', you know it does, kind of, you know, that way, give you a bit more of an insight
369. R1: Yeah. How do you feel about sharing yours?
370. R2: Yeah. I don't give a shit
371. R1: The most recent one, that was brilliant
372. R2: The Ravenous Beast!
373. R1: The only thing is, the Ravenous Beast or the wreckage one, it's nice to show, it's nice to show like, the seven minutes, d'you know what I mean? Because showing a bit of it is like, 'ah, yeah, she's just reading the story'. If you show it all and you show the repetition and bringing it back and giving examples, no more than the wreckage one, so ravenous beast and wreckage, if we show those two?
374. R3: Yeah
375. R1: We have a nice video, and I know you're not in it (name of R4), but your voice is in it, when they're doing the test?...
376. R4: No

377. R1: No
378. R4: No (name of R4), I hate...
379. R1: That's fine, I was just going to say, not to exclude you
380. R4: Uuuggghh, no...exclude me PLEASE
381. R1: That's fine, I was just going to say if you want to, there's a nice one of them doing the test but that's fine if you don't want to as well. That's grand. Fine, totally fine....em....any resources we want to share them?
382. R3: The Talk Time leaflet
383. R1: Leaflet
384. R3: You know the homework leaflet?
385. R1: Yeah, anything else?
386. R2: The poster, you know, that's hung up inside or mine's just outside the door
387. R1: Yeah...poster...eh, did you say (name of R4), Isabel Beck, that handout?
388. R4: Oh yeah. I think-, yeah
389. R1: It's nice and colourful
390. R4: Yeah
391. R3: It's friendly looking, you'd want to pick it up and have a look at it as opposed to those bloody black and white things, that we're...oh Jesus
392. R1: Yeah, and we'll have to make this colour as well
393. R3: You know it's half two, and if you really want to get, it has to be appealing
394. R1: Would anyone like to show them a picture of a 4 square?
395. R3: I, I think I have them above if you want, that's no bother
396. R1: I'm just wondering, you know they way if we say 4 square, like...
397. R4: What's that?
398. R1: What is that?
399. R4: But if you're showing the video, they'll get to see it won't they?
400. R1: Oh they will actually
401. R3: And I can bring them and hand them out. And I think as well, like what the people from Navan saw that day as well, is that the 4 square wasn't, you didn't have to sit down at a computer, you didn't have to come up with it, like 1 literally got a pen and broke it in 4, you know, it's doable, we're not talking...
402. R2: You don't need a template, 'oh go down and photocopy that
403. R1: Yeah, ok, so, so far we have in terms of the expose, it's, we've decided that we're sharing information, what we've been doing since September, why we did it, what were the main em...and I don't mind giving a brief background to that, we're going to talk them through the key points that we looked at, and especially, with a special focus on the Talk Time and maybe if we had that poster done out, we could just talk them through that and show them the video clips of ravenous and wreckage and the resources. Maybe we could have a little pack of the resources and then maybe one..homework leaflet, one poster, one, a picture of a word wall, 4 square
404. R3: I just think, remember the auld golden rule there, short and sweet
405. R4: Yeah
406. R3: Very important because otherwise you lose people
407. R2: But even on the back of the poster, if you had...a picture of the Talk Time leaflet, the poster, a word wall and something else, well then it's only 2 pages and then give them the other little leaflets as a separate handout
408. R3: Because to be honest, I don't think they're going to be too bothered about what we're doing
409. R2: Yeah, unless it's going to be implemented
410. R3: Yeah, that's the thing, that's why I was saying to you, is this a case that we're trying to sell it, you know?
411. R1: Well what do you think? Do you think it is something that we should try to sell?
412. R3: I don't want to be, I don't want to be making people feel like they have extra work
413. R1: Yeah
414. R3: D'you know? When people do that to me, I don't like it
415. R1: Yeah
416. R2: But then, is it something that you're going to do next year?
417. R3: But it is something I'm going to do next year, yeah
418. R2: But it's probably something we're all going to do next year, whether we have to do it or we don't, and we might not do it as religiously, but we still will be very aware of it, but it's because we've done it for a whole year and we've seen the benefits of it
419. R1: Yeah
420. R2: So from someone else sitting in the chair 'oh yeah, that's what you've been giving out

- about for the whole year'...only joking....you know, it's very hard when you haven't...as you say, when someone says 'do that', 'as if I didn't have enough to do!'
421. R3: Yeah, there's nothing worse than someone throwing something at you
422. R1: So do we need to say something up here about like what you're saying, integrating it into the curriculum, like, why would you do this? Helps with oral language planning?
423. R2: Like that, that could be your oral language for the year. Like I know there's oral language in the plan already BUT-
424. R3: I put in 8 Talk Time words in my oral language box, that's what I do, plus my talk time homework
425. R1: So will I put that in, why, help with oral language planning?
426. R2: Yeah
427. R1: Yeah? Like it goes in your cúntas míosúil, yeah?
428. R3: Forget 'helps', provides oral language planning
429. R1: Provides a template for oral language planning?
430. R3: Oh just provides oral language planning
431. R1: Provides oral language planning, ok
432. R3: Because if you give a list of your target words, they're what you're speaking and what you're teaching
433. R1: Ok, provides oral language planning. Perfect. Emm....we will have time next week just to go over a little bit more. Like I don't think we need a power point or anything, the video clips will be fine. I'll do up something rough and then we can see what we need to change on it
434. R3: Ok, cool, cool
435. R2: So we're doing it in a room, like the library or whatever?
436. R1: Yeah, I presume so, yeah...we're going to finish now....but the last thing, there are two parts, we're doing the stuff with the kids in the class. The thing that I'll be looking at is how we got this up and running, the PROCESS, like you know the way I'm always talking about, this is what we're doing and this is HOW we did it, you know, the process or whatever? So one of the things I was going to ask you to do is em...just reflect on what was it like being involved and you can take it with you and give it back next week....What was it like for you? My personal reflections on being involved in this shared oral language project?

Appendix G: Extract from Ruby the Copycat Text Talk Example (Moses, 2005)

LESSON 1

Comprehension
Story Structure

Vocabulary

coincidence
loyal
murmured
recited
bitter
sensitive

About the Book

Summary Ruby, the new student, copies Angela. At first Angela is flattered, but then she gets upset. When Ruby copies Miss Hart, the teacher, Miss Hart helps Ruby think of something she likes to do for herself—hop. Soon everyone is copying Ruby.

Focus A key point for understanding is Ruby's real-life problem of feeling so unsure of herself that she copies others she sees. Then she finds out about her own unique talents.

Literary Element Realistic Fiction

About the Author

Peggy Rathmann
When Peggy Rathmann first took a writing class, she borrowed characters from other students' stories! This gave her the idea to write about a copycat—Ruby. One of her other books, *Officer Buckle and Gloria*, is a Caldecott Medal winner.

Ruby the Copycat • Lesson 1 **13**

Introduce Vocabulary

coincidence

Explain
In the story, Miss Hart called it a coincidence that both Ruby and Angela were flower girls over the weekend. That means it happened by chance. Say the word.
A coincidence happens when two or more things happen at the same time without planning. It would be a coincidence to run into your best friend while away on vacation.
Let's say the word that means things that happen by chance at the same time.

Discuss & Summarize

▶ Let's think about some coincidences. I'm going to tell something that happened, and if you think it is a coincidence, say, "coincidence." If not, don't say anything.

- giving your sister the same present that she plans to give to you **coincidence**
- two friends playing together on the same softball team
No response.

▶ If you and your best friend found out that you both brought turkey sandwiches for lunch, what might you say? You could say, "It was a coincidence that we both brought the same sandwich on the same day."

▶ What's the word that means things that happen by chance at the same time? **coincidence**

loyal

Explain
In the story, Angela wrote a poem about her cat that was a loyal pet. That means that the cat was always by her side. Say the word.
If someone is loyal to you, that means that he or she will always support you or be your friend. Being loyal is an important part of being a good friend.
Let's say the word that means always being there for someone.

Discuss & Summarize

▶ Let's think about some examples of loyalty. I will name some things, and if they are examples of a person or pet that is loyal, say, "loyal." If not, don't say anything.

- a dog that waits by the door until you come home **loyal**
- a man who loses his friend's book **No response.**
- a friend who always tells people how great you are **loyal**
- a person who eats at the same restaurant every week **loyal**

▶ If you saw a friend cheering for her team when they lost, what might you say about her? For example, "She is loyal to her team."

▶ What's the word that means always being there for someone or for a group? **loyal**

bitter

Explain
In the story, Angela became angry with Ruby for copying everything that she did. Another way to say that is that Angela became bitter toward Ruby. Say the word.
If you are bitter toward someone, you become upset because of something the person did, and you keep feeling that way. You might be bitter toward someone who always teases you.
Let's say the word that describes the feeling you have when you stay angry.

Discuss & Summarize

▶ Let's think about when people might feel bitter. If I say something that you think is a time you might feel bitter, say, "bitter." If not, don't say anything.

- your sister eating your ice cream again **bitter**
- your favorite cousin visiting
No response.
- your brother using up the hot water for your bath again **bitter**

▶ If a boy is angry because his friend has disappointed him many times, what might you say about the boy? You could say, "He is too bitter to forgive his friend right now."

▶ What's the word that describes the feeling you have when you stay very angry? **bitter**

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Introduce Vocabulary

murmured

Explain

In the story, Miss Hart murmured, "What a coincidence." That means that she said it in a quiet way so that not many people could hear her. Say the word.

If you murmur something, you are saying it in a low and quiet voice. (*Demonstrate.*) You might murmur something to your mom that you don't want anyone else to hear. Let's say the word that means to say something softly.

Discuss & Summarize

▶ Let's think about when people might murmur. If I say something that you think is a time you might murmur, say, "murmur." If not, don't say anything.

- telling a secret **murmur**
- shouting a chant **No response.**
- laughing **No response.**
- quietly complaining **murmur**

▶ If your teacher asked you a question and you weren't sure about the answer because you hadn't done your homework, what might you say? You could say, "I murmured that I hadn't done my homework."

▶ What's the word that means to say something softly? **murmured**

recited

Explain

In the story, Ruby recited a poem to the class. That means that she said the poem out loud. Say the word.

If you recite something, that means that you are reading or saying something out loud in front of other people. You might recite a special poem about what you are thankful for at Thanksgiving dinner. Let's say the word that means to read something out loud.

Discuss & Summarize

▶ Let's think of some things that you might recite. If I say something that you could recite, say, "recite." If you couldn't recite it, don't say anything.

- the words to a song **recite**
- a funny story **recite**
- a drawing **No response.**
- the Pledge of Allegiance **recite**

▶ If you were speaking out loud or saying something you know by heart, what might you say about what you are doing? You could say, "I am reciting the words I learned yesterday."

▶ What's the word that means to read or say something out loud? **recite**

sensitive

Explain

In the story, Miss Hart noticed that Angela was upset with Ruby for copying her. Another way to say that is that Miss Hart was sensitive to Angela's problem. Say the word.

When you are sensitive to something, you are aware of the thoughts and feelings of other people. A sensitive mother would not talk about the family pet turtle that was lost. Let's say the word that means understanding other people's feelings.

Discuss & Summarize

▶ Let's think about times you might show sensitivity. If I say something that is a time you might show you are sensitive, say, "sensitive." If not, don't say anything.

- when you see that your friend is upset **sensitive**
- after your sister falls and skids her knee **sensitive**
- after your neighbor asks you to come play **No response.**
- when your teacher says you did a great job **No response.**

▶ If a girl cries while watching a movie about a baby bear that gets lost, what might you say about her? You could say, "She was sensitive about the bear being lost."

▶ What's the word that means to understand the feelings of others? **sensitive**

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Develop Vocabulary

Session 1

Situations and Examples

Tell children you will ask them to use their new words in different ways. Explain that you will give them examples and then have them do the same. As children provide examples, respond by stating the connection between the word and its meaning.

- If you were acting in an exciting play, you might hear the crowd **murmuring** during the entire show. When else might you hear a murmur? For example, if a person wanted to share a secret, he might murmur.
- If your class said the Pledge of Allegiance, you might say "My class **recited** the Pledge of Allegiance."

What else might someone recite? For example, a poem or multiplication tables.

- If you are touched by the feelings of others, you are **sensitive**. How might a sensitive person act if she saw a puppy with a broken leg? For example, sad, sympathetic, helpful.

Choose the Best Answer

Tell children that you have some questions that ask them to choose an answer that makes sense with one of the words. After getting a response, call on a child to explain why that choice is best.

- Which makes people **murmur** more . . . something they want everyone to know or something they don't want everyone to know? Why?
- Which would a kindergarten student **recite** . . . the alphabet or a picture he drew? Why?
- Which person is **sensitive** . . . the one who feels sad after hearing a story or the one who tells the story to a lot of people? Why?

Word Association

Tell children that you will say something and they are to tell you which of the three new words (murmured, recited, sensitive) it makes them think of. For each word, ask a child to explain why. If necessary, provide an explanation. Repeat the three possible words at the end of each sentence.

- Which word does *shh*, it's a secret make you think of? **murmured**
- Why does *shh*, it's a secret make you think of **murmured**?
- Which word does aware make you think of? **sensitive**
- Why does aware make you think of **sensitive**?
- Which word does said make you think of? **recited** Why?

Using All The Words

- Which word tells what people do when they say something out loud that they know by heart? **recite**
- Which word is most like whispered? **murmured**
- Which word describes someone who understands the feelings of others? **sensitive**

Word Winner

- **murmured**
- **recited**
- **sensitive**

Refer to the Word Winner routine on p. 11 of your Professional Guide.

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Appendix H: 'Talk Time' in the 'Class Acts in Literacy' community resource

Talk Time

School: [REDACTED]

Contact person: [REDACTED]

E-mail: [REDACTED]

Tel: [REDACTED]

What Is It?

Talk Time is a literacy initiative to support oral language development, and vocabulary development in particular.

What personnel are needed?

Two classroom teachers, two learning support/resource teachers and one volunteer teacher.

What personnel are needed?

Talk Time is delivered to the whole class by the classroom teacher. Parents are involved through oral language homework.

How does It work?

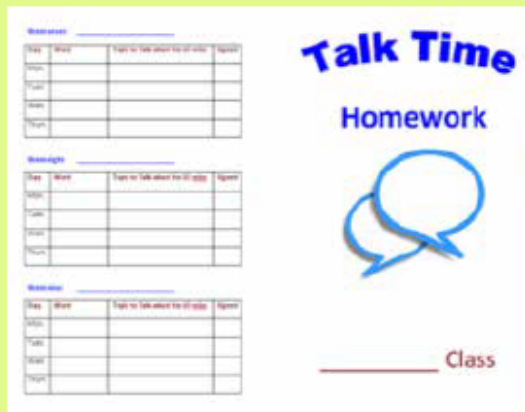
- One word is targeted per day – vocabulary to be taught can be chosen from a book, curricular topic, current affairs or pupils' conversations
- Target words are recorded on 'word walls' in the classroom and in pupil 'Talk Time booklets' for homework
- Words are taught using different methods (e.g. examples, non-examples, synonyms, opposites, generating own definitions, repetition and review using different games, activities and worksheets)
- Assessment every Friday on the four words targeted during the week. The 'word wall' is taken down and the definition is called by teacher. Pupils write the corresponding word. Spelling mistakes are overlooked for the marking of this assessment.
- Teachers can assess all words targeted during a term(s) and send report cards home to parents

What resources are needed?

- Word wall for classroom
- Talk Time booklet for pupils to record homework
- Activities and worksheets to assist with repetition and review of vocabulary (e.g. word lines, 4 squares, venn diagrams, semantic feature analysis)

<p>1. Target Word:</p> <p>Donation</p>	<p>2. Examples</p> <ul style="list-style-type: none"> • Money to charity • Clothes to charity • Books to charity
<p>3. Child's own definition</p> <p>Something that you give away for free to help others</p>	<p>4. Non-Examples</p> <ul style="list-style-type: none"> • Pay a bill • A set amount of money

4 square worksheet completed on a target word



Talk Time booklet for Pupils to record oral language homework

Appendix I: 'Talk Time': Support material for the National Primary Language Curriculum



Support Material

ENGLISH | ORAL LANGUAGE | Stages 1 & 2

PRIMARY LANGUAGE CURRICULUM
ENGLISH

Talk Time

LEARNING OUTCOMES

Children develop concepts, dispositions and skills in relation to:

- Oral language acquisition and use of oral vocabulary
- Reading vocabulary
- Writing vocabulary

Oral Language Requires Explicit Attention

Oral language skills are central to children's literacy, intellectual, social and emotional development. Teachers play a key role in incidentally supporting oral language development through, for example, modelling, discussion, conversations, play and the use of stories. However, effective oral language teaching also requires

explicit instruction, including the use of a number of specific methodologies and activities in the classroom, within a balanced literacy framework. Parents also play a significant role in children's oral language development.

Getting Started!

By its very nature, explicit oral language instruction adapts well to whole-class teaching, small group work or pairs.

Start with selecting your target vocabulary words/phrases/sentence structures. These may be chosen from any curricular area, a big book, textbook, lesson theme, current affairs topic or directly from a child-initiated theme (e.g., song lyrics).

The language that appears repeatedly in school does not

EXAMPLES OF WORD LISTS:

- Biemiller's (2009) Words Worth Teaching: 5000 most frequently known root words
- Marzano's (2004) list of content-area words and phrases across numerous subjects
- Coxhead's (2000) Academic Word List: 570 word families that represent the most repeated vocabulary from textbooks and other academic writings

subject (e.g., mathematics, SPHE, or English) but it is typically not used in everyday conversation. Therefore, 'estimate' would be a powerful word to explicitly teach your children. Many researchers have published lists that document the most commonly occurring words, word families and phrases.

It is important to teach children words that will come up in school over and over again across curricular areas which are less likely to be learned incidentally (e.g., Tier 2 words).

necessarily include the words or phrases most frequently used in conversation. For example, a word such as 'estimate' will come up frequently in school in more than one

Support Material

ENGLISH | ORAL LANGUAGE | Stages 1 & 2

Talk Time



Word walls can support oral language learning by creating a dedicated space for displaying new vocabulary, phrases and/or sentences.

How Best to Teach Oral Language: Quantity and Quality

Research gives us very clear direction on how teachers can best support the development of oral language concepts, dispositions and skills. The advice can be summarised into two key ideas – quantity and quality. The following tables illustrate practices that ensure a balance between quantity and quality when explicitly teaching vocabulary.

More specifically, teaching the word 'loyal' (a Tier 2 word) could involve using a selection of the following activities and visual organisers, orally or written, to support appropriate quantity and quality of instruction.



Support Material

ENGLISH | ORAL LANGUAGE | Stages 1 & 2

Talk Time

QUANTITY

- Regularly promote children's engagement with discovering and learning about new words.
- Teach fewer words robustly instead of several words in an incidental, ad-hoc way.
- Provide many opportunities to hear and use new vocabulary across curricular subjects.
- Create as many opportunities as possible to use and emphasise target words in different contexts throughout the week.
- Space-out exposure to new words across several days, rather than one exposure on a single day.
- Select a minimum of one/two words a day to teach explicitly using rich vocabulary instruction.
- Repeat and review the new words taught regularly using different methodologies throughout the week.
- Test children's knowledge of the new words taught using weekly and end-of-term tests.

QUALITY

- Select Tier 2 words to teach.
- Generate examples and non-examples to illustrate the new vocabulary item.
- Brainstorm synonyms and antonyms for the new word.
- Support children to generate their own definitions of the vocabulary item, instead of using dictionary definitions.
- Discuss the difference between the new word and related words.
- Use visual organisers to support rich instruction, such as 'four squares', 'semantic maps', 'Venn diagrams', 'word lines' and 'semantic feature analyses'.
- Support children to produce their own sentences using the word(s).
- Play games that target repetition and review of the new words.
- Expand the word to new contexts (e.g., create a narrative based on the word, talk about personal experiences, encourage children to listen out for the word outside of class).

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3



Support Material

ENGLISH | ORAL LANGUAGE | Stages 1 & 2

PRIMARY LANGUAGE CURRICULUM
ENGLISH

Talk Time

4 SQUARE

TARGET WORD

Loyal

EXAMPLES

Pet who waits for you; friend who tells people how great you are; supporter of a sports team, win or lose

OWN DEFINITION

Someone who will always be there for you

NON-EXAMPLES

Stray dog; classmate who teases you; someone who only supports the football team at the top of the league

WORD LINES

Arrange the words in terms of least fan/supporter to greatest fan/supporter:

- **Follow** Ballymun Kickhams
- **Devoted to** Ballymun Kickhams
- **Loyal to** Ballymun Kickhams
- **Support** Ballymun Kickhams
- **Watch** Ballymun Kickhams play
- **Wear** Ballymun Kickhams jersey



VENN DIAGRAM

WHAT IS UNIQUE ABOUT LOYAL?
Someone who is always there for you

WHAT'S THE SAME ABOUT THEM?
Someone who's nice to you

WHAT IS UNIQUE ABOUT FRIEND?
Someone you enjoy spending time with

SYNONYMS

True, trustworthy, dependable

SENTENCE

My loyal friend stuck up for me in the yard

ANTONYMS

Disloyal, unreliable

LOYAL

NON-EXAMPLES:
Someone who lets you down or doesn't take your side

EXAMPLES
A friend who sticks up for you; a pet dog





Talk Time



Parental Involvement

There are many ways to involve parents directly in supporting children's oral language development. However, at times there is often an over-emphasis on written and reading homework with minimal amounts of oral language given, if at all. The following examples can support parental involvement:

- Provide parents with (i) a simple record of new vocabulary, phrases or

sentence structures taught during the week and (ii) a topic to talk about for 10 minutes at home – the topics may be suggested by children or relate to a curricular area, book or other reading material. It is important to ensure children have opportunities to share the content of their discussion with their peers.

- Organise parent information workshops – gather parents together in a relaxed and supportive environment

to hear about your focus on oral language, activities you will be using and how, together, you can strengthen children's oral language skills. This workshop could be held in the classroom and children can then show parents exactly what they are doing and how parents can further support the learning at home.

Studies have shown that parental involvement significantly impacts on a child's progression in oral language and his/her overall achievement.

Talk Time Homework record sheet for parents sharing oral language targets and providing a topic to discuss at home

Week one		Week two		Week three	
Date	Topic	Date	Topic	Date	Topic

Talk Time

Homework

_____ Class



Support Material

ENGLISH | ORAL LANGUAGE | Stages 1 & 2

Talk Time

- Introduce 'Talking for Fun' in your classroom, whereby parents are invited in to your classroom to play specific oral language board games with children (e.g., *Granny's Candies*, *Vocab Bingo*, *Descripto Dino*, *Headbanz*, *Blurt!*, etc.)
- Share with parents specific suggestions on how they can reinforce the vocabulary, phrases or sentence structures you are teaching in class, such as the handout shown.



Research and Related Reading

The key recommendations on how to support the development of children's oral language skills can be simplified into two vital words – "quantity" and "quality".

In terms of quantity, we know that children's oral language skills are enriched when teachers provide many language learning experiences in the classrooms, frequently promote children's active engagement with oral language and create many opportunities for children to communicate. We are also aware that more frequent exposures to the same oral language objective, spaced across several days, is more useful than one exposure on a single day.

Quality is typically described in the context of teacher-child interactions, rich oral language environments, and explicitly teaching oral language, instead of relying on children to "pick it up" from what they hear in the classroom.

The key recommendation on how to support the development of children's oral language skills can be simplified into two vital words – 'quantity' and 'quality'.



Support Material

ENGLISH | ORAL LANGUAGE | Stages 1 & 2

PRIMARY LANGUAGE CURRICULUM
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Talk Time

Quality oral language instruction includes using evidence-based teaching methodologies such as mapping language onto what children are paying attention to, providing scaffolding for their attempts, extending their utterances, providing in-depth meanings of words, using contextual aids, ensuring multiple repetitions and reviews, and modelling the use of more complex oral language. There are numerous benefits to developing children's interest in, and engagement with new words and fostering their active involvement in the process of discovering the meanings of new words.

For further information, see the reading material suggested in the References section.

Appendix J: Example of analysing and coding a transcript in terms of the processes that occurred

Process Coding	Transcript: 22 nd October 2012
<p>Reflecting on practice</p> <p>Agreeing with opinion Directing inquiry at particular researcher Expressing uncertainty Describing change Reflecting on practice</p> <p style="text-align: center;">Affirming Describing change</p> <p>Asserting expertise Paraphrasing Agreeing with opinion Directing inquiry at particular researcher</p> <p>Making excuses Making excuses Making excuses</p> <p style="text-align: center;">Using humour Reflecting on practice</p> <p>Describing change</p> <p>Proposing action</p> <p>Describing change</p> <p>Backing down Social niceties Agreeing with opinion Social niceties Agreeing with opinion Social niceties Agreeing with opinion Proposing action</p> <p>Agreeing with opinion Clarifying</p>	<ol style="list-style-type: none"> 1. R3: I don't know if, like if I'm just doing an aul' geography lesson or something I mightn't think about it, but when I'm doing an oral language lesson specifically, or when I'm doing a prolonged, you know a chat that has gone on- 2. R1: Yeah, a discussion or something. OK. What about yourself (name of R2)? 3. R2: Emm...I don't know, I'm trying to... let's say we have been more focusing on more words, like 'prickly' and things like that. We've extended those during the week, if they've found anything prickly or if I've found anything prickly or whatever the word is, like costume or, it was prickly and insect, was it? 4. R1: Yeah 5. R2: So just to, kind of, more so to bring in the words during the week in a different context as oppose to- 6. R3: Well that's your deep, rich instruction 7. R1: So you're doing lots of repetition and review 8. R2: Yeah 9. R1: Yeah, that's grand. And (name of R4), I know on Friday I sprung it on you there about maybe yourself to fill in the checklist, was there anything that -? 10. R4: Yeah, look, (name of R1), I'm not going to lie to you, Friday was a- 11. R1: Crazy! 12. R4: Well it was a waste of a day for me anyway because I had the paired reading, over there for the breakfast, and it was just we had to get a competition done 13. R1: So funny, seeing them all in their pyjamas watching it back! Gas! 14. R4: I know. I know going by this anyway, I know, say, for myself it would be an awful lot of display questions that I would ask a lot of the time, emmm, but then...a lot of praise but there is probably no need for it though. Yeah, praise, but this whole, the scaffolding thing, like I've been watching you, you know, extending and all that- 15. R1: Is there one that you think you'd like to focus on? Is there one that you think-? Like we don't have to video it, but is there one that you think- 16. R4: Well like, even from what you've been doing, I have actually, you know, during the week then, I will try and, y'know - 17. R1: To just try and bring it in. Like the girls were great at cooperating, like (name of R4)'s class are little-, aren't they? 18. R4: They are SO good, like, honestly 19. R1: Yeah, not that yours aren't, but they are particularly- 20. R4: Yeah, they're, they're great, honestly 21. R3: They are awful cute, aren't they? 22. R1: Yeah, they are awful cute. So I suppose I'm saying they are the kind of kids who would respond well, like they're that eager age where they're like 'oh please, please let me answer', you know, they really are an eager age, aren't they? 23. R4: Oh, they are 24. R2: What are they now? 4th is it? They're a nice little class anyway though, aren't they?

<p>Agreeing with opinion Agreeing with opinion Negotiating action Proposing action</p>	<p>25. R1: They're a lovely little class 26. R4: I swear, that class is just lovely 27. R1: Yeah, they're very nice. So I suppose it's just, no more than ourselves, picking one that you think 'I'm going to focus on that for 5 or 10 minutes' and then see if you can extend it. So, for you, if you think that it's all display questions, you might want to focus on the open questions</p>
<p>Agreeing with proposed action Proposing action Negotiating action Negotiating action Asking the expert</p>	<p>28. R4: Yeah 29. R1: Or if you want to focus on the scaffolding 30. R4: The scaffolding, yeah. 31. R1: Which one do you think would-, you'd like to focus on? 32. R4: You were doing more kind of, extension and reformulation, weren't you?</p>
<p>Affirming Reflecting on practice Agreeing with opinion Reflecting on practice</p>	<p>33. R1: Yeah. I did a good bit of that with them. Not so much this week now. I was looking back thinking "not so much of that going on this week!" 34. R4: Yeah, emmm 35. R3: The only thing about this is you need to prepare, the referential questions you need to prepare</p>
<p>Agreeing with opinion Reflecting on practice</p>	<p>36. R1: It's hard to think of it- 37. R3: Oh my God, it's so hard to think about those 'what do you think?', 'why do you think?'</p>
<p>Proposing action Reflecting on practice</p>	<p>38. R1: Scaffolding is an interesting one to try out. I know, it's what I tried out with your class, I know I went a bit crazy with 'caucasian' but, like it does make you think about how you could say that a different way. It does make you think about it. It's up to you, it doesn't matter, there's no right or wrong one</p>
<p>Backing down</p>	<p>39. R4: Yeah (3 seconds), I'm just thinking...and it's the teacher who comes up with the, the new word</p>
<p>Negotiating action</p>	<p>40. R1: Yeah, exactly, you know when they say said 'oh their skin, it's normal' and I was like 'Oh yeah' and she said 'it's pale' and I was like 'yeah, it's caucasian'</p>
<p>Teaching with examples</p>	<p>41. R4: Yeah, maybe I'll try, and yeah maybe kind of, because I did think, I thought that was really good when you did it with them</p>
<p>Agreeing with proposed action Affirming Agreeing with positive outcomes of change Proposing action</p>	<p>42. R1: They kind of responded to it so it might be 43. R4: They did, yeah 44. R1: And I'm only in there once a week, so it might be something for you-. Ok, so extending? 45. R4: Yeah</p>
<p>Agreeing with proposed action Setting the scene</p>	<p>46. R1: Perfect. (3 seconds). Ok, well speaking of extending, I actually think that, em, [name of R3], there's loads of examples in yours, so we might go to you first if that's ok...</p>
<p>Teaching with examples</p>	<p>[video clip of R3 played for 30 seconds]</p> <p>47. R1: So they're saying 'they're singing' and (name of R3) says 'they're performing'</p>
<p>Teaching with examples</p>	<p>[video clip of R3 played for 150 seconds]</p>
<p>Praising researcher Praising researcher</p>	<p>48. R1: Ok, so I was just writing them down there. So the child said 'singing' and you said 'yeah they're singing, they're performing'. They said one of them, 'Harry is his name' and you said 'yeah, he's the lead singer'. They said 'microphone' and you said 'speakers'. They said some other lad and you said 'he's a member of the band'. They said 'guitar' and you said it was an 'instrument'. They said, my personal favourite, 'the lights are shining', 'yes, they're illuminating the stage'. They said 'steps', you said 'stairs'. They said 'stage', you said 'raised platform'. She said 'happy', you said 'cheerful', 'delighted', 'enjoying themselves'. So there's loads- 49. R2: Fair play (name of R3) 50. R1: Loads of examples of adding on, and that was just 3 minutes, I</p>

Appendix J continued p. 3: Example of Analysing and Coding a Transcript in Terms of the Processes that Occurred

<p>Teaching with examples Praising researcher Praising pupils</p>	<p>think it's 3 minutes 20 seconds, you know – 51. R3: I think you're right though, you kind of nearly underestimate them, I would automatically think they wouldn't give it to me good enough, that I wouldn't be able to find anything to add, but then they give you some really good words and you're like 'oh..'</p>
<p>Reflecting on practice Asking for opinion/inquiry</p>	<p>52. R1: Yeah, I suppose again...What do you think when you hear that?</p>
<p>Self-criticism Reassuring researcher Reassuring researcher</p>	<p>53. R3: I think I speak too fast. Every time-, that was definitely too fast 54. R1: I can still understand everything you're saying 55. R2: They can understand you, so, they can understand what you're saying</p>
<p>Reassuring researcher Agreeing with opinion Self-criticism</p>	<p>56. R4: I wouldn't have thought that was too fast 57. R1: No 58. R3: At the start, you couldn't understand what I was saying, it was all 'buddlebubbleiddleooh'</p>
<p>Using humour Using humour</p>	<p>59. R2: You just got really excited because the camera was on you I'd say 60. R3: [laughs] You know me (name of R2), looking for the nearest camera at all times</p>
<p>Asking for opinion/inquiry Praising researcher Self-criticism Asking for opinion/inquiry Ask the expert</p>	<p>61. R1: What about the extension of the language? 62. R2: I thought it was good 63. R3: Do I sound like an awful eejit though? Like did they get anything out of it?</p>
<p>Teaching quoting evidence</p>	<p>64. R2: But should we be doing that automatically though? Should we be doing that ALL the time? 65. R1: Well that's what the, well we know for kids, basically, this is the thing right? It hasn't been studied in kids over the age of 5. Most of the studies, like millions of pounds, hundreds and thousands of kids have been, all the studies have been in the 0-5s, and we know that extension DOES work for the 0-5s, it just hasn't been studied in the overs, 5s and overs</p>
<p>Filler Teaching quoting evidence</p>	<p>66. R2: emm 67. R1: All the interventions, all the research is usually on those early kids, that's to help them talk and talk a bit better, there is not as much done on the over 5s. So once they get talking it's more the studies are done on the kids that have problems</p>
<p>Accepting expertise Teaching quoting evidence</p>	<p>68. R2: Right 69. R1: Like language disorders, or whatever. So there isn't a whole lot done on extension</p>
<p>Describing change Reflecting on practice</p>	<p>70. R3: I did the same thing there that I did last week. I repeated what they said in a bid to give myself a bit of time to come up with the scaffolding or the extension</p>
<p>Praising researcher Praising researcher</p>	<p>71. R1: It sounded natural 72. R2: They don't always hear, you know, if they were saying 'singing' and you were saying 'performing' so they would see the correlation between 'singing' and 'performing' as well, so I don't think there is any harm. It's not like you were 'teacher echoing'. You were saying it and then saying something, extending it</p>
<p>Asserting expertise Affirming Asking for opinion/inquiry</p>	<p>73. R1: Extending it, yeah, you're reformulating it. I suppose it's an interesting question, 'should we being doing that all of the time?'. What do ye think?</p>
<p>Asking the expert Clarifying Asserting expertise</p>	<p>74. R3: Should we be echoing all the time? 75. R1: Yeah, or extending all the time 76. R2: Extending all the time. Well I do think, you do extend with the smaller ones because sometimes they look at you and they have no idea, like the other day with the 'tray', it's like a big plate, you know, and it will be the ones that have a huge, extensive vocab will know it, whereas it's the</p>
<p>Reflecting on practice</p>	<p></p>

<p>Judging Teaching with examples</p>	<p>ones that don't have an extensive vocab will go on 'what's that?', you know, a 'web', web was the other one, until I showed them what a web, like a spider web, they didn't know what a web was, and when they saw it they knew what it was and they were like 'oh, that's a web', but you know, I thought that was a very basic one that they would know like</p>
<p>Asserting expertise Expressing uncertainty</p>	<p>77. R1: And that's one where you need loads of different examples, it's a big plate, you carry things on it, you might see it in a restaurant, you know, it's that type of thing</p>
<p>Teaching quoting evidence Reflecting on practice</p>	<p>78. R2: Yeah, I think it's age group, I do think with the smaller ones I do it, but it's to explain a word more so than me saying 'oh I better extend it so they understand'. You're looking at the blank faces and you go 'em...' I don't know, whatever you were talking about, like</p>
<p>Describing change Reflecting on practice</p>	<p>79. R1: So I suppose the research for their age range says that will help them, if you extended, it just hasn't been STUDIED in the older group</p>
<p>Agreeing with opinion Agreeing with opinion</p>	<p>80. R3: You see if I had done that lesson, like not with the video camera in my face, I would been 'great verb' and I would have written down, 'great adjective' and I would have written it down. I don't think I would have looked for anything else</p>
<p>Asking for opinion/inquiry Agreeing with opinion</p>	<p>81. R2: Yeah, I don't think it's something you do second nature for the older ones, unless they don't understand it, and then you put it into a different context so that they do get what it means</p>
<p>Teaching with explanation Agreeing with opinion</p>	<p>82. R3: mmmm</p>
<p>Teaching with examples Reflecting on practice</p>	<p>83. R1: mmmm, yeah, and if you're putting it into a different context, is that because you want to help them understand it as opposed to, you want to give them something extra?</p>
<p>Asking the expert Teaching with explanation</p>	<p>84. R2: mmmmm, yeah</p>
<p>Asking the expert Teaching with explanation</p>	<p>85. R1: Do you know, like, tray, you put it into a different context, it's a big plate</p>
<p>Affirming Asking the expert</p>	<p>86. R2: Yeah</p>
<p>Teaching with explanation</p>	<p>87. R1: As opposed to tray, oh God, I don't know what I'd say for that</p>
<p>Expressing frustration</p>	<p>88. R3: You know, I did a piece of reading this week, and it's a recount, the biography of Mother Teresa's life, and when we went through it, there were so many words that were so difficult, and I just didn't go into any of it because I thought 'what am I trying to do here?'. Like I'm trying to get them to be fluent and to understand the words. So I just said 'we will focus on the words today and then like talk about the meanings tomorrow'</p>
<p>Affirming</p>	<p>89. R1: Yeah</p>
	<p>90. R3: Like what do you do? What's the right practice in that situation?</p>
	<p>91. R1: I think you can do both. If you're, if you're objective is reading fluency, you'd give them the word and then they'd move on.</p>
	<p>92. R3: But what about the two, you see, I want both</p>
	<p>93. R1: I think, sometimes you can't focus on the two at the one time</p>
	<p>94. R2: You'd nearly need an easier passage if you want to focus on fluency, do you?</p>
	<p>95. R1: Exactly.</p>
	<p>96. R3: There you go, I suppose yeah. But that doesn't mean we compromise fluency for, should we compromise fluency for the words</p>
	<p>97. R1: I suppose you'd build up to it, don't you? Like if that's the case, it's too hard for them, I can't focus on fluency now. I'll focus on the words, then I'll focus on reading comprehension. If they know the words and can understand it, they more likely they are to be fluent. You know, so there might be more of a step process</p>
	<p>98. R3: It's frustrating though, when it's in your plan and you need to get it done by the end of the week though</p>
	<p>99. R1: Yeah, that is frustrating, yeah. (2 seconds). So do you think this is something you could, like we've got one, what did you say, three more days in school, four more days, let's discount Friday, three more days of school. Is it something you could focus on doing over the next three days?</p>

Appendix J continued p. 5: Example of Analysing and Coding a Transcript in Terms of the Processes that Occurred

<p>Proposing action Making excuses Negotiating action Clarifying Affirming Agreeing with proposed action Proposing action</p>	<p>100. R3: Discount tomorrow as well 101. R1: Discount tomorrow. So Wednesday and Thursday? And see how it goes? 102. R3: Yeah. So to practice that again, is it? 103. R1: Yeah, without the video camera 104. R3: It would be interesting</p>
<p>Summarising</p>	<p>105. R1: And see what you think, do you notice anything? I suppose you're looking to notice two things. You are noticing yourself, 'is this awkward? Is it becoming more automatic?' and then you're noticing the kids 'are they picking it up?', 'are they repeating me?', 'is it going over their head?', 'are they looking out the window?', you know, 'are they even listening?'. We don't know. So it might be good to focus on you as a teacher and to focus on the kids, how they're responding. And the same would go for you then (name of R4) again, if you're the same as (name of R3), if you do the two days, Wednesday and Thursday, think about it, focus on yourself 'is this awkward or am I, is this actually ok? Is this a bit of fun?' and then focus on the kids 'are they picking it up?'. Like we know the kids, like some of the girls, we tested it out, they were picking some of it out</p>
<p>Agreeing with positive outcomes of change Summarising Setting the scene Directing inquiry at particular researcher Clarifying Clarifying</p>	<p>106. R4: Yeah 107. R1: Ok, focus on you and focus on the kids. (3 seconds). Alright (name of R2), you were doing... 108. R3: What were you doing? 109. R2: Halloween. 110. R1: Halloween. Ah yeah, costume</p>
<p>Asking the expert Teaching jargon Reflecting on practice</p>	<p>111. R3: And what was it? Was it extension or what was it? 112. R1: Rich vocabulary 113. R2: Yeah, we wanted to see if they could remember the words from last week. Remember we had hedgehog and prickly and insect. I forgot totally about insects. I was thrown with my Cheerio's breakfast. I threw it in in the end, but we were going to talk about Halloween and see if they could come up with costume, lantern and decorations</p>
<p>Social Niceties Agreeing with opinion Setting the scene Agreeing with opinion Praising researcher Reflecting on practice</p>	<p>114. R3: Cool. Okey dokey. 115. R2: Yeah 116. R1: And we focused mostly on the costume 117. R2: Yeah 118. R1: And it worked really well actually...emmm 119. R2: It was nearly harder to get into because it was so...broad anyway</p> <p>[played video clip of R2 in the classroom for 235 seconds]</p> <p>[off topic about class numbers for 25 seconds]</p>
<p>Directing inquiry at particular researcher Self-criticism Reassuring researcher Praising researcher Reflecting on practice</p>	<p>120. R1: So you were focusing on 'costume'. How do you feel about it looking back on it and listening to it? 121. R2: Horrendous 122. R1: I don't think it was horrendous at all. I thought it was brilliant 123. R3: I thought it was really brilliant 124. R2: I wasn't as comfortable doing that one I have to say, because before we had the picture and the focus words. That was just a chat, and to kind of get them into it, it was kind of 'oh what are we wearing? What are you dressing up as? What's your favourite thing?' You could have gone anywhere so I found it kind of hard to get into the whole costume thing. I should have started off myself with dressing up and tried to introduce it that way I think.</p>
<p>Affirming</p>	<p>125. R1: Ok</p>

Appendix J continued p. 6: Example of Analysing and Coding a Transcript in Terms of the Processes that Occurred

Self-criticism	126. R2: emm....because I didn't even get to decorations or try and get to lantern or anything
Reassuring researcher	127. R1: And it's ok, because I was literally-, like it's only 10 minutes, like, it's not that you couldn't get them, it's just within that time frame, that was fine
Agreeing with opinion	128. R2: Yeah
Teaching with examples	129. R1: Like, what I've written down is, all the different ways, if your focus is rich instruction, I've written down things you said: 'different clothes', 'not your normal clothes', 'dress up', 'handbags, scarves, hats and dresses', 'witch costume', 'ghost costume'-
Asserting expertise	130. R3: Like you're totally connecting it to everything they would know you see
Agreeing with opinion	131. R4: mmmm
Reassuring researcher	132. R1: And then you're getting one kid to say it back: 'so what were you wearing?'. Like you didn't have to do that
Agreeing with opinion	133. R2: Yeah
Teaching with examples	134. R1: You know she said 'I dress up as a dinosaur' and 'what were you wearing?' and then you were getting her to say it back 'costume', and then asking again. So to me there's loads of instruction and loads of connections
Agreeing with positive outcomes of change	135. R2: Yeah
Asserting expertise	136. R3: I think you're definitely, you're activating their prior knowledge and you're making connections and that must work because-
Teaching with examples	137. R1: And you're giving examples
Asserting expertise	138. R3: But that's how (name of child) knew 'costume', because she applied it to herself. 'I made a dinosaur costume'
Self-criticism	139. R2: Yeah, but she even said it, she said it, I didn't hear her saying it originally, when she want about the big spiel about the dinosaurs, she said costume and I didn't even hear that, did you hear her the first time?
Reassuring researcher	140. R1: I didn't hear, I didn't hear it real, but on the video I heard it
Self-criticism	141. R2: Yeah. Oh she's saying it, I didn't even hear it
Reassuring researcher	142. R4: awwwww
Praising pupils	143. R2: Such a big spiel about the dinosaur
Reassuring researcher	144. R1: No I didn't hear it in real life
Teaching with examples	145. R2: [unintelligible]
	146. R1: But basically, for rich instruction, we know we have to give them examples, which you did give loads of examples, you have to say what it's like, 'different clothes, hats and scarves', and you say what it's not like, 'not my normal clothes', 'different clothes'. So you did those 3 basic things, which was great, and then getting 'insects' back was nice, wasn't it, after doing all that?
Reassuring researcher	147. R2: Ok, yeah
Agreeing with positive outcomes of change	148. R1: So what about yourself then, is that something-? One of the questions we ask is 'should we do it all the time?' or 'could we do it all the time?'
Proposing action	149. R2: Well I find myself doing it more now. Now I would say you would do a certain amount of it yourself, when you know, they are looking at you blankly and you're kind of going 'oh...ok'. Like hot water bottle, there was a hot bottle there last week. Not a clue, I think (name of child) was the only one who knew what a hot water bottle was, and what it was for, you know, so if they don't know a thing, you definitely use it, but I probably could use it more, like if they say something and then I extend it out, whereas I kind of only extend if they don't understand what the thing is
Describing change	
Reflecting on practice	
Agreeing with positive outcomes of change	150. R1: Yeah
Affirming	
Affirming	151. R3: Neither would I

Paraphrasing	152. R1: So, only if they don't understand
Asking the expert	153. R3: You really have to show it to them, don't you? It's the only way
Agreeing with opinion	154. R1: Pictures are great. Well that's what's great about the interactive whiteboard, isn't it?
Asking the expert	155. R3: It's fantastic if it's a noun, but if it's a verb, how do you show somebody?
Filler	156. R1: Yeah
Reflection on practice	157. R3: Dedication and devotion were words we were doing today
Teaching with explanation	158. R1: Yeah, you have to give examples then. So basically, that's what I always think, if a word comes up that a child doesn't know, I say words that also mean the same, words that mean the opposite and give loads of examples. You know even thinking about that (2 seconds). I suppose, there's two things, isn't there? It's doing what we said we were going to do, either extend or ask questions or rich instruction, and it's thinking about 'how can I remind myself to do that more?'
Proposing action	159. R3: mmmm
Agreeing with proposed action	160. R4: mmmm
Agreeing with proposed action	161. R1: And then, focusing on YOU, and then the same as (name of R3) and (name of R4), focusing on you, like 'what am I doing?' and then focusing on the kids 'is it actually making any difference?'
Proposing action	162. R2: Yeah
Agreeing with positive outcomes of change	163. R1: So that could be something for the two of ye, for the three of ye, what did we say? Wednesdays and Thursdays, wasn't it? Wednesday and Thursday, to try it out for a little bit longer than we were doing. So we were doing, I'd say 10 minutes, so trying maybe doing it for 15 minutes, Wednesdays and Thursdays
Proposing action	164. R3: Yeah, ok
Agreeing with positive outcomes of change	165. R1: Just trying to extend it a bit
Summarising	166. R3: But like, we'll say, they knew insects, well (name of child) knew insects, but how do you assess how many the rest of them knew? Like she'll know it every week, she'll know prickly, she'll know insect, she'll know costume. (name of child) probably as well
Polite challenge of opinion	[off topic discussing child and her siblings for 45 seconds]
Asking for opinion/inquiry	167. R1: How are we doing for time? Right, I'm going to show you my bit, emm-
Setting the scene	168. R3: What were you doing?
Setting the scene	169. R1: What was I doing? I am all the time trying to use...visual organisers or activities, that the research shows are useful
Teaching quoting evidence	170. R2: Ok
Clarifying	171. R1: So we have the venn diagram, then we did that semantic feature analysis, you know the one with plus minus, plus minus
Teaching using examples	172. R2: mmmm
Agreeing with opinion	173. R1: With the features, so this one-
Teaching with examples	174. R3: It's called semantic feature, is it?
Clarifying	175. R1: Semantic feature analysis
Teaching jargon	176. R3: Because I showed it to a friend of mine last night, we were having a very boring dinner,
Asserting expertise	177. R1: You need to get out more (name of R3)
Using humour	178. R3: No sure, I was out, that's the sad thing... semantic...
Polite challenge of opinion	179. R1: Semantic feature analysis. Like they enjoyed it, you know the one
Teaching jargon	

Appendix J continued p. 8: Example of Analysing and Coding a Transcript in Terms of the Processes that Occurred

<p>Agreeing with positive outcomes of change Agreeing with positive outcomes of change Setting the scene Reflecting on practice</p>	<p>with the plus minus 180. R2: Yeah 181. R3: yeah 182. R4: What did you do on Friday? 183. R1: Friday I did the word lines, scared, so I did the word line. Even before I show it, how did you think, compared to the three of them now, we had the venn diagram, the plus and minus, semantic feature and then the word line</p>
<p>Asserting expertise Clarifying Agreeing with opinion Reflecting on practice Agreeing with opinion Polite challenge of opinion Agreeing with opinion Reflecting on practice Agreeing with opinion Reflecting on practice Setting the scene</p>	<p>184. R4: Yeah, well I think out of the two that would have caught me, and the two of them were the venn diagram and the, and Friday's one 185. R1: This one? 186. R4: Yeah, the line. 187. R1: The line?. Yeah. The semantic feature takes a bit more time. 188. R4: Yeah 189. R1: The only thing I would say is that I think I got the most talk out of the venn diagram, out of the three of them 190. R4: Yeah 191. R1: I did get a bit more talk- 192. R4: Yeah, the venn diagram 193. R1: I did get a lot more chat out of them, didn't I? and that was my fault. Like it wasn't as if they kids were any less chatty, I actually got less chat out of them, I thought last week, but they might have got a better understanding of 'animated'. So this is me doing a line, sure I'll just press play</p>
<p>Teaching with examples Asserting expertise Teaching with explanation Affirming Teaching with explanation</p>	<p>[played video clip of R1 in R4's classroom for 40 seconds] 194. R1: So you can see I put up all the words they gave me, 'scared, afraid, terrified, frightened, what's this..? Freaked out, horrified, spooked' 195. R3: Oh we did it with the ladder before, didn't we? 196. R1: Yeah, you can do it up 197. R4: Oh the ladder 198. R1: You can do it up or down or I just did it across this time</p>
<p>Teaching with explanation Agreeing with opinion Teaching with explanation</p>	<p>[played video clip of R1 in R4's classroom for 175 seconds] 199. R1: And that is right, there is no right answer. The reason why we do this is that it gets the kids thinking about all these words. Like they know the words, they came out of their own heads, so the idea behind this is, that, if they can talk about them and give examples and say what you do in those, and when you would be or what that's associated with. Like you might associate afraid with a spider but terrified with ghost, or whatever. It helps them to get a really good understanding of the words, so they would know if they are writing a story then, and somebody em...the door bell rang, they wouldn't be horrified, they might be a bit scared 200. R3: mmm 201. R1: So it helps them see it in context</p>
<p>Teaching with example Asserting expertise Affirming Asserting expertise Agreeing with positive outcomes of change</p>	<p>[played video clip of R1 in R4's classroom for 25 seconds] 202. R1: A bit like you (name of R3), I was repeating back what she said 203. R3: And trying to come up with the next one 204. R1: Yeah, trying to come up with more of the words. 205. R3: Yeah, you need your stall tactic 206. R1: Exactly, so it's, so maybe that's something that's realistic, repeating back and extending, that's ok....so from watching that, what did</p>

<p>Proposing action Directing inquiry at particular researcher Affirming Agreeing with opinion Praising researcher</p> <p>Accepting praise Praising researcher Teaching with explanation Agreeing with opinion Self-criticism Reflecting on practice</p> <p>Agreeing with opinion Reflecting on practice Asserting expertise Teaching with explanation</p> <p>Describing positive outcomes of change Affirming Describing positive outcomes of change Affirming Asking the expert</p> <p>Teaching quoting evidence</p> <p>Paraphrasing Affirming Teaching with explanation Asserting expertise Polite challenge of opinion Counter challenging opinions Polite challenge of opinion Counter challenging opinions Backing down Reflecting on practice</p> <p>Agreeing with opinion Agreeing Teaching with examples</p> <p>Agreeing with opinion</p>	<p>you think (name of R4), you know your class well? From watching that with the kids, whatever, you think the venn diagram got more out of them?</p> <p>207. R4: I do, yeah, I do think the venn diagram did</p> <p>208. R1: I think so as well</p> <p>209. R4: Now, I still think that was very good (name of R1), because even at the end when you trying to get them to put it into a sentence, and like you said you were extending</p> <p>210. R1: Yeah</p> <p>211. R4: I thought that was, that was really good</p> <p>212. R1: That was probably the best bit of it, in that they were using it</p> <p>213. R4: Yeah, they were using it</p> <p>214. R1: Maybe if I picked better words, maybe if they were words they didn't know. I was debating, because I knew we only had a bit minutes, I was thinking, like 'petrified', should I introduce this new word for them?</p> <p>215. R3: Yeah</p> <p>216. R1: And I didn't, I just used what they had</p> <p>217. R3: But I suppose work with their own words first, before you start-</p> <p>218. R1: Yeah, and then maybe if a new scary word, if I was reading a book and a new word came up, like petrified, if you had that word line on the...interactive whiteboard, you could come back and say 'now where would we put this one?'. D'you know? Like a living chart, you're always going to come back to it</p> <p>219. R3: You know, these are the type of things that are really going to help with the auld, eh, the auld Micra-T's, I think</p> <p>220. R1: Yeah</p> <p>221. R3: All this new vocabulary</p> <p>222. R1: Yeah</p> <p>223. R3: Like should we be making word walls and things that we do in these lessons?</p> <p>224. R1: Well they say that that really helps, but as long as the words come from them. Like there would be no point in me, making the most magnificent chart and sticking it on the wall. What they say is that it needs to come from the kids, and then keep adding to it, it's living, like I could easily go to my thesaurus and come up with scary words, like I could have-</p> <p>225. R3: But if it doesn't come from them, it means nothing</p> <p>226. R1: Yeah, exactly...I was probably doing a mixture of a bit of rich instruction and extension, like I only extended that last little chunk there</p> <p>227. R3: You were making connections as well though.</p> <p>228. R1: Making connections?</p> <p>229. R3: Yeah, you were.</p> <p>230. R1: With the spider maybe?</p> <p>231. R3: Yeah, you were, like, I think you do, yeah</p> <p>232. R1: Ok, making connections...again my aim was to extend and I felt was that that word line didn't really allow me to extend until I was getting them to use it</p> <p>233. R3: mmmm</p> <p>234. R4: Yeah, until they were using</p> <p>235. R1: Yeah, for the first part, I was kind of talking about the words, so it was harder for me</p> <p>236. R4: Yeah</p>
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<p>Teaching with examples</p> <p>Proposing action</p> <p>Affirming Proposing action</p> <p>Paraphrasing Asking for opinion/inquiry</p> <p>Polite challenge of opinion</p> <p>Agreeing with opinion Polite challenge of opinion</p> <p>Agreeing with opinion Polite challenge of positive outcomes of change</p> <p>Finishing sentence Polite challenge of positive outcomes of change</p> <p>Counter challenging opinions</p> <p>Agreeing with opinion Reflection on practice</p> <p>Reassuring researcher Polite challenge of positive outcomes of change</p> <p>Proposing action</p> <p>Describing change Reflecting on practice</p> <p>Paraphrasing Reflecting on practice Teaching with examples</p> <p>Asking for opinion/inquiry Expressing uncertainty Paraphrasing</p>	<p>237. R1: So maybe it shows us as well that there are certain things that we do that will HELP us extend or ask certain questions and there's other things that don't actually help as much</p> <p>238. R3: I suppose, you nearly need to pick each of these, and then pick an activity that goes with each</p> <p>239. R1: Yeah, we could do that, yeah, yeah...so what I'm going to do, I'll be in different schools and different classes, I'm going to be focusing, it won't be, it won't be in this school, I'm going to be focussing on extending the kids answers myself in the different classes, and again, I'll think about if any kids repeats, I'm still waiting for somebody to repeat back what I said. That hasn't happened yet. It still might be going in, so I am going to think and see. Again I'll be focusing on me, am I remembering to do it all the time, because I wasn't doing it all the time, but then the activity didn't lend itself so well and I'm going to be focusing on the kids 'are they taking it in?' 'are they listening to me?' 'are they picking it up?'</p> <p>240. R3: Is it going in?</p> <p>241. R1: Yeah, is it going in? exactly. Ok....very good. Anything else that comes to mind when we're thinking about this? Do you think it would make a difference?</p> <p>242. R2: (6 seconds) I do and I don't, d'you see, with mine, they didn't know what prickly was and now they know what it is. But that's one word and it was a week, so...</p> <p>243. R1: Yeah</p> <p>244. R3: It's all relative too</p> <p>245. R2: Yeah</p> <p>246. R3: If I went back into my class after that lesson, I don't think I would get 'illuminating' back, I don't think I'd get...</p> <p>247. R2: Platform</p> <p>248. R3: Raised platform, you know, I'd just..</p> <p>249. R1: And we know that we need repetition</p> <p>250. R3: Yeah, we do, and it has to be, like those words, d'you know when you came in, and we had just done recurrent and vacant and stuff?</p> <p>251. R1: Yeah, they were great words</p> <p>252. R3: They knew them by Friday but I'd say if I asked them today they wouldn't know, I'd have to go back over them again</p> <p>253. R1: Yeah, so maybe that's part of this as well? Maybe that's something for us to think about?</p> <p>254. R3: Oh do you know what, sorry to cut across, but when I was teaching those words last week, do you know what I did? I connected them all to them and we had sentences with each of them so I think that does help</p> <p>255. R1: Yeah, so making it...</p> <p>256. R3: And connecting it to themselves</p> <p>257. R1: And they say, kids making up their own definitions, like, you know, 'prickly is something that I touch and it hurts me', you know, as opposed to 'this is a sharp object that may cause injury' or whatever, you know....well I suppose what we all have said is that review and repetition is needed, so what's the best way to do that? And maybe something like extension or asking questions would help with review or maybe we need to do something else? Like how do you keep 'recurrent' keep recurring?!</p> <p>258. R3: I've no clue</p> <p>259. R1: Yeah, it's like how to bring it in</p>
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Appendix J continued p. 11: Example of Analysing and Coding a Transcript in Terms of the Processes that Occurred

Proposing action	260. R3: Unless you were talking about the weather, like 'this is terrible weather, it's recurrent' or...
Proposing action	261. R1: Yeah, so I suppose for us, it's becoming aware of it
Agreeing with positive outcomes of change	262. R3: Yeah
Proposing action	263. R1: And that's ultimately what we're trying to teach the kids as well
Judging	264. R3: You really notice the deficit coming from home, don't ya?
Polite challenge of opinion	265. R1: mmmm. And for some kids, they have different terms for it maybe. You know, I remember we were doing 'fast' and 'slow' in (name of R2)'s class and one of the little one's said, she didn't say fast, but she said 'he's bombing it' and that was her fast, like, she knew it
Making excuses	266. R4: That's it, like, they're hearing those words at home and there's only so much we can do in school from 9 to half 2, and it's the parents that spend most of the time
Agreeing with opinion	267. R1: Yeah. Definitely, if you take a day
Judging	268. R4: Like you don't, when you hear people saying 'oh their language is so bad', but sure no wonder their language is so poor, like, sure their parents can't talk properly
Paraphrasing	269. R1: So if they're not hearing it at home, they're not going to use it in school
Judging	270. R3: Like (name of parent) said to me one day 'Oh your handbag is massive' and I was like 'oh my God', no wonder the child, if that's what she thinks massive is
Agreeing with opinion	271. R4: mmm
Judging	272. R3: Like (name of pupil) said to me something is 'lethal'. Well it's not really, 'lethal' means it will KILL you
Polite challenge of opinion	273. R1: mmm
Mimicking pupils	274. R3: She's like 'wha'?
Polite challenge of opinion	275. R1: Yeah, it's like all those slang words
Expressing frustration	276. R4: You see (name of R1), it does annoy me, I think that, especially for young children, as in before primary school, who are in crèches, people working in them
Filler	277. R1: mmm
Judging	278. R2: They can't speak properly
Judging	279. R4: Sure it's no wonder when you go in, like to junior infants, and they're coming in, like if they are going to a crèche you would expect them, because to be involved in activities, you would expect them to have a lot more language
Agreeing with opinion	280. R2: Yeah
Judging	281. R4: Sure like (name of pupil)'s mother, working in a crèche, doesn't she work in the community centre or some of those?
Challenging opinion	282. R1: And they're trying to up-skill, professionalise that group, aren't they? Like that's something they are trying to do. I think like the whole reason, you know, like Aistear and everything? They're trying to bring that in so that there will be an evidence-based curriculum framework
Teaching quoting evidence	283. R4: Yeah. How can people like that be qualified-? And I know I told you this before (name of R3), when my daughter was in crèche, she was probably about 2, and she was in with the crèche and it was in with, and maybe she wasn't just two yet, right, but it would be things like this...if you said to her 'what's that?' and if she didn't know, she use to say 'I not know'
Judging	284. R3: Oh my God
Relating to personal experience	285. R4: And I mean, I was like, (name of daughter) you don't say 'I not know', 'I don't know'. And she use to get all upset 'my teacher said it's 'I not know''
Affirming	286. R3: Oh Jesus, and then maybe was getting all upset
Judging	287. R4: Well holy...
Affirming	288. R3: That's a wholly fair point. Wouldn't you be freaking out?

Appendix J continued p. 12: Example of Analysing and Coding a Transcript in Terms of the Processes that Occurred

<p>Relating to personal experience Paraphrasing Challenging opinion</p> <p>Affirming Judging Mimicking pupils Judging</p>	<p>289. R4: Like the thing is, like when she's say 'I not know', I'd say 'oh you don't know, that's ok' but like, the amount of times she use to say it</p> <p>290. R1: So if they're not hearing it, that makes a difference</p> <p>291. R3: Well obviously she is picking up what the other woman is saying like</p> <p>292. R4: You see, that's it. They're picking it up...</p> <p>293. R3: And then if you're saying it wrong. Well it's like crisps</p> <p>294. R4: Crips</p> <p>295. R2: None of them say 'crisps' because they all say 'crisps' because their parents say 'crisps', everyone says 'crisps'</p> <p>[discussion ended abruptly as R3 had to leave]</p>
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Appendix K: List of all the problems posed and problem-solving responses

	Problem-posing		Problem-solving	
Sept 1	How to watch video	R1	Tally at the end or pause Divide among co-researchers Pause	R1 R2 R2
Sept 2	Confusing terminology	R3	Do task together	R1
Sept 3	How to categorise video transcript	R3	Answer Answer Answer	R2 R1 R3
Sept 4	Limited space in checklist	R1	Make boxes bigger Leave to one page	R1 R1, R2, R3, R4
Sept 5	Predominance of one strategy	R1	Useful strategy	R3, R1
Sept 6	Is checklist adequate	R1	Yes	R2, R3, R4, R1
Sept 7	What strategy to focus on in class	R2	Any strategy	R1
Sept 8	Video clip has different objective	R1		
Oct 1	No time to fill in checklist	R4		
Oct 2	Unnecessary/excessive use of praise	R4		
Oct 3	Co-researcher hasn't chosen strategy to focus on	R1	Try to think of one during week Co-operative class Pupils are eager Pick only one strategy Suggested a strategy Offered choice of strategy Suggested a further strategy Agrees on a strategy to focus on	R4 R1 R1 R1 R1 R1 R1 R4
Oct 4	Not using new strategies as much	R4		
Oct 5	New strategy requires preparation	R3	Providing ways to give time to prepare	R3
Oct 6	Perception that children have limited language ability	R3, R2	Sometimes just an underestimation of their ability Need lots of scaffolding	R3 R1
Oct 7	Co-researcher fast rate of speech	R3	Misperception/reassurance	R1, R2, R4
Oct 8	Co-researcher sounding foolish implementing strategy	R3		
Oct 9	Consistently and automatically using strategy	R2, R1, R3	Evidence-based of effectiveness of consistent use More embedded to use with younger pupils If obvious pupils don't understand the vocabulary	R1 R3 R2
Oct 10	Not same level of research on older children	R1		
Oct 11	Extension alone ineffective	R2	Evidence-base for extension	R1
Oct 12	Difficult to think of connections	R1		
Oct 13	Clarifying what to focus on in a literacy lesson	R3	Suggested focus Use different text Differentiate	R1 R2 R1
Oct 14	Time constraints in meeting all curricular objectives	R3		
Oct 15	Co-researcher sounds horrendous implementing strategy	R2	Misperception/reassurance	R1, R3

Problem-posing		Problem-solving		
Oct 16	Difficulty introducing new vocabulary item	R2	Examples of appropriate introduction of new vocabulary item	R1, R3
Oct 17	Difficulty finding an image to demonstrate some vocabulary items	R3	Give examples	R1
Oct 18	Assessment of knowledge of new vocabulary item	R2		
Oct 19	Strategy is time-consuming	R1		
Oct 20	Selection of vocabulary for word walls	R1	Emerge from classroom lesson Not pre-made Emerge from pupils	R1 R1 R3
Oct 21	Strategy limiting use of another strategy	R1	Misperception/reassurance Importance of selecting appropriate strategy	R3 R1
Oct 22	Limited number of vocabulary items taught in a week	R2		
Oct 23	Pupils don't remember new vocabulary taught	R3	Repetition required Making connections Pupils' own definitions	R1 R3 R1
Oct 24	Methodologies for repetition	R1	Using context Increased teacher awareness Increased pupil awareness	R3 R1 R1
Oct 25	Deficit of support from home	R3	Dialectical differences	R1
Oct 26	Teachers can't be fully responsible for improving language abilities	R4		
Oct 27	Parents have language difficulties	R4		
Oct 28	Early years educators can provide poor language models	R4, R2	Currently trying to professionalise the sector	R1
Oct 29	Parents can provide poor language models	R2		
Nov 1	Abilities of pupils impacts on learning	R1, R2		
Nov 2	Parents of pupils not all engaged	R2, R4, R3	Easier with Junior infants pupils Give oral language homework that pupils must complete Support from Home School teacher Newsletter Familiar with what pupils are learning	R2 R1 R3 R3 R1
Nov 3	Parents are not likeable	R2, R4		
Nov 4	Parents don't bother to get involved in school activities	R2, R4	Maybe it's boring to them Maybe it's fear Requires explanation Simplify requirements They know someone else will do it Maybe they haven't had the experiences themselves Low self-esteem First name basis with parents Work commitments Other children to care for	R1 R1, R4 R2, R4, R1 R2, R1 R2 R3 R3 R3 R3 R3
Nov 5	Difficulty assessing level of parent support for language development	R1, R2, R4	Check homework	R2

	Problem-posing		Problem-solving	
Nov 6	Older pupils don't always do homework	R2, R4, R3	Ensure homework is signed by parent After school project helps to ensure homework is completed Sanctions for not completing homework Not as eager as junior pupils Highlight the importance of homework consolidating the day's work Explain everything with examples	R2 R2 R2 R2 R3 R3
Nov 7	How to ensure effective parental engagement for language enrichment	R1	List of words to bring home Listen to your child when talking Ask your child about words for homework 3 new words to bring home Child teaches a family member the word Inform parents about homework Ask parents to sign homework Staple word sheet to homework journal Word a day Test on Friday Include oral language as part of homework Explain the difference between learning meaning of word and learning spelling of word Give 4 square for homework Watch the kids news together Talk about homework Give the parents the words for the month in advance	R2 R1 R1 R4 R2 R1 R2 R2 R1 R1 R3 R3 R3 R3 R3 R3
Nov 8	Parent doesn't understand the vocabulary	R2	Child can teach the word to their parent	R2
Nov 9	Onus on the child to ensure parental engagement	R2		
Nov 10	Hard to assess whether oral language homework is completed	R2, R4,	Teacher to place greater emphasis on it	R3
Nov 11	Many years of experiencing limited parental engagement	R2		
Nov 12	Describing limited parental engagement sounds negative	R2, R4	Researchers sharing their experiences	R1
Nov 13	Parents find it difficult to commit to being involved consistently	R2, R4		
Nov 14	Lack of evidence-based strategies used by parents to support language enrichment	R1	Parents have other effective strategies to share	R1, R3
Nov 15	Coping with limited parental involvement	R1	Try and involve parent Sanctions for not completing homework Write in homework journal Parent-teacher meeting	R2 R2 R4 R2
Nov 16	Parents don't always sign to indicate homework is completed	R2, R3		
Nov 17	After-school projects don't always check homework	R4	Leader look at homework journal and check all parts completed	R2, R4

Problem-posing		Problem-solving		
Nov 18	Inconsistency of homework policy enforcement by different teachers	R2, R4		
Nov 19	Promoting the importance of language development with parents	R1	Class meeting Improvements in literacy because of focus on language development Potential for further improvements	R2, R4 R2 R2
Nov 20	Limited interaction between parents and their children	R2, R4	Ask parents to talk more to their child at home Listen to your child Ask a question	R4, R2, R1 R1 R1
Nov 21	Unfair not to try with some, just because others may not engage	R1		
Nov 22	Parents who do engage are often the parents of children who need the least support	R2, R3		
Nov 23	Timing of class meeting	R2, R4	R1 to hold class meeting	R1, R3
Nov 24	Limited interaction from parents at class meeting	R2	Tell parents rather than asking them Arrange pair discussions Ask for feedback Go round each pair individually Facilitator summarises contributions from pairs Explain purpose of project Inquire from parents	R2 R1 R4 R2 R1 R3 R3
Nov 25	Ranking teachers current level of parental engagement in language development	R1	Depends on the parents in the class	R2, R4
Nov 26	Language development is complex	R1	Give examples	R1
Nov 27	Difficulties for pupils forming definitions of words	R1, R3	More practice	R1
Nov 28	Inaccurate use of language	R3	Ballymun dialect	R1
Nov 29	Focus is on reading with accuracy rather than understanding meaning	R3	Discuss at parent-teacher meeting Ask questions about the reading Promote the importance of reading comprehension	R3 R3 R3
Nov 30	Supporting oral language through written work may take away from oral language focus	R3	Better than no focus	R1
Nov 31	Oral language homework may be confused with spelling homework	R3	Explain to parents at class meeting	R1
Nov 32	How to support language development is not frequently something parents think about	R3		
Nov 33	If homework too difficult, may not be done at all	R3		
Nov 34	Lesser weight given to oral language homework than written homework	R3	Promote the fact that all homework equally important	R1
Nov 35	No research reports on how best to involve parents in language enrichment	R1	Trial and error, plan/do/review	R1

	Problem-posing		Problem-solving	
Nov 36	Using language enrichment strategies automatically	R3	Listen to what pupils are saying Becoming more comfortable	R3 R3
Jan 1	Parent requesting Talk Time in different school	R2	Seek clarification Available in both schools Increase enrolment in their school	R1, R4 R2 R4
Jan 2	Not all pupils completing Talk Time Homework	R3, R2	Not completing homework is a discipline issue Only day 2 of giving it Pupils had homework signed Most pupils had homework signed	R4 R1 R4 R3
Jan 3	Only bright pupils understood the Talk Time homework	R2	Parent teacher meeting	R1, R2
Jan 4	Pupils maintaining progress that was reported at parent teacher meeting	R2, R3		
Jan 5	Explaining Talk Time homework to older pupils	R1	Explaining easy Pupils understood Pupils excited	R4 R4 R4
Jan 6	Over use of the same topic	R4	Rule not to repeat topic Tell pupils Pick related topic to their preferred topic	R1 R1 R1, R4
Jan 7	Parents not engaged with Talk Time homework	R2	Pupils still provided with opportunity to discuss a topic Can discuss topic informally Give parents weekly test results on the record sheet	R2 R2 R1
Jan 8	Which vocabulary items to select to teach	R4	Mix of words Consider Isabel Beck's Tiers Provides example Choose other words from the book Role of comprehension in selecting vocabulary Pupils self-selected Select words from a story book Selecting words in a context	R1 R1 R1 R1 R1 R4 R2 R1
Jan 9	Easier to teach nouns	R3	Pupils need to know all types of words Use of 4 square	R1 R1
Jan 10	Parents don't know the vocabulary given for homework	R3	Pupils teach the words to parents Not actually a problem	R3, R1 R1
Jan 11	Word walls for junior pupils	R3	Picture wall	R3
Jan 12	Testing junior pupils	R1	Using picture wall Question to ask	R1 R1
Jan 13	Inaccurate record of agreement of how to test pupils	R3, R4	Documented Clarification on agreement	R1 R3, R1
Jan 14	How to administer the test for older pupils	R2	Similar to spelling test Take down word wall Call out definition Mix order from word wall	R4, R2, R3 R1 R1 R1
Jan 15	Accuracy in spelling needed for recording the vocabulary item for homework	R3	Agrees	R1
Jan 16	Parents of older pupils wont see word walls	R3, R2, R1		

Problem-posing		Problem-solving		
Jan 17	Ensuring Talk Time runs smoothly	R1	Explaining to pupils Make it into a game for pupils	R3 R3
Jan 18	Forgetting to give Talk Time homework	R1	On sheet Words in their folder Provide incentives	R3 R2 R2
Jan 19	Parents not attending parent-teacher meeting	R2	Particular parent interested in reading	R3
Jan 20	Pupils think the words taught in Talk Time are the answers to the standardised tests	R3, R1, R2		
Jan 21	How to teach/explain new vocabulary items	R1, R2, R3	Use of picture/image Keep explanations simple Teach in context of story Amount of instruction will vary depending on the word	R4 R3 R2 R1
Jan 22	Parents focussing on rote-learning instead of meaning	R1		
Jan 23	Particular child constantly inquiring/interrupting	R3, R2	Encourage her creativity Discipline Empathy	R3 R2, R4 R4
Jan 24	What strategy to focus on	R1	No new strategy Happening naturally Additional strategy	R2 R3, R2, R4 R2
Jan 25	Already doing all the strategies on the list	R3, R2, R4	Repetition and review hasn't been focussed on	R1
Jan 26	How to embedded repetition and review of new vocabulary items	R1	Incidental reinforcement Story books Creating opportunities for repetition Happening naturally Teacher being conscious of words Planning Having a list to tick off Trial Reminder system Pupil-led Having 3 or 5 strategies to ensure repetition and review Different methodologies Cloze tests	R3 R2 R1 R4 R2 R1 R2 R2, R3 R1 R2, R3 R1 R1 R3
Mar 1	Talk Time not getting same focus due to other factors	R3, R2, R4		
Mar 2	Pupils saturated with Talk Time	R2	Review vocabulary items taught to date	R2, R3
Mar 3	Pupils requesting visit from R1	R3	Date arranged Suggestions for what to say at the visit Obtain pupils' perspective	R1 R2 R2, R3
Mar 4	Some pupils not completing Talk Time homework	R2	Pupils learning vocab items from teachers, regardless of home input One class parental involvement as high as 80% One class parental involvement as high as 75%	R1, R2 R3 R4
Mar 5	R4 not in school for class visit	R1	Copy of vocab items Volunteers to photocopy	R1 R3

Problem-posing		Problem-solving		
Mar 6	Isabel Beck handout not relevant for younger pupils	R2	Relevant ideas in handout	R1
Mar 7	Nouns easier to teach than verbs/adverbs	R3	Suggestions for making verbs/adverbs easier to teach Agrees	R1 R3
Mar 8	How to evaluate progress	R1	Test all vocabulary items taught to date Give a score Use of pictures and question Provide test options Prepared test sheet	R3, R2 R1 R2 R1 R3
Mar 9	Feedback was promised to parents	R1	Have another parent meeting	R3
Mar 10	Usefulness of another parent meeting	R3	Small turnout at last meeting Too much effort for small numbers Limited parental involvement Not worth organising Send report card home Include rubric in report card	R1, R2 R4 R3 R3 R2, R3, R1 R3
Mar 11	Without home support, extra time needed teaching vocabulary items in class	R1	Repetition needed by teacher	R2
Mar 12	Only collating existing test scores not true reflection of vocabulary items retained	R3	Need for review New test of all items	R1 R3
Mar 13	Gap of 3 weeks before testing pupils	R4	Fits with objective of testing the retention of new vocabulary items taught	R1, R2
Mar 14	Pupils wont remember vocabulary items taught	R3	Need for review	R1
Mar 15	Wording of report card for pupils who don't achieve high score	R3, R1, R2	Suggested scales Label low scores as: 'disappointing' 'more work needed' 'serious work needed'	R1, R3 R3, R4 R3 R3
Mar 16	Negativity of wording of report card of pupils who don't achieve high scores	R1, R2	Negativity justified as factual Suggest action: 'would benefit from reviewing words' Suggest action: 'would benefit from more help at home' Negativity justified as homework task was not difficult For some pupils with lower ability, negativity inappropriate Omit negativity and only focus on suggested actions	R2, R3 R1 R2 R3, R2 R1 R1
Mar 17	Wording of report card for pupils scoring in mid-range: 15-25	R1	Label mid-range scores as: 'good effort' 'very good effort' 'very good effort. Keep it up' 'keep up the work on words at home' 'keep up the good work at home'	R3, R4 R1 R3, R2 R1 R3, R2

Problem-posing		Problem-solving		
Mar 18	Wording of report card for pupils scoring in high range: 25+	R1	Label high scores as: 'excellent' 'genius' 'excellent. Keep up the great work at home' 'keep up this fantastic work. You are a word champion' 'Talk Time champions' 'keep up the great work you're doing at home'	R3, R2 R4 R3 R3 R3, R1 R3
Mar 19	To continue Talk Time after Easter or not	R1	Continue Pupils learning new vocabulary items Only continue teacher elements not homework elements Occurring spontaneously Pupils enjoy homework aspect Comparison of pupil test scores who do/do not the homework Pupils interested/motivated	R3, R4 R1 R2, R4 R2 R3 R3, R1, R2 R3
Mar 20	Lack of desire for parental involvement sounds negative	R2		
May 1	What category to assign 'picking out resources' to	R1	Not fit with existing categories Many possible categories Context	R3 R1 R3
May 2	What to include in expose to staff about Talk Time	R1	Don't complicate it Information-sharing Teachers experience Changes made Targeting specific vocabulary items Summary of strategies used Selecting words Isabel Beck handout Poster Video Results of assessments Resources Appealing resources Short and sweet	R3 R1 R1 R1 R3 R1 R2 R3 R1, R2, R3, R4 R3 R1 R1 R3 R3
May 3	Staff not aware that they might be expected to do Talk Time next year	R3	Might not be all classes Showcasing only Depends on principals decision Expose help inform decision making	R1 R3 R2, R3, R4 R1
May 4	A further expose will be needed after the school holidays	R3		
May 5	Over use of teacher echo initially	R2	Now teacher echo and extension Self-awareness	R3 R3
May 6	Transfer of Talk Time to new school	R3	Partial use	R2
May 7	Talk Time wouldn't be needed in non-disadvantaged areas	R3	All pupils need to enrich vocabulary Selection of words may be different	R1 R1

	Problem-posing		Problem-solving	
May 8	What vocabulary items to include in end of year test	R2	All words taught	R3
May 9	Whether to revise vocabulary items before test	R2, R3	Don't revise Allow pupils to revise	R1, R2 R1
May 10	What to include in poster for staff	R1	Why: teach target words Why: improve language skills What: teach target word What: select words from context or child How: different methodologies (e.g. 4 square, synonyms, antonyms, games) How: student-generated definitions How: display words How: visual aid How: word wall How: homework How: don't put in homework How: homework 1 word per day How: homework plus talking How: assessment - weekly/daily How: teacher echo/extension How: beneficial add on How: repeat and review regularly Pictures of word walls Quality and quantity	R3 R1 R3 R1, R3, R2, R4 R3, R4, R2, R1 R3 R1 R2 R3 R1, R3 R2 R3, R1 R3 R3, R1 R1 R2, R3 R1 R1, R3
May 11	Took a long time for co-researchers to use language enrichment strategies automatically	R2	Handouts support the use	R2
May 12	Whether to create a dictionary of new vocabulary items taught	R3	Agrees with suggestion Create in individual copy One dictionary for whole class	R1 R4 R3
May 13	How to explain repetition and review to other staff	R1	Place in methodologies Discussion on word	R3 R3
May 14	Not all pupils doing Talk Time homework	R2	Empathy	R3
May 15	Jargon will turn staff off	R3, R4, R2	Leave jargon out Simplify jargon	R3 R1, R3, R4
May 16	Potential to overcrowd poster	R3	Example of good poster Example of what to include Concrete example	R1 R1 R3
May 17	Is repeat and review a methodology	R1	Yes	R3, R4
May 18	Exact aim of expose	R3	Share information Not sell Talk Time	R1 R3
May 19	Which video clips to share	R1	Volunteers clip Edited clip Second clip Show full clip	R3 R1 R1, R3 R1
May 20	Which resources to share	R1	Homework leaflet Poster Isabel Beck handout 4 square	R3 R2 R1 R1, R3
May 21	Staff will lose interest if format too long or detailed	R3	Only 2 pages	R2

	Problem-posing		Problem-solving	
May 22	Don't want to be adding to workload of colleagues	R3, R2	Helps with curriculum planning Provides oral language planning Provides a template for oral language planning	R1, R2, R3 R3 R1

Appendix L: List of all the incidents of ‘change-talk’

Identifier	Epistemology	Order of Change	Content
<i>Professional Dimensions of Change</i>			
Professional Sept 1	Propositional Knowing	1 st order	Identified classroom practices and labelled them with technical and theoretical language
Professional Sept 2	Propositional Knowing	3 rd order	Discussed creation of an innovative oral language checklist
Professional Oct 1	Practical Knowing	2 nd order	Discussed need for time is need to prepare referential questions
Professional Oct 2	Propositional Knowing	1 st order	Discussed evidence behind the language enrichment strategy of extension
Professional Oct 3	Practical Knowing	2 nd order	Reflected that pupils do benefit from extension
Professional Oct 4	Experiential Knowing	1 st order	Discussed practise of strategies to support reflection on practice
Professional Oct 5	Propositional Knowing / Practical Knowing	1 st order	Discussed links between theory or rich instruction and how that was implemented in practice
Professional Oct 6	Practical Knowing	1 st order	Reflected on importance of using visual aids
Professional Oct 7	Propositional Knowing	3 rd order	Discussed how to assess language learning
Professional Oct 8	Practical Knowing / Propositional Knowing	3 rd order	Proposed use of word walls
Professional Oct 9	Propositional Knowing / Practical Knowing	1 st order	Discussed importance of repetition and review
Professional Oct 10	Propositional Knowing	1 st order	Discussed importance of student-generated definitions
Professional Nov 1	Practical Knowing	2 nd order	Discussed how to explain interventions to parents to support engagement
Professional Nov 2	Practical Knowing / Propositional Knowing / Experiential Knowing	1 st order / 3 rd order	Discussed how to ensure parental involvement with language development
Professional Nov 3	Practical Knowing / Experiential Knowing	3 rd order	Discussed asking parents opinions on how to teach vocabulary
Professional Nov 4	Practical Knowing	1 st order	Discussed using homework journal to support language development at home
Professional Nov 5	Practical Knowing	1 st order	Proposed focusing on one word a day for homework
Professional Nov 6	Practical Knowing	1 st order	Proposed testing words taught on Friday
Professional Nov 7	Practical Knowing / Propositional Knowing	2 nd order / 1 st order	Reflected that pupils rarely have experience of generating their own definitions

Identifier	Epistemology	Order of Change	Content
Professional Nov 8	Practical Knowing	1 st order	Proposed need to ensure focus is on language development not spelling
Professional Nov 9	Practical Knowing	1 st order	Discussed helping to place emphasis on oral language through written homework
Professional Nov 10	Practical Knowing	2 nd order	Discussed need to place equal emphasis on non-written homework
Professional Nov 11	Practical Knowing	2 nd order	Proposed giving parents list of target words in advance
Professional Jan 1	Practical Knowing	3 rd order	Reflected on parent-teacher meetings and timing of them
Professional Jan 2	Practical Knowing	1 st order	Reflected on Talk Time becoming part of homework journal
Professional Jan 3	Practical Knowing	1 st order	Proposed telling pupils not to pick same topic for homework
Professional Jan 4	Practical Knowing	2 nd order	Reflected Talk Time provided opportunities for encouraging expression
Professional Jan 5	Practical Knowing	2 nd order	Reflected Talk Time encouraged pupil's awareness of the need to learn words
Professional Jan 6	Practical Knowing	3 rd order	Proposed new form of assessment of vocabulary taught
Professional Jan 7	Practical Knowing / Propositional Knowing	2 nd order	Discussed that pupils teaching parents meanings of words supports language development
Professional Jan 8	Practical Knowing	1 st order	Reflected 4 square helps pupils to understand the word
Professional Jan 9	Practical Knowing	2 nd order	Discussed selection of words to teach using big book
Professional Jan 10	Practical Knowing	2 nd order	Discussed selection of words in advance allows preparation for word wall
Professional Jan 11	Practical Knowing	1 st order	Proposed to remind pupils to ensure homework is completed
Professional Jan 12	Practical Knowing	1 st order	Proposed need to ensure accurate spelling of word in homework record sheet
Professional Jan 13	Experiential Knowing / Practical Knowing	1 st order	Reflected that Word walls enhanced teaching of words
Professional Jan 14	Practical Knowing	2 nd order	Discussed making a game out of vocabulary learning
Professional Jan 15	Experiential Knowing	1 st order	Reflected on selection of words in advance rather than daily
Professional Jan 16	Experiential Knowing	1 st order	Reflected on Talk Time homework record sheets being child friendly
Professional Jan 17	Propositional Knowing / Practical Knowing	1 st order	Informed pupils that vocabulary development will help with standardised test results
Professional Jan 18	Propositional Knowing	2 nd order	Discussed that memorisation strategies not sufficient for rich vocabulary instruction
Professional Jan 19	Practical Knowing	2 nd order	Reflected on ensuring both extension and praising and not extension only
Professional Jan 20	Practical Knowing / Propositional Knowing	2 nd order/ 1 st order	Discussed need for explicit focus on repetition and review

Identifier	Epistemology	Order of Change	Content
Professional Jan 21	Propositional Knowing	3 rd order	Discussed applying strategies from research example
Professional Mar 1	Practical Knowing	1 st order	Suggested testing all words taught over last two terms
Professional Mar 2	Practical Knowing	1 st order	Asserted that even if minimal parental involvement, pupils developing language in school
Professional Mar 3	Practical Knowing	1 st order	Suggested different methods to test words taught
Professional Mar 4	Practical Knowing	2 nd order	Asserted that testing inadequate to reflect retention of vocabulary over time
Professional Mar 5	Experiential Knowing	1 st order	Asserted that pupils enjoy Talk Time homework
Professional May 1	Practical Knowing	2 nd order	Asserted that another presentation would be needed for staff after the Summer holidays
Professional May 2	Practical Knowing	3 rd order	Asserted that teachers best people to share Talk Time with other staff
Professional May 3	Practical Knowing	1 st order	Identified effective language enrichment practices
Professional May 4	Practical Knowing	1 st order	Identified less praise for the sake of it
Professional May 5	Practical Knowing	2 nd order	Identified previous frequent echoing of pupils comments not as beneficial as other practices
Professional May 6	Practical Knowing	2 nd order	Discussed selection of target words from book rather than random selection
Professional May 7	Propositional Knowing	3 rd order	Recommended to other staff - extension to help with vocabulary development and general language development
Professional May 8	Practical Knowing	3 rd order	Recommended to other staff - select target words from a context
Professional May 9	Practical Knowing	3 rd order	Recommended to other staff - select target words based on child-initiated topic
Professional May 10	Practical Knowing	3 rd order	Recommended to other staff - use 4 square visual organiser to help teach the word
Professional May 11	Practical Knowing	3 rd order	Recommended to other staff - provide examples and non-examples of target words
Professional May 12	Practical Knowing	3 rd order	Recommended to other staff - play games to support repetition and review
Professional May 13	Propositional Knowing	1 st order	Recommended that Isabel Beck resources useful for supporting language enrichment
Professional May 14	Practical Knowing	3 rd order	Recommended to other staff - Isabel Beck handout
Professional May 15	Practical Knowing	3 rd order	Recommended to other staff - facilitate student-generated definitions of words
Professional May 16	Practical Knowing	2 nd order	Suggested creating a specific dictionary of words taught to pupils
Professional May 17	Practical Knowing	3 rd order	Recommended to other staff - use of word wall
Professional May 18	Practical Knowing	3 rd order	Recommended to other staff - importance of repetition and review
Professional May 19	Practical Knowing	3 rd order	Recommended to other staff - use of oral language homework
Professional May 20	Practical Knowing	3 rd order	Asserted to avoid jargon when explaining Talk Time to school staff
Professional May 21	Practical Knowing	3 rd order	Asserted that teachers may assume they are extending but in practice they are not

Identifier	Epistemology	Order of Change	Content
Professional May 22	Practical Knowing	3 rd order	Recommended to other staff - weekly assessment of word taught
Professional May 23	Propositional Knowing / Practical Knowing	3 rd order	Shared research on importance of quality and quantity of instruction
Professional May 24	Propositional Knowing	3 rd order	Recommended to share assessment results with other staff members
Professional May 25	Practical Knowing	3 rd order	Recommended to share video clip with other staff members
Professional May 26	Practical Knowing	3 rd order	Recommended to share copy of Talk Time homework leaflet
Professional May 27	Practical Knowing	3 rd order	Recommended to share copy of Talk Time word wall template
Professional May 28	Practical Knowing	3 rd order	Recommended to share example of a completed 4 square
Professional May 29	Practical Knowing	3 rd order	Discussed plans to implement Talk Time following year because of positive impact on pupils
Professional May 30	Practical Knowing	3 rd order	Recommended to other staff - Talk Time supports oral language planning
Personal Dimensions of Change			
Personal Sept 1	Practical Knowing	1 st order	Reflected on how teachers try to elicit language from pupils
Personal Sept 2	Practical Knowing	1 st order	Reflected on how to give clear instructions rather than frequent repetitions
Personal Sept 3	Practical Knowing	2 nd order	Reflected on practices most important for language enrichment
Personal Sept 4	Experiential Knowing	2 nd order	Reflected on potential use of circle time as a useful practice
Personal Oct 1	Practical Knowing	1 st order	Reflected on use of new language enrichment practices introduced – specific to oral language lessons
Personal Oct 2	Practical Knowing	1 st order	Reflected on use of new language enrichment practices introduced – reviewing vocabulary in new contexts
Personal Oct 3	Practical Knowing	2 nd order	Reflected on over use of praise and benefits of extending instead
Personal Oct 4	Experiential Knowing	2 nd order	Reflected on potential use of extension and reformulation
Personal Oct 5	Practical Knowing	1 st order	Reflected on use of extension and reformulation
Personal Oct 6	Experiential Knowing	3 rd order	Reflected on tendency to underestimate pupils' abilities
Personal Oct 7	Experiential Knowing	1 st order	Reflected on fast rate of speech
Personal Oct 8	Practical Knowing	1 st order	Reflected on the automatic use of extension when younger pupils don't know a word but not for older pupils
Personal Oct 9	Propositional Knowing	2 nd order	Discussed how to select the appropriate learning objective – language or reading fluency or reading comprehension
Personal Oct 10	Experiential Knowing	1 st order	Reflected on attempted use of rich instruction
Personal Oct 11	Practical Knowing	2 nd order	Reflected on how to improve use of rich instruction

Identifier	Epistemology	Order of Change	Content
Personal Oct 11	Experiential Knowing / Practical Knowing	1 st order	Reflected on importance of making connections for rich instruction
Personal Oct 11	Experiential Knowing	1 st order	Reflected on preferred language enrichment visual organisers
Personal Oct 12	Practical Knowing	2 nd order	Reflected on choice of target vocabulary
Personal Oct 13	Practical Knowing	2 nd order	Reflected on limited amount of learning happening – 1 word
Personal Oct 14	Experiential Knowing	1 st order	Reflected on pupils not retaining new learning
Personal Nov 1	Experiential Knowing	2 nd order	Reflected that fear may prevent parental involvement rather than disinterest
Personal Nov 2	Experiential Knowing	2 nd order	Reflected that not as negative about prospect of parental involvement
Personal Nov 3	Practical Knowing	1 st order	Reflected that language enrichment strategies implemented had positive effect on pupils
Personal Nov 4	Practical Knowing	1 st order	Reflected on attempted use of rich instruction
Personal Nov 5	Practical Knowing	1 st order	Proposed possibility of encouraging pupils to use internet for language homework
Personal Nov 6	Experiential Knowing	2 nd order	Reflected that non-written homework of researcher was not completed with same consistency as written homework
Personal Nov 7	Practical Knowing	2 nd order	Proposed the need to place equal emphasis on non-written homework
Personal Nov 8	Experiential Knowing	1 st order	Reported excitement about prospect of parental involvement
Personal Nov 9	Practical Knowing	1 st order	Reported that use of language enrichment strategies becoming more automatic
Personal Nov 10	Experiential Knowing	1 st order	Reported that use of language enrichment strategies feels positive
Personal Nov 11	Practical Knowing	1 st order	Reflected that paired work more effective than group work
Personal Jan 1	Practical Knowing/ Propositional Knowing	2 nd order	Reflected on best words to select to teach – based on literature
Personal Jan 2	Practical Knowing	2 nd order	Reflected on how to teach verbs as easily as nouns
Personal Jan 3	Practical Knowing	1 st order	Reported selecting words within a topic
Personal Jan 5	Practical Knowing / Experiential Knowing	2 nd order	Reported the introduction of the concept of incentives to support Talk Time
Personal Jan 6	Experiential Knowing	2 nd order	Expressed a change of attitude towards individual parent
Personal Jan 7	Experiential Knowing	2 nd order	Reflected on importance of simple accessible definitions
Personal Jan 8	Propositional Knowing	1 st order	Discussed the use of checklist to identify changes to make to practices
Personal Jan 9	Practical Knowing	1 st order	Reported that rich instruction of vocabulary occurring naturally

Identifier	Epistemology	Order of Change	Content
Personal Jan 10	Practical Knowing	1 st order	Discussed how to teach words in context
Personal Mar 1	Practical Knowing	1 st order	Discussed implementation of Talk Time every week
Personal Mar 2	Practical Knowing	1 st order	Shared how knowledge of words was being tested
Personal Mar 3	Practical Knowing	1 st order	Reflected that asking pupils to explain word using their own words had become automatic
Personal Mar 4	Practical Knowing	1 st order	Reflected on the perception that nouns easier to teach than verbs
Personal Mar 5	Practical Knowing	1 st order	Reflected on asking pupils to identify known words within new vocabulary items
Personal Mar 6	Practical Knowing	1 st order	Reflected on using current affairs as a focus for vocabulary development
Personal Mar 7	Experiential Knowing	2 nd order	Asserted that pupils like focus on current affairs topics because it facilitates them to participate in conversations with adults
Personal Mar 8	Practical Knowing	2 nd order	Asserted that amount of teacher input has an impact
Personal Mar 9	Practical Knowing	1 st order	Reported that target words placed on word wall
Personal Mar 10	Experiential Knowing	1 st order	Expressed disappointment with perceived lack of input from parents
Personal Mar 11	Experiential Knowing	2 nd order	Suggested that parents may like positive reinforcement
Personal Mar 12	Practical Knowing	1 st order	Discussed plans to continue Talk Time into 3 rd term
Personal Mar 13	Practical Knowing	1 st order	Discussed plans to continue Talk Time without homework element into 3 rd term
Personal Mar 14	Practical Knowing	2 nd order	Suggested that bright pupils will develop language from teacher without parental involvement
Personal Mar 15	Practical Knowing	1 st order	Reflected that rich vocabulary instruction happening automatically
Personal Mar 16	Experiential Knowing	1 st order	Reported perceived lack of parental involvement rationale for not giving oral language homework in term 3
Personal May 1	Practical Knowing	1 st order	Reflected on greater praising and not enriching language
Personal May 2	Practical Knowing	1 st order	Reflected that extension was not automatic in the beginning
Personal May 3	Experiential Knowing	1 st order	Reflected that more aware of impact of own teaching – heartening & motivating
Personal May 4	Experiential Knowing	2 nd order	Reflected that more understanding of why parents may not always do the homework
Political Dimensions of Change			
Political Oct 1	Practical Knowing	3 rd order	Discussed trialling of new classroom practices
Political Oct 2	Practical Knowing	3 rd order	Discussed positive influence of language enrichment practices on standardised assessments
Political Nov 1	Practical Knowing / Experiential Knowing	3 rd order	Discussed not fair to avoid parental involvement just because some parents won't participate

Identifier	Epistemology	Order of Change	Content
Political Nov 2	Practical Knowing / Experiential Knowing	3 rd order	Suggested introduction of class meeting to discuss with parents who they can become involved in language enrichment
Political Nov 3	Experiential Knowing	2 nd order	Shared how pupils demonstrated how they used new vocabulary at home
Political Nov 4	Practical Knowing	1 st order	Reported pupils demonstrated improvements in generating definitions of new words
Political Nov 5	Practical Knowing	1 st order	Suggested putting dates of class meetings in school newsletter
Political Jan 1	Experiential Knowing	2 nd order	Reflected that parents did attend meeting and were enthusiastic in their interest
Political Jan 2	Experiential Knowing	1 st order	Reported that Talk Time homework completed
Political Jan 3	Practical Knowing	1 st order	Reported that pupils asking to pick topic for oral language homework
Political Jan 4	Propositional Knowing	1 st order	Reported that pupils taught parents words that parents didn't know
Political Jan 5	Experiential Knowing	1 st order	Reported that pupils asked to complete visual organiser on new words
Political Jan 6	Practical Knowing / Experiential Knowing	3 rd order	Reported that Talk Time implemented routinely
Political Jan 7	Experiential Knowing / Practical Knowing	2 nd order	Suggested providing feedback to parents on assessment results
Political Jan 8	Propositional Knowing	1 st order	Suggested explaining to parents the difference between strategies for rote learning and strategies for vocabulary learning
Political Jan 9	Practical Knowing	1 st order	Discussed how to share learning with other teachers
Political Mar 1	Practical Knowing	1 st order	Reported that pupils requested teacher to teach them new words
Political Mar 2	Experiential Knowing	1 st order	Reported that pupils attempts to explain vocabulary using own words were sometimes abstract
Political Mar 3	Experiential Knowing	1 st order	Shared perception that parental engagement lost momentum after time
Political Mar 4	Practical Knowing	3 rd order	Suggested including Talk Time results in end of year school reports
Political Mar 5	Experiential Knowing	3 rd order	Asserted that parent meetings not worth organising because of low attendance/low interest
Political Mar 6	Experiential Knowing	1 st order	Reported higher parental engagement in two classes
Political Mar 7	Propositional Knowing	1 st order	Reported that pupils demonstrated knowledge of words taught
Political Mar 8	Practical Knowing	3 rd order	Agreed to send home Talk Time report card
Political Mar 9	Practical Knowing	3 rd order	Discussed possible wording for Talk Time report card
Political May 1	Experiential Knowing	1 st order	Shared perception that pupils more aware of importance of learning new words

Identifier	Epistemology	Order of Change	Content
Political May 2	Practical Knowing	1 st order	Asserted that Principal would decide on whether Talk Time will be implemented in other classes
Political May 3	Practical Knowing / Experiential Knowing	1 st order	Reported that pupils demonstrated the use of new words in other contexts
Political May 4	Practical Knowing	1 st order	Reflected that test results allowed pupils to see their own progress & learning
Political May 5	Propositional Knowing	3 rd order	Reflected that positive impact on teachers and pupils created a desire to implement Talk Time in other classes
Political May 6	Practical Knowing	3 rd order	Stressed the importance of keeping presentation to staff brief
Political May 7	Experiential Knowing	3 rd order	Expressed desire not to make staff feel like researchers giving them extra work to do