

**AN INQUIRY INTO THE LITERACY PRACTICES OF PUPILS
WITH AUTISM IN MAINSTREAM PRIMARY SETTINGS IN
THE REPUBLIC OF IRELAND.**

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DECLARATION

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SUMMARY

Nationally and internationally there has been a call to advance literacy and numeracy skills for better work/life outcomes. Included in this call is the need to support learners with special education need in advancing their potential literacy and numeracy outcomes (Government of Ireland, 2011a). Autism diagnosis and prevalence rates have emerged across Europe and the United States as a predominant concern in education placement and provision. The need to explore the teaching and learning experiences of children with autism is well argued in the research literature (Bond & Symes, 2014; Parsons et al., 2009; Wong et al., 2014). The call to research comes from reviews of literature, which determined an over-emphasis on qualitative investigations on social skills and behaviour for learning among pupils with autism rather than literacy and numeracy. This research project sought to inquire into the literacy practices of children with autism in mainstream primary settings in the Republic of Ireland. It provides a description of the teaching and learning experiences for children with autism aged between 6 and 10 years and explores the supports available to facilitate literacy practices.

This research project is positioned within a sociocultural perspective (Vygotsky, 1997) and holds that the actions of society elucidate the true nature of literacy experiences for and by learners with autism. It sought to explain and explore the practices, structures, processes and policies that support or prohibit literacy development from a bio-ecological lens (Bronfenbrenner, 1994). A sociocultural perspective supports the theory that language and literacy develops through the interplay between the social and cultural relationship experienced by the pupil in context with his environment. This study is a small scale, qualitative study of the literacy practices and learning experiences of children with autism in mainstream primary schools (n=7) in the Republic of Ireland. The participants include parents (n=24) and teachers (n=14) of children (n=34) with autism and data was generated through naturalistic observations (n=63) and semi-structured interviews (n=35).

This qualitative research proposed to provide ‘connections between lived experiences, social injustices, larger social and cultural structures, and the here and now’ (Denzin & Lincoln, 2013, p. 43). It sought purposefully to explore how all the elements of literacy and being literate create a ‘whole’ picture of teaching and learning for children with autism. Stake (2010, p. 13) holds that qualitative research is ‘situational’ as ‘things work differently in different situation’. He cites teacher professional knowledge as being qualitative in nature. He refers to the reflective practices of the teacher as responsive qualitative forms of examining and interpreting actions for professional standards and ethics. He further contends that the qualitative researcher seeks to advance knowledge to assisting practice and policy. The case study approach allowed for an in-depth study and interpretation of

the phenomenon of teaching within the bounded case of variables such as age and setting and supports a ‘flexible, open-ended technique of data generation and analysis’ (Kumar, 2014, p. 155). The focus of attention in this study was literacy.

Key findings from this study indicate that pupils with autism aged between 6-10 years of age demonstrated oral language and reading skills within developmental bands on the Primary Language Curriculum Progression Milestones, National Council for Curriculum and Assessment (2016). Writing skills and practices were rarely evidenced and rarely exercised. The use of technology was limited and not used to support or advance independent literacy practices. While the professional role and competencies of the teacher as an eclectic practitioner emerged as a critically important element of effective literacy outcomes, teachers in their interpretation of ‘literacy’ presented an outmoded definition of the concept. In some classes, there was an over emphasis on mechanistic approaches in restricted repetitive routines of practice that did not advance the engagement of the pupil in literacy experiences. Restrictions in the practice of inclusion presented few opportunities for pupils to engage with non-autistic peers. Parents in this study presented a broader interpretation of the concept of being literate and included being numerate within that concept. Echoic behaviours were valued by parents as communicative intent. Play was not observed as a pedagogical practice.

The findings of this study indicate that a significant focused approach to teacher education and continuing professional development is needed in literacy teaching and learning. A broader conceptualisation of literacy practices needs to embrace being numerate as a form of being literate. The use of information technology as a mode for exploring the literate behaviours of pupils with autism needs greater attention and position within the pedagogical practices of the teacher. Echoic behaviours of children with autism may demonstrate communicative intent and need to be observed, evaluated and acknowledged. A caution is argued in the use of programmes where mechanistic practice restricts a differentiated, informed pedagogical approach to literacy instruction. Greater inclusive opportunities are needed for children with autism to build literacy practices through play and social experiences. The establishment of units and the physical architecture of these units does not guarantee or safeguard quality or effective inclusive provision or participation. However, where a school-wide culture of accepting and valuing all members of the school community is evidenced there was a notable progressive development of inclusive practice. While these schools did maintain the ‘unit’ for social skills training and additional support resource they did not restrict the teaching and learning to within the unit.

An expected but not looked for finding related to marital/family status. While no question was asked relating to marital status it is important to note that six parents of the twenty-one families have indicated/declared a relationship breakdown, which statistically is 30% of the families in this study. This has implications for family literacy activities and was also a feature in research with families in the UK by

Preece (2014) and correlates with his call for further research in this area. This research project advises further research to explore whether separation and/or divorce impacts on the cultural and social aspects of literacy practices of children with autism.

The aim for this research project was to explore the realities of teaching and learning for pupils on the autism spectrum. It focused on transforming empirical data into practical and applicable strategies to enhance our capacity in classroom practice and whole school policy development. It adds to the current pool of knowledge and enhances our understanding of autism and being literate for society and the economy. This study is of importance to current research on evidenced-based practices, curricula and interventions for children with autism in mainstream primary schools in Ireland. It provides a profile of literacy practices of children with autism that is unique to previous research.

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I have always enjoyed school and learning. Being a teacher, being able to support and encourage others in the learning process is very important to me. As a young child, my Grandfather Dunne and my uncle David O’Connor promoted the concept of life-long learning and getting a college education. I honour their memory.

I dedicate this work to my father Brian O’Connor, a man of many words and songs, who passed away during my studies. He appreciated the arts and particularly the work of Percy French. He would launch into a rendition of a piece he felt fit the mood and tone and there would be no stopping half way. Being awarded a PhD in Education would I feel warrant the following piece being recited?

“If I were a lady I’d wear a hat, that all of the street would be lookin’ at!” (French, 1912)

TABLE OF CONTENTS

TABLE OF CONTENTS	VI
LIST OF FIGURES	IX
LIST OF TABLES	X
CHAPTER 1: INTRODUCTION	1
1.1 POLICY AND LEGISLATIVE BACKGROUND	1
1.2 RATIONALE.....	3
1.3 VISION.....	5
1.4 VISION FOR FUTURE RESEARCH	5
1.5 BACKGROUND TO ‘SPECIAL NEEDS’ AND ‘SPECIAL EDUCATION’	6
1.6 DISABILITY AS A SOCIAL CONSTRUCT	7
1.7 RESEARCH QUESTION	9
1.8 HOW THIS THESIS IS STRUCTURED	10
CHAPTER 2: LITERATURE REVIEW	12
2.1 INTRODUCTION	12
2.2 CONTEXT	12
2.3 LITERACY IN A CONTEMPORARY CONTEXT	14
2.4 INCLUSION	25
2.5 SPECIAL EDUCATIONAL NEEDS	37
2.6 AUTISM (IS ?)	41
2.7 AUTISM – TEACHING AND LEARNING	46
2.8 EDUCATIONAL INTERVENTIONS AND BEST PRACTICE FOR PUPILS WITH AUTISM	51
2.9 PEDAGOGY WITHIN SPECIALISED UNITS IN THE REPUBLIC OF IRELAND	52
2.10 LITERACY TEACHING IN AUTISM CLASSROOMS IN THE REPUBLIC OF IRELAND	65
2.11 ASSESSMENT FOR SKILLS DEVELOPMENT.....	67
CHAPTER SUMMARY	74
CHAPTER 3: EPISTEMOLOGY	75
3.1 INTRODUCTION	75
3.2 A PHILOSOPHY	76
3.3 WHO IS THE RESEARCH FOR?	78
3.5 OBJECTIVITY WITHIN THIS RESEARCH	79
3.6 PERSONAL AND ACADEMIC BIOGRAPHY	79
3.7 RATIONALE: CONTEXT DETERMINES THE WAY WE RESPOND	84
3.8 THEORETICAL ASSUMPTIONS: SOCIAL THEORY	85
3.9 IDENTITY: TEACHER/RESEARCHER.....	86
3.10 QUALITATIVE RESEARCH	89
3.11 REFLEXIVITY.....	91
CHAPTER SUMMARY	93
CHAPTER 4 METHODS	94

4.1 INTRODUCTION	94
4.2 THE SAMPLE	94
4.3 ETHICAL RESEARCH WITH PUPILS WITH AUTISM	96
4.4 RESEARCH SAMPLE	99
4.5 GATEKEEPERS	102
4.6 THE PILOT STUDY	104
4.7 RESEARCH DESIGN – COLLECTIVE CASE STUDY.....	105
4.8 METHODS OF DATA COLLECTION	106
4.9 PREPARING THE MATERIAL FOR ANALYSIS.....	119
4.10 THE CODING JOURNEY	125
4.11 REALITIES OF THE PROJECT	137
CHAPTER SUMMARY	138
CHAPTER 5: RESULTS	139
5.1 INTRODUCTION	139
5.2 DATA SOURCE INFORMATION	140
5.3 FAMILY STATUS.....	142
5.4 PARENT PARTICIPANTS	143
5.5 SCOIL DE VALERA.....	144
5.6 FAMILY ROLES AND RELATIONSHIPS	144
5.7 PUPIL PARTICIPANTS	146
5.8 TEACHERS INTERVIEWED.....	154
5.9 THEMES TO EMERGE	157
5.10 LESSON OBSERVATIONS AND MODES OF DELIVERY	216
5.11. RELATIONSHIP.....	219
5.12 COMMUNICATING EXPECTATIONS	220
5.13 IDENTIFICATION – ROLES	223
5.14 LITERACY PRACTICES OF CHILDREN WITH AUTISM.....	225
5.15 KEY FINDINGS	249
CHAPTER SUMMARY	251
CHAPTER 6: DISCUSSION.....	252
6.1 INTRODUCTION	252
6.2 PURPOSE AND FOCUS OF THE STUDY.....	252
6.3 LITERACY AND BEING LITERATE	253
6.4 STRUCTURED, SEMI-STRUCTURED ENVIRONMENTS.....	261
6.5 PLAY OR LACK OF: ‘POVERTY OF A STIMULUS’	264
6.6 “LITERACY IS UNLOCKING THE WORLD”	267
6.7 INCLUSION AND CONNECTING.....	271
6.8 LEADERSHIP FOR INCLUSION	272
6.9 TO CONCLUDE: WHAT WORKS AND WHY? ‘CONNECTING’	274
CHAPTER 7: CONCLUDING CHAPTER	279
7.1 INTRODUCTION	279
7.2 PARENTS AND PARENTAL INVOLVEMENT.....	279
7.3 COMMUNICATIVE INTENT	280
7.4 PRACTICAL APPLICATIONS OF FINDINGS.....	281

7.5 COMMUNITIES OF PRACTICE.....	282
7.7 REALITIES OF THE RESEARCH	284
7.8 FURTHER DIRECTIONS FOR RESEARCH	285
CONCLUSION.....	287
APPENDICES	307
APPENDIX A: CALL FOR EXPRESSION OF INTEREST	308
APPENDIX B: CONSENT FORM 2 TEACHERS/PRINCIPALS.....	309
APPENDIX C: CONSENT FORM 2 FOR PARENTS.....	311
APPENDIX D: CONSENT FORM PUPILS	314
APPENDIX E: POSTER FOR SCHOOLS INVOLVED IN THE STUDY.....	315
APPENDIX F: INDIVIDUAL INTERVIEWS – SEMI-STRUCTURED INTERVIEW FOR PARENTS.....	316
APPENDIX G: INDIVIDUAL INTERVIEWS – SEMI-STRUCTURED INTERVIEW FOR TEACHERS	318
APPENDIX H: CODING BOOK	320
APPENDIX I: EXAMPLE OF HAND CODING OF TEACHER INTERVIEW SCOIL HILLERY	321
APPENDIX J: EXAMPLE OF THE COLLATION OF DATA AUTISM IS.	323

LIST OF FIGURES

- FIG. 1 INTER-RELATIONSHIP BETWEEN PLANNING AND ASSESSMENT
- Fig. 2 Assessment as classroom practice
- FIG. 3 RESEARCH PHASES
- FIG. 4 PERSONAL PATHWAY
- FIG. 5 VYGOTSKIAN THEORY OF CHILD LEARNING
- FIG. 6 CODING CYCLE
- FIG. 7 PROCESS OF DATA ANALYSIS
- FIG. 8 WORD FREQUENCY OF LITERACY
- FIG. 9 PARENT AND GUARDIAN DETAILS
- FIG. 10 BAR CHART OF TEACHER EXPERIENCE
- FIG. 11 SENSORY BAG OF WET PAINT
- FIG. 12 WRITING WORKSHEET
- FIG. 13 STAFF SCHEDULE
- FIG. 14 PUPIL SCHEDULE
- FIG. 15 STAFF AND PUPIL SCHEDULE
- FIG. 16 DAILY CLASS TIMETABLE
- FIG. 17 PUPIL SCHEDULES
- Fig. 18 P(c) IEP
- FIG. 19 P(D) IEP
- FIG. 20 PHYSICAL STRUCTURE
- FIG. 21 VISUAL STRUCTURE
- FIG. 22 TASK STRUCTURE
- FIG. 23 BERT'S SHOEBOX
- FIG. 24 EXAMPLE OF WRITING
- FIG. 25 TIMER SCHEDULE
- FIG. 26 NIAMH'S SCHEDULE
- FIG. 27 NIAMH WORKING AT MATHS
- FIG. 28 WORD BINGO CARD
- FIG. 29 NIAMH'S READER
- FIG. 30 KARL'S READER
- FIG. 31 KARL'S WORK SCHEDULE
- FIG. 32 KARL'S WEEKLY SCHEDULE
- FIG. 33 SOCIAL STORY
- FIG. 34 SAMPLE COMPUTER WORK BY KYLE
- FIG. 35 KYLE'S HANDWRITING
- FIG. 36 GER'S HANDWRITING
- FIG. 37 SAMPLE OF SOPHIE P'S HANDWRITING

LIST OF TABLES

TABLE 3.1 OVERVIEW OF RESEARCH	93
TABLE 4.1 AN EXAMPLE OF THE CHILD OBSERVATION SCHEDULE FOR A TYPICAL AUTISM CLASS.....	115
TABLE 4.2 AN EXAMPLE OF THE ADULT OBSERVATION SCHEDULE FOR A TYPICAL AUTISM CLASS.....	115
TABLE 4.3 RULES FOR INCLUSION	128
TABLE 4.4 THEMATIC ANALYSIS OF ‘WHAT IS AUTISM?’	131
TABLE 4.5 PROGRESSION CONTINUUM OF LITERACY KEY SKILLS	136
TABLE 5.1 EVIDENCE OF THE DATA COLLECTED AT SCOIL HYDE.....	140
TABLE 5.2 EVIDENCE OF THE DATA COLLECTED AT SCOIL Ó CEALLAIGH	140
TABLE 5.3 EVIDENCE OF THE DATA COLLECTED AT SCOIL DEVALERA.....	141
TABLE 5.4 EVIDENCE OF THE DATA COLLECTED AT SCOIL CHILDERS	141
TABLE 5.5 EVIDENCE OF THE DATA COLLECTED AT SCOIL Ó DALAIGH.....	141
TABLE 5.6 EVIDENCE OF THE DATA COLLECTED AT SCOIL HILLERY	142
TABLE 5.7 EVIDENCE OF THE DATA COLLECTED AT SCOIL ROBINSON	142
TABLE 5.8 SCOIL HYDE PUPIL INFORMATION.....	146
TABLE 5.9. SCOIL Ó CEALLAIGH PUPIL INFORMATION	147
TABLE 5.10 SCOIL CHILDERS PUPIL INFORMATION	148
TABLE 5.11 SCOIL Ó DALAIGH PUPIL INFORMATION	150
TABLE 5.12 SCOIL HILLERY PUPIL INFORMATION.....	151
TABLE 5.13 SCOIL ROBINSON PUPIL INFORMATION	153
TABLE 5.14 ALL TEACHER PARTICIPANT INFORMATION	155
TABLE 5.15 FACTORS RELATING TO INCLUSION.....	160
TABLE 5.16 INCLUSION IN PRACTICE	162
TABLE 5.17 OBSERVATION OF THE TEACHING SCHEDULE IN CASE SCHOOLS G, F, B AND E	190
TABLE 5.18 OBSERVATION OF LESSON FROM SCHOOL A	197
TABLE 5.19 OBSERVATION OF LESSON FROM SCHOOL F.....	199
TABLE 5.20 OBSERVATION OF LESSON FROM SCHOOL B.....	200
TABLE 5.21 SAMPLE CASE FROM SCHOOL (A) OBSERVATION TERM 2, SESSION 2	204
TABLE 5.22 BERT: POSITION ON THE PROGRESSION CONTINUUM	227

TABLE 5.23 NIAMH: POSITION ON PROGRESSION CONTINUUM	232
TABLE 5.24 FRANCES: POSITION ON PROGRESSION CONTINUUM	235
TABLE 5.25 KARL: POSITION ON PROGRESSION CONTINUUM.....	238
TABLE 5.26 KYLE: POSITION ON THE PROGRESSION CONTINUUM	242
TABLE 5.27 GER: POSITION ON PROGRESSION CONTINUUM	245
TABLE 5.28 SOPHIE P: POSITION ON PROGRESSION CONTINUUM	248

ABBREVIATIONS

ABA	Applied Behaviour Analysis
AAC	Augmentative and Alternative Communication
ADHD	Attention Deficit Hyperactivity Disorder
ADOS	Autism Diagnostic Observation Schedule
ASD	Autism Spectrum Disorder
C-ABA	Contemporary ABA
CAMHS	Child and Adolescent Mental Health Services
CBI	Cognitive Behavioural Intervention
CPD	Continuous Professional Development
DCYA	Department of Children and Youth Affairs
DES	Department of Education and Skills
DEIS	Delivering Equality in Education in Schools
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, 5 th Edition
EBD	Emotional Disturbance/Behaviour Disorder
ECCE	Early Childhood Care and Education
EPSEN	Education of Persons with Special Educational Needs Act
ESRI	Economic and Social Research Institute
FBA	Functional Behaviour Assessment
GLD	General Learning Disability
HSE	Health Service Executive
ICD 10	International Classification of Diseases and Related Health Problems
ICT	Information and Communication Technologies
IEP	Individual Education Plan
INTO	Irish National Teacher Organisation
ISS	Inclusion Support Service
ITE	Initial Teacher Education
LST	Learning Support Teacher
MGLD	Mild General Learning Disability
NCCA	National Council for Curriculum and Assessment

NCSE	National Council for Special Education
NEPS	National Educational Psychological Services
OECD	Organisation of Economic Co-operation and Development
OCD	Obsessive Compulsive Disorder
OT	Occupational Therapy
PECS	Picture Exchange Communication System
PRT	Pivotal Response Training
RT	Resource Teaching
RTI	Response to Intervention
SEN	Special Educational Need
SENO	Special Educational Needs Organiser
SERC	Special Education Review Committee
SESS	Special Education Support Service
SEBD	Severe Emotional disturbance/Behaviour Disorder
SNA	Special Needs Assistant
TEACCH	Treatment and Education of Autistic and related Communication Handicapped Children
TES	Teacher Education Section
UNESCO	United Nations Educational Scientific and Cultural Organisation

CHAPTER 1: INTRODUCTION

This chapter sets out to provide the policy and legislative background relating to this research project. It is then followed by, a brief but thoughtful presentation of a philosophical stance, a description of the project undertaken and its relationship to current debates and positions on inclusion and education of pupils with autism in the Republic of Ireland. The theoretical framework in which this study is situated is then presented. Finally, the research questions, aims and objectives are posed.

1.1 Policy and Legislative Background

Political agents and policy makers have led a focused drive to advance teacher education and curriculum reform to respond to growing industrial and economic needs across European countries. An emphasis has been placed on raising the literacy and numeracy skills of populations within European member states and, also features strongly in the Global Agenda of World Economic forums (Conway & Murphy, 2013). Education is tasked with eliminating costly social issues such as long-term unemployment, income inequality, and a lack of responsive leadership. The Republic of Ireland has, because of an economic downturn, experienced a more intensive need for accountability of exchequer-funded investments. Quality leadership and management in schools and teacher accountability for educational outcomes has been enshrined in enacted legislative acts such as; the Education Act (1998), the Education (Welfare) Act (2000) and, the Teaching Council Act (2001). Quinn (2013, p. 9) states

The era of self-evaluation has arrived. We need to have robust internal quality systems matched by external quality assurance mechanisms that are proportionate to needs. Accountability systems that empower teachers and enhance teacher motivation can lead to

significant improvements in student achievement and equity, even in traditionally low-performing schools...We want best practice to become consistent practice. And we want to reach for new levels of system responsiveness, connectedness between what happens in education and the wider society and enhanced levels of performance and quality.

There is a changing educational profile occurring in all schools in the Republic of Ireland as a direct result of the partial enactment of the Education of Persons with Special Educational Needs Act (EPSEN) (2004). As a primary school teacher, autism and effective teaching interventions have become a major focus in classrooms, staffrooms, committee meetings and continuous professional development courses. As Ireland embraces the concept of inclusive education more children with a diagnosis of autism are enrolling in mainstream schools. Correspondingly, special class provision in mainstream school has increased significantly to support autism specific learning needs. Schools have been encouraged to take on an autism 'unit'/classroom/s to provide local education opportunities for locally resident children and young people. Any new school being developed and organised is 'required' to facilitate local children with diverse/special educational needs by establishing and maintaining an appropriate classroom (Government of Ireland, 2011b). In of 2014 the National Council for Special Education (NCSE) indicated that 60% of special class provision in mainstream schools in the Republic of Ireland was allocated solely to autism specific provision (McCoy et al., 2014).

Autism

Defining and redefining autism is a global activity and evolving theories and definitions vary across fields of psychology, medicine, education, neuroscience and the commercial industry. It has become a 'complex' issue and causes significant

concern to parents and people with autism themselves. The historical developments of this conditions are relevant to the lens in which autism is viewed. In this research project, autism is defined as a neurodevelopmental condition that is diverse and unique to the individual. From a Vygotskian Sociocultural theory, a perspective is taken that autism, as a condition, impacts on the interactional and transactional process of social and cultural experiences across the ecology of childhood, adolescence and adulthood.

1.2 Rationale

Literacy and numeracy has been declared ‘an urgent national priority’ and ‘a sustained national effort’ has been established to ensure that education settings, including primary schools, establish new goals and set targets to improve the literacy and numeracy outcomes of all learners (Government of Ireland, 2011a, p. 14). The national strategy (Government of Ireland, 2011a) sets out to raise emphasis on the role of parents in the literacy and numeracy development of their children and to foster learning communities and advance family literacy. It also sets out and draws attention to the quality of teacher professional practice and makes the statement ‘better teaching will support better learning’ (Government of Ireland, 2011a, p. 30).

International debates and research on the topic of literacy for children with autism focuses predominantly on reading behaviours and the implementation of ‘evidenced based practices’ and programme integrity. Little is known of the literacy practices of children with autism or how children with autism learn to be literate. Literacy in this project is explored via a semiotic theory of language

development, and holds as a principle that signs, both verbal and non-verbal, are culturally bound and significant to a 'closed' system of meaning. Literacy is defined within this thesis as a 'social practice' that can be evidenced in literacy events (social interactions) and literacy practices (values, attitudes, feeling and relationships). Literacy in education, therefore can be evidenced beyond a narrow concept of reading, writing and oral language within classroom-based settings and explores the physical, emotional, social, spiritual, creative and intellectual practices of the child when making meaning to communicate within themselves and relevant people in a social and cultural context. Being numerate holds a significant position within this ideology as it requires the child to communicate scientifically and mathematically in play and inquiry.

As a spectrum condition autism presents uniquely to the individual and therefore a general application of teaching methods and approaches may not suffice in progressing literacy practices. Powell and Jordan (2012) contend that issues exist and tensions are created when teachers in trying to respond to the autism traits of young children expecting them to function and perform in a non-autistic world. Teaching is complex and teaching children with autism is more complex and requires an insightful, reflective model (Powell & Jordan, 2012). Research into the existing structures of teaching and learning for children with autism in Irish schools is needed to support a more informed position and guide future progress and direction.

This research project sets out to inquire into the literacy practices of children with autism in mainstream primary settings in the Republic of Ireland. It provides a description of the teaching and learning experiences for children with autism aged

between 6 and 10 years and explores the supports available to facilitate literacy practices.

1.3 Vision

The vision and aim for this research project is that it will explore the realities of teaching and learning for pupils on the autism spectrum. It will focus on transforming empirical data into practical and applicable strategies to enhance our capacity in classroom practice and whole school policy. It will add to the current pool of knowledge and enhance our understanding of autism and being literate for the society and the economy. To achieve this, it has been essential to engage with experts across other disciplines and to present and attend conferences, both national and international, seeking and transforming knowledge from leaders in the field. It is intended that this research project will be articulated directly to teachers via in-service and continuing professional development (CPD) courses. It will also be conveyed to academics, policy makers, and curriculum developers and cross disciplinary experts via academic papers and conferences.

1.4 Vision for Future Research

This research project has revealed areas for further research. One important area, is the need to explore the distinctive characteristics of echoic speech patterns in young children with autism. This research should illuminate our understanding of the importance of these utterances, for example, the way in which the meaning of words is extended, focused or broadened in context and when decontextualized. It is essential that teachers, practitioners and parents continue to enhance knowledge

and explore the relationship between the child with autism, his/her verbal and non-verbal utterances and the world in which they engage. This research could also embrace an ‘embodied’ perspective to ensure the voices of children with autism are included (Shakespeare & Watson, 2006).

1.5 Background to ‘Special Needs’ and ‘Special Education’

The origins of the words ‘special needs’ and ‘special education’ can be traced back through centuries of provision and transformation in education both nationally and internationally (Griffin, 2006; Griffin & Shevlin, 2011). The language we use to discuss, debate and examine pedagogy reflects our ethical values and is closely linked to the progression of our interpretation of humanitarianism. Concepts such as ‘rights’ and ‘equality’ have emerged and presented challenges to previous educational actions and understandings. Tomlinson (1982, p. 2) defines the term ‘special needs’ as a ‘post 1978 terminology’. In doing so she divides the history of special education into pre Warnock and post Warnock eras. She argues that historically national and international leaders and policy makers have presented ‘moral frameworks’ to guide professional practice when working with children who have been ‘categorised out of ordinary or mainstream education and into special education’ (Tomlinson, 1982, p. 5). Further she notes the structure of the ‘social groups’ who form these decision-making assemblies and raises concerns as to the lack of relevant contributions from parties without political or power agendas and significantly, the voices of the children concerned. Tomlinson (1982) contends that ‘society’ responds to special education because of ‘power influences and vested interested’. She specifically identifies professionals involved in ‘referring, assessing, recognising, treating, teaching or administering in special education’ as

having their own vested interests (Tomlinson, 1982, p. 8). McDonnell (2003, p. 259) also argues that the ‘domains of medicine and psychology exert a powerful influence on theory and practice in special education’ and noticeably omit the opinions of people with disabilities. Tomlinson (1982) asserts the importance of clarifying the value positions and vested interests so that debate can be meaningful for change and development in special education.

Explaining the emergence and progression of special education as a means of provision to support learning requires investigating the ‘value positions’ of the policy advisors and lawmakers. Tomlinson (1982, p. 5) argues that ‘special education is permeated by an ideology of benevolent humanitarianism, which provides a moral agenda within which professionals and practitioners work’.

1.6 Disability as a Social Construct

The trouble is that once you see it, you can't unsee it. And once you've seen it, keeping quiet, saying nothing becomes as political an act as speaking out. There is no innocence. Either way you are accountable (Roy, 2002, p. 32)

Our education system in the Republic of Ireland, and across Europe, strives to enable each child to reach its potential and to be a fully functional individual within society. It focuses on being ‘able to’ and therefore ingrains an attitude and perception towards ability and ‘disability’. Society expects that on leaving childhood and entering adulthood that the person should be able to support themselves and function independently. These attitudes and perceptions present the biggest barriers to all society. College students are assigned supervisors, newly qualified teachers are assigned mentors, everyone in their workplace has a line manager that they report to and seek guidance from. On one hand society provides,

and on the other it takes away. So why does society expect complete and total independence in transitions across personal and professional life? The overall theoretical framework underpinning this thesis is that ‘disability’ is a socially constructed phenomenon. Society through its perceived notions of ability applies a condition to the function of the person, placing emphasis on limitations, which in turn impacts on quality of life and living. Haegele and Hodge (2016) contend that the terms ‘disability’ and ‘impairment’ are disconnected and divorced from each other in a social model of disability. This is an important stance as it positions disability away from the bodily functions of the person onto the restrictions to the individual constructed by society. Society interacts with power and politics and imparts both negative and positive categories to ability and disability. Positively it recognises the need to provide supports via additional education resources and financial structures. However, it also attaches to this positive a negative in applying a ‘dependency’ label. This ‘dependency’ label enables our education system to separate out and position children with ‘disabilities’ into unique classroom structures in ‘inclusive’ environments. This is a social issue and a public concern. As will be illuminated in the literature review, we know very little about what is happening in these classrooms and for children with autism in mainstream placements (Daly et al., 2016; Parsons et al., 2009). This research project is positioned within a sociocultural perspective and holds that the actions of society elucidate the true nature of literacy experiences for and by learners with autism. It seeks to explain and explore the practices, structures, processes and policies that support or prohibit literacy development from a bio-ecological lens (Bronfenbrenner, 1994). The sociocultural bio-ecological model ‘recognise that

nature and nurture are intertwined and that development is fundamentally linked to the context in which it takes place' (Hayes, O'Toole, & Halpenny, 2017, p. 46)

1.7 Research Question

The scope of the enquiry within this research project focuses on the research questions, the vision as discussed earlier, and the objectives. This research seeks to explore the literacy practices of pupils with autism within the cultural setting of the mainstream school, and to explore how their home (culture) experiences support their literacy development. The research objectives are to:

- a) Consider the concept of literacy and being literate
- b) Examine the current curricula and its progression continuum
- c) Consider inclusion and its role in promoting literacy practices and skills for pupils with autism
- d) Consider the concept of autism and being literate
- e) Examine classroom practice and pedagogy to inform future directions

Research questions emerged from an exploration of the literature relating to literacy and autism. The questions formatted to this enquiry are:

How are literacy practices supported for pupils with autism in special classrooms attached to mainstream primary schools?

- a) What literacy practices do pupils with autism experience in mainstream primary schools?

- b) What are the influences on how literacy is constructed in school and at home for pupils with autism?
- c) What if any distinct pedagogies are used to enhance literacy practices among pupils in autism specific classrooms?
 - a. Do pupils with autism require specialist teaching to advance literacy practices?
- d) Do curricula, school policy and practices support the literacy experiences of pupils with autism in mainstream primary schools?

In essence, this qualitative research project sought to gain an emic perspective and an appreciation of literacy within education settings, and to communicate the reality of the teaching and learning of literacy in autism specific classrooms in mainstream primary schools in the Republic of Ireland. How teachers perceive and interact with learners with autism is knowledge that is critical to our child centred decision-making processes. Seven schools took part in the project with 34 pupils and 14 teachers being observed and 11 teachers and 23 sets of parents interviewed.

1.8 How this Thesis is Structured

Chapter one has presented the background to this research project from a national and international perspective. It has portrayed the philosophical stance in which the research is positioned. The questions, aims and objectives have been arranged to position the thesis within a sociocultural paradigm.

Chapter 2 presents the literature review in the areas of literacy, inclusion, autism pedagogy and curriculum as it relates to supporting pupils with autism in

mainstream education. It attempts to identify and articulate the relationship between literature and the field of research on autism and in doing so it provides a context for the research question and sub-questions.

Chapter 3 positions this research in a qualitative paradigm and demonstrates a focused approach to the methods employed within this research project. It qualifies the use of data collection instruments with the purpose of attending to and answering the research questions.

Chapter 4 organises the findings generated from the thematic analysis of the data corpus. It presents the ‘voices’ of parents and teachers on the concept of literacy and being literate, and it elucidates on the reality of literacy practise of pupils with autism in mainstream schools.

Chapter 5 discusses the project findings in relation to the published research in the field and provides an interpretation of the significance of the findings in relation to current and future practice and policy. It purposefully connects the findings to the research questions.

Chapter 6 draws the thesis to a close and highlights the key points of the findings and places them in context to current practice. It identifies how the gaps in the literature have been addressed and how this research adds to our current understanding of autism, literacy and being literate.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This literature review investigates, describes, summarises, evaluates and clarifies the key research in the areas of literacy, inclusion, autism, pedagogy and curriculum as it links to supporting pupils with autism in mainstream education in Ireland. It attempts to identify and articulate the relationship between literature and the field of research and in doing so it provides a context for the research question and sub-questions (see chapter 1, section 1.7).

2.2 Context

Evidence from the Department of Education and Science Inspectorate evaluation (Government of Ireland, 2006) has provided a platform for further investigation and exploration into the educational provision for pupils with autism in Ireland. This published evaluation sets out the complexities of the range of different approaches used for teaching and learning and school communities' interpretations of inclusive practice. The evaluation recommends that the goals of education and curriculum are (for pupils with autism) to progress in 'social, cognitive, verbal and non-verbal communication skills, adaptive skills, a reduction in behavioural difficulties and the generalisation of abilities within multiple environments' (Government of Ireland, 2006, p. 80). This evaluation specifically acknowledges the areas of literacy difficulties for pupils with autism and recommends specifically that education and curriculum should address

the social aspects of language, such as turn-taking, active listening, topic introduction, maintenance, and change. It should also incorporate the direct teaching of gestures, facial expression, vocal intonation and body language and use visual material or signing to facilitate the child's communicative initiations and responses. A clear and unambiguous language of instruction is also needed (Government of Ireland, 2006, p. 83).

The report also recommends further research-based investigations of effective best practice for pupils with autism. In response to this and other public debates such as Mr. Justice Peart's (2007) conclusion that an 'eclectic' programme of education being provided by the state is 'appropriate autism-specific educational provision', a review of literature has been under-taken by Parsons et al. (2009, p. 127). Recommendations from this review have called for

- (A) A more intense investigation into the impact of specific educational interventions. Further within this recommendation is the call for a study into age ranges and subgroups and, to obtain the perspectives of children and young people with autism.
- (B) An exploration of the types of intervention and settings correlating to the best outcomes for individual needs. In exploring best outcomes, it is required that a 'detailed assessment of the child, considering their individual profile and the needs and wishes of their family, are essential in making informed decisions about educational provision'. Also noted is the fact that a lot of research has focused on early intervention and there is a necessity to research the needs of the older child.
- (C) Key recommendation 6 highlights the need for more qualitative inquiries.

An American review of evidenced based programmes (EBP) in 2014 by Wong et al. (2014, p. 27) note the inclusion of 'new technology-aided instruction' which

expanded the classifications of type based on quality research in the area. They also noted that much research was conducted with predominantly male participants with little data collected on issues such as ‘race/ethnic/cultural diversity or socioeconomic status’.

Bond and Symes (2014), in their review of published literature of EBP since 2008-2013, also found limited quality research in the qualitative domain. Both reviews by Parsons et al. (2009) and Bond and Symes (2014) focused on the evidenced based interventions in areas of social, play, communication approaches, behaviour and learning via discrete trial training (behaviour approaches). An in-depth exploration of teaching and learning for literacy outcomes has not yet been conducted in Ireland.

2.3 Literacy in a Contemporary Context

Rapid advances in social experiences and technology have influenced cultures throughout the world; people are on the move from one cultural domain to another both in the physical world and the technological world via the World Wide Web (WWW). English as a language has been globalised along with competencies in computer technologies and many countries have placed emphasis on both these subjects in their school curricula. Kress (1997, p. 2) argues that the term ‘literacy’ has become ‘unstable’ in its definition. He seeks; that we critically examine the ‘literacy’ curricula we develop for children of this modern age and, make it more relevant to their potential in the decades to come. Further he suggests that a starting point is to observe and trust children as active participants in this fast and rapidly changing concept of literacy and being literate. A point of contention for Kress

(1997, p. 9) is that methods (modes) of communication such as ‘painting, drawing, building and play of various kinds... tends to be treated... as expressions of children’s feeling desires and emotions rather than as forms of communication’. He maintains, from a theoretical perspective, that evolving modes of communication constitute modern ‘literacy’ (Kress, 2014).

This debate is further reinforced as the United Nations Educational Scientific and Cultural Organization (United Nations Educational, 2006) advises that the concept and definition of ‘literacy’ has changed and evolved over the past century. Also highlighted is the fact that the term ‘literacy’ has held different meaning from country to country. Only in the twentieth century has there been a focus on generating a more collective definition for the term. ‘Literacy’ today, this report asserts, has ‘four discreet understandings: literacy as an autonomous set of skills, literacy as applied, practiced and situated, literacy as a learning process and literacy as text’ (United Nations Educational, 2006, p. 146). Literacy today, they contend also encompasses numeracy in skills of oral, reading and written communication modes. Further, literacy has been applied to many other skills such as ‘information literacy, visual literacy, media literacy and scientific literacy (United Nations Educational, 2006, p. 150). This development of the definition of literacy also locates it in a significant world economic view where the application of skills, move from the technical literacy to critical literacy. Kress (2003) argues against this and the interpretation of ‘literacies’ and holds, for example, that images are resources to present ideas and therefore don’t constitute a form of literacy but a mode of communicating meaning. He calls for a ‘radical rethink’ of extending the term and suggests that ‘literacy is a term to use when we make messages using letters as a means of recording that message’ (Kress, 2003, p. 23). Wells (2012) presents an

interesting interpretation of ‘literacies’ and suggests that it is an umbrella term for activities in being literate. He reasons this in the theory of Wittgenstein’s philosophy that literacies are a ‘family concept’ of being literate and he examples ‘games’ as activities sharing similarities but being compositionally different. For Wells (2012, p. 2) being literate means being human and using external symbols. He maintains that being human

involves the human mind, meaning, feelings, and purposes and they are externally symbolic because they use symbols and materials, numerals, alphabets, and paper and pencil, which are outside the mind, to represent other things. External symbol systems underpin the skills involved in reading, writing and human minds and purposes underlie the social practices in which activities are embedded.

In furthering the debate Kress (2003) suggests that we can ‘no longer treat literacy (or language) as the sole, the main, let alone the major means of representation and communication’ (Kress, 2003, p. 35). For Kress, meaning making needs to be re-conceptualised and the modes of presenting meaning. It is on this theoretical transformation from linguistics, historical, anthropological and educational viewpoints to the socio-cultural context of meaning-making that he rests his thesis in a multimodal theory of literacy. This Wells (2012) supports and validates, by positing that literacy is powerful in that it should be viewed and understood as composing of syntax and semantics (form and meaning). He presents four principles of the power of literacy;

- the potentially endless creation and existence of text
- the permanence of text allows for review, reflection and extended reasoning
- as the human mind engages with the social and cultural world of form and meaning, there is potential to advance the ‘literate’ state
- the properties of the symbols of literacy enable a greater foundational understanding of mathematics and technology

Wells'(2012, p. 4) definition of being 'literate' is quite straightforward, it means being human and having 'command of both syntax and semantics'. Being 'non-literate' he argues means not being able to make use of written form to generate a permanent record of meaning.

Literacy in Ireland

In Ireland, the National Council for Curriculum and Assessment (NCCA) are tasked on a statutory basis with developing innovative curricula and assessments for the advancement of all skills including literacy and numeracy skills. National and international examination of literacy has drawn attention to Ireland's 'literate' and 'non-literate' population (Eivers et al., 2010; OECD, 2010; Perkins, Moran, Shiel, & Cosgrove, 2011). These assessment results have influenced and driven policy change in Ireland and across Western society in a race to maintain and develop the 'skilled workforce' for better economic growth. In 1999, the implementation of a revised curriculum provided a change in understanding of the teaching and learning of literacy and an emphasis was placed on the central role of language across all subjects. While continuous professional development was provided to all teachers, for this new understanding, teachers reported that the curriculum was 'over-loaded' (National Council for Curriculum and Assessment, 2010). In response, the NCCA have undergone a reform of the language curricula for the junior primary age group (National Council for Curriculum and Assessment, 2016). This reform has lead, to the development of a new language curriculum to be rolled out in schools in the school year 2016/2017. Other policy changes have provided evidence of a change in perspective and advancements in the literacy debate. Aistear (the early childhood curriculum framework), for example has enabled a more focused view of the

importance of language development across the early years sector giving rise to a greater understanding of the role of play in the language arts curriculum (National Council for Curriculum and Assessment, 2010). Within the Literacy and Numeracy Strategy literacy includes:

the capacity to read, understand and critically appreciate various forms of communication including spoken language, printed text, broadcast media, and digital media (Government of Ireland, 2011a, p. 8).

The National Council for Curriculum and Assessment (2009) in defining literacy for an Irish education context suggest that literacy has to be considered across the life span of the person and should include dimensions such as cognitive, affective, socio-cultural, cultural-historical, creative and aesthetic. Further they contend that in the advancement of a broader conceptualisation of defining literacy that a semiotic position must also be acknowledged. Kennedy et al. (2012) also advocates for a semiotic position of literacy and therefore considers the role of semantics, syntactics and pragmatics.

Semiotic Mediation

Vygotsky, according to Hanfmann, Vakar, and Kozulin (2012) positions innate tools such as inner speech, imagery and the manipulation of concepts as associated with our culturally shared experiences. They assert, Vygotsky theorises that these innate cultural tools are tied to our developing mental functions and are the sociocultural patterns of how we learn to communicate and function within our shared environment and shared methods of meaning making. Halliday (1978) presents a Vygotskian Sociocultural interpretation of the acts of representation or meaning making as embedded in social processes or practices and that they rely on semiotic means.

Social Semiotic Theory

Halliday (1978) asserts that language is ‘a product of the social process’. The developing child, through engaging and interacting with the significant people in his/her life, generates an interpretation of signs and symbols that they themselves begin to use to communicate with. For clarity in the following discussion it is essential to define ‘semiotics’ as the study of meaning (signs) and ‘semiosis’ as the study of interpretation. Halliday (1978) places emphasis on the functional role of signs and their relevance to the social context in which they are used. Signs may differ in functionality from one society to another and it is the acknowledgement of the function of the sign within the context that leads to meaning making and interpretation. An example of this is:

Teacher: *Michael, where is John and why is he not in school?*

Michael: *He’s in the keyhole Miss, playing football.*

‘Key hole’ in that inner city north Dublin community means cul-de-sac and you have to be a member of the community (or a teacher) to know where John is, and further, reference to John’s activity implies that he won’t be coming in to school because football takes precedence. The teacher in this instance engages in code switching for meaning, taking the cultural and social context into consideration. These, Halliday (1978) states, are the variants in signs determined by the social context and he references Bernstein (1971) sociolinguistic theory of language codes. Bernstein (1971) identifies two codes of language ‘elaborate and restricted’. ‘Key hole’ according to Bernstein (1971) would exist in the ‘restricted’ code because it is only understood by the insiders of that particular community. From an educational perspective, the use of a ‘restricted’ code has implications for

underperformance in standardised literacy assessments and is therefore linked to educational failure. However, Halliday (1978) argues that educational failure is really a social issue and not a linguistic one. He holds that this is language ‘difference’ and it is difference in function rather than form. Wyse, Jones, Bradford, and Wolpert (2013) argue for the socially developed aspects of accents and dialect in the developing child’s literacy identity. It is this platform they contend on which the child uses their linguistic experience to engage with written standard text. O’Síoráin (2009, p. 220) in an examination of key writing skills development examples Amy’s vernacular emerging in her written communication ‘moi dant rexs moi head’. Amy, according to O’Síoráin (2009, p. 220), ‘has attempted to demonstrate her understanding of her dialect and the sounds of standard English’. She suggests that ‘moi’ is the dialect of ‘my’. Amy ‘hears oi as in oil and therefore inserts ‘oi’ instead of ‘y’’. From an Irish perspective, this correlates to the Irish government recognising that pupils from disadvantaged communities (where dialects differ) require additional support to generate understanding, interpret and use the signs and symbols of ‘standard’ language so as to support them in acquiring greater literacy skills and modes in which to communicate (Government of Ireland, 2005). The initial results from the Delivering Equality in Education in Schools (DEIS) initiative (Weir, Archer, O’Flaherty, & Gilleece, 2011) evidenced significant advances in literacy and numeracy skills within the first 5 years of the programme being implemented. This evidence demonstrates that support in acquiring additional literacy skills builds ‘embodied cultural capital’ for better outcomes (Bourdieu, 1986).

Multimodality

Kress (2003) and more recently Mingers and Willcocks (2014) have argued for an understanding of signs moving beyond written symbols to events, objects and behaviours that represent something other than themselves. It is the social meaning making and interpretation that lends the meaning to the form. Kress (2014, p. 60) proposes, ‘mode is a socially shaped and culturally given resource for meaning making’. He suggests ‘mode’ is a resource to semiotics (sign/meaning) and therefore the resources used by a culture are specific to the semiosis (interpretation) of that culture. Further he suggests, that modes while similar in form may be different in presentation from one culture to another. An example of this may be evidenced in the use of Irish Sign Language (ISL) among the Irish deaf community and the use of Lámh among the Irish Down Syndrome community. These are both hand gesture modes of communication however they have distinct similarities and differences such as Lámh uses simple hand shapes while ISL uses finger spelling. (Kress, 1997, 2003); Kress (2014, p. 63) identifies modes as ‘image, speech, gesture, writing, gaze and music’. He expands his theory by suggesting that in selecting a mode from the multimodal choices that the ‘sender’ is ‘fixing’ the meaning but in composing or shaping within the mode the sender ‘frames’ the communication for the ‘receiver’ to interpret the meaning. For example, in the mode of writing there might be the use of regular text versus **bold text**. In the same way, a brief glimpse may differ in meaning from a prolonged gaze.

Digital Technology as a Mode

A mode given significant attention and support in regular and special education is the use of digital technologies for communication including augmentative communications. Kress (2003) suggests that the move from books to screen has

produced a revolution in the effects of literacy and has enabled new means of communicating and being literate. He stresses the power that digital images have in reading pathways and he argues that all modes have a vital place in the language and communication pathways of being literate. New technologies Kress (2003, p. 6) advocates have advanced our ability to communicate and interact from a 'unidirectionality to a bidirectionality' and provides opportunities for greater authorship.

Mingers and Willcocks (2014) in addressing the new technological modes of communication suggest

Semiotics can be seen as the most fundamental of the social sciences since it underlies all communication and social action...semiotics has to consider both individuals, as senders and receivers, and technology as the medium in which signs are embodied and transmitted (Mingers & Willcocks, 2014, p. 51).

Pupils with autism who are minimally verbal, Xin and Leonard (2015) contend, find visual language on Augmentative and Alternative Communication (ACC) devices easier to manipulate. Murray (2012, p. 88) argues that computers and information technology offer opportunities for pupils with autism to focus attention 'with minimal risk of overload' and enable greater 'information connection and memory retrieval'. She claims the monotropic nature of engaging with technology supports the autism trait of tunnelling attention (monotropic state). This she reasons widens the attention window and does not, she disputes, narrow it. Murray (2012, p. 89) further explores 'why computers suit autistic individuals' and she claims that quality computer programmes can reduce the invasive nature of language that pupils with autism may experience. She advocates that pupils with autism 'should have a definite period every school day during which he/she will get 1:1 support at the computer' (Murray, 2012, p. 92). This she maintains allows the pupil with

autism to experience kudos among their non-autistic peers, broaden their willingness to co-operate and provides a motivation to communicate. Schools are collecting clothes, mobile phones and a range of goods for recycling to build points and tokens to exchange for items of technology such as iPads. Xin and Leonard (2015) propose a need for more research into the use of iPads as a means of communication and language exchange.

Literacy Definition

M. Rose (2007, p. 10) explores the complexity of skills required to be literate and he argues that defining it as the ability to read and write ‘tells us next to nothing about it’. He suggests that literacy is not ‘instinctive’ nor can it be simply acquired. It is, he contends, an ‘evolved human faculty’ dependant on ‘developmental pre-conditions’ (M. Rose, 2007, p. 17). He posits that literacy is a new kind of consciousness that is ‘focused on the inner world of the individual self’ (M. Rose, 2007, p. 17). There has always been a tension between the narrow definition of literacy as reading, writing and oral language and the broader conceptual definition of literacy. Freire and Macedo (1987) argue that literate behaviours are only evident and relevant in the social and cultural context in which they occur. They argue that literacy must connect directly to the lives of people and provide for them a way in which to communicate socially and to provide a release from the constrains of fixated mind-sets. A definition of literacy according to Freire and Macedo (1987) is personal to our own ‘reading of the word and the world’ (Meek, 1987). Kennedy et al. (2012) in their research report on literacy in early childhood education, provide a variety of definitions of literacy that suggests an instable conceptual understanding across policy makers. What is evident from this research report, and acknowledging Kress’ (2003) call for greater stability in the definition,

is firstly the need to identify what literacy is not and secondly to identify what it is especially for children with autism. Kennedy et al. (2012, p. 54) from a socio-cultural theoretical perspective suggest

literacy is not simply an individual cognitive activity, but is a communicative tool for different social groups with social rules about who can produce and use particular literacies for particular social purposes

They continue to argue (Kennedy et al., 2012, p. 56)

Literacy is not just reading and writing English text (in English dominant settings) but is a multimodal social practice with specific affordances in different contexts (Kress, 2003).

With this in mind and, acknowledging the difficulties children with autism may experience in literacy learning and practice (discussed below within section 2.6 of this chapter) the definitions of emergent literacy and literacy from the Aistear Framework (National Council for Curriculum and Assessment, 2009, p. 54 & 56) may support a suitable definition from a socio-cultural perspective for children with autism.

Emergent literacy is concerned with children developing a growing understanding of print and language as a foundation for reading and writing. Through play and hands-on experience children see and interact with print as they build an awareness of its functions and conventions.

(Literacy) is about more than having the ability to read and write. It is about helping children to communicate with others and to make sense of the world. It includes oral and written language and other sign systems such as mathematics, art, sound, pictures, Braille, sign language and music.

Smidt (2003) concurs with this interpretation and places emphasis on the variety of opportunities offered to children in enabling them to make sense of their world. She contends that play has a vital role in literacy definitions and that ‘making sense of this world of theirs is the prime work of early childhood’ (Smidt, 2003, p. 116). Inclusion therefore has a role to play in the literacy skills development of children

with autism. If literacy is explained by the definitions above it requires that we provide opportunities for children with autism to communicate with ‘others’ and to make sense of the world in which they live.

2.4 Inclusion

Ireland has declared and legislated, within the Education of Persons with Special Educational Needs (EPSEN) Act (Government of Ireland, 2004b), that the education of persons with special educational needs is to take place ‘wherever possible within an inclusive environment with those who do not have such need’ (Government of Ireland, 2004a, 2004b). The ‘inclusive environment’ is not clarified within the act and there is a clause that recognises the need for appropriateness of setting where the identified needs of the child dictate an alternative environment. The term ‘inclusion’ is regularly reflected upon across arenas of education both nationally and internationally. Its definition depends on the purpose of the debate and the clarity required for the discourse intention. Debates relating to ‘inclusion’ are evident from as far back as the 1770’s. Thomas and Vaughan (2004) name Thomas Paine (1737-1809), the political theorist, activist and revolutionist of that time as one of the first thinkers on inclusion and education for all. They also credit R. H. Tawney’s (1931) work “Equality” with being ‘modern in its attitude to difference’ (Thomas & Vaughan, 2004). They continue to acknowledge Tawney’s call to not only celebrate diversity but to recognise that barriers to inclusion are ‘caused by the social arrangements that society engineers’ Thomas and Vaughan (2004, p. 8).

The Rights Movement

Article 26 of the 1946 United Nations Education Scientific Cultural Organisation UNESCO Universal Declaration of Human Rights sets out that everyone has the ‘right’ to an education not by ‘accident of circumstance or as a privilege’ (<http://www.unesco.org/en/efa/the-efa-movement/10-things-to-know-about-efa/> accessed 7/11/13). In 1978, the Warnock Report brought the dilemma of special education provision to the attention of all nations. The Salamanca Statement (United Nations Educational, 1994) ‘endorsed the idea of inclusive education’ (Thomas & Vaughan, 2004, p. 8) and, emerging from that document and the ‘rights movement’ began the concept of ‘Education For All’ (EFA) (United Nations Educational, 2006). UNESCO, at the turn of the century, 2000, held a world education forum where the Jomtien Declaration set out a vision and purpose for EFA (Ainscow & Sandhill, 2010). This ‘rights based’ philosophy has driven national and global communities in their political ideology and policy developments to focus on ethical practice. Forums are essential in forming our thought processes and giving voice to new creative thinking and innovation as Slee (2006) contends. Interestingly he cites Ware (1995) who cites Lather (1986) who calls upon a dialogical agenda to become ‘transformative’ in our thinking about inclusion (Slee, 2006). This raises a question ‘how is the theory of inclusion applied in practice and does it support the development of literacy?’

Towards a Definition

UNESCO define inclusion as a ‘dynamic approach of responding positively to pupil diversity and of seeing individual differences not as problems but as opportunities for enriching learning, cultures and communities’ (United Nations Educational, 2005, p. 12). Further UNESCO particularise ‘change and modification in content

approaches, structure and strategies, with a common vision' for all and a 'conviction of responsibility' by the 'regular system' to 'educate all children' (United Nations Educational, 2005).

Norwich according to Terzi (2010) expresses 'inclusion' as a 'pluralistic framework' where emphasis is placed on respect for diversity and a sense of belonging to a community. In a three-country study of practice for inclusion as a 'pluralistic framework' Norwich (1993) determined that similarities in determining 'dilemma' as 'problem' focused on three areas: identification, curriculum and placement. He argues that this is a limited interpretation of the term and therefore hinders real examination of special and inclusive education. He also warns of the lack of sufficient analysis of social and political responses for inclusive ideologies, which are presented as rigorous theory and practice (Norwich, 1993). Cook (2003) suggests that inclusive ideologies are interpreted differently by different sectors of policymakers. Social policymakers, she contends, look more at the non-problematic notion of inclusion and integration, while educationalists, focus on the inclusion process and its problematic issue of 'education in an unequal society and how this can be achieved' (Cook, 2003, p. 111). Norwich (2007) expands on the 'dilemma of difference' by revisiting theories of pluralistic democracies by Dahl (1982), Minow (1990), Berlin (1990) and Stoker (1990). In doing so he draws attention to 'dilemma' as placing a value or choice where value or choice has implications for good and not so good outcomes depending on where the justification for the action lies. Appreciating the outcomes of pluralistic values, Norwich (2007) contends, leads to conflicts and contradictions in debates on equality and therefore not 'inclusive' in nature. An example of this is the 'Down Syndrome Equality of Access Bill 2013' presented to the Dáil for enactment. It

holds that pupils assessed as having this low incidence syndrome should be entitled and enlisted to resource teaching allocation as set out in the DES circular 'sp ed 02/05 section A'. This bill does not venture to support other assessed low incidence syndromes (as set out in section B) therefore setting a 'dilemma of difference' and presenting both an equality and an inequality value. This example supports Norwich's 'ideological dilemma' where decision-making and policy building to ensure inclusive, progressive and pluralistic values also present a wider 'dilemma of difference'. Terzi (2010) argues that if the broad ideal of equality is enacted as 'equal entitlement' to access, participation and outcome within education, then how we decide on the distribution of resources should demonstrate a philosophical morality to all abilities.

Interpretations of Inclusion

Thomas and Vaughan (2004) guard against the misappropriation of language intent within political discourse. Thomas and Loxley (2007) also warn of its possible misuse among politicians for the purpose of projecting an image of a wise and knowledgeable thinker but lacking the notion of action alongside the term. Clough (2009) also cautions us on how 'politicians, bureaucrats and academics' use the term to affect and sway debate. Tomlinson (1982) asserts the importance of clarifying the 'value positions' and 'vested interests' of such parties so that debate can be meaningful for change and development. Thomas and O'Hanlon propose that politicians in 'talking casually' about inclusion transmit an inaccurate impression that they are confident and informed on the finite aspects of inclusion. They reiterate Tomlinson's call for caution as this detracts from and diminishes a more comprehensive discussion and debate among the general population as they fall into a false notion that action on inclusive practice is being adequately

addressed (Thomas & O'Hanlon, 2004). Slee also notes the limitless number of groups and agencies who comment on or theorise on the ideology of inclusion, which has allowed 'all manner of thinking, discourse and activity to be passed off as inclusive' (Slee, 2006, p. 111). Thomas and Loxley (2007, p. 1) propose that over the past twenty years the 'focus of inclusive thinking is diversity and social justice just as much as it is mainstreaming and disability'. They progress the argument, with reference to Foucault, that the concept of difference is to mark the 'reality' of same and different so as to purposefully adapt practice for all needs and to 'reduce the gaps'. Foucault, they claim asserts that 'difference' is manufactured by 'regimes', 'systems' and 'power' but if not acknowledged and the 'different' not given voice only lead to segregation, not respect for diversity (Thomas & Loxley, 2007, p. 81). It is this respect for diversity that Thomas and Loxley advocate to 'minimise' forms of domination or segregation (Thomas & Loxley, 2007). Norwich (2007) found that knowledge of 'dilemmas of difference' contributed to the relevance of debating special education policy and the practice of inclusion. Ainscow, Booth, and Dyson (2006) suggest two definitions of inclusion, one being rhetoric bound and based on descriptive and the other being prescriptive focused on the proposed action and/or the 'standards agenda'.

Armstrong, Armstrong, and Spandagou (2011) associate four roots to the rhetoric of inclusion within social policy: voice of parents, teacher and advocates for students with disabilities, the role of special education as a means to inclusion, accountability in practice and embracing diversity, and lastly the developmental needs of the student. United Nations Educational (2005) advises that advancing the notion of inclusion requires action from the community in macro and micro responses. In particular 'mobilising opinion, building consensus, carrying out local

situation analyses, reforming legislation and supporting local projects’ (United Nations Educational, 2005, p. 16). Ainscow et al. (2006) in debating the place of ‘standards agenda’ in inclusion and general reform in education has created a greater ‘accountability culture’ and in doing so ‘potentially bypasses the participation of teachers in their own work and disengages schools from their local communities’ (Ainscow et al., 2006, p. 296).

Alongside the development of the notion of ‘inclusion’, Ireland has developed a pathway called a ‘continuum of provision’ to ensure that there is a fluid mind-set as to the quality of the provision rather than solely based on placement issues. In their research into international trends and definitions Rix, Sheehy, Fletcher-Campbell, Crisp, and Harper (2013) reveal that ‘inclusion’ remains as a diverse term from country to country. They contend that there still exist approaches that range from ‘full inclusion’ to ‘an incomplete position’. Rix et al. (2013) determine that the term inclusion for the ‘continuum’ means ‘effective and meaningful involvement within services or provisions’.

An Equitable Model

Another term closely linked in political and academic discourse with ‘inclusion’ is ‘equity’. In Ireland, the debate around ‘inclusion’ includes and recommends actions such as justice, fairness, impartiality and modification. In 2012, the OECD published a spotlight report “*Equity and Quality in Education: Spotlighting Disadvantaged Students and Schools*” in which they define ‘equity’ as

Equity in education means that personal or social circumstances such as gender, ethnic origin or family background, are not obstacles to achieving educational potential (fairness) and that all individuals reach at least a basic minimum level of skills (inclusion)

Further the OECD contends that the ‘highest performing systems across OECD countries are those that combine quality with equity’ (OECD, 2012, p. 14). Ainscow, Dyson, Goldrick, and West (2012) emphasis the impact of wider politics of the teaching profession, of decision-making at a national level, of whole system approach to equitable school improvement. They examine ‘ecology of equity’ as how the macro and micro community ‘interacting processes’ affect pupil experiences in school. Further they posit that to achieve a more equitable (as in rightful, impartial, justifiable, and fair) education experience for our pupils, those involved in education must acknowledge the importance of links between areas of ‘within schools, between schools and beyond schools’. In the same published article, however Ainscow et al. (2012) proclaim that to effect ‘understanding and developing inclusive practices in schools’ the researchers were required in their role as ‘critical friends’ to offer research-based evidence to free ‘practitioners from the constraints of national policy’ (the main emphasis being on standards) to allow them to ‘change their value positions and assumptions’. The OECD report previously mentioned also notes how education policies can provide obstacles in delivering both equitable and quality education. Ainscow et al. (2012) found that when teachers and schools were engaged in supported reflective practice via the ‘critical friend’ the standards ‘agenda’ and the inclusion ‘agenda’ became ‘intertwined’. They note that teachers engaged proactively in targeting specific inclusion issues reference standards and vice versa. Each agenda provided a platform for change, enhancement and enrichment of the other agenda except in cases where schools held strong beliefs and this prevented any flexible thinking.

Teacher Attitudes and Inclusion

Shevlin, Winter, and Flynn (2013) in an exploration of ‘teacher attitudes about inclusion and the perceived constraints to inclusive practice’ highlight empirical research on the importance of the role of teachers in establishing inclusive practice. Their research concurs with national and international findings that initial and on-going professional development in special educational needs remains a serious concern for teachers (Florian & Linklater, 2010; Woodcock & Hardy, 2017). A specific challenge, identified by teachers, is their own vulnerability in supporting children/groups of children with challenging social and emotional behaviours (Shevlin et al., 2013). Florian and Black-Hawkins (2011) also raise concerns relating to teachers who hold ‘deterministic beliefs associated with bell-curve thinking about ability’, they suggest that these teachers place learners with special educational need (SEN) in particularly ‘vulnerable’ positions. Also, they suggest that this vulnerability is further ‘compounded’ when teachers ‘believe’ that ‘specialist teaching’ is required (Florian & Black-Hawkins, 2011, p. 813).

The World Health Organisation (2011) in its *World Report on Disability* advocate the ‘appropriate training of mainstream teachers is crucial if they are to be confident and competent in teaching children with diverse needs’, they continue to highlight that this training requires focused attention on attitudes, values, knowledge and skills (World Health Organisation, 2011, p. 222). This presents as a point of contention for Florian and Linklater (2010) who argue that it is not about teacher knowledge, skills and competencies relating to learners with SEN but more about utilising knowledge and being flexible in approaches to ensure that any learner who experiences difficulties can be supported. They argue for a rethink on pedagogical approaches to inclusion and provide evidence from research to support a move away

from historical individualised programmes of support to the development of ‘rich learning environments characterised by lessons and learning opportunities that are sufficiently made available to everyone’ (Florian & Linklater, 2010, p. 370).

Teacher Education Reform

The European Agency for Development In Special Needs Education (European-Agency.Org, 2011) sets out to affect reform in initial teacher education (ITE) to ensure capacity, skills and competencies within the teaching profession for the diverse classroom of the 21st century. Their research spotlights special education as a ‘specialism’ in ITE and identifies that less than 10% of the 29 countries involved, at the time of their study (2010), offered modules in this area. Also, identified within this research was the variance of content relating to inclusion across modules. They conclude by suggesting that the model of ITE (emerging from research in Iceland to address inclusion/diversity) should focus on inclusion as a ‘continuum, rather than a distinct approach’ (European-Agency.Org, 2011, p. 25). ITE in Ireland has undergone major reforms to support a more inclusive education system; all teacher-training colleges have included modules for teaching pupils with specific special educational needs and for diverse learning styles. The Teaching Council of Ireland have mandated the inclusion of a module ‘inclusive education (special education, multiculturalism and disadvantage, etc.)’ to ensure that newly qualified teachers have a ‘high level of beginning competences to be built on through the continuum of teacher education’ (Teaching Council of Ireland, 2011, p. 13). Modules in school placement have also been extended to include a special education placement so that student teachers get access to observing an expert practitioner within the field of special education. The definition of inclusive education is yet again placed under the spotlight and demonstrates the limited thinking linking

inclusion solely to special education. Thomas (2013) raises an important argument for our consideration relating to inclusive thinking and the structures of ITE programmes. He suggests that the future of inclusive education ‘hinges on its ability to retreat from histories of identify-assess-diagnose-help and to examine the ways in which schools enable community and encourage students’ belief in themselves as members of such community’ (Thomas, 2013, p. 486). The new model of resource allocation to be rolled out in Irish schools in the coming year 2017/2018 seeks to provide a more equitable and fair route to inclusive education (National Council for Special Education, 2014). The new model relies on the stakeholders being able to develop a school educational profile to identify and assess needs, to provide a baseline level of support to all classrooms, before targeting additional resources to those ‘with the greatest level of need’ (National Council for Special Education, 2014, p. 6). This relies on the school’s professional capacity of knowledge, skills, and competencies and the disability approach to supports. Florian and Pantic (2017) maintain that many of the proposed reforms to more inclusive approaches do not address the preparation of the teacher to work with the growing diverse needs of learners. In fact, they argue that this lack of attention to teacher education limits and maintains the idea that ‘special qualifications’ are needed to work with different student/learner groups.

On-Going ‘Inclusion’ Developments

The term ‘inclusion’ itself continues to emerge and evolve from international expositions on the development and progression of an egalitarian society. In Ireland, the Education Act (1998), the Education Welfare Act (2000), the Equality Act (2004), the Disability Act (2004), and the Education of Persons with Special Educational Needs Act (EPSEN) (2004) safeguards the rights of the people of the

nation to an appropriate education to meet the full potential of the individual alongside their peers. However Shevlin et al. (2013) cite Drudy and Kinsella's research (2009) where they contend that

Inclusion has been too narrowly conceptualised as only involving children and young people with special educational needs and the concept of inclusion needs to focus on developing school capacity to respond to diversity including children and young people from ethnic minorities and from disadvantaged communities (Shevlin et al., 2013, p. 1121)

United Nations Educational and Scientific Organisation (UNESCO) has defined 'inclusion' as determined action to ensure that marginalisation, restriction or exclusion of any persons from full participation in society is eradicated. It explicitly determines that knowledge and respect of 'difference' be valued and protected (United Nations Educational, 2001). Miles and Singal (2010) explore the arguments surrounding 'inclusive education'. They draw attention to the rhetoric of removing barriers to learning or where the focus of 'inclusion' is for pupils with special educational needs/disability exclusively and where 'inclusion' fills the gaps in learning for socio-cultural reasons. They maintain that national and international organisations should champion the need to improve teaching and learning environments for all. Mittler (2013) positions the United Nations Convention on the Rights of Persons with Disabilities (CRPD, 2006) (entered into force 2008) to the fore of future movements in 'inclusion'. He asserts that 140 countries have 'signed up' to engaging in a process of action and accountability for reform in the areas of standards and provision for a more equitable education for persons with special educational needs. A decade on from 'signing up' to engage in this process Ireland has yet to ratify and validate these rights.

The Role of Parents: An inclusive model of collaboration

The SERC Report (Government of Ireland, 1993) drew attention to the importance of including parents and enabling them to have an active part in the decision making process about the education of their child with special needs. Since this report has been published much attention has been given to ensure that parents are included and key legislation now provides statutory rights (Government of Ireland, 1998, 2000, 2004b). That being said, Griffin and Shevlin (2011, p. 240) assert that this does not necessarily guarantee that the relationship will be a ‘collaborative experience’. There has been much research on the impact of supporting a child with a disability on family life and it is well acknowledged that they experience ‘chronic vulnerability’ on the receipt of a diagnosis (Griffin & Shevlin, 2011, p. 244). In the case of parents of children with autism, the policy advice from the National Council for Special Education (2015, p. 14) acknowledges ‘the additional emotional, practical and financial stresses’ of supporting a child with autism across the lifespan of the disability. Importantly they advise that parents, siblings and carers require additional supports and knowledge to equip them to sustain positive family life for all the family members. McGoldrick, Carter, and Garcia-Preto (2014) present evidence from research with families of children with disabilities, on the impact of the disability on the traditional functioning roles of family members. They assert that the normal patterns of family life present normal patterns of stress that can be dealt with by the traditional roles of family members. However, they contend that when a child is born into the family with a disability this creates more difficult vertical and horizontal life stressors that may create a ‘dysfunction of the system’ or a break in the family life cycle (Carter & McGoldrick, 2005). This ‘dysfunction’ may appear as a de-skilling or loss of

coping and capabilities strategies or even separation. A number of salient points are advanced by Preece (2014) in his research with families. Most notably the stress related impact of the diagnosis and the marital status of families involved. He noted that of the fourteen families involved in his research, 50% were separated and the father had minimal or no contact with the family. He advises a cautious interpretation of his study and similar studies and suggests that research on the impact of living with a child with autism may be limited in design and may focus mainly on the voices of 'parents'. In fact, he further argues that predominantly the 'parent' or 'family' perspective is that of the mother's as it is usually mothers who step forward as available participants. The voices of fathers, he asserts, are under-presented and require further investigation. Current research on the impact on families has serious implications for how the role of the family is conceptualised in relation to the decision-making process for their child with autism.

2.5 Special Educational Needs

As briefly discussed in the introduction chapter, the use of the term *special education* within Ireland has historically evolved through the identification of need to provide and protect those who demonstrate a level of vulnerability and even a risk to the general 'well-being of the community' (Griffin & Shevlin, 2011). In early medieval Ireland, the Brehon Laws supported the customs and unwritten rules of society. These laws focused on restitution rather than punishment and placed a value on protecting the rights of people with diminished ability.

When a person was judged to have exploited, neglected or abused a disabled person who had some land or resources or the 'power of amusing', there was a fine imposed on the guilty party of five cows. However if the offence had been committed on a person whose

disabilities were such that he was completely dependent on society, was without resources and had no capacity to amuse, the fine was doubled to ten cows (Griffin & Shevlin, 2011, p. 31)

Griffin (2006) proposes David Manson's (1775) educational philosophy as a significant development in special education in Ireland. In particular Griffin states that Manson's pedagogical approach was 'deliberately accommodating to pupils with learning disabilities and behavioural problems' (Griffin, 2006, p. 134). Historical events of the 18th century saw more people experiencing extreme poverty and deprivation and the establishment of asylums and workhouses to provide 'separate containment' (Griffin & Shevlin, 2011, p. 37). Internationally and nationally the medical profession were relied upon to cure all ills and to protect and improve the potential development of the economy. It wasn't until the 19th century that the emphasis shifted to institutional segregation of individuals with reduced cognitive ability and or sensory deficits. Swann (2000) is cited by Inclusion Ireland as identifying three periods of progression in special education in Ireland: the era of neglect and denial, the era of special school, the era of integration and inclusion (Inclusion Ireland, 2005). In the late 20th century pressure from parent bodies, institutions, researchers and rights activists ensured that special education provision became a significant focus. The Warnock Report (1978) in particular made significant recommendations, which had an enormous impact on the debate around special education internationally. Recommendations, which supported strong debates, included removal of inappropriate labelling, early identification of need, early support and intervention, the importance of parents in the decision-making process, provision within the community, provision among 'typically developing' peers and professional development of teachers. Ireland responded to these recommendations by enabling pupils with a mild general learning disability to be enrolled in special classes in mainstream schools (Griffin & Shevlin, 2011). An

important development in Irish historical terms emerged in the 1990's with the publication of the Report of the Special Education Review Committee in 1993. This policy document held that:

- All children have the right to an appropriate education
- The needs of the individual child should be considered when determining provision
- Parents are entitled to be active agents in the decision-making process
- The development of a 'continuum' of services
- Appropriate education for pupils with SEN should be provided in ordinary schools except in exceptional cases
- Only in exceptional cases should children live away from home when pursuing education
- The state should provide adequate resources for pupils with SEN to avail of an appropriate education (Government of Ireland, 1993)

The 21st century has seen enormous changes in education policy in general and in the legislation for right of access, participation and outcomes for diverse needs. In particular, it has been necessary to define our understanding of special education. The Education of Persons with Special Educational Needs Act (2004) defines special education as

“special educational needs” means, in relation to a person, a restriction in the capacity of the person to participate in and benefit from education on account of an enduring physical, sensory, mental health or learning disability, or any other condition which results in a person learning differently from a person without that condition...
(Government of Ireland, 2004b)

Current Provision for SEN

Identification and educational provision for pupils with special educational needs has grown rapidly in Ireland over the past two decades. The international drive for inclusive practice has supported the expansion of Ireland's interpretation of special education and additional learning needs (an international term). In 1993 and 2001 two major court cases challenged the states interpretation of 'primary education'

and provision for pupils with special educational needs. The EPSEN Act's (2004) definition of special education broadens the categories under which Irish society must acknowledge and address diversity of need for equality of access, participation and outcome. It acknowledges the 2001 Supreme Court ruling that primary education ends at 18 years of age. Further the EPSEN Act (2004) asserts the importance of being educated alongside typically developing (TD) peers in an inclusive setting. Ireland has had and continues to provide a range of settings for pupils with special educational needs. These placements range from enrolment in a mainstream class with additional learning support/resource hours, in a special class within a mainstream school and in a special class in a special school. The National Council for Special Education (2013) acknowledges current inclusive practice and they have published a 'guide for parents and guardians of pupils with special educational need' to support parents in their decision making process on appropriateness of placement. Within this document, the NCSE make the claim that 'the majority of children with special educational need now attend their local primary or post-primary main stream school'. This claim is further supported by McCoy et al. (2014), however they also provide evidence that this segmented approach to supporting learners with SEN is also exclusionary. They provide evidence that suggests that while the majority of learners with SEN are enrolled in mainstream school; 50% of them spend the majority of their day in their 'special class' while 21% never leave their 'special class' and never interact with TD peers. Cullinan (2017) reaffirms these concerns and provides further evidence that learners with SEN 'did not experience a level of social acceptance on a par with TD peers' (Cullinan, 2017, p. 34).

2.6 Autism (Is ?)

‘Autism is a neurobiological disorder of development that causes discrepancies or differences in the way information is processed’ (Frith, 1970; Janzen, 1996, p. 5). We process information through our central nervous system, the brain and the spinal column. Biologically the central nervous system functions as a processor for the whole-body relaying messages to support learning and thinking, understanding and responding. When abnormalities develop in the central nervous system a spectrum of developmental disabilities or delays manifest. Pupils with autism may present with significant attention difficulties due to under/over sensitivity to environmental stimuli. This presents as ‘weak central coherence’, a significant challenge to cognitive and social functioning as the pupil may be selective about what they attend to and may not be aware of the whole context of the experience therefore missing the ‘big picture’ (Happe & Frith, 2006).

Autism affects learning, thinking and functioning in a variety of ways and is unique to the individual. The Task Force Report on Autism advises a ‘pattern of life-long disorder whereby individuals with an autism spectrum disorder continue to be ‘autistic’ throughout their lives’ (Government of Ireland, 2001, p. 26).

Powell and Jordan steer professional thinking towards a deeper understanding of autism and learning with less focus on the diagnostic medical model of the past (Powell & Jordan, 2012). They argue for the use of new diagnostic criteria set out in the *Diagnostic and Statistical Manual Of Mental Disorders 5* (DSM 5) by the American Psychological Association (American Psychiatric Association, 2013). According to Powell and Jordan (2012) the new criteria offers a move away from a medical model to a ‘dimension’ for educational diagnosis. They further propose that autism does not occur in a ‘pure’ form and children may present with other

general or specific disabilities. They advocate the use of the term ‘autism’ as a means of recognition of the broad spectrum of disabilities within the new diagnostic criteria of the DSM5. They acknowledge a commonality of disturbances across the different syndromes within the autism spectrum. Further they determine this supports a better understanding of the patterns of autism features and ‘unique learning styles’ (Powell & Jordan, 2012). The two-symptom cluster is now comprised of development delays in social communication and the existence of restricted, repetitive behaviours. The DSM 5 also defines the level of severity as:

1. Requiring support
2. Requiring substantial support and
3. Requiring very substantial support (Sipes & Matson, 2014).

Autism Isn’t

Autism isn’t an illness. It’s a different way of being human. Children with autism aren’t sick; they are progressing through developmental stages as we all do. To help them we don’t need to change them or fix them. We need to work to understand them and then change what we do (Prizant & Fields-Meyer, 2015, p. 4)

Prizant and Fields-Meyer (2015, p. 5) assert ‘there is no such thing as autistic behaviours’. All behaviours they contend are human behaviours and human responses based on human experiences of our interactive worlds. They caution against the concept of autism as being a unique phenotype and suggest that the ‘unregulated enterprise’ of professionals (with this mentality) offering autism treatments has generated a deficit model approach to support. This, they further argue, has de-skilled parents and educators and created a limited understanding as to the flexibility required to supporting people with autism to be their unique selves. They dispute the idea that the behaviour of people with autism are ‘random, deviant

or bizarre’ and particularly they disapprove of the intention of certain professionals of ‘eliminating’ behaviours such as hand flapping or echolalia (Prizant & Fields-Meyer, 2015, p. 4). They condemn a behaviourist approach that seeks to ‘eliminate behaviour without fully understanding its purpose’ this they claim is not just ‘unhelpful’ but also demonstrates a ‘lack of respect for the individual. Worse it can make life more difficult for the person with autism’ (Prizant & Fields-Meyer, 2015, p. 27).

Prizant and Fields-Meyer (2015) suggest that in the field of autism ‘behaviour’ has developed a negative connotation and they further warn against the behavioural assessment approach and the use of checklists in practice. They contend that these observations detract from a correct ideology and lead to a cycle of thinking and acting failure. This, they maintain positions a deeper deficit model of autism into practice and actions. They example; ‘Why does Rachel flap her hands? Because she has autism. Why has she been diagnosed with autism? Because she flaps her hands’ (Prizant & Fields-Meyer, 2015, p. 17). A shift is called for by Prizant and Fields-Meyer (2015) in the way we see autism and particularly in the way we behave as professionals in supporting children with autism. This requires a move in attitudes about behaviours as deficits and a positive view of behaviours as strategies of being and existing. Being a responsive parent and practitioner for children and young people with autism is about naturalistic observations that ask ‘why?’ of behaviours rather than managing behaviours (Powell & Jordan, 2012; Prizant & Fields-Meyer, 2015; Tutt, Powell, & Thornton, 2006).

Autism and Social Learning

Children with and without autism live in multi-layered, interactive and, in constant flux social, emotional, physical, intellectual and spiritual worlds. How children

function in these environments is regularly judged and commented on and references made about being adaptive and flexible. A complex area for non-autistic people to comprehend is the irregular responsive behaviours of children with autism to their environment. Conn (2014, p. 13) makes a salient point when she suggests that the focus should not be on clinical features such as ‘sensory, perceptual, motor and affective experience of the condition’ but rather on the socio-cognitive domain. As mentioned above autism can affect many aspects of thinking and learning and these have implications for play behaviours and social skills of children and young adults with autism.

The process of play in early years has long been associated with successful literacy development and, particularly narratives to emerge from play support the development of cognitive narratives. Conn (2014) contends that the research literature into play behaviours and categories of children with autism is limited. Carpenter, Pennington, and Rogers (2002) argue that because autism is unique to the individual so too are the play patterns and behaviours of each child. Boyd, Conroy, Asmus, McKenny, and Mancil (2008) in an investigation of play-based interactions support the argument that children with autism interact better in small group or 1:1 peer-instigated events than adult-instigated events. Friendship is an essential element to play-based interactions and Conn (2014) asserts that a dyadic two-way activity enables the child with autism to engage and interact. Parsons et al. (2009), Wang, Sandall, Davis, and Thomas (2011), and Conn (2014, p. 19) suggest there is a paucity of ‘robust empirical research’ in naturalistic setting that explore the social development and play interactions of children with autism. Conn (2014) advises research should be conducted in truly naturalistic setting, meaning children with autism alongside children without autism. This she suggests is vital

because of the ‘complex nature of the social phenomenon of play, interaction, friendship and the emotion involved’. She further contends this ‘probably accounts for the often-noted “fuzziness” of the concept in the literature on autism’ (Conn, 2014, p. 23).

Communication and Literacy Skills

Interaction is fundamental to communication and one of the most difficult areas for adults working with children with autism is that these children may not see communication in the same attractive way or be motivated to communicate like typically developing children (Davies, 2012). Difficulties in social communication present challenges to literacy skills development. TD children use observation and mimicking to learn language and communication. They use both verbal and non-verbal mechanisms to receive and relay information in a social context. They naturally internalise and generate understanding of the functions of language, reading and writing. Children with autism may not develop this ability at the ‘normal’ milestones and therefore the messages have less meaning and understanding. As a result the mechanics of language development for social situations and relationships are not acquired successfully and lead to social communication deficits (Powell & Jordan, 2012; Zager, Wehmeyer, & Simpson, 2012). Late language development, limited language ability or diminished language ability have frequently been the early concerns of parents at initial diagnostic conferences and are given significant weighting to the diagnosis of autism (Lanter, Watson, Erickson, & Freeman, 2012). Alpern (2012) cites significant research into early language development and stages of language development as essential knowledge for supporting language and communication difficulties in pupils with autism. In particular she emphasises the importance of

understanding that pupils with autism have ‘deficits in communication rather than speech’ (Alpern, 2012, p. 282). Davies (2012) supports this argument and proposes that while the lack of speech is usually the first symptom identified as concerning, it is ‘only a symptom of a more fundamental problem... the principles of communication’ (Davies, 2012, p. 119). Davies (2012) also stresses the importance of home and environmental experiences in communication practices. She suggests that all areas of communication between parent/guardian and their child need observation and support. When children with autism and communication difficulties have more success with their primary care giver they have more success in school and in other social settings (Davies, 2012). Davies (2012) advocates that early intervention in interaction and communication skills is most important. She argues that waiting for a sign or a signal from the child on where to begin is futile and the need to teach early communicative exchanges in the home is essential for success in school. In critiquing Davies work, Powell and Jordan (2012) contend that the message is that teaching communication to children with autism ‘requires the highest degree of professional expertise and art’ (Powell & Jordan, 2012, p. 133).

2.7 Autism – Teaching and Learning

Children with autism will need a kind of schooling which includes, as a planned part of the curriculum, teaching those skills and aspects of knowledge that they find difficult yet which are accepted as spontaneous or ‘natural’ for non-autistic. They will need to be *taught* to recognise their own emotions and those of others, to ‘read’ the intentions of staff when they give instructions, to interpret ‘motivating’ messages, to transfer knowledge from one circumstance to another, and to understand the meaning of the whole (Powell & Jordan, 2012, p. 11)

It is well debated that pupils with autism require a curriculum specifically developed for their particular learning styles and needs (Guldberg, 2010; Iovannone, Dunlap, Huber, & Kincaid, 2003; Powell & Jordan, 2012; Tutt et al., 2006). Powell and Jordan (2012) advocate a curriculum where emphasis is placed on communication and interpersonal skills with a focus on teaching cultural norms and meanings. Further they stress the importance of training children with autism in imitation and observational skills and in supporting them to synthesise and transfer these skills to alternative social settings especially with peers. Powell and Jordan (2012) also support analysis of teaching and learning in autism. They state that teacher knowledge of learning patterns and skills development in TD pupils enable the teacher to evaluate and analyse teaching and learning in pupils with autism.

Learning through movement is a natural early learning mechanism in the TD child. Children learn through sense impressions how to recognise, interpret and process information from the environment. The perceptual-motor system, in the form of our senses, transmits information to the cerebral cortex of the brain and these messages stimulate responses in movement and behaviour. From these concrete experiences the child builds a conceptual movement model and builds patterns of mental sequences. From these connections TD children acquire executive functioning processes, that allow the child to plan, organise, strategise, attend to, remember and manage information (Bee, 2007; Macintyre, 2009). S. Goldstein and Naglieri (2014) suggest

executive functioning has come to represent a number of mental processes which allows individuals to use thought to govern behavior and to perform complex activities involving planning, organizing, strategizing, controlling and sustaining attention and self-management (S. Goldstein & Naglieri, 2014, p. ix)

Simpson, Ganz, and Mason (2012) notably identify three specific aspects of executive functioning as ‘inhibition, cognitive flexibility and working memory’ and they theorise that children with autism exhibit impairments in all these areas. Behaviour, according to Janzen (1996), is determined as a communication and reflects the rational, reasonable and analytical response to stimuli within the situation and context. For children with autism the impact of deficits in social learning presents ‘an incredibly pervasive effect on the ability to interpret the social world and to respond to typical situations’ (Janzen, 1996, p. 46). Barton and Harn (2012, p. 12) identify developmental delays in joint attention, imitation, pretend play and play with peers as significant ‘early red flags’. Alpern (2012, p. 282) further highlights that development in joint attention and characteristic play and social behaviours are ‘significant predictors of language acquisition’. Barton and Harn (2012) contend that teaching specific behaviours such as gaze shifting, and motor imitation within natural social interactions, play-based activities with an increased focus on manipulative and peer participation is essential for pupils with autism. Janzen (1996) notes, among areas of difficulty, the literal interpretation of language. She indicates that while children and adults with autism might demonstrate good verbal ability they seldom correctly interpret the meaning of the communication.

A Summary of Prevalence Issues

Prevalence of autism nationally and internationally over the past two decades appears to demonstrate a significant rise within populations. However, without critical data from all countries this is difficult to measure accurately from a whole world perspective (Charman, 2011; Grinker, 2011; Kim et al., 2011). Within

Europe and the United States diagnosis of autism is now more accessible and is also notably beginning prior to school enrolment. Assessment criteria have also developed and correspondingly this is expanding the prevalence figures as it focuses on the broader diagnostic features of the spectrum. Hall (2013) emphasises how variances in definitions and methods used internationally in surveying prevalence challenge data collection. While investigating research from within the United States she further argues that variances such as ethnicity weaken prevalence data on a national scale, as they are 'not representative of the nation'. Current prevalence figures (for educational support) in Ireland are advised by the National Council for Special Education (2015, p. 3) as 1.55% of the population. This provides a significant shift in previous figures quoted: Government of Ireland (2006) estimated figure of 56:10,000, and Staines and Sweeney (2013) figure of 1:100. General knowledge of autism has grown considerably with the provision of teacher education courses provided by the Special Education Support Service (SESS) for teachers in autism specific classes.

Current Provision for Pupils with Autism in Main-Stream Primary Schools in the Republic of Ireland

In 2013, due to the increased number of learners with autism in the school system, the then Minister for Education and Skills sought policy advice from the NCSE regarding the current and future education provision for students with autism. The resulting policy advice document (National Council for Special Education, 2015) identified that by December 2014 there were 13,873 students with autism enrolled in the school system. Of these 13,873 students

- 63% were being educated in mainstream schools
- 23% were being educated in special classes (autism) in mainstream schools

- 14% were being educated in 118 special schools
(National Council for Special Education, 2015, p. 4)

This policy advice also evidenced that 73% of all special education classes were approved as autism specific. These were primarily based in primary schools and consisted of early intervention classrooms for pupils aged 3-6 years and follow-on classrooms for pupils aged 6-9 years and 9-12 years. Where classes exist in secondary schools Banks et al. (2016) found that they were of a mixed age group, covering the full life-span of secondary school.

An important theme to emerge in the National Council for Special Education (2015) policy advice relates to ‘confusion’. Parents of pre-school pupils with autism were found to be confused about the placement options available and the different approaches espoused by certain early-years intervention providers. It also found a need for intense focus on raising the quality of early intervention provision and the access to assessment services. Confusion was also found across the system in the purpose and role of the special autism class. Stakeholders were found to be limited in their thinking relating to enrolment and possible learning outcomes for learners with autism. In fact, the policy advice suggests that the current special class model may not be suitable and especially in post-primary settings. The review panel suggests, to deploy specialist teachers with appropriate skills, knowledge and competencies in the role of learning support and resource teachers and to consider disbanding the special class provision in secondary schools.

2.8 Educational Interventions and Best Practice for Pupils with Autism

Guldberg (2010) in a review of literature on ‘best autism practice’ in early years sets out certain ‘preconditions for inclusion’ for pupils with autism spectrum disorder. She emphasises the importance of a ‘transactional approach’ to inclusion. She advocates a need for environments, personnel and curricula to be flexible and accommodating stating that learning happens for pupils with autism through a process of ‘transactions between individuals’. Guldberg (2010, p. 170) continues to argue that

Intervention therefore needs to be a two-way process that relies on typically developing people adapting their communication styles and their learning environments to the person on the spectrum

Education and care provision for pupils with autism has frequently had positive and negative publicity. More recently, in Ireland, there are education and welfare issues surrounding the appropriateness or inappropriateness of the Applied Behaviour Analysis (ABA) approach, sensory and/or ‘quiet’ rooms and the implementation of inappropriate ‘crisis’ intervention strategies

(May 20th 2014, <https://www.irishtimes.com/news/education/the-battle-over-aba-autism-education-in-limbo-1.1798534>).

Methodological approaches and curricula while recommended by policy and guidelines remain a challenge to implement because of the vastness of the spectrum (Simpson, 2005). There have been many debates and legal challenges about the appropriateness of programmes and settings.

Simpson (2005, p. 143) contends that

successful identification and implementation of effective practices will best be made at a local level by groups of professionals and parents who possess the most knowledge and information about individual students

Mr. Justice Peart (May 16th 2007) upheld that an ‘eclectic programme’ offered by the Irish state was ‘appropriate autism specific educational provision’. Simpson (2005) stresses the need for the intervention/programme to be matched to the individual student’s needs. He calls explicitly for ‘treatment fidelity’ and asserts that if the methods are not adhered to as specified within the original method research then it is ‘likely’ that expected outcomes will not emerge. Parsons et al. (2009, p. 5) however, advise that the diversity of need across the spectrum means that ‘one type of approach or intervention is unlikely to be effective for all’.

2.9 Pedagogy within Specialised Units in the Republic of Ireland

Set within the Report of the Task Force on Autism (Government of Ireland, 2001, p. 111) is the recommendation for a ‘reflective practitioner model...where the system has the capacity to be flexible’. Educational approaches identified and evaluated by the Department of Education and Science (Government of Ireland, 2006) are separated by category:

- Interactive approaches (Intensive interaction, Dir™ Floor Time)
- Communicative approaches (Total Communication Approach-Augmentative and Alternative communication, Picture Exchange Communication System (PECS) and Lámh
- Integration approaches (**LEAP** Life-skills Education for Children with Autism and Pervasive Development Disorder. This is a US based government funded early-years service for children aged 3-5 years with autism. Similar programmes are funded in Ireland through the Health Service Executive (HSE) (e.g. Jonix and the Shine Centre for Autism). The Department of Education and Skills (DES) has also funded pre-school early-years intervention classes in mainstream primary schools to support and facilitate community needs.
- Behaviour approaches (Lovaas- ABA, Contemporary ABA (CABA)

- Discrete Teaching approaches – The Treatment and Education of Autistic and Communication related handicapped Children (TEACCH) (Government of Ireland, 2006, p. 15)

The Special Education Support Service add to this

- Social Stories™
- Information Communication Technology

(<http://www.sess.ie/categories/autismautistic-spectrum-disorders/aspergers/tips-learning-and-teaching> accessed 30/04/2014)

Language and Communication

The Revised Primary School Curriculum (1999) identifies learning through language as a key principle. Specifically, it holds that learning takes place through communication in language and experience. Further it requires that an essential methodological component of all lessons should be ‘talk and discussion’. Talk and discussion is deemed to enhance ‘the exploration of ideas, emotions and reactions through increasing complex language, thus deepening the child’s understanding of the world’ (Government of Ireland, 1999, p. 15). Elements within the new Primary Language Curriculum describe essential aspects of language learning:

- Developing communicative relationships through language
- Understanding the content and structure of language
- Exploring and using language (Government of Ireland, 2016)

A key feature of children with autism is (as outlined earlier) a difficulty in communication such as in exchanging and sharing of ideas, thoughts and emotions (Kalyva, 2011; Powell & Jordan, 2012; Wetherby & Prizant, 2005). The Oxford English dictionary defines communication as ‘imparting or exchanging information by speaking, writing or using some other medium’. The original Latin word ‘communicatio’ means ‘to share’. Research estimates that 50% of people with autism are non-verbal or have no functional communication (Barton & Harn, 2012;

Rhea, 2008; Wetherby & Prizant, 2005). Communication skills training for children with autism is deemed an essential focus for curriculum (Potter & Whittaker, 2001). In Ireland, The Report of the Task Force on Autism identifies what it calls as two ‘promising’ programmes (the Hanen approach <http://www.hanen.org/CMSPages/PortalTemplate.aspx?aliaspath=%2fHome> and Picture Exchange Communication PECS (Bondy & Frost, 1994)) to be implemented in supporting language development with the additional contributions of a speech and language therapist (Government of Ireland, 2001, p. 111). H. Goldstein (2002, p. 373) in an evaluation of empirical studies of intervention programmes indicates the use of ‘interventions incorporating sign language, discrete trial training and milieu teaching procedures have been used successfully to expand the communication repertoires of children with autism’. He suggests that the wide range of communication intervention programmes has embraced linguistic domains such as comprehension, production, social use of language form, semantics and pragmatics. He further posits that children with autism may have difficulties across a variety of linguistic domains and identifying the appropriate communication intervention programme requires prioritising areas of greater need. Rhea (2008) provides a detailed review of literature on interventions for early communication. He details the breakdown of interventions into three categories: didactic, naturalistic and developmental/pragmatic. Didactic approaches recognise and begin from the current level the child is at and focus on skills the child requires. Opportunities are presented in logical and fact-based forms and the child is prompted to respond (H. Goldstein, 2002; Paul & Sutherland, 2005; Rogers, 2005; Wetherby & Woods, 2006).

Rhea (2008) provides an example of this in discrete trial training, where the task is broken down into component parts and the child is trained to complete each aspect of the task sequentially. It is predominantly teacher centred as opposed to child centred and ‘lead to a passive style of communication, in which children respond to prompts to communicate but do not initiate communication or transfer the behaviours acquired to situations outside the teaching context’ (Rhea, 2008, p. 838). The naturalistic approach is according to Rhea (2008) slightly less teacher directed and uses targeted outcomes set by the teacher. The child is provided with reinforcements based on the child’s preferred object/likes. Contemporary ABA falls within the bracket of the naturalistic approach.

The developmental/social-pragmatic approach is characterised by following the child’s lead and allowing the child to instigate a natural progress to language development. In this instance, the child is considered ‘pre-verbal’ as opposed to ‘non-verbal’ and the theory is based on the principle of ‘delayed’ language development. Rhea (2008) suggests ‘proponents of this approach advocate the use of a variety of non-verbal forms of communication as “stepping stones” to speech’. He suggests the central principles as

- Following the child’s focused lead
- Focusing on the lines of development in language acquisition
- Provide intense experiences in the natural activities of typically developing peers for social and communicative growth
- ‘Seize the moment’ use the naturally arising ‘teachable moments’ that occur within the context of the child’s day to exploit learning opportunities
- Target specific skills development for functional, practical outcomes
- Valuing the role of the pre-verbal/non-verbal behaviours in the development of language (Rhea, 2008, p. 840)

Intervention programmes that fit into this developmental/social pragmatic model include Intensive Interaction, The Hanen Approach, Augmentative and Alternative Communication strategies (aided and unaided) including Picture Exchange Communication (PECS), Lámh ™ (sign language) and ICT (the use of switches and technology and voice output communication devices (VOC)) (Bondy & Frost, 1994; Chawarska & Volkmar, 2008; H. Goldstein, 2002; Paul & Sutherland, 2005; Rhea, 2008; Wetherby & Prizant, 2005; Wetherby & Woods, 2006). A major feature of the effectiveness of the developmental/social pragmatic model is the capacity of the teacher/parent/caregiver in successfully implementing the intervention programme. As stated previously (Simpson, 2005), the integrity the intervention programme requires, on the part of the persons implementing the programme, is an in-depth knowledge, competence and confidence. This implies a requirement for on-going professional development and training to build capacity for success and effectiveness (Rhea, 2008). Rhea (2008) concludes when deciding on a didactic, naturalistic or developmental/social pragmatic model:

Little research exists on the relationship between child characteristics and intervention efficacy, so we do not know which approach is the best match for a particular child. What does seem clear is that communicative deficits in preverbal children who have autism are amenable to treatment and that a range of treatments has been shown to be useful in enhancing communicative behaviour (Rhea, 2008, p. 845).

Intensive Interaction

Caldwell (2013, p. 33) provides an exact definition

Intensive interaction is an approach that uses body language to facilitate positive engagement with non-verbal children and adults with intellectual disabilities and or autism and with whom communication is difficult. Positive outcomes include a deepening of emotional engagement as measured by increases in eye contact and social responsiveness and a reduction in distress (challenging) behaviours.

Intensive Interaction (Nind, 1999) emerged as a methodology for supporting communication and learning in the 1980's in Britain following the Education (Handicapped Children) Act of the 1970's. Education of pupils with severe/profound disabilities focused primarily on psychological/behaviour approaches and this according to Caldwell remains the situation in the United States. Intensive Interaction is practiced in Europe where there is less emphasis on scientific quantitative measurements of outcomes (Caldwell, 2013). The main function and aim of Intensive Interaction is on building relationships and natural forms of communication similarly to very early development. The purposeful role of the peer/adult or communicative partner is in ensuring an equality of power and offering a unique inclusiveness to social and communicative behaviours. The role of the communicative partner extends once relationships are established to encouraging and eliciting the most effective social and communication strategies at a developmentally appropriate level. Nind (1999, p. 96) contends that there has been a focus on past research on the 'special' as opposed to the 'naturalistic' intervention processes and this draws attention away from the 'intuitive' responding and the 'rich interactive opportunities offered by able peers and siblings'. Many debates still exist into how effective this intervention could be considering the vast spectrum of autism and particularly the area of social communication and the lack or impairment of 'connection' and 'awareness'. Rizzolatti, Fabbri-Destro, and Cattaneo (2009) and Ramachandran and Oberman (2006, p. 62) propose that 'mirror neurons', in the frontal lobe cortex of the brain, control motor movements and enable us to 'determine the intentions of other individuals by mentally stimulating their actions' these neurons they claim are under-functioning in children with autism. However, much research has evidenced that there is advancement of

the interaction between the care-giver and the pupil/child in the intensive interaction experience (Caldwell, 2013; Hewett, Firth, Barber, & Harrison, 2012; Nind, 1999). Most particularly, Nind (1999) argues that the emergence of intentional vocalisation and ‘motherese’ (Snow, 1977) provides sufficient evidence of emerging language development opportunities, the concept of sharing meaning, the ‘want’ to communicate and turn-taking skills.

The Hanen Approach

The Hanen Approach™ is a clinical intervention originating from Canada. It is constructed of manualised programmes with the aim to enhance the early intervention services for language development. It has a parent lead ideology to intervention and trains the parent to perform the language therapy for their child within the child’s social context and settings (Weitzman, 2013). Privately registered practitioners primarily host training for parents, speech and language pathologist and educators in Ireland and costs vary according to the length of training and the specific programme.

Augmentative and Alternative Communication Systems (ACCs)

Augmentative and alternative communication enables communication via aided and unaided systems other than speech and written modes (Barton & Harn, 2012; Rhea, 2008). Picture Exchange Communication System is an aided communication system and is more readily available to the class teacher and family as it does not require expensive technology. It is also a more recent (1994) methodology developed specifically for use with children and people with autism and communication difficulties. Bondy and Frost (1994) developed this sequenced training programme to address prompt dependency and limited spontaneous use of other picture/symbol programmes implemented by speech therapists. The protocols

outlined in PECS are founded on the principles of applied behaviour analysis (ABA) and include behaviour, developmental and interactional perspectives (Bondy & Frost, 2001). Ganz and Simpson (2004) (in a study of three participants being trained in PECS) also contend that there is a dearth of scientific experimental evidence to examine the efficacy of PECS use in children with autism. In a review of literature, they cite many studies where PECS was determined to support non-verbal exchanges and a reduction in challenging behaviours however they found little to support Bondy and Frost's (2001) claim that using PECS would enable the development of speech. Kalyva (2011) in a critical analysis of alternative communication approaches state that Bondy and Frost's (1994) claim that many children who are trained in PECS develop speech. This she challenges declaring a lack of scientific evidence. Refocusing on Ganz and Simpson (2004) experimental study however suggests that the three children engaged in PECS training did in fact emerge as functional word users. The fact that all three participants were verbalising and had a restricted language use prior to using PECS only indicates that they formed an understanding of the four phases of the system: picture exchange, increased distance, picture discrimination and sentence construction.

Advancements in technology and the ideology of inclusion have enabled vast developments in aided systems such as voice output communication aides (VOCAS). These can be 'low tech or high tech' where the child activates a switch and a response is generated via an electronic voice. Switchboards can be as simple as having only one button to complex computer systems with touch-screens (Rispoli, Franco, van der Meer, Lang, & Camargo, 2010). Tincani and Zawacki (2012) provide an evaluation of research in the use of VOCAS on communication skills for children with AUTISM and they claim 'it is difficult to characterise the

overall effectiveness' of this approach as there is such a diversity of systems used to address individual needs. VOCAS require the child to be able to recognise the symbolic meaning of the switch and to intentionally touch it to elicit an adult/carer response (Tincani & Zawacki, 2012, p. 176). Tincani and Zawacki (2012) also emphasise the importance of the maintenance of the device and indicate that a technological specialist is required to ensure proper use.

While the underlying theory for implementing aided and unaided augmentative and alternative communication is ABA in nature it is also used with TEACCH.

Applied Behaviour Analysis (ABA)

Alberto and Troutman (1999) support the principles of Skinner's (1957) behaviourist approach in operant conditioning where the emphasis on learning is a response to a stimulus. Applied behaviour, according to Cooper (1982), is the manipulation of the environment (stimulus) to affect a behaviour (response). He further asserts that quantifiable precise measurement is needed to satisfy the criteria of analysis of behaviour outcomes. Lovaas, Smith, and McEachin (1989) according to Kalyva (2011, p. 2) argue autism as a 'syndrome of behaviour deficits and excessive reactions that have a neurological basis' which can be corrected by controlled structures. Applied Behaviour Analysis is a clinical intervention 'typically' delivered by a Board Certified Behaviour Analysts (BCAB) (Foran et al., 2015) and is not 'routinely supported by governments in much of Europe, with the notable exception of Norway' (Dillenburger, 2011, p. 1121). Powell and Jordan (2012, p. 133) suggest that

strict behavioural approaches became popular in special education in the 1960's and 1970's because they seemed to offer accountability and a technique that could be used without professional knowledge or skill'

ABA focuses on the observation and measurement of behaviours; these behaviours are explored for functionality and purpose and then considered for modification. Behaviours are assessed in the context of where they have been observed and examination of the antecedent, the behaviour and the consequence is considered. Kalyva (2011) argues that ABA not only looks at reducing or stopping undesired behaviours but also is concerned with establishing and promoting ‘appropriate and desirable behaviours’ (Kalyva, 2011, p. 4). As with all approaches there are advocates and opponents and Kalyva (2011, p. 9) argues that ABA has ‘fanatic followers and opponents’. She draws attention to the manner in which it is implemented and suggests that as with any programme it needs to reflect and respect the child it is being implemented with. Historically implementation and programme design has raised concern in Ireland and this programme has had to undergo standard reviews of application. In Ireland, the Department of Education and Skills (DES) via the Special Education Support Service (SESS) fund ABA training for teachers of children with autism. This programme of training now applied a more moderated approach to behaviour analysis and is titled Contemporary Applied Behaviour Analysis (C-ABA). ABA is considered as a therapeutic approach applied via a therapist on a one-to-one. Parent involvement in this programme requires that the parent adhere strictly to the programme methodologies and objectives, and their role is as a therapist as opposed to a parent (Kalyva, 2011).

TEACCH Programme

(Treatment and Education of Autistic and Communication related handicapped Children)

Mesibov and Shea (2010, p. 571) describe the TEACCH approach as ‘Structured Teaching’ based on the principle of autism being a ‘pattern of neuropsychological

deficits and strengths' that they call the 'Culture of Autism' (Mesibov, Shea, & Schopler, 2004). Mesibov and Howley (2003) advocate that 'structured teaching' enables learners with autism to access the curriculum. Howley (2015) presents a collective sample of research evidence that supports a thesis that using a TEACCH approach enhances student 'engagement, behaviours and independence' (Howley, 2015, p. 109) Structure within 'structured teaching' relates to the teacher engaging in highly organised and planned timing, sequencing and patterns of learning with an emphasis on the role of the environment (Mesibov & Shea, 2010). Kalyva (2011, p. 19) proposes that while there are elements of behaviour principles within this programme, she asserts the difference is in maximising skills rather than 'recovery' from autism. Kalyva (2011, p. 20) presents TEACCH as

TEACCH is an individualised instruction programme, every child in every classroom needs different levels of structure. Low functioning students will need more structure and more limits and directions or prompts in comparison to high functioning students.

The structure and layout of the classroom environment is vitally important to the implementation of the daily lessons and the general organisation and plan for the day. TEACCH works on the premise that children with autism are reliant on visual strategies. On entry into the classroom the learners move to a visual schedule and establish a movement routine working from individual, small group and whole class lessons/activities. It promotes collaboration strategies; parent/teacher, teacher/learner, learner/learner and teacher/teacher (Kalyva, 2011). Howley (2015) in an examination of the literature on 'structured teaching' identifies gaps in research evidence. She asserts that research has not revealed 'what children with autism are learning and why they are learning what they are learning', 'the social validity' of structured teaching and the effects of the programme on the 'inner experiences and well-being' of the learner (Howley, 2015, p. 110). Howley (2015)

concludes that there is insufficient evidence to suggest that this programme provides a holistic approach to teaching and learning. She suggests, like Parsons et al. (2009) that more significant research is required if a 'whole' picture is to emerge.

She advocates research into

- The what, why and how children with autism learn
- The perception of those implementing structured teaching
- The impact of structured teaching on the 'soft outcomes' and quality of life (Parsons et al., 2009, p. 111)

Social Stories™

Carol Gray is heralded as the champion of the Social Stories movement (Attwood, 2010). She developed social stories to enable children with autism to understand and manage their own engagement and involvement in society. Gray (1994) holds that children with autism because of their difficulties with Theory of Mind (Baron-Cohen, 2008) perceive social situations differently and in doing so mis-interpret or fail to understand social rules, cues and context. This may present the child with insecurity, anxiety or aggression (Kalyva, 2011).

A Social Stories™ describes a situation, skill or concept according to ten defining criteria. These criteria guide story development to ensure an overall patient and supportive quality, and a format, "voice" and relevant content that is descriptive, meaningful, and physically, socially, and emotionally safe for the audience. The criteria define what a Social Story™ is, and the process that researches, writes and illustrates it (Gray, 2010, p. xxv).

Attwood (2000) in exploring the characteristics of social integration of children with Asperger's Syndrome (now referred to as autism) suggests Social Stories™ are created to provide important person-centred information such as feelings, actions and expectations. He further suggests that there is information provided to 'script...what to say or do...in other words, the what, when, who and why aspects

of social situations' (Attwood, 2000, p. 90). Kalyva (2011) posits that Gray (1994) and Gray and Garand (1993) suggest Social Stories™ are more appropriate for learners with high-functioning autism. However, she holds that the structure of the Story in the 'framework of TEACCH' can be used with children with low-functioning autism (Kalyva, 2011, p. 52).

Play-based Support to Teaching and Learning

Early play has well been established as an important interactive learning experience for young children (Bruner, Jolly, & Sylva, 1976). A particular important element of early play is the development of understanding of games with rules. This is cited as a vital developmental stage in young children's ability to reason a lived experience through an imaginary play-based experience (Piaget, 1976; Vygotsky, 1976). Jordan and Libby (2012) assert that play can contribute to the overall development of the child with autism. They argue that play has a role in the curriculum for children with autism. Interestingly play is very rarely referred to as a supportive pedagogical tool for teaching children with autism. This may be because it is viewed as a possible deficit characteristic of children with autism. Children with autism can be described as playing awkwardly or inappropriately (Kalyva, 2011). Play behaviours are one of the first signs looked for by assessment teams and diagnosis includes reference to observed play-based behaviours. Conn (2016) offers this as a narrow view of autism and suggests it is linked with 'bell curve' thinking (Florian & Black-Hawkins, 2011). She further emphasises that in relation to autism the focus is placed on pretend play and other forms of 'play are overlooked' (Conn, 2016, p. 2). Jordan and Libby (2012) identify symbolic play as a possible support to the development of concepts and cognition. They also draw attention to the limited value placed on play versus other pursuits such as 'work'

(Jordan & Libby, 2012, p. 25). Conn (2016, p. 2) cautions that the literature on autism and play positions play ‘as a set of skills to be learned or a series of actions to be performed, with little sense that play exists as a result of the child’s intrinsic motivation and interactive response to the world around’. Mesibov, Howley, and Naftel (2016) advocate for the use of visual structures to support learners with autism in engaging in play activities. They suggest that children with autism may need the visual structures of the TEACCH programme to guide them through the rules, component parts and turn-taking elements of play with peers. Jordan and Libby (2012) in advocating a play-based curriculum for children with autism also identify the TEACCH programme’s visual strategy as a key component. They are adamant that play ‘can and should be a valuable part of the curriculum for pupils with autism, facilitating all aspects of development- the social, the cognitive, the emotional and the communicative’ (Jordan & Libby, 2012, p. 36).

2.10 Literacy Teaching in Autism Classrooms in the Republic of Ireland

Having grounded the project in a Vygotskian Sociocultural perspective required exploring what is known about literacy (beyond reading) and autism for and from parents, practicing teachers and researchers in the field, along with the contributions of pupils with autism where appropriate. Literature on literacy and autism primarily focuses on reading behaviours and behaviourist approaches to the teaching of reading. Also evident was a dominance across research on testing for standards in reading behaviours. Therefore, this type of research did not need repeating and since the objectives were to enhance our understanding and interpretation of literacy as a broader concept, this literature review required a much more focused

observation of being literate within a culturally relevant context. Consequently, literature that presented a narrow focus on literacy as a reading behaviour was deemed by the researcher as criteria for exclusion. The same was determined where writing and oral language presented solely as literacy. Inclusion criteria emerged as a definition of literacy that provided greater exploration of literate acts and practices within social and cultural settings. Language used to explore databases sought to open the possibilities for current and emerging research. Literacy for example is a limited term in definition and therefore needed to be explored across reading, writing, oral language, speaking, listening, non-verbal communicative behaviours, communicative intent and literacy practices. As determined by Westerveld et al. (2017) and Parsons et al. (2009) few studies were found on the subject of literacy skills and practices and none were found relating to the Republic of Ireland.

Daly et al. (2016) in their evaluative research on educational provision for students with autism in the Republic of Ireland found that teachers used a range of strategies and autism specific methodologies to support and accommodate communication. However, the study did not evidence literacy practices or literacy teaching specifically. As of now, 2017, there has been no recognised research on the literacy practices of children with autism in mainstream Irish primary or post-primary settings. Lanter et al. (2012) determine that ‘few studies have examined emergent literacy skill development in young children with ASD’. In an international review of literature on ‘best practice provision’ Parsons et al. (2009) cite three studies exploring some elements of ‘literacy’ development; Cihak (2007), Delano (2007) and Browder (2007). The search of the literature available on autism and literacy focuses more on reading skills development and behaviour for learning. Kluth and Chandler-Olcott (2008) further contend that what literature exists is very narrow in

its focus. Further they caution, that within some research there exists labels suggesting a strong link between autism and educability. Potter and Whittaker (2001) maintain that research literature across the subject of autism generally focuses on communication deficits within the triad (now dyad) of impairment. Communication interventions (as presented above) are well debated especially the social aspect of communication and there are significant writings on strategies to employ to support better outcomes (Conn, 2014; Davies, 2012; Farrell, 2012; Pierangelo & Giuliani, 2008; Potter & Whittaker, 2001; Powell & Jordan, 2012). The Special Education Support Service (SESS) provide continuing professional development (CPD) modules and courses for teachers in the area of communication but not on literacy in general. Carnahan and Williamson (2010) have provided key writings in the broader area of literacy. However, there is a significant requirement to investigate the unique approaches to unique needs and the shared understanding of supporting positive literacy outcomes for pupils with autism. A key finding of empirical and expert research from Parsons et al. (2009, p. 6) suggests that additional research is needed ‘on the impact of specific educational settings and interventions across a range of ages and subgroups within autism’.

2.11 Assessment for Skills Development

‘Assessment is an essential component of teaching’ (M. Russell & Airasian, 2012, p. 2). A crucial element of the Revised Primary School Curriculum (Government of Ireland, 1999) and the New Primary Language Curriculum (Government of Ireland, 2016) is the central role of assessment in the teaching and learning process. The curriculum provides a guide to the teacher on specific skills, competencies, information and attitudes of the pupils within an age and subject cohort. Each area

of the curriculum has a section dedicated to the appropriateness of assessment use and its role in identifying specific learning styles and needs. The role of assessment is extended to ensure that it becomes an integral part of a triad of planning for teaching and learning and goes beyond the notion of testing. Figure 1 (below) sets out the inter-relationship between planning and assessment (M. Russell & Airasian, 2012, p. 59).

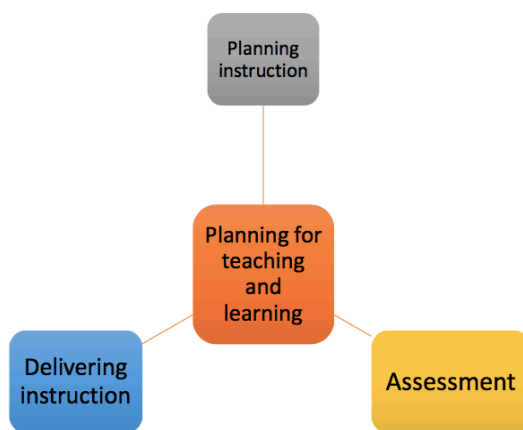


FIG. 1 INTER-RELATIONSHIP BETWEEN PLANNING AND ASSESSMENT (M. RUSSELL & AIRASIAN, 2012, P. 59)

The main purpose as outlined by the National Council for Curriculum and Assessment (2007) in their guidelines for schools, is to generate a documented learning journey of a child's progress and achievements during primary education. Research into 'quality' teaching and learning emphasises the level of teacher engagement with the assessment process. 'The end goal of assessment is improved educational outcomes for students' (Salvia, Ysseldyke, & Bolt, 2012, p. 9). The NCCA signpost assessment as 'classroom practice' and provide the following diagram, Figure 2 below, as indications of the teacher's action in this process. Most notable is the importance of the role of conferencing with pupils about their learning and it provides a platform for pupil involvement in the decision-making process of

what, how and why learning will take place. The NCCA call this a ‘re-envisioning’ of assessment (National Council for Curriculum and Assessment, 2007, p. 8)



FIG. 2 ASSESSMENT AS CLASSROOM PRACTICE (NCCA, 2007, p.8)

Within this guideline document the NCCA also extend the functions of assessment and determine two principle aspects for attention: assessment for learning (AFL) and assessment of learning (AOL). It is within the AFL that there emerges a role for the pupil in leading the assessment and taking a reflective role in self-evaluation.

Assessment is also required to provide accurate evidence of progress in learning for education partners such as other teachers, education professionals, parents and the pupils themselves. It also provides evidence of quality in education (Government of Ireland, 1999). Watkins (2007, p. 30) found that all countries (in a project involving 23 individual countries to address supporting a more

educational/interactive approach to assessment within inclusive settings) were ‘considering using assessment information to inform monitoring of educational standards’. She cites England particularly as having advanced significantly in this area

All assessment in England must be seen in the context of the government’s priorities of raising standards of achievement and school improvement. These priorities apply to all pupils of all abilities (Watkins, 2007, p. 30)

Watkins (2007) continues to suggest that countries are presented with a significant challenge when using assessment information from individual pupils including those with SEN to monitor and focus on raising standards. She posits that international comparative studies such as OECD PISA are likely to impact on national expectations and accountability. International and national studies on general pupil assessment outcomes in literacy and numeracy provide evidence that Irish pupils still present as underachieving on international norms. In 2009, the OECD PISA study focusing on assessment of reading found that 18% of Irish 15 year olds were performing below the level considered to be functionally literate (Perkins et al., 2011). These results have been subject to scrutiny and considered erroneous (Conway & Murphy, 2013), however Ireland as a result and in response has set out a major strategy to address falling literacy and numeracy skills among school age children, school leavers and young people ‘Literacy And Numeracy For Learning and Life: 2011-2020’ (Government of Ireland, 2011a). The National Council for Curriculum and Assessment (2007) also highlights the legislation in relation to inclusive practice and indicates that schools be aware of the use of appropriate assessment for pupils who may encounter barriers to assessment as a result of a SEN.

The literacy and numeracy strategy 2011-2020 focuses particularly on ‘effective school and educational interventions that can improve learning outcomes substantially for all students’ (Government of Ireland, 2011a, p. 10). An area given significant priority is assessment and evaluation. The strategy states ‘our collection and analysis of information about student learning in literacy and numeracy need to be improved significantly’ (Government of Ireland, 2011a, p. 73). This call for improvement also emanated from teachers themselves through the ‘Primary Curriculum Review, Phase 1’ (National Council for Curriculum and Assessment, 2005) in which they asked the question “How do you quantify how ‘good’ a child is at creative writing, reading for pleasure etc.?” Teachers have asked a relevant question ‘what are the acknowledged standards to be achieved within each phase of the curriculum?’ The strategy also identified that teachers need ‘clear examples of what learners should know or be able to do when they have mastered the learning outcomes at each level in the curriculum’ (Government of Ireland, 2011a, p. 73).

The strategy *Literacy and Numeracy For Learning and Life* (2011-2020) also includes the raising of literacy and numeracy outcomes of pupils with special educational needs. Significantly it prioritises the role of ‘assessment’ along with

differentiation and personalisation in teaching and learning as vital skills for all teachers and Early Childhood Care and Education (ECCE) practitioners in all contexts but particularly important in the case of children and students with special educational needs

Further it proposes to

ensure that schools prioritise the tracking, assessment and analysis of the achievements of students with special educational needs as part of the school’s self-evaluation and improvement process. (Government of Ireland, 2011a, p. 66)

During the school year 2013-2014 educational systems, schools and teaching staff of pupils with special educational needs were expected, for the first time, to gather data on learning and to provide evidence of pupil advancement in literacy and numeracy skills (DES 2012, circulars 0056/2011 and 0018/2012). Douglas et al. (2012) acknowledge assessments as set out in Aistear: The Early Childhood Curriculum Framework (National Council for Curriculum and Assessment, 2009) as moving to more inclusive practice enabling the pupil to lead the assessment of and for learning. However, they criticise the appropriateness of access to these assessments for pupils with special educational needs where the pupil is required to be able to comment on, think about and make decisions about future learning (Douglas et al., 2012). Within the *Inclusive Education Framework: A Guide For Schools On The Inclusion Of Pupils With Special Educational Needs* (National Council for Special Education, 2011) inclusive assessment is also mentioned as good practice. However, it neglects to discuss or promote teacher education around the notion of inclusive assessments or on how schools and teachers can devise and implement an inclusive assessment policy.

The focus of assessments of the literacy and numeracy strategy as set out in the Department of Education and Skills circulars 0056/2011 and 0018/2012 are based on standardised testing in English reading and Mathematics at end of 2nd class, 4th class and 6th class. While this will allow schools to plot progress in these specific standardised assessments it does not promote the overall development of literacy or numeracy skills and abilities as developmental progression. Black and William (1998, p. 1) caution ‘a focus on standards and accountability that ignores the processes of teaching and learning in classrooms will not provide the direction that teachers need in their quest to improve’. They further argue that if policy and

national strategies demand a rise in standards surely standards should be clearly defined. The Department of Education and Skills in its ‘Whole School Evaluation’ appraisals have recorded teachers as effective curriculum developers that look for ways to provide and implement a high-quality curriculum to advance learning into the 21st century. They acknowledge the role of multimodal texts and media and the change in problem solving approaches required for this digital age. This is evidenced by Department of Education (2013) inspectorate Whole School Evaluation reports an example of which states

The quality of teaching in English is very good. The language proficiency of pupils is very impressive in all classes. Literacy development is very well monitored. Systematic structured teaching is occurring from infants upwards. The Jolly Phonics focus gives great consistency to the development of reading skills. There is an excellent expertise within the staff and teachers are able to orchestrate effective and interesting instructional episodes for pupils and generate interest and enthusiasm. There is a great variety in teaching methods with a wide range of teaching materials, including information and communication technology (ICT) available (http://www.education.ie/en/Publications/Inspection-Reports-Publications/Whole-School-Evaluation-Reports-List/report1_20335T.pdf)

Kennedy et al. (2012) acknowledge that ‘quality’ teaching methods establish effective learning and that teaching pupils with special educational needs ‘may require a greater degree of adaptation to teaching methods.’ The report further contends that pupils with special educational needs may ‘require high levels of practice, more examples of a concept, and greater error-free learning to master key skills. Others may benefit from intensive multi-sensory learning opportunities’. The report continues to advocate that assessment supports the identification of specific learning targets for the development and implementation of an Individualised Education Plan (IEP).

Chapter Summary

This chapter has reviewed the literature relating to literacy, inclusion, autism, pedagogy and curriculum. It explored the theoretical underpinnings of autism and being literate and draws attention to the significant lack of knowledge and research in this area, and it raises an important question: How are literacy practices supported for children with autism in special classes attached to mainstream primary schools in Ireland?

The literature review has also analysed the context for teaching and learning and positioned the importance of inclusion and inclusive practice within the contemporary context of literacy learning and practice. Sub-questions emerge from this review as it highlights a lack of awareness of pedagogical practices for better learning outcomes.

What literacy practices do pupils with autism experience in mainstream primary schools?

What are the influences on how literacy is constructed in school and at home for pupils with autism?

What if any distinct pedagogies are used to enhance literacy practices among pupils in autism specific classrooms?

1. Do pupils with autism require specialist teaching to advance literacy practices?

Do curricula, school policies and practices support the literacy experiences of pupils with autism in mainstream primary schools?

It has established a concept of autism that positions it within a Vygotskian sociocultural understanding of ability within a shared cultural environment.

CHAPTER 3: EPISTEMOLOGY

3.1 Introduction

This chapter sets out to articulate the theoretical underpinnings of the research. Firstly, it will address the philosophical journey of the decision-making process and present the researcher's justification for the approach and methods employed. The project was conducted in three phases and the following figure 3 sets out the details of each phase.

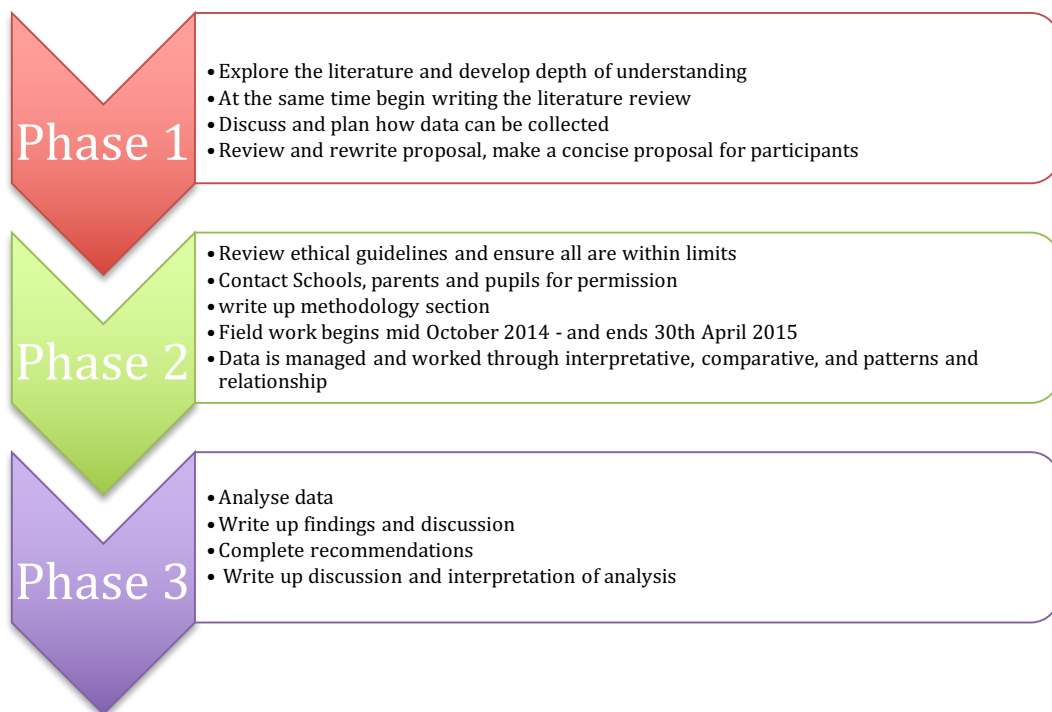


FIG. 3 RESEARCH PHASES

The questions to emerge from the exploration of the literature also shaped the methods employed in this project and provided a platform on which to explore the rationale for utilising the approach and data collection tools. **How are literacy practices supported for pupils with autism in special classrooms attached to mainstream primary schools?**

- a) What literacy practices do pupils with autism experience in mainstream primary schools?
- b) What are the influences on how literacy is constructed in school and at home for pupils with autism?
- c) What if any distinct pedagogies are used to enhance literacy practices among pupils in autism specific classrooms?
 - 1. Do pupils with autism require specialist teaching to advance literacy practices?
- d) Do curricula, school policies and practices support the literacy experiences of pupils with autism in mainstream primary schools?

3.2 A Philosophy

Being able to think and respond to rational questions with a depth of reflection supports the rationale and guiding principles that govern this research. This analytical way of thinking helps to orientate the researcher in the research and continuously gives reason to seek further to observe, question, search and test the interpretations of the reality (Saldana, 2013, 2015). In engaging with these ideas, the researcher created a visual map of emerging personal understanding (see figure 4, p 78). The development of this map has enabled the researcher to research within a personal ethical framework. It has ensured that the procedures used, the approach selected and the methodological tools relate to and are in keeping with the sociocultural theory. Further the research design provides evidence for continued objective reasoning.

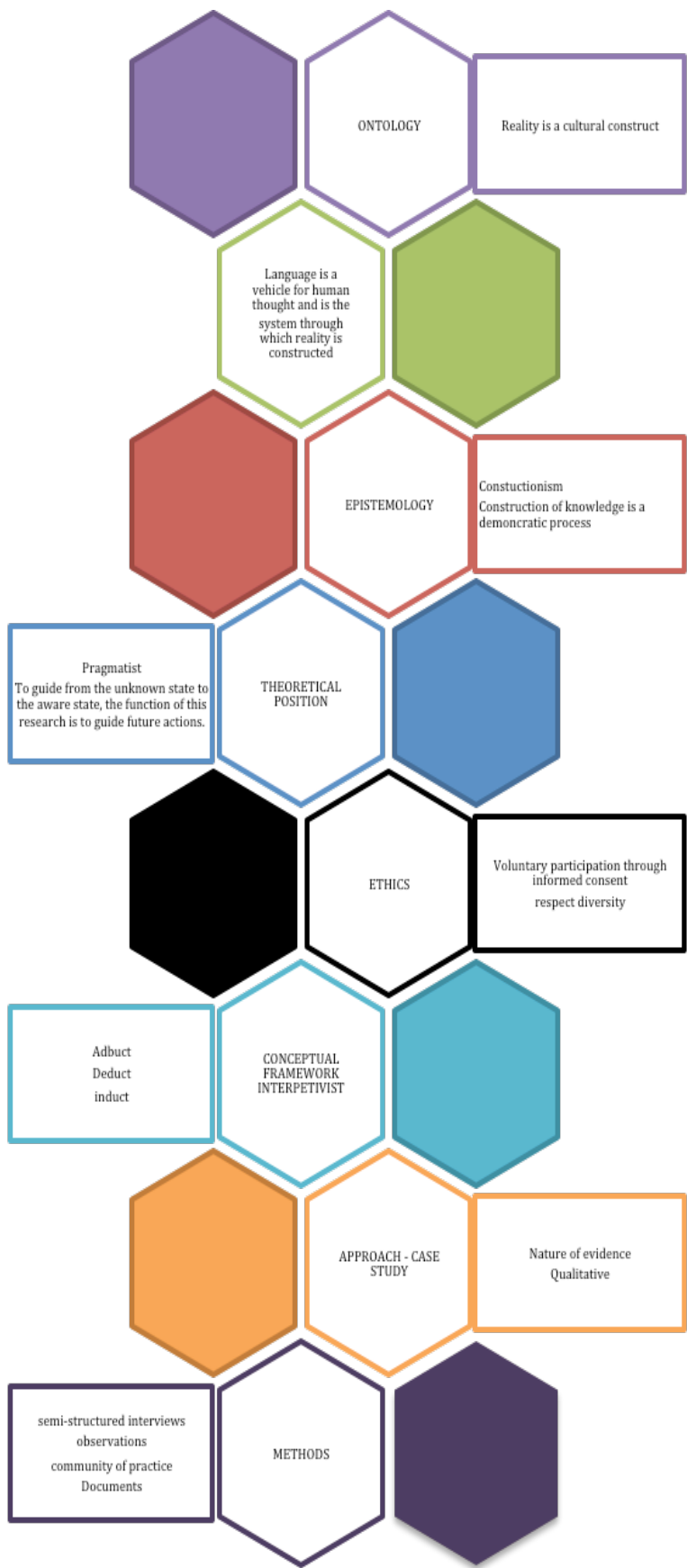


FIG 4 PERSONAL PATHWAY

3.3 Who is The Research For?

The drive to apply research to educational practice in inclusive/special education focuses predominantly on researched evidenced best practice (EBP). The Teaching Council of Ireland has provided access for registered teachers to a variety of research to inform their practice. An interesting observation from international reviews of literature on EBP in education for provision for pupils with AUTISM, Parsons et al. (2009) and more recently Bond and Symes (2014), is a focus on quantitative research as opposed to qualitative. The criteria for entry into the research review in Bond and Symes (2014) research determined that of the 85 papers considered at a medium quality for entry only 9 progressed to best quality and these were all quantitative. This creates a debate as to whether evaluating quality of research requires a quantitative paradigm. Taber (2013) suggests a predetermined focus on the intentional outcomes will provide a qualification to the research paradigm. If this classroom based research project is to have an impact on the future decisions and outcomes of literacy teaching and learning for pupils with autism then it needs to be narrative, and to effectively communicate the observed reality in classrooms. Importantly it needs to acknowledge the limited number of participants and the fact that it is an inquiry into a phenomenon. The concentrated focus on seeking purposefully to generate a story places value and worth in the social constructivist, qualitative paradigm where the philosophical orientations stem from an interpretation of the data. This research is therefore for teachers working and practicing in early years and primary, the parents of primary aged children with autism and the academic community.

3.5 Objectivity Within this Research

Lichtman (2013, p. 159) suggests that striving for objectivity within qualitative research is ‘foolish and impossible’ as objectivity can rarely be obtained as the researcher (influenced by experiences etc.) filters the data collected, generated, organised and interpreted. She further suggests that the researcher should reveal themselves to themselves and ‘face head on the subjective nature of their role. They need to consider effects on the research process and the effects on themselves’ (Lichtman, 2013, p. 159). Mauthner and Doucet (2003) support this view and draw attention to the issues of ‘power and exploitation’ during data generation and interpretation. They contend that the reflexive researcher acknowledges their ‘pre-conceived ideas and assumptions’ and how they influence the research project in its entirety (Mauthner & Doucet, 2003, p. 417).

3.6 Personal and Academic Biography

The researcher grew up in an economically and educationally disadvantaged community. Progression in education was not the norm within the community nor considered necessary, however having a good work ethic was deemed essential to life-long employment. The researcher returned to education later in life and specifically to teaching in response to her children’s experiences in early years; pre-school settings. As a mature student, the researcher began teacher training in an undergraduate degree in Montessori teaching and later in primary teaching. Through post-graduate studies, continuous professional development and further academic studies, the following educational theorists give a snapshot of some influences to the researcher’s mind-set, ideology, approaches and methodology:

John Pestalozzi, John Dewey, Maria Montessori, Jean Piaget, Lev Vygotsky, Jerome Bruner and Margaret Donaldson.

Influenced by the pragmatist philosopher Rousseau, Pestalozzi held naturalism and social responsiveness to the fore in his personal philosophy of education. He advocated a whole child approach to teaching and learning, using sensory learning through an object lesson, using the environment and the community as a context for learning. He emphasises on individual ability and developmental pathways as the foundations for an inclusive and humanistic view of childhood (Forkner, 2012).

John Dewey held that education leads to intellectual freedoms. In his philosophy, he argued for quality of provision for optimal growth in the human potential. The theory of experience, purposeful human action and activity leads to creativity and flexible mind-sets. In enabling the potential of the person to emerge and develop Dewey theorised that society would have greater social and economic mobility. He is known as a social pragmatist and placed value on the importance of social relations in education (Freeman-Moir, 2012; Keall, 2013).

Montessori pioneered a more scientific approach to teaching and learning. She emphasised the need for meticulousness in observation and recording of the child's spontaneous behaviours (Giardiello, 2014). Like Dewey she affirmed the child as a natural learner and by providing a positive environment he/she would reveal him/herself through purposeful activity. She held that the child through deep sustained and focused interaction with her didactic material could take autonomy for his/her own learning. This she theorised provided them with the intrinsic motivation to pursue higher and more complex learning tasks. The structure of the environment and the professional quality of the teacher were also held as the

foundations of her philosophy. She identified the sensitive periods of development as paramount to the developmental journey of the child. She held particularly that the language of the home and learning environments impact on the literacy development of the child. Language, according to Montessori is the vehicle of human thought and behaviour (Montessori, 1989; Stoll-Lillard, 2007).

All the theorists previously mentioned inspired Piaget. His theory lies in a pedagogical approach based on ‘actions and self-directed problem solving’ (Halpenny & Pettersen, 2014, p. 1). Further they suggest Piaget theorised that the child was an ‘active, progressive and constructive agent in the learning process’ and that this was in ‘stark contrast’ to the practice of education and schooling at the time (Halpenny & Pettersen, 2014, p. 3). This constructivist approach to child development held that the child as an active learner is self-directed and that all children have an innate ability to amend their concept and further to transform and act upon an object or an idea. He theorised that children move developmentally from their physical, concrete world to higher cognitive functions where ‘abstract reasoning, language and symbolic representations support imagination and fantasy’ (Halpenny & Pettersen, 2014, p. 6).

As discussed in the literature review, Vygotsky’s major contribution to educational thinking lies in the context of sociocultural theory. He argued the importance of language in the process of cognitive development. Predominantly, he theorised that children in constructing their understanding of the physical world, combine language with thought. Further he contends that the scope of our learning ability is advanced by support from knowledgeable adults or peers and further internalised by self-reflection and ‘inner speech’ (Vygotsky, 1978, p. 27). Egan and Gajdamaschoko (2003) contend that Vygotsky viewed play as a pre-requisite to

literacy learning. They emphasise that he argued that play is a ‘cognitive tool’ of literacy and is supported by the developing imagination and emotions. This, along with narrative ‘inner speech’ and self-reflection, supports logicomathematical thinking. Vygotsky’s interpretation of play differed greatly to the theories of Froebel or Montessori in that ‘movement, object manipulation and exploration did not constitute ‘real play’’ (Brodova & Leong, 2003, p. 161). Vygotsky reasoned disability as a sociocultural development and that the concept of disability varies in different environments and cultural contexts (Kozulin, Gindis, Ageyev, & Miller, 2003).

Strongly influenced by the work of Vygotsky, Bruner held that learning happens through adapting to new phenomena in socially constructed settings. He offered a ‘spiral’ model to learning where revisiting prior learning and knowledge solidifies understanding and supports growth in concept development. Bruner could be considered as a founder of differentiation as he focused on the role of knowledgeable others in scaffolding and setting realistic tasks for learners (Sensenig, 2012). He held that anyone can learn anything once they are supported in rationalising their understanding and knowledge of the topic. He asserted that metacognitive adaptation happens through reflection and interaction with our social groupings and is supported or scaffolded through an ‘interplay of narratives’ (Raw, 2014, p. 95). Bruner’s 1960s work on early learning supports the thesis that young children are highly social and communicative. He positioned the ‘interaction’ between the adult caregiver and the baby as an essential building block to later cognitive and social development. This he also posits frames the development of language learning as the adult care-giver invites and scaffolds the child into the literate society (Sensenig, 2012). Bruner also held that learners need to be engaged

in what is to be learned and should take ownership of the learning task. He argued that learners should be reflective on what, how and why they learn and the teachers should also be reflexive pedagogues (Moore, 2012).

M. Donaldson (1987a) like Vygotsky and Bruner holds that language and thought are connected. She presents early childhood as an important stage in the development of literacy and being literate. Donaldson argues that young children have a vast word bank and in using words within the environment build an understanding of the function of language, and as a consequence, develop concepts about objects (M. Donaldson, 1987b). She asserts that the very young child develops communicative intent from a very early age by using non-verbal gestures and draws their caregiver into reciprocal relationships by manipulating the environment. To this end she endorses the importance of observation in education, adults must observe and scaffold young children and support the development of thinking and understanding.

These theorists have influenced the researcher to position the child at the centre of the process of learning, and place a significant value on the role of the adult/teacher in the context of supporting the unique development of the child within the teaching and learning environment. Approaching this exploration of literacy necessitated a sociocultural/bio-ecological approach where the child with autism and their literacy practices be observed within the context of the school and the family. Bronfenbrenner's (1994) bio-ecological systems theory also presents an integrated dynamic system of learning and development. It supports an understanding of the processes of interactions, which occur across the learning environments of the child, and supports a research design to embrace development in context (Hayes et al., 2017).

3.7 Rationale: Context determines the way we respond

Why research literacy practices among pupils with autism?

Parsons et al. (2009, p. 111) have called for ‘urgent focused research attention’ on educational practices in autism specific settings and how they ‘operate and their influence on individual outcomes’. The Irish government, in responding to diverse need and the significantly increased prevalence rates, has established autism units with specialist provision within mainstream settings, and as a result has created environmental phenomena. These social, physical, spiritual, emotional and intellectual classrooms/institutions are ‘created/stabilised by the actions of its participants’ (Silverman, 2013, p. 114). This new phenomenon, through the lens of a ‘late modernity’ perspective, exemplifies the reactive measures of society to provide structure and agency for a rapidly changing educational landscape (Beck, Giddens, & Lash, 1994). This, Giddens (1999) and Beck (1992) assert is ‘risk management’ and requires ‘reflexivity’. They emphasise the importance of going beyond basic analysis and discourse and theorise that the agents become active, creative and reflective reality-seekers (Jones, Bradbury, & Le Boutillier, 2011).

How does literacy become the case for exploration and study?

The government in calling for a rise in literacy skills has drawn attention to the case of literacy for pupils with autism (Government of Ireland, 2011a). The reviews of literature by Bond and Symes (2014), Wong et al. (2014) and Parsons et al. (2009) reveal a significant dearth of research in the area of literacy for pupils outside of early years education (3-6 years) and in particular a significant lack of focus on literacy as a multimodal tool. Parsons et al. (2009, p. 122) in their ‘Summary of main gaps: What we have yet to find out’ specifically point out that

Most research on educational interventions uses standardised measures and quantitative data to evaluate efficacy and outcomes. While these offer important evidence, qualitative research and/or measures on aspects of educational provision or interventions is significantly lacking.

Teachers as responsive practitioners must answer to the case. It is therefore essential to explore the case of 'literacy' within the context of the autism specific classrooms attached to mainstream primary schools.

3.8 Theoretical Assumptions: Social Theory

The educational research community places value in the ability to link and connect with historical educational theorists and to interpret their contributions to debate and extend our understanding of phenomena within the context of a social reality. Theorists such as Derrida, Foucault, Bourdieu and Habermas have provided theoretical platforms for contemporary educational researchers to evidence theory and practice (Murphy, 2013). Murphy (2013, p. xxiii) cites Harrington's (2005, p. 1) thesis that social theory provides an analytical framework to examine 'how societies change and develop, about methods of explaining social behaviour, about power and social structure, gender and ethnicity, modernity and 'civilisation', revolutions and utopias'. Drawing on the influences of these theorists has provided the researcher with foci:

- How is the definition of literacy constructed/deconstructed?
- How does culture support learning?
- How does the role of the teacher in constructing and re-constructing the literacy learning experiences of pupils with autism impact on the idea of transformational practices?

- What elements of choice are available to the teacher and the learner? And, how does choice of approach or method impact on the educational outcomes for these learners?

These questions have challenged the researcher to consider the challenges to gathering the data and highlight the importance of the analytical/interpretivist framework.

3.9 Identity: Teacher/Researcher

It is important to expand on the identity of the researcher beyond the philosophical influences. Denzin and Lincoln (2005) like Lichtman (2013) assert that it is imperative for the researcher/inquirer to reveal a personal/professional stance. As a teacher, teacher educator and student of education the concept of 'reflective practice' reflects on the identity of the teacher as a 'professional' (T. Russell, 2005). Reflective practice requires the teacher to engage in continuous reflection on actions to maintain and enhance quality in learning. Equality in education calls for activism in practices and policy-making. Seeking the real story of the situation of learning experiences of pupils with autism requires abduction, deduction and induction of realities. This leads to realities that are not wholly generalisable or as Crotty (1998, p. 15) suggests they are 'fuzzy' and both objective and subjective. This, he suggests would be rejected by the realist researcher. Healy and Perry (2000, p. 120) classify realism as 'abstract things that are born of people's minds but exist independently of any one person'. The aim within a realist paradigm is research that focuses on reality 'beyond perceptions' and 'assumes that the research is dealing with complex phenomena involving reflective people'. It is fact bound and does not offer reflections nor does it position the bias, political goals or judgments of the researcher or participants (Creswell, 2008). Realists argue that

while social and natural structures exist they are not observable and therefore can't be deduced. Pragmatists such as William James, John Dewey and George Herbert Mead held that the

value of knowledge should be broadly assessed in terms of its wider ramifications for the good of the individual and society rather than in the more formal, rigid, and narrowly specified philosophical or scientific terms proposed by other philosophical schools of thought (Holstein & Gubrium, 2008, p. 28)

Pragmatists value transformation for advancing a 'just' society and therefore place worth in relationships between acknowledging that our social world exists, understanding our social world, and that we might consciously change it. Holstein and Gubrium (2008) stress the importance of the pragmatic researcher being inclusive of the voices, perspectives and attitudes of others within the context to present both the objective and subjective view. They assert that the pragmatic researcher must be consciously aware of how they position themselves in the actions of the context and the discourse that emerges.

In this project, the researcher sought to find the facts of literacy for pupils with autism through interpretation and reinterpretation of the social structures created in the teaching and learning environment. As a participant within this environment active discourse and reflections on structures and practice inform the teaching in the environment, and it is anticipated that through dialogue with teacher participants, pupil experiences will improve. The practical aspects of the research make for the reality of the situation. Levi (2012, p. 120) advocates that judgments of truths are subject to change as a 'result of future inquiry, reflection, or deliberation'.

A Relativist Ontological Position

The relativist ontological position within this research is that reality is constructed

through reflection, meanings and understanding from social and cultural experiences. A constructionist paradigm provides the theoretical perspectives guiding the exploration of the phenomenon of 'literacy' for pupils aged 6-10 years with autism. Constructionism provides 'multiple realities' by engaging in conscious construction of meaning. In a constructionist view the realities of 'literacy' are dependent on the knowledge of, engagement with and interpretation of literacy by the people involved within the environment of the classroom. Crotty (1998) draws attention to the characteristic traits that distinguish constructivism and constructionism. He determines that constructivism acknowledges the involvement of the individual in the natural world and how engagement within this world enables us to make sense of our surroundings. In exploring the philosophical underpinning of constructivism, Crotty (1998, p. 47) references Denzin and Lincoln and Levi-Strauss' accepted wisdom that constructivists focus on the concept and are flexible to constructed reinterpretations. Constructionism, he offers, relate cultural and social histories in an analytical manner to their involvement and engagement with their natural world. Silverman (2013) maintains a constructionist agenda enables the researcher to

look at, listen to, the activities through which the everyday actors produce the orderly, recognizable, meaningful features of their social worlds... Constructionist researchers are interested in the practical activities in which persons are continually engaged, moment by moment, to construct, manage and sustain the sense that their social worlds exist as factual and objectively 'out there', apart from their own actions (Silverman, 2013, p. 107)

Social Constructionism

Social Constructionists, according to Crotty (1998), place emphasise on the 'hold our culture has on us: it shapes the way in which we see things (even the way in

which we feel things!) and gives us quite a definitive view of the world' (Crotty, 1998, p. 58). He also presents the limitations of this knowledge building by drawing attention to the need to constantly evaluate the theories we generate to prevent embedding ideas built on false notions. He argues for the role and significance of 'developing a critical spirit' so we can examine our cultural values, understandings and drives and where we can critically identify our limitations and false perceptions (Crotty, 1998, p. 59). Holstein and Gubrium (2013, p. 256) suggest that the 'central phenomena of interests' such as realities of society or 'priori' (in this research instance, realities of literacy or all that we know about literacy) are valued and considered but 'suspended' temporarily 'in order to make visible how they become realities for those concerned'. They further theorise that social constructionists rely on the 'structure' of knowledge, discussion and the relevant actions, which result from the communicative processes.

The literature review has highlighted significant questions for exploration and has helped to develop a sense of understanding of the reality of 'literacy' among pupils with autism. There is evidenced need to gain a deep knowledge beyond 'what is going on?' to a more analytical and decided emphasis on 'how literacy is supported and developed?'

3.10 Qualitative Research

Denzin and Lincoln (2013, p. 43) propose that the qualitative researcher pursues approaches that will provide them with 'connections between lived experiences, social injustices, larger social and cultural structures, and the here and now'. Merriman (1998, p. 8) affirms qualitative research as research that looks at how all

elements work together to create a 'whole' and notes that the analysis 'strives for depth of understanding'. She asserts that qualitative researchers construct theory from observation and 'intuitive understanding' abductively from the field. The data generated offers topics in 'themes, categories, typologies, concepts, tentative hypotheses' for deduction and induction (Merriman, 1998, p. 8). Qualitative research designs are flexible in nature and sensitive to environmental influences (Merriman, 1998). Stake (2010, p. 13) holds that qualitative research is 'situational' as 'things work differently in different situations'. He cites specifically teacher professional knowledge as being qualitative in nature. He refers to the reflective practices of the teacher as responsive qualitative forms of examining and interpreting actions for professional standards and ethics. Stake (2010) further contends that the qualitative researcher seeks to advance knowledge to assist practice and policy. Kumar (2014) explains this further in that as data is generated and analysed the research redevelops and re-formulates so that depth of understanding of the phenomenon is a key outcome. But how can there be depth of understanding of 'literacy' for pupils with autism when there are so many variables? Geertz (1973, p. 314) declares 'phenomenalistic observation' as 'our own constructions of other people's constructions'. He continues to suggest that the observations of the researcher in gathering or generating data create a 'thick' descriptive narrative and while these present a story in themselves do they really have worth or 'depth' (Geertz, 1973)? It is in the analysis of observation that depth of understanding emerges, Geertz (1973) defines the analysis of observations as 'sorting out the structures of significance'. He clarifies this in suggesting that

man is an animal suspended in webs of significance that he himself has spun, I take culture to be these webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretative one in search of meaning (Geertz, 1973, p. 311)

The extent of the variables also presents a question, how can this research lead to a national understanding of 'literacy' teaching and learning for pupils with autism? In essence it can't, as Geertz (1973) states 'it is not the world in a teacup' but the beginning of an understanding to consider the situation of 'literacy' in the lives of pupils with autism in a cultural context. Stake (2010) warns that qualitative research can be undermined by the researcher/s themselves if they are focused only on change for change sake. He draws attention to the special characteristics of qualitative research: interpretive, experiential, situational, personalistic, well triangulated and focused on knowledge production, advocacy, presenting multiple realities and reaching saturation (Stake, 2010, p. 16).

In essence, this qualitative research sought to gain an emic perspective and an appreciation of literacy within specific settings and, to communicate the reality of the teaching and learning of literacy in autism specific classrooms in mainstream primary schools (Merriman, 1998; Stake, 2010).

3.11 Reflexivity

Mauthner and Doucet (2003) raise an important issue for discussion; the limitation of the reflexivity within the analysis of data, and in this instance, this pertains to the lack of experience of the researcher as a reflexive researcher. It is essential, they contend, that the researcher persistently draw links and connections across the data to their personal selves, their interpersonal relationships and the social and institutional circumstances (Mauthner & Doucet, 2003, p. 415). They contend that situating oneself within the social and emotional context of the relationships with participants is essential as it influences our knowledge production. A particularly

important decision the researcher took when in the field affected the gathering of data through parent interviews. Prior to the process of the second observation visit to Scoil Robinson (pseudonym), the researcher's father died and the researcher had to cancel scheduled interviews. While every effort was made to re-schedule, it was not possible to reschedule all interviews previously arranged due to logistics and parent availability. Also within the context of relationships and influences, it is essential here to acknowledge the role of the mentor/supervisor, institution and the experts sought in supporting a growth of knowledge and the analysis of the data generated. Regular formal and informal meetings with the mentor/supervisor and experts in the field have provided strong reflective and learning opportunities as the project evolved. Presentations of emerging findings at conference also provided additional opportunities to engage reflexively with the data and the method. Further, to provide opportunities for genuine reflexivity in the data analysis of the interviews, a 'voice-centred relational method' was used (Discussed further on page 117). This involved the researcher reading the interview through three times, responding in role as a parent, as a teacher and as a researcher. Methodologically, this enabled the researcher to identify with her emotional, social and intellectual reactions and to enable the researcher to be visible within the research. This is particularly evident in the parent interview data analysed (Mauthner & Doucet, 2003).

The following table 3.1 presents the research details and duration of the data generation. This will be further explored in Chapter 4: Method

TABLE 3.1 OVERVIEW OF RESEARCH

Participants	Pupils	Parents	Teachers
Number	n= 34	n= 32 sets	n= 14
Number observed/interviewed	n= 34	n= 21 mothers n= 3 fathers	n= 14/11
Number of full case details	n = 21	n= 21	n= 11
Research Tools	Observation Work samples	Semi-structured Interviews	Observation Semi-structured interviews Discussion notes from field
Mode	Naturalistic Field records and Developmental continuum	Audio	Audio Naturalistic Field records
Frequency	3 hour observations on 3 consecutive days, once per term	Once off	Once off interview, 3 hour observations on 3 consecutive days, once per term, informal review of previous observations on 2 nd day of observation
Duration of Project	September 2014 to September 2015	September 2014 to September 2015	September 2014 to September 2015
Total Number of Observations	N=63		

Chapter Summary

This chapter presented the philosophical and theoretical framework underpinning this research project. It presented the researcher’s position within the project and the explorations of how the project established meaning, validity and reliability within a Vygotskian Sociocultural perspective.

CHAPTER 4 METHODS

4.1 Introduction

This chapter presents the pathways undertaken to complete the research project. The chapter describes an in-depth presentation of the study, it provides information on how the sample was achieved, methodology employed, instruments for data collection and analysis. Lastly the chapter concludes with a reflection on the ‘realities’ of undertaking a project of this nature.

4.2 The Sample

The literature review evidenced an argument that the middle years of primary have not been adequately researched in relation to literacy and reading behaviours (Carnahan & Williamson, 2010; Kluth & Chandler-Olcott, 2008; Parsons et al., 2009). This provided a foundation for the rationale for purposive sampling as set out below. Purposive sampling allowed the researcher to seek out this age group and to set certain criteria for inclusion into the research project (Denzin & Lincoln, 1994; Silverman, 2013).

Purposive Sampling

The researcher purposively selected the 6-10 year classroom as the 3-6 year old child is considered at a pre-school level in Ireland and as such is expected to be at a pre-academic stage of learning (Government of Ireland, 2013). Given the difficulties pupils with autism face in the acquisition of language and communication it would be inappropriate to track literacy skills in a primary setting within this age cohort. Purposive sampling is a ‘non-probability sampling design’ and provides the researcher with opportunities to continue to generate data until the

evidence reaches ‘saturation’ (Kumar, 2014, p. 249). Denzin and Lincoln (2013); Silverman (2013) assert that purposive sampling requires the researcher to critically evaluate the parameters of the population and to ‘seek out’, within this population, participants who can provide quality and quantity to the data generation. Criteria for entry into this project had to be focused on supporting the key question. To enable the researcher to optimize on access and opportunities to the site and participants, while at the same time protecting the integrity of the ethical principles, it became necessary to consider variants like locality, economic status, governance etc. Questions relevant to the criteria for entry into this project were

- What schools have more than one autism class?
- What is the patronage of the school?
- What is the economic status of the school?
- What age band is the class? Classes serving pupils over 6 years would be deemed eligible
- Are there two or more pupils, aged 6 years and above, in the class?

Typology of the population and exact lists of relevant schools was accessed via the National Council for Special Education website www.ncse.ie. This list was used as a reference for the researcher to further investigations as to their suitability for the project. The autism early intervention classes were excluded for the reasons mentioned above. A list was compiled of all the relevant schools and these were further examined geographically so that all regions of the Republic of Ireland could be included.

Conditions of the Sample: Gaining access

‘People in extraordinary situations are vulnerable’ (Schrems, 2014, p. 829). Pupils with autism can experience many challenges in the educational and cultural

environments in which they live. Researching these fields is important so that their lives can be supported and their parents/guardian as well as their own expectation of their own potential can be met. Excluding them from research because of the risk of potential harm may be disadvantaging them further (Lichtman, 2013; Schrems, 2014). Being vulnerable does not mean being incapable, incompetent or unqualified. In health and science research ‘relational ethics’ considers vulnerability as related to situation and context as opposed to a characteristic of the person (Schrems, 2014). It is the responsibility of all concerned to ensure that ethical principles are adhered to and that individuals in a vulnerable context are protected but more importantly given voice and opportunity to relate their ideas and understandings. Schrems (2014) continues to suggest

By combining vulnerability as a context-related and situational concept with existing approaches of informed consent and the different ethical principles can be balanced and preserved at every step of the research process (Schrems, 2014, p. 829).

4.3 Ethical Research with Pupils with Autism

The Department of Children and Youth Affairs in Ireland has developed a set of guidelines to research involving children in Ireland (Government of Ireland, 2012a). These guidelines draw attention to ‘best practice principles as set out in articles 2, 3, 4, and 6’ of the UN Conventions on the Rights of the Child (United Nations, 1990) and more particularly to the lack of child participant voice in previous research (Government of Ireland, 2012a). In addressing issues of governance Allen (2005, p. 16) posits there are three levels which need attention

- Regulatory – codes of ethical and professional practice as set out by the Department of Children and Youth Affairs

- Institutional – ethical practice guidelines within Trinity College Dublin and reference to each primary schools’ ethos
- Individual practitioner – personal responsibilities to the profession and the general wellbeing and care of all participants including the researcher.

In addressing the national regulatory codes the researcher compiled the following rules to guide the observation and field note-taking process:

- Adherence to child protection guidelines and regulations, adherences to the principle of ‘do no harm’, and to ensure a child-centred, inclusive approach
- Observations and field notes could only occur with continued agreement from the class teacher and the pupils in attendance on a daily basis.
- At any time during the observations the teacher or any pupil could ask the researcher to leave.
- If a pupil being observed became distressed in any way due to a physical or sensory upset the observations on the pupil would stop for a period or until the next scheduled time. For example, pupil distress occurred once in Scoil Robinson during the second set of observations, it became apparent the Fred was not up to working or being observed and the researcher asked; ‘do you want to say goodbye to Carol-Ann?’ He waved and said ‘bye, bye’ and the following day he gave me a ‘high five’ gesture welcoming me back.

Informed Consent

Gaining informed pupil consent whether from pupils with or without autism is essential to any ethical practice in research. While this project did not administer

any action or programme on the pupil participants involved it was, through observations and discussion, about them. As a result, the researcher would write for historical record and further discussions or research may evolve. Other researchers may gain access to this written record and make interpretations of their own. This, places an even greater ethical issue before the researcher, responsible adults and potential gatekeepers. Deep reflective thinking and actions are required at all stages of this research to ensure ethical standards are maintained (Wiles, Crow, Charles, & Heath, 2007). Providing pupils with limited communication skills with appropriate access to information about the research and providing them with opportunities to regularly review and reconsider their involvement in the project is an essential ethical issue (Government of Ireland, 2012a; Shaw, Brady, & Davey, 2011).

From an institutional perspective, Trinity College has established strict regulations and the research proposal was scrutinised and rigorously examined by the School of Education Ethics Committee. All questions within the interview schedule were optional and participants chose whether to answer them or not. In Scoil de Valera the teacher chose not to answer one question at the time of interview and asked could she consider it and answer later? Her request was acknowledged and the researcher moved on to the next question. All names within this research are pseudonyms.

The researcher was also conscious of the need, to the greatest extent possible, to protect the participants from any misinterpretation of the research data collected. For example, the behaviours exhibited by the child or the management methods employed in schools or units could be misinterpreted. Observations and field notes did not record the behaviour management approaches when pupils exhibited falling

to the ground or any physical behaviour or distress. As a guiding rule the researcher and the teacher made a professional decision at the beginning of the project that the sole purpose was to record teaching and learning behaviours and to not record any behaviours of a sensory nature unless directly relevant to literacy teaching and learning.

4.4 Research Sample

Qualitative research allows for an inclusive approach to participant involvement. In purposive sampling the researcher seeks participants who can provide information, depth of knowledge and ‘voice’ to the phenomenon (Creswell, 2008, p. 213). Maximal variation sampling allows the researcher to explore cases acknowledging the individuality of the traits and characteristics of literacy for pupils with autism and enables the researcher to develop a depth in perspectives. To gain access to a variety of participants the researcher sought access via the gatekeepers of primary schools (principal teachers) with autism units attached. 75 invitations were posted out at the beginning of the second year of the project (October 2014) via the national postal system. ‘Insider researchers, according to Homan (2001, p. 340), should not be their own gate keepers’, as a teacher researcher in the field of special education/autism it could be presumed by the autism community that there would be a right to collect data relevant to further research and understanding. Parry and Mauthner (2004, p. 140) highlight that researchers across disciplines are collaborating and sharing research due to ‘diminished resources’ making previously ‘private property’ of the researcher a ‘global commodity’. Lichtman (2013, p. 61) asks pertinent questions for researchers to

reflect upon, ‘who owns the data? Who controls it?’ She points out that as qualitative data is co-operatively constructed between the researcher and the research participants, issues need to be addressed re on going ‘confidentiality and the treatment of archival data’. Information gathered by researchers and freely given by teachers may be taken for granted as open knowledge and in this way negates the rights of participants in vulnerable situations or contexts. Parry and Mauthner (2004, p. 142) suggest that the joint construction of qualitative data requires that it is jointly owned and therefore has ‘practical, legal and ethical implications for archiving and re-use’. They contend that the key issue surrounding access to data lies in the continued requirement to protect confidentiality and anonymity and as a result clarity is required from the outset re ownership of the data. The participants in this research project are protected under the Data Protection Act (amendment 2003) (Government of Ireland, 2003). The consent forms in this research project give the researcher ownership of the data and under the directions of the Act confer the title of ‘data controller’ upon the researcher (Government of Ireland, 2003, p. section 2).

Research in the field of early years, primary and special educational needs is at an all-time high in Ireland and across Europe. Emphasis is placed on realising the true nature of children’s lives and their lived experiences in all areas and cultural communities. The Irish Research Council has enabled a wealth and depth of research through its’ funding mechanism. In line with the Children First Act (Government of Ireland, 2012a) has (as previously discussed) published ethical guidelines to safeguard children within research projects. Alongside the acknowledged ethical guidelines of research in general, the guidelines identify ‘core ethical concepts; minimising risk of harm, informed consent and assent and

confidentiality and anonymity'. Further, it requires adherence to 'child protection principles, legal obligations and policy commitments in relation to children and a child-centred, inclusive approach to research' (Government of Ireland, 2012a, p. 1).

As stated earlier consultation with participants, who may be vulnerable, means that the researcher must acknowledge any possible barriers to understanding the proposed course of research. In acknowledging that pupils with autism have unique ways of interpreting the world around them the researcher deemed it essential to ensure that informed consent could be obtained. This meant that the research had to guarantee that participants could gain access to real understanding by using whatever form of existing effective communication systems between their parents/guardians and their teachers acting *in loco parentis* (Homan, 2001). The role of researcher, the principal teacher, class teacher and parent is essential to the ethical values within this research. Each gatekeeper had a moral duty to place the wellbeing of the pupil participant to the fore and to respond to any potential risks. An area given significant attention by Parry and Mauthner (2004) in the nature of qualitative research is the fact that 'once off' informed consent does not ensure that participants who may be vulnerable are being kept informed of the changes to the project as they occur. Further they contend that vulnerable participants 'are unable to fully appreciate the immediate implications of participation it is unlikely they will be able to grasp the longer-term implications of data archiving' (Parry & Mauthner, 2004, p. 147). As a result, it was deemed by the researcher to be ethically essential to revisit the consent forms at each visit and to examine and reflect on issues as they arose. Consent forms within this project took the form of 'Social Stories™' (appendix D) and were adapted and tailored to the needs of each pupil participant.

4.5 Gatekeepers

The researcher also sought expert advice in relation to access and participation, and four communication emails to specifically targeted individuals with access to clusters of autism specific classrooms were also sent during the month of October 2014. The gatekeepers received detailed information about the research in advance of the project. Each gatekeeper was asked by the researcher to identify suitable sites for exploration based on their knowledge and experience of the sites and their suitability to the proposed objectives of the project. A site within this research is defined as a designated autism classroom within a mainstream primary school; with pupils diagnosed as having autism and ranging in age from 6 to 10 years, a class teacher and a minimum of two special needs assistants. Two of these gatekeepers responded positively. One gatekeeper was a facilitator within a regional Education Centre and another was a primary principal, both gatekeepers were participants in cluster groups for autism provision. Both gatekeepers were unsuccessful in providing any contact, while they themselves expressed deep interest in the project they were met with fear and trepidation from teachers at the notion of being observed and therefore were unable to provide access to participants. Another gatekeeper contacted in this email communication was a member of the Educate Together national office staff, the researcher received no response but two schools in the project were Educate Together schools. The final gatekeeper to be approached was a ‘charity based autism partner’, who provides clustering opportunities for local schools and parents, the researcher received no response directly from the autism partner but one school from this cluster responded.

Between December 2014 and January 2015, a further fifty-five email communications were sent to principals in primary schools with two or more autism specific classrooms.

Response

In total, 109 schools were contacted by the researcher by postal and/or email contact. In total five school principals responded to the 75 posted invitations. Of these five schools; three met the criteria for entry into the study; one school declared it was currently engaged in a research project and would not be able to participate; one school only had one pupil of the appropriate age in the class. Of the 55 schools emailed and re-emailed, five schools responded, three positively with direct contacts to the teachers involved, of these two teachers contacted me directly to discuss and agreed to enter the project. One principal responded negatively citing reasons of teacher workload and in further discussion stated that his teachers were so busy dealing with pupil behaviour that they felt there wouldn't be enough literacy practice within the classroom. The researcher personally contacted a colleague from a previous autism cluster group and they requested to be emailed again with the details and they responded positively. In total seven schools entered the project.

Lesson Learned

Considering the cost of the postage and the poor response rate of 3.75% the researcher on reflection should have registered all mail, so that it could be tracked and the receiver contacted. Further, in discussion with some principals and teachers they declared that they never received the original post or the email and this draws attention for the need to challenge 'self-authorized' gatekeepers. A principal in a school in the Leinster region openly informed me that he tells his secretary to throw away all research applications as the school has so many visitors attending the

autism units. He also stated that the increasing demand for school placement requirements for initial teacher education has put his school under pressure to function normally.

Another issue for this researcher was trying to access participants from a non-funded research project. Some of the schools contacted were already engaged in research with research groups from government bodies and cross border funded projects and they had agreed as a staff not to have any other researcher doing research during that data collection time.

4.6 The Pilot Study

Silverman (2013) contends that a pilot study is required to provide the researcher with insight into possible weaknesses and flaws in the method and to provide an opportunity to reflect and alter the tools so that quality of data is generated. In this study, the researcher for exploration prior to commencing the full study identified the following areas:

- Are the interview questions sufficiently structured/unstructured to allow appropriate discussion to take place and do they offer a depth and range of response?
- Are the researcher's interview techniques skilled enough to allow natural responses from the interviewees? Does the researcher influence the discussion or response of the interviewee with added comments or interruptions beyond light guidance?
- How relevant is the data generated from the teacher interviews and the parent interviews?
- What issues may arise in the observation periods that could undermine the data collected? Is the structure of the observation schedule realistic?
- Is the proposed sample and frame feasible?
- Does the proposed coding system and data analysing techniques reveal any inadequacies?

The pilot study took place in a large vertical school in the Connaught region. This school had one autism classroom. The school is well established within the community and the autism classroom has been established for more than seven years. A temporary teacher was employed at the end of August 2014 to take the class for the coming year. The principal of the school contacted the researcher following postal and email invitations. Permission was sought and agreed from the principal and the co-operating class teacher. From the criteria for entry into the study, the teacher selected three pupils from the five and contacted their parents for permission to engage with the researcher. Following this pilot, the following criteria was applied to the project:

- Only schools with more than one unit/special class to be engaged in the project to ensure anonymity across the community
- Schools without autism units were invited to participate but they had to have special classes on site
- Only pupils whose parents have attended for interview will have case studies presented in the results chapter
- The number of questions set in the parent interviews was reduced to ensure that interviews lasted a maximum of 30 minutes.

4.7 Research Design – Collective Case Study

The objective of this research was to engage in an in-depth exploration of literacy for pupils aged 6-10 years with autism. The researcher sought to explore and identify the uniqueness of literacy, patterns of literacy, experiential accounts, actions and perspectives of teachers and parents.

This project used a ‘collective case study’ approach to explore and generate an understanding of how key skills in literacy are supported/developed for 6-10 year old children with autism in mainstream autism classrooms (Stake, 2010). A collective case study according to Stake (2005) is where a number of cases are

considered to explore a general phenomenon. The focus of attention in this case study is literacy practice in relation to children with autism. A search of the databases on empirical studies of evidenced best practices in literacy skills development for pupils aged 6-10 years with autism was undertaken. It reveals a paucity in research relating to literacy and autism, on further inspection it also reveals that the articles are more focused in areas of reading behaviours, instruction and communication for pupils on the higher end of the spectrum. This correlates with Parsons et al. (2009, p. 3) findings in a review of literature of evidenced best practices where they determined a dearth in 'quality literature' and as a consequence that 'many gaps remain in knowledge of methods and interventions'.

The literature review reveals that little is known of literacy practices of children with autism and most particularly in the age range of 6-10 years.

The case study approach allows for an in-depth study of the subject of literacy within a bounded case of variables such as age and setting and supports a 'flexible, open-ended technique of data generation and analysis' (Kumar, 2014, p. 155).

4.8 Methods of data collection

From the review of empirical literature into literacy and autism it was evident that there remains insufficient data to generate an understanding of how literacy is supported in autism specific classrooms attached to mainstream primary schools.

It was also evident that to generate knowledge of the 'true life' literacy experiences of pupils with autism that observation should be the key principal method.

Evidenced documentation of pupil work and key literacy skills demonstrating progress across the school year also support the generation of a visual map of

literacy ability. Semi-structured interviews with teachers and parents/guardians provide an account of the interpretation and understanding of those involved closely with the child with autism.

Classroom Observations

Observation is the watching, recording and analysis of events and behaviours. It is a 'flexible approach that provides information about the 'real world' in which we operate' (Robson, 2011, p. 316). Observation supports an interpretivist paradigm in that it can be unstructured in diary writing and field note texts. It can be systematic as it enables the researcher to note frequencies of behaviours as they occur and in this research project, record skills as they emerge or are repeated. Stake (2010) contends that interpretation is an element of the observation process and it naturally impacts on reshaping the research as the process develops. An important argument for using observation is (in seeking to include the voice of the pupil with autism) the fact that some pupils with autism experience difficulties in expressive and receptive language as per their diagnosis. Questionnaires and interviews were not necessarily possible communication/interaction techniques that would generate appropriate and sufficient data.

Observation of Literacy Practices

Anning, Cullen, and Fler (2009) present the historical background to the advancements of the Vygotskian sociocultural theoretical framework to include post-Vygotskian theory of development and learning. They draw attention to the use of observational and child study approaches that have influenced our thinking and understanding of how children think, learn and develop. Sociocultural theory they contend offers the researcher/practitioner an opportunity to seize associations and connections between the learner and the social context. Neuroscience has also

provided evidence of the impact of social functions on the development of cognitive ability (Misra, 2014). Misra (2014, p. 72) posits that ‘learning is genetically programmed but environmental activity dependent’. A possible barrier for children with autism is the stress related experiences they encounter in and from their environment. Autism as a condition impacts on the transactional and interactional relationships with the learning environment and it is the facilitation and scaffolds provided by the teacher/caregiver that enables the child to engage in natural learning activities. This supports Vygotsky’s theory that the child is an active and intentional learner in the process (see figure 5).



FIG. 5 VYGOTSKIAN THEORY OF CHILD LEARNING

McLachlan, Nicholson, Fielding-Barnsley, Mercer, and Ohi (2013) contend that literacy research in pre-primary and primary pupils should observe the theories of Vygotsky and Luria (1930). They hypothesised that learning behaviours in literacy should be examined ‘within the context of evolutionary, historical and ontogenic development, thus explaining the essential nature-nurture components of literacy research’ (McLachlan et al., 2013, p. 5).

An important element of the theoretical framework of sociocultural theory is the importance and relevance of learning within a ‘community’. Burton, Brundrett, and Jones (2014, p. 116) assert that observation is the ‘natural research tool of the educational profession’. They contend that teachers are engaged regularly in natural observation and the recorded accounts of these observations support professional decisions and future actions. Further they reason and cite Hammersley (1993, p. 197) that observations provide a quality to the ‘research process since it “provides a degree of life experience that is lacking in most academic environments”’. In this research project the researcher is the observation instrument, using professional insights to acknowledge the role of context, to examine, and to advance the inquiry (Stake, 2010). Particularly important to highlight is that the observations are used not just to determine development of key skills in literacy but to ascertain how pupils with autism learn literacy and how the teacher interacts professionally to advance learning (Anning et al., 2009).

Observations as a Method of Data Generation

Literacy practices and skills development in pupils with autism is an under-researched field and the use of qualitative observations in the natural learning setting of the classroom should provide an opportunity to explore and inquire into this phenomenon (Palaiologou, 2016). Data generated should provide the researcher with an assortment of information to allow the research questions to be answered. Observation in a naturalistic qualitative research tradition strives to ‘understand social reality and provide a full account of descriptions of people and interactions in a natural setting’ (Palaiologou, 2012, p. 123). Wragg (2012) advises that ‘billions of events take place’ in classrooms around the world, interactions occur and concepts are explored and developed at a fast pace. He provides

significant research into the complexities of recording these events and the importance of analysing them correctly. Pointedly he also references the fact that teachers are too busy teaching to be able to record detailed observations themselves.

Naturalistic Observations

The theoretical underpinning of a naturalistic approach using narrative forms is a sociocultural position. Naturalistic observations in the narrative method were employed in this project. These running records required the researcher to note as much as they could in the simplest of forms. The only structure to the observation form is the sequencing of time and the use of the present tense (Fawcett, 2009). Following reflections from the observation in the pilot study the researcher employed the International Association of Evaluation of Educational Achievement's (IEA) Child Activities Observation System and the Adult Activities Observation System (HighScope Educational Research Foundation & International Association for Evaluation of Educational Achievement, 2007b; HighScope Educational Research Foundation & International Association for Evaluation of Educational Achievement, 2007a). These observation schedules allowed the researcher to frame a more structured schedule for the naturalistic observations. The administration guidelines required the observer to observe both the targeted adults and pupils over two days, during morning sessions and for periods of ten minutes straight generating approximately 40 minutes of observations for each child and adult. The scope of the observations is based on the observed activities and these were then coded as to the coded system provided within the observation form. To get a picture of developmental progression across the academic year, the researcher conducted three sets of observations, one at the beginning of the project, one in the

middle and one at the end. This eventually led to 90 minutes of recorded observations on each of the targeted adults and pupils.

Naturalistic observation has a number of strengths including; no advanced preparation other than pen and pencil, it can provide an all-round picture of the participants, narratives can be supported by photographs and digital recordings, it includes the ecology of the environment and provides active engagement of participants (Fawcett, 2009; Podmore & Luff, 2012). Disadvantages of this approach, according to Fawcett (2009), can be that it ‘creates dilemmas as to what and how much to record, produces a mass of unstructured data and makes it difficult to prepare observations’ (Fawcett, 2009, p. 56). Wragg (2012) argues that naturalistic observations are criticised also for a lack of moral stance whereby the observer appears to condone certain behaviours such as deviance. In autism specific classrooms challenging behaviours are not seen as deviant but, are seen as a means of communication and the theory of applied behaviour analysis is used in an investigative way to explore the reality of the situation from multiple perspectives. Wragg (2012) suggests that there is a view held by opponents to naturalistic observations that this could expose individuals to risk or harm. In Ireland, the Children First Act 2014 ensures that the rights and welfare of the child are protected. The naturalistic observations within this research project held the rights and welfare of the child to the fore, the class teacher remained as the responsible adult and the researcher observed all legal requirements.

Objectivity Within the Observation Tool

Records of observations are written in ‘plain, unpretending text’ and are intended to relate the exact experience of the observer from the observers view point (Geertz, 1988, p. 2). The observation records were then, reviewed by the participants and

enhanced with comments and re-inspection for accuracy of reporting. Geertz (1988, p. 9) argues for the quality of discussion and clarity of exposition, his concern goes beyond ‘an honest story honestly told’ to ‘prevent subjective views colouring objective facts’ and more particularly being judicious in ‘seeing facts as they really are’ not ‘as one would have them’. Wragg (2012, p. 57) asserts that observations of teachers and their teaching by nature have an evaluative aspect to them and the teacher inevitably enquires ‘was that ok?’ He emphasises the importance of remaining non-judgmental to such enquiries. He suggests that good note taking should capture the essence of what is happening and then allow for further clarification but not provide an immediate evaluation of the observed. An essential element of the objectivity of the data-gathering tool is the pre-planning and the clarity around the purpose of the observation (Wragg, 2012). In this research project teacher participants were informed that a copy of the researchers recorded observation would be given to them for joint discussion about the teaching and learning observed and their comments would be included.

Participant Observation

Participant observation enables the researcher to obtain information by engaging, when invited by participants, into a task/activity or behaviour. Also on occasion the researcher as a non-participant observer, passively watches, records and analyses the literacy functions of the classroom. Kumar (2014, p. 174) and Peggs, Burrige, and Smart (2013, p. xxvi) highlights matters to be aware of when using observations, the ‘Hawthorne effect’ (an awareness of being studied that may impact on behaviour), ‘observer bias’, also variance in interpretations of different observers and ‘incomplete observations and /or recordings’. Peggs et al. (2013, p.

xxviii) present a fourfold typology of observation roles, two of which are; Participant as Observer and Observer as Participant.

Selecting an Observation Schedule

As an inexperienced researcher, it was essential for the researcher to communicate and liaise with an expert in the field of child and adult/teacher observations. The researcher met with this expert on two occasions and engaged in in-depth discussion about recording and coding of field observations. The expert suggested and provided access to High/Scope Educational Research Foundation and the International Association of Evaluation of Educational Achievements' child and adult instrument to effective observations and coding. This was examined in detail and the researcher sought opinions of its efficacy from other colleagues and peers. While this instrument is aimed for use in the pre-primary setting or in the home for children with/out a disability, it was deemed appropriate for use in this research.

Administration and Observation Schedule

The High/Scope administrative guidelines as mentioned previously require the child observations to occur on two consecutive days with a minimum of 20 minutes per day divided into two ten-minute observation sets. Resulting in a total of 40minute observations per target child over the two days. The adult observation guidelines require the adult/teacher to be observed for at least 30 minutes per day over the course of two separate days. Resulting in the adult/teacher observations totalling 60 minutes. To tailor this to the autism classroom and to ensure that ethical standards are upheld the following administration and schedule has been standardised.

A maximum of three visits to the class over the course of the school year, each visit (observation set) to last for nine hours divided into three hours by three consecutive days. This is to allow for child absenteeism, fitness to participate and/or wellness. Each class according to Department of Education regulations could have a maximum of six pupils, one class teacher and two SNAs as standard. To ensure that pupils do not experience an ‘under the microscope’ experience, the observations focus shifts every ten minutes to an alternative participant.

Table 4.1 displays an example of the child observation schedule for a typical autism class while table 4.2 displays an example of the adult observation schedule for a typical autism class.

TABLE 4.1 AN EXAMPLE OF THE CHILD OBSERVATION SCHEDULE FOR A TYPICAL AUTISM CLASS

	Child 1			Child 2			Child 3			Child 4			Child 5			Child 6		
Ob set 1	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Ob set 2	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Ob set 3	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Total	30x3			30x3			30x3			30x3			30x3			30x3		

TABLE 4.2 AN EXAMPLE OF THE ADULT OBSERVATION SCHEDULE FOR A TYPICAL AUTISM CLASS

	T			SNA 1			SNA 2		
Ob set 1	10	10	10	10	10	10	10	10	10
Ob set 2	10	10	10	10	10	10	10	10	10
Ob set 3	10	10	10	10	10	10	10	10	10
Total	30x3			30x3			30x3		

Coding and Analysis of Empirical Materials from Observations

As the purpose of this study was an inquiry into the literacy practices of pupils with autism, it required the researcher to take an exploratory stance to the material gathered by observations. In so doing the researcher sought, through a constructionist lens, to engage with the material generated via the observation sets in an interactive manner. This involved identifying the actions and reactions of participants within the environment and interpreting key moments of interaction (Saldana, 2013). Categories and assigned codes from the IEA/HighScope system (with a few minor adjustments) were entered into a Computer Aided Qualitative Data Analysis (CAQDAS) programme 'NVivo 11' along with all the observations, set out by school. On the first round of the analysis the researcher applied 'splitter' coding to each of the observation sets so as to capture a line-by-line detailed analysis of the interactions (Saldana, 2013, p. 23). As a solo coder in this process the researcher sought the expertise of the supervisor in reviewing through discussion coded excerpts from observations to validate and clarify emerging understanding, ideas and insights from the data (Saldana, 2013). Further discussion of the coding method is detailed below (Section 4.9).

Unstructured Interviews

The researcher in adhering to a constructionist paradigm interviewed the parents and teachers of the pupil participants to develop the story of literacy for pupils with autism. The person-to-person interaction and the 'unstructuredness' of the interview allow the researcher to deviate from the set questions, follow a lead and dig deeper into the phenomenon. Importantly this supports the issue of the diversity of the spectrum of autism (Kumar, 2014, p. 177). Prior to the formal parent/guardian interviews commencing, the researcher introduced herself from a

private and professional capacity and allowed the parents/guardians an opportunity to ask her questions relating to both aspects of her life. The researcher acknowledged that the parents/guardian might feel that some questions were quite private or personal and that they could choose not to answer.

Data Analysis of Interviews: ‘Voice-centred Relational Method’

Engaging in ethical research requires the teacher/researcher to be consciously active in maintaining professional codes of behaviour such as respect, care, integrity and trust (Teaching Council of Ireland, 2012, p. 23). Ribbens and Edwards (1998) emphasise that social research and ethical practice does not just focus on access, interpretation, analysis and theory but include aspects of what might be considered ‘private’ as opposed to ‘public’ worlds of participants. In fact, engaging parents/guardians in the interview process relating to their experiences and understandings of their children’s literacy means inviting their private voices into the public domain. Having invited and established a ‘safeness’ to contribute ‘voice’ from the parent/guardians and the teachers of pupils with autism on the topic of literacy it was essential that the ethical principle of ‘do no harm’ be extended to ‘voice’. Ribbens and Edwards (1998, p. 2) further contend that ambiguity arises when researchers write for academia on empirical materials gained from a ‘domestic, personal or intimate setting’. They continue to support the thesis that ‘voices’ are ‘drowned’ out when the researcher engages in dominant academic discourse. Gilligan (2014) and Noddings (2013) both assert that when pupils or participants are asked their opinion that they don’t just provide an answer, they bring a sense of their identity and cultural tones to the conversation and discussion. Parents/guardians of pupils with autism have in general experienced a vast number of interviews and assessment questions based on the child’s early and on-going

development. They have had to tell and retell their stories and in some cases, they experience outcomes which challenge trust, such as the lack of response or the withdrawal of what they see as an essential service. An important recognition was the value-laden language of the rational and emotional self. Gilligan (2014, p. 91) in extending her theories on ‘moral injury’ cites Shay (1994) who contends that ‘our mode of listening deteriorates into intellectual sorting’ where we ‘make assumptions’ about what we hear and file into ‘mental bins’ without really connecting with and genuinely understanding what has been communicated. Parents in the interviews expressed themselves with varying degrees of emotions. Some demonstrated and emphasised happiness, guilt, anger, loneliness, hurt, fear and confusion. The ethical duty bound in respect, care, integrity and trust of ‘voice’ reinforces that no ‘moral injury’ from a misinterpretation or a lack of understanding should occur.

To this end the researcher purposefully applied a ‘voice-centred relational method’ and a ‘listening guide’ method to the analysis of the interviews (Gilligan, Spencer, Weinberg, & Bertsch, 2006; Mauthner & Doucet, 2003; Ribbens & Edwards, 1998). This involved the researcher reading/listening to the interview through three times, responding through relationships of care and responsibility as a parent, as a teacher and as a researcher (Noddings, 2013). Another area for additional attention in this process emerged when parents presented themselves for separate interviews. This meant that the research held three different types of interviews with parents; researcher/mother, researcher/father and researcher/father and mother. The researcher/mother interviews must then be explored for mother/mother (female/female), teacher/mother and researcher/mother ‘voice’. Likewise, the researcher/father interviews must acknowledge mother/father (female/male),

teacher/father and researcher/father ‘voice’. Gilligan et al. (2006) ‘listening guide’ method asks fundamental questions to allow the researcher to compose multiple layers of understanding. ‘Who is speaking and to whom, telling what stories about relationships and in what societal and cultural relationships?’ (Gilligan et al., 2006, p. 255). By engaging in this activity, the emergence of topics for themes began to appear and hence directed the researcher to focus on specifics. As previously mentioned, this enabled the researcher to identify practically with personal emotional, social, professional and intellectual reactions (Mauthner & Doucet, 2003). This is chiefly apparent in the parent interview data analysed.

4.9 Preparing the Material for Analysis

From the outset, this project sought an emic perspective of the literacy practices of young children with autism in mainstream primary schools. As a result the empirical materials for investigation required the researcher to gather and generate a variety of forms of evidence, which in turn, require the researcher to handle and prepare them for analysis in different ways (Creswell, 2008).

The semi-structured interviews were fully transcribed from digital audio recordings. In consideration of the magnitude of the materials generated it was pertinent to the study that all interviews would be transcribed by a reputable transcription company, who have significant experience in relating to the nuances within educational interviews. This company has long-standing professional relationships with the academics within the School of Education and is highly regarded by many professional researchers in the field. To gain an in-depth sense and understanding for the interviews, the researcher personally transcribed all

interviews from three of the seven schools involved prior to sending all interviews on for professional transcription. The researcher then inspected the finished transcriptions against the original recordings and corrections were made where necessary and pseudonyms applied. An example of a correction is the acronym IAP, which appeared throughout the transcripts instead of the acronym IEP.

The interviews were then loaded onto the Computer Assisted Qualitative Data Analysis (CAQDAS) (Fielding & Lee, 1991) programme, NVivo 11™. Observations were transcribed from the recorded field observations with field notes and memos attached. These were uploaded onto NVivo 11™ under classroom observations. All other documents such as; photographic examples of pupil work, copies of IEP's, inclusion/special education policy documents and photographic evidence of class structures were all uploaded onto NVivo 11™ under internal documents and recorded under the school name and then linked to cases within the project.

The justification for using NVivo 11™ or any other CAQDAS programme, is in its capacity to hold the empirical materials for analysis in one place, and to allow the researcher to utilise the in-built tools to assist in the 'effectiveness and efficiency' of learning from the material (Bazeley & Jackson, 2013, p. 2). An argument exists that using technology to conduct qualitative analysis is problematic, as it may, if not utilised properly as Seidel (1991, p. 107) suggests, lead to 'analytical madness'. This he contends may lead the researcher away from a focus on depth to a focus on breadth, 'reification of the relationship between the researcher and the data' and disconnect the researcher from the data. In confronting this dilemma within this research project, it became imperative that the researcher engaged in multiple readings of the materials to become deeply familiar with the content so as to

evaluate and justify the selection of materials for qualitative analysis. Seidel (1991) also argues for the need for the researcher to be continuously reflective in what the programme is doing **for** the researcher rather than **to** the researcher. Being a qualitative researcher, in the twenty first century, means that we use technology for better access, evaluation and to communicate in-depth inferences from qualitative information. Using a qualitative computer programme is recommended for data sets of more than 500 transcription pages that require a close inspection of every word (Creswell, 2008).

Being confident in the technological aspects of this programme NVivo 11™ was an important factor in deciding to employ it as data storage, process of analysing and as a sorting tool. The researcher engaged in on-line YouTube tutorials and sought expert advice from senior colleagues within the School of Education, Trinity College, Dublin. The researcher engaged in a small group, hour-long tutorial with an experienced CAQDAS user and was provided with additional documents to support better manipulation of the data within the programme. This advice and support enabled the researcher to utilise the programme at a more efficient level. Alongside the use of CAQDAS the researcher also engaged in manually coding all the transcripts and this hands-on approach supported a more informed understanding of the data sets.

What Method of Analysis?

The data corpus presented a dilemma for analysis and was broken down into three clear data sets; the data from interviews, the data from observations of teaching and learning and the data of literacy skills observed. The interviews as a distinct data set are open-ended and are representative of the interviewee's perspectives. The interview set gives insight into the variety of rich ideas and concepts of the

interviewee and require repeated exploration and analysing in detail about what is being said or what is being implied. To gain real insight and to explore the phenomenon of autism and literacy for patterns and themes that represent the ideologies of teachers and parents required the researcher to undertake thematic analysis of the interview set.

The observation data also stands uniquely within this project. From the outset, the researcher experienced what might be best described as theatrical performances. Each observation experience played out in similar fashion to a drama of social action. The teacher/principal (as performers) welcoming the audience (researcher) to the performance, the backstage preparation with the setting of scenery, props to be managed and used, the drama on the front stage, interacting with the audience via gestures, facial expressions and body language. Life in the classroom is never repetitive, no lesson repeats itself exactly because each person involved in the execution of the lesson interacts differently and uniquely with the relationship of performers and materials. It could be argued that a dramaturgical approach to the analysis of the observations would be pertinent (Brissett & Edgley, 1990). However, as the overall aim of the research requires the researcher to:

- Identify literacy practices
- Analyse within the framework of the curriculum progression milestones
- Report on patterns of skills

A thematic analysis (Braun & Clarke, 2006) and a framework analysis (Richie & Spencer, 2002) was used. This enabled the researcher to analyse the social and academic interactions of the performers/participants within the classroom from a social constructionist perspective and to address directly the research questions.

It is acknowledged that the dramaturgical principle that people in ‘concert with similarly situated others, create meaning in their lives’ (Edgley, 2013, p. 2) also supports a constructionist paradigm. While meaning from a dramaturgical perspective, is evident in the interactions, expressions and behaviours of the performers and their audiences, it would detract from the aims of this research. It is intended to explore the dramaturgical perspective to uncover the ‘arena of appearance’ (Edgley, 2013, p. 7) and to draw the meaning of all communicative acts from their expressive and impressive nature in a future research paper.

The observation of literacy skills from the observation sets and photographs of pupil work were analysed via a ‘framework analysis’ against the progressions descriptors in the National Council for Curriculum and Assessment (NCCA, 2016) Language Curriculum Progression Continua.

Selection of Naturalistic Observations for Analysis

In relation to naturalistic observations, it was noted by the researcher that day one of each observation set was a re-introduction to the process of observation and adult participants remained conscious of the presence of the observer. Day three the researcher recognised that the pupil participants were more aware of being observed. The observations selected for analysis within this research project were decided upon in consultation with the project supervisor. Day two of each observation set from each school was selected as it yielded the greatest evidence of the naturalistic observations.

Thematic Analysis

Thematic analysis, according to Braun and Clarke (2006, p. 78), ‘is the first qualitative method of analysis that researchers should learn, as it provides core

skills that will be useful for conducting many other forms of qualitative analysis'. They argue that thematic analysis is flexible within the constructionist paradigm. In thematic analysis patterns are sought within the data and frequency of occurrence noted. This allows the researcher to examine themes from socially constructed 'events, realities, meanings, experiences' (Braun & Clarke, 2006, p. 81). In this research project, thematic analysis was the ideal qualitative analysis tool as it provided the researcher with opportunities to examine, study, dissect, analyse and pore over the data sets again and again. Using a 'voice-centred relational model' and 'listening guide' supported the process of inductive research as the researcher explored the semi-structured interviews from an enquiry position to determine patterns to emerge, applying a tentative hypothesis to them before returning again to the original transcripts and recordings, exploring from a different 'voice' and relational perspective. A theory then emerged based on the combination of voices and perspectives. Examining the observations from a theory first perspective also provided opportunities to hypothesise and explore common patterns and to make observations about the emerging theories and to relate them to actual teaching and learning practice in the autism settings. This provided the researcher with inductive and deductive approaches to identifying latent themes (Boyatzis, 1998).

Framework Analysis –

Framework analysis can support the exploration of policies and documents in the analysis of qualitative data (Gale, Heath, Cameron, Rashid, & Redwood, 2013). It sets out to structure the emerging findings within the framework of identified themes (Srivastava & Thomson, 2009). As the New Language Curriculum (National Council for Curriculum and Assessment, 2016) has set out key progressions milestones these were used as a priori (Richie & Spencer, 2002) to

indicate skills from the observation and photographic evidence of literacy practices. This enabled the researcher to locate the position of the learner with autism on the framework and to determine their current skills acquisition. An example of this process is provided below in Table 4.3 (page 129).

Repeated Exploration

Repeated exploration of the data corpus for analysis presented the researcher with four phases of inquiry and enabled the researcher to keep a keen focus on the research questions.

These phases included

- Reading for deeper understanding; reflecting on content and asking what is happening here? What is the purpose of the language/behaviour used? Does this answer the question asked? What is this about? Is this important? Why?
- Collecting ‘patches of importance’ and relating them to the context
- Elucidate ‘patches’ further, how do they relate to the overall picture? Is this a unique element? What is it really? What code can be applied?
- How does it relate to the theory and context of the study and does it answer the question and advance our understanding?

4.10 The Coding Journey

The foundation principles determined by the theoretical and conceptual framework within this project required the researcher to approach the empirical materials from both a deductive and inductive perspective. The deductive process accepts the ‘global’ view of the empirical materials and acknowledges that there exists a predetermined set of nodes associated to the concept under investigation along with

the researchers pre-existing knowledge on the subject. In an inductive approach the researcher looks at the empirical materials and seeks to expose emerging nodes. This requires open-mindedness and an objective stance to not impose from pre-existing theory. Saldana (2013) suggests that coding is a craft that requires reflection from the professional roles of the coder. Being aware of your behaviour when coding he holds as an ethical standard. It is his argument that as a researcher it is essential to identify our processes as educators and how we apply these; ‘creative impulse, trusting your instinct, taking a risk, and just being empathetically human,’ to our coding (Saldana, 2013, p. 40).

As a researcher, learning to code has presented challenges, and reflection of the process has enabled the researcher to apply stages of learning through the process.

1. ‘Have a go’
2. ‘Re-think and seek reliability’
3. ‘Confirmation of coding’

As an inexperienced coder, the researcher first embarked on a preliminary exploration of the materials, within the NVivo 11™ programme, selecting key phrases and words and allocating nodes and codes. It became evident that the data set was so large and coding became somewhat incomprehensible that it was less informative than had been expected. This presented a challenge to the researcher to demonstrate a level of reliability and consistency that would provide credibility, transferability, dependability and confirmability of the nodes generated (Denzin & Lincoln, 1994).

To address this issue the researcher decided to analyse a teacher interview by hand analysis. In seeking to establish a sense of accuracy of hand analysis, an expert was

sought. One interview ‘Susan’ was given to an experienced researcher colleague for ‘inter-observer reliability’ (Armstrong, Gosling, Weinman, & Marteau, 1997). This expert and the researcher proceeded to hand code separately and to examine and explore the similarities and differences of the hand-coded data against the coded NVivo set (see appendix 1).

This form of triangulation provided the researcher with a more informed interpretation of the data and provided, as Armstrong et al. (1997, p. 598) suggest, critical reflection and refinement of the coding system. As a result, a more stringent ‘rule for inclusion’ (see appendix 3) of codes for nodes emerged. This collaboration also established a colour-coding system and refined codes for imputing into second stage coding within NVivo. All teacher interviews were then coded by hand through a process of reading and re-reading the data, underlining key phrases, boxing individual words and then applying colour-coding to test against the new ‘rules for inclusion’. A second expert opinion was then sought to orally review this process with the researcher and to explore the transparency of the process.

The following table examples a framework of rules for the first question that were created to support nodes, codes and themes to emerge.

TABLE 4.3 RULES FOR INCLUSION

How is literacy supported for pupils with autism in special classrooms attached to mainstream primary schools in Ireland?

Rule for inclusion	Related to question	Teacher interview Nodes
Locating self in professionalism Parent as educator	Professional identity: Specialist Teacher	Identity
Defining, characterising Traits and links to literacy	Autism and literacy	Autism
Parents, staff, partnerships	Literacy beyond the classroom	Relationships
Actions, philosophy, team, classroom management, planning and assessment	Enhance learning	Pedagogy teaching
Provision, Policy and Curriculum	Linked across all questions	Education
Impact on teaching and learning, family, wellbeing	What hinders progress or process	Challenges
Philosophical statements	Linked across all questions	Participant world view
Ability V disability	Specialism or 'normal'	Models of disability

Saldana (2013) contends that coding is cyclical in nature and occurs in cycles; first cycle and second cycle.

Figure 6 presents the cyclical nature of the coding system within this project.

Coding Cycles

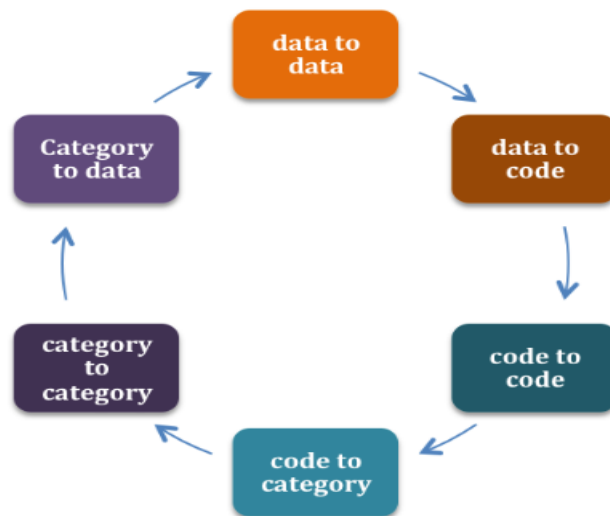


FIG. 6 CODING CYCLE

The following stages of thematic analysis were established as the progressive elaboration of themes to emerge across all empirical materials: Initial coding, focused coding, generating theories.

In initial coding as mentioned previously, the researcher engaged in reading, re-reading and comparing the data with the data, exploring what is happening and applying codes to phrases, lines or single words using the analytical question mentioned.

Qualitative research requires the regular review and advancement of ideas. The node in NVivo™ is the focus of analytical thinking in qualitative analysis (Gibbs, 2002). Node definitions and rules for inclusion provide justification for coding at the node. The researcher returned to the transcripts, observations and documents and reviewed each code in context with the node. This determined in earnest the accuracy of the code at the node and is inductive by nature.

The nodes were then brought together and further examined to generate a concept of the emerging phenomenon to build a theoretical coherence across the data sets.

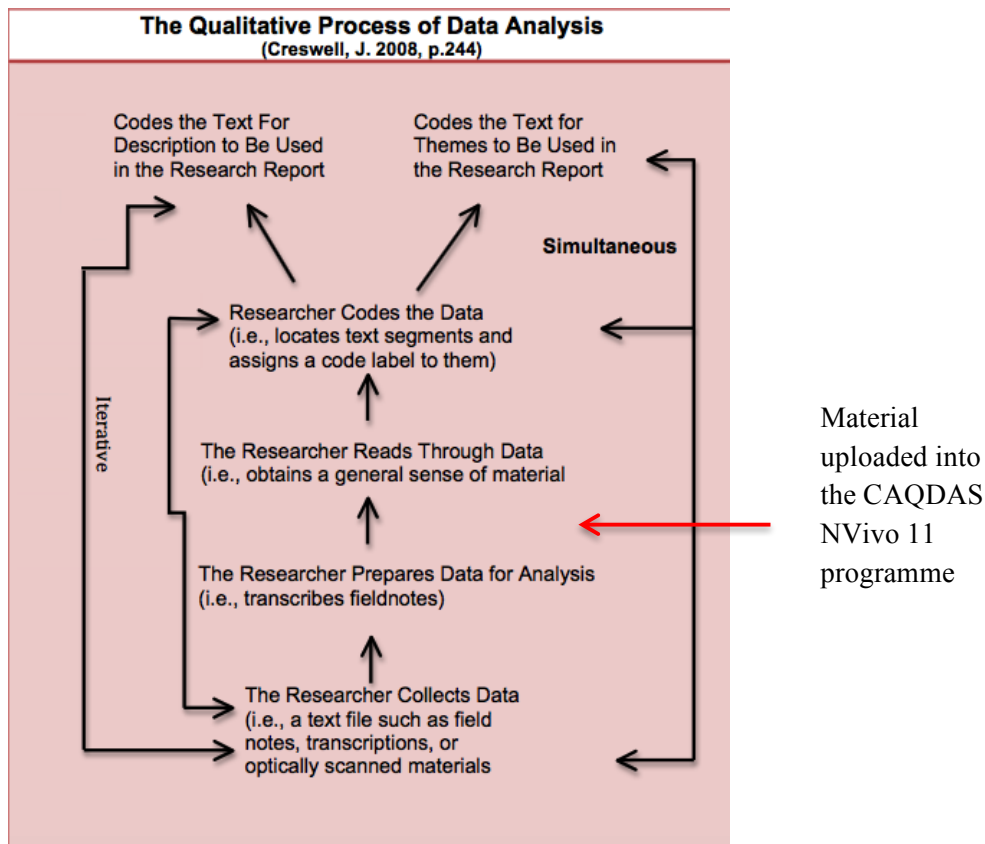


FIG. 7 PROCESS OF DATA ANALYSIS

Thematic Analysis Example

The following table 3.5 presents an example of the thematic analysis process of parent and teacher interviews, and a focus on the question what is autism?

TABLE 4.4 THEMATIC ANALYSIS OF ‘WHAT IS AUTISM?’

Coding key:		Thematic codes
	Philosophical	Participant world view
	Challenge	Challenges
	Clinical response	Model of disability
	Ability V Disability	Model of disability
	Hope V Despair	Challenges
	Nebulous	Challenges
	Educational response	Education
Autism is?		
School name	Teacher responses	Parent responses
Scoil Hyde	Bernie 'different'	<p>Henry Bert's Dad 'Autism is, you know what? I think people with Autism and people like that are here for a reason that was always my view on it.'</p> <p>Therese Bert's Mum 'Autism is being different but not less'</p> <p>Tara Cal's mum 'I'd say, other than his speech, you wouldn't really get that he has any autistic tendencies. Where before... it was very challenging. It was tough but we got there in the end so he's fabulous now, he is a wee dote so he is.'</p> <p>Doireann Ed's Mum 'Autism is extremely challenging, but at some stage we are privileged to have a child with autism'</p>
Scoil Ó Ceallaigh	Tina 'Indefinable, it's language, its social skills, it's deficits'	<p>Lochlann Barbara's Dad 'Well to me it's a very nebulous thing'</p> <p>Dharma Barbara's Mum 'If I were honest I would say autism is a bit scary. That's just the truth, that's how I feel - a bit scary'</p> <p>Keith Ethan's Dad 'let's start with the negative part of it. Heart-breaking; just frustrating;</p>

		<p>thought-provoking; hard work; and challenging. But it's a reality</p> <p>Noeleen Ethan's Mum 'challenging. But it's honest. We don't get anything but honesty. He can't lie to save his life; so it's so honest there, you get what it is. He tells you like it is'</p>
Scoil deValera	<p>Marie 'it's the children themselves, the way they communicate their needs.</p> <p>I don't understand it, I find it hard, I don't understand them'</p>	No parent interviews
Scoil Childers	<p>Leah 'developmental delay, effects your communication, your imagination, your social connection to the outside world'</p>	<p>Mo Fabia's Mum 'Tough, honestly? As a mother if I could take it away in the morning I would'</p> <p>Betty Izzy's mum 'A pain in the hole. I hate it. So, maybe I'm the one that needs a bit of therapy. Really I wonder about this. Why have I got? I still have a bee in my bonnet about it. I try to convince myself that it's wonderful, but I do wish he didn't have it'</p> <p>Lulu Kaden's Mum 'Being different. Being unique, just maybe being a sensitive person'</p> <p>Mia Jack's Mum 'It's a neuro-developmental condition; it affects how somebody interacts with the world around them. I mean, I could give you all the DSM criteria, because that's my field'</p>
Scoil Ó Dalaigh	<p>Bea 'Oh Good God! It's communication, it's social, it's a life-long challenge'</p> <p>Dawn 'Oh no! I don't know, ignorance is bliss'</p>	<p>Barb Barry's Mum 'communications, wires in their head not operating the way that you want them to. Sometimes I think Barry's trapped in a body, you know, he just can't communicate to the world what he's thinking'</p> <p>Fern Fintan's Mum 'I don't define Fintan by autism, this is Fintan, he just happens to have autism because every child is different. I don't see him as an autistic child, he just has things that he does differently to others. It's a social thing really with him</p> <p>Kelly Kyle's Mum 'Different, hard, scary... It's frightening for children, it's frightening for</p>

		<p>parents because there is no – I think, and I could be totally wrong but I think no two kids are the same’</p> <p>Magda Mat’s Mum (laughter) ‘is, was...autism is a journey...it’s long, definitely long. It’s hard at times. It’s a new life, it’s a different life. It’s kind of a journey I think is the big one, because that’s really what it is. It’s an experience... it’s déjà vu...it’s Groundhog day’</p>
<p>Scoil Hillery</p>	<p>Susan ‘Oh my heaven, oh man, God knows, it’s not the child’</p>	<p>Ursula Brian’s Mum ‘I can’t really put a thing on that...I don’t see him as a child with a disability in any way, I wouldn’t even say Brian is special needs, to me he has a few extra care needs...when we got Brian diagnosed and like ‘what does it mean’, ‘it just means he is wired slightly different than us, so he doesn’t always get to the same conclusions as we do the same way, he has to go in a round about way’</p> <p>Betty 2 Eric’s Mum ‘He has a learning disability so he is behind, he has an IQ of 65. So he is behind, I would say he has a moderate level of autism, sometimes it seems severe but they are on the bad days. I think moderate would be a good indicator. Definitely mild</p> <p>Penny Ewan’s Mum ‘a neurological disorder and it can cause impairments for social interactions. It can lead to repetitive behaviours. It can lead to impairments in social interactions with other peers. It’s, I think it is genetic...I have a scientific background, it’s not connected to any vaccines’</p>
<p>Scoil Robinson</p>	<p>Kristine ‘a neurological delay, a different way of understanding, a different way of relating... communicating, slightly rigid in behaviours’</p> <p>Diane ‘A different way of living and being’</p> <p>Donna ‘Autism I suppose is just how we, it is just a different way of learning is how I would see it at and just another way of you know looking at the world and dealing</p>	<p>Anita Fred and Kevin’s Mum ‘it’s a toxic overload, that something happened that their whole systems just went into downfall, and it’s the only explanation I can have for it. Obviously it manifests differently in different people because they have different systems, they have different thoughts, they have different emotions, they have a different outlook. Everybody does, so of course it’s going to manifest differently. Some people wear it better than others’</p>

	<p>with what we might consider every day issues like I can't find my coat or I am after losing my pencil'</p> <p>Lorraine 'I just say like it's a spectrum, I don't know how to even define it'</p>	<p>Eithne Vincent's Mum 'problem with the speech, his eye, eyes contact'</p> <p>Brid Faith's Mum struggled with the diagnosis and still feels very distressed by the word and it's attachment to her daughter. She said 'It is very hurtful. I would love to destroy those reports'</p> <p>Mary Sophie P's Mum 'OK, to be very honest, the triad of impairment is really it. The three things come together in varying degrees and individual amounts. Some of my kids have lots of sensory issues, some have none. All of them have social issues, social issues in the sense that their ability to make relationships is definitely impaired, all of them. But they're not insurmountable things. They can be taught'</p>
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Word Frequency Query from Nvivo™

The use of the query aspect of the Nvivo™ programme enabled the researcher to reflect on word frequency and to pull out nodes as they emerged. Figure 8 below provides an example of a word frequency check from interview schedules from the parent interview relating to the question what is literacy? The size of the font relates to the frequency of the word used within the topic under exploration. It provides a clear picture of the weightiness afforded or not afforded as the case maybe to the elements of literacy.

TABLE 4.5 PROGRESSION CONTINUUM OF LITERACY KEY SKILLS

Strand	Milestone	Evidence
<p>Oral Language</p>	<p>(e)</p> <p>The child begins to use decontextualized language, such as topic-specific language acquired through text and through interactions with others.</p> <p>He/she recalls unshared experiences, sequences an event for a listener.</p> <p>The child is more aware of audience and uses language differently depending on the listener.</p> <p>He/she speaks with a wider range of vocabulary and detail, uses context to help understand new words and responds to lengthy instructions.</p> <p>The child reflects on experience, gives explanations, considers problems and suggests solutions</p>	<p>Obs 1:2 9.10am</p> <p>To teacher – ‘I hate morning song! Where is Mrs (SNA)?’</p> <p>Obs 2:3 9.10 am</p> <p>Research to Bert- ‘Hi Bert, who is that in your hand?’</p> <p>Bert ‘It’s Creeper, he’s a monster.’</p> <p>R ‘What does he do?’</p> <p>Bert ‘he explodes, when Creeper and Skeleton get together you have a mob.’</p> <p>R ‘who would win the mob?’</p> <p>Bert ‘Creeper’</p> <p>R ‘why?’</p> <p>Bert ‘he is more powerful and he spawns on blocks’</p> <p>R ‘what does spawn mean?’</p> <p>Bert ‘he drops eggs’</p> <p>T calls pupils to welcome hoop</p> <p>Obs 1:2 11.15am</p> <p>To researcher ‘you’re writing a book, my mum wrote my name in your book’</p> <p>Obs 1:2 9.50 am</p> <p>To teacher –‘hard work, that was hard work!’</p> <p>Obs 1:2 10.20am in yard to peers- ‘run for your lives he’s coming! It’s a mob, it’s a monster!’</p>

		<p>A peer pushes another, Bert approaches and says 'say sorry to R right now, go on say sorry'</p> <p>Obs 2:2 11am Bert object to work scheduled but follows T instruction to complete tasks</p> <p>Obs1:2 10.20am to teacher-</p> <p>'Where is Cal? Does he have to finish his work?'</p>
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4.11 Realities of the Project

The reality of the family system within this project relate to the lack of father participants. Ideally this research project would have benefitted significantly with a greater sample framework including where possible the voices of children with autism but from an ethical practitioner position this was not appropriate within the age and sample of the child participants involved. Gathering samples of assessment and planning also presented limitations as teachers were not willing to share copies of planning or IEPs due to the privacy concerns and confidentiality clauses attached to them. It would be pertinent to secure authorisation for IEP copies for in-depth examination and for these to be securely maintained by more experienced professional researchers. To apply these changes, a team approach to the research would be required. It is acknowledged that the inter-observer process is limited due to only one single transcript interview being dually coded, this limitation is imposed by the scope of the project and the ability to obtain co-operation of busy senior research colleagues. It would be more advantageous to have a team of researchers engage with all data, either independently or in a focus group manner. Another

realisation is in the fact that all the schools in the project volunteered to allow the researcher in to observe and ask questions, these schools could be seen to be more willing to inter and intra-spection. The schools that did not enter the study may have yielded very different outcomes. Also, the application of a qualitative method only, in retrospect, has also limited the scope of the study and the use of a mixed methods approach could in fact have yielded a quantitative value to quality of provision, lessons and practices.

Chapter Summary

This chapter presented the approaches and methods used to explore the questions that emerged from the literature review and adhered to the epistemological underpinnings set out in chapter 3. Interpretative and constructivist paradigms supported the operation and organisation of the project. Furthermore, the chapter debated the research methodologies and design used to stimulate the generation of relevant data for analysis. A historical overview of the coding journey was presented with diagrammatical presentations.

CHAPTER 5: RESULTS

5.1 Introduction

The purpose of this research was to enquire into the literacy practices of children with autism, in mainstream primary education settings in the Republic of Ireland. Based on the critical review of the pertinent literature relating to literacy practices of children with autism the following research questions were identified as warranting further research:

How are literacy practices supported for pupils with autism in special classrooms attached to mainstream primary schools?

- a) What literacy practices do pupils with autism experience in mainstream primary schools?
- b) What are the influences on how literacy is constructed in school and at home for pupils with autism?
- c) What if any distinct pedagogies are used to enhance literacy practices among pupils in autism specific classrooms?
 1. Do pupils with autism require specialist teaching to advance literacy practices?
- d) Do curricula, school policies and practices support the literacy experiences of pupils with autism in mainstream primary schools?

A qualitative approach was employed across a multi-site case study with data collected via classroom observations of teaching and learning, semi structured interviews with teachers and parent participants, photographic evidence of pupil work, teacher planning and policy documents relating to autism. Pseudonyms for school sites, teachers, pupil participants and parents were created (as described in chapter 4) to ensure the anonymity of the participants involved. The findings for

each school case are presented separately from each other to provide data on the background to each case. As discussed in the methodology chapter, the interviews and classroom observations were analysed using a thematic approach and the evidence of literacy practices was analysed using a framework approach, the priori being set in the progression descriptors of the NCCA Language Curriculum (2016). Finally, the presentations of themes to emerge are presented in cross-case analysis format with emphasis on evidence to support responding to the research questions. Themes such as inclusion, identity, roles and relationships, policy and provision and pedagogy emerged through the narratives of parents and teachers, and the observations of teaching and learning.

5.2 Data Source Information

The following tables present the data sources and types:

Table 5.1 to table 5.7 provide evidence of the data collected at each case site.

TABLE 5.1 EVIDENCE OF THE DATA COLLECTED AT SCOIL HYDE

School	Observation of Pupils	Sex M/F	Interview Mother	Interview Father	Parent declared family separated	Interview Teacher	Classroom Observations	Photographic Documents
Scoil Hyde	Ed	M	Doireann	-	-	Bernie	27 hours collected	1. Examples of work 2. Classroom structure 3. Planning 4. SEN Policy
	Cal	M	Tara	-	-			
	Bert	M	Therese	Henry	-			

TABLE 5.2 EVIDENCE OF THE DATA COLLECTED AT SCOIL Ó CEALLAIGH

School	Observation of Pupils	Sex M/F	Interview Mother	Interview Father	Parent declared family separated	Interview Teacher	Classroom Observations	Photographic Documents
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Scoil Ó Ceallaigh	Oscar	M	-	-	-	Tina	27 hours collected	1. Examples of work 2. Classroom structure 3. Planning 4. SEN Policy
	Ian	M	-	-	-			
	Niamh	F	-	-	-			
	Ethan	M	Noleen	Keith	-			
	Barbara	F	Dharma	Lochlann	-			

TABLE 5.3 EVIDENCE OF THE DATA COLLECTED AT SCOIL DEVALERA

School	Observation of Pupils	Sex M/F	Interview Mother	Interview Father	Parent declared family separated	Interview Teacher	Classroom Observations	Photographic Documents
Scoil deValera	Frances	F	-	-	-	Marie	9 hours in term 1	No
	Helen	F	-	-	-			
	Evan	M	-	-	-			
	Earl	M	-	-	-			

TABLE 5.4 EVIDENCE OF THE DATA COLLECTED AT SCOIL CHILDERS

School	Observation of Pupils	Sex M/F	Interview Mother	Interview Father	Parent declared family separated	Interview Teacher	Classroom Observations	Photographic Documents
Scoil Childers	Izzy	M	Betty	-	-	Leah	27 hours collected	1. Examples of work 2. Classroom structure 3. Planning 4. SEN policy
	Kaden	M	Lulu	-	Yes			
	Karl	M	-	-	-			
	Ken	M	Mia	-	Yes			
	Fabia	F	Mo	-	Yes			
	Owen	M	-	-	-			

TABLE 5.5 EVIDENCE OF THE DATA COLLECTED AT SCOIL Ó DALAIGH

School	Observation of Pupils	Sex M/F	Interview Mother	Interview Father	Parent declared family separated	Interview Teacher	Classroom Observations	Photographic Documents
Scoil Ó Dalaigh	Mat	M	Magda	-	-	Bea	27 hours collected	1. Examples of work 2. Classroom structure 3. Planning
	Barry	M	Barb	-	-	Dawn		
	Kyle	M	Kelly	-	Yes			
	Steve	M	Sophie	-	-			

	Fintan	M	Fern	-	-			
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TABLE 5.6 EVIDENCE OF THE DATA COLLECTED AT SCOIL HILLERY

School	Observation of Pupils	Sex M/F	Interview Mother	Interview Father	Parent declared family separated	Interview Teacher	Classroom Observations	Photographic Documents
Scoil Hillery	Harry	M	-	-	-	Susan	27 hours collected	1. Examples of work 2. Classroom structure 3. Planning 4. SEN Policy
	Brian	M	Ursula	-	Yes			
	Ger	M	-	-	-			
	Sam	M	-	-	-			
	Eric	M	Betty 2	-	-			
	Ewan	M	Penny	-	-			

TABLE 5.7 EVIDENCE OF THE DATA COLLECTED AT SCOIL ROBINSON

School	Observation of Pupils	Sex M/F	Interview Mother	Interview Father	Parent declared family separated	Interview Teacher	Classroom Observations	Photographic Documents
Scoil Robinson	Fred	M	Anita	-	-	Diane RT	18 + hours collected	1. Examples of work 2. Classroom structure 3. SEN Policy
	Kevin	M				Kristal RT		
	Faith	F	Bríd	-	-	Donna		
	Sophie P	F	Mary	-	-	Lorraine		

5.3 Family Status

Tables 5.1 to 5.7 above also provide additional information parents offered, but not looked, for during the interview process relating to marital/family status. While no question was asked relating to marital status it is important to note that six parents of the twenty-one families have indicated/declared a relationship breakdown, which statistically is 30% of the families in this study. This has implications for family literacy activities and will be explored later under the theme of Family Literacy;

(Family Literacy: what are the influences on how literacy practice for children with autism are constructed in the home?)

5.4 Parent Participants

In all thirty-two sets of parents in the study gave permission for their child to be observed and all were invited to participate in a short interview. Twenty-one mothers and three fathers came forward for face-to-face interviews. Fig.9 below presents the parent/guardian sets per site.

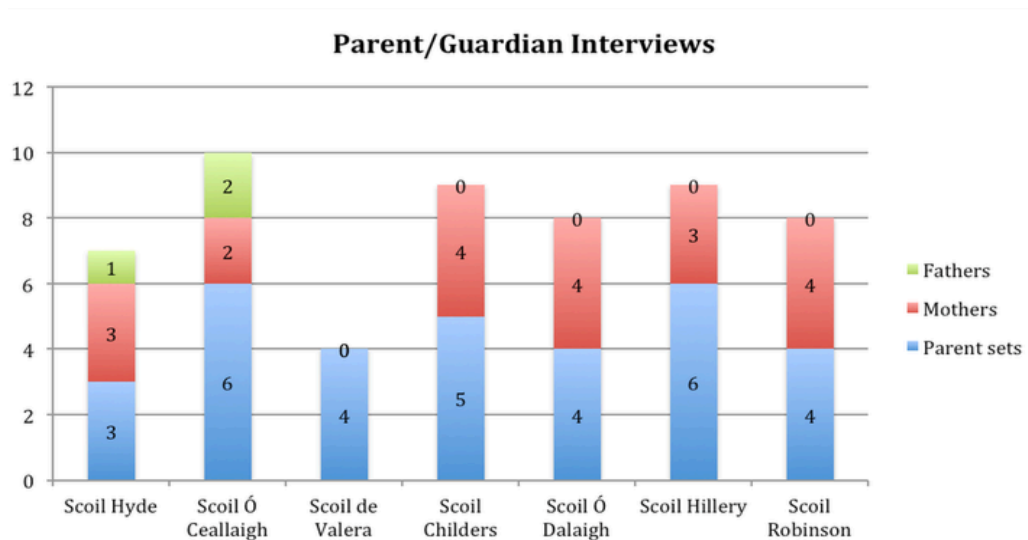


FIG.9 PARENT AND GUARDIAN DETAILS

All parents (n=32 sets) were invited by letter to attend a short face-to-face interview. A point worth noting from the request for face-to face interviews is that most mothers made themselves available to the researcher during the period of classroom observations or when their child was attending school. Attempting to interview fathers raised some pertinent issues. When mothers were questioned about their spouses'/partners' availability to be interviewed whether face-to-face or by phone, those separated from their partners had no opinion, while others responded that their husband/partner would not have anything different to add.

5.5 Scoil de Valera

In Scoil de Valera, while two parents signed the consent forms and two others gave formal verbal permission via the teacher to observe their children, two of them did not want to be interviewed and the other two did not turn up at their allotted time. Marie (the autism class teacher) informed me that this was not an unusual pattern of behaviour as these parents are non-attenders at parent/teacher meetings or Individual Education Plan (IEP) meetings. Pupils within the study from this school also present as a unique cohort as they each have an additional diagnosis such as cerebral palsy, moderate general learning disability and sensory impairments such as deaf/blindness.

The researcher, in discussion with the principal and teacher, determined that to continue observing would not constitute good ethical practice. For this reason, there is only one set of classroom observations (n=9 hours n=1 term) and only the two pupils with signed consent forms are included in the study. As the parents did not engage with the interview process there is little historical data relating to both Frances and Evan. This school did not withdraw from the study and have not requested that their data be withheld.

5.6 Family Roles and Relationships

Some mothers elaborated on the family system to the researcher at interview after a verbal request to access and interview the fathers of the pupils in the study. Some stated that their husbands/partners wouldn't know about homework or anything like that because there had been a shift in roles and responsibilities. This they

acknowledged, in many cases, to be the impact of the diagnosis of autism on the family system. In some cases, the diagnosis has exacerbated already existing relationship issues and 30% of the parent/guardians in this study declared themselves 'separated'. In one specific case a mother presents her situation '*look I'm not going to put (child's) autism on us, we were already dealing with (other issues mentioned) at that stage as well, ... it was a bit of a strain anyway and we split up*'. This mother relates that herself and her separated husband have made an agreement that she is the '*Monday to Friday parent*' ensuring that the routine of home/life, care and school support is maintained within the original home setting and the children go to their father on Friday and they get to stay up late because it is the weekend, there is no routine. She expressed that this has implications and an impact on her role

you kinda feel a bit jealous for it all, but I wasn't begrudging him that... Daddy always got him McDonalds on a Saturday.... we've had to learn individually how to deal with (child's name). You know... "super daddy lets me play all day" ... and I feel for him (husband) because he didn't stay the course (support from HSE services)... he (Husband) has a certain denial about Name (son's) diagnosis.

Anita, Fred and Kevin's mother (Scoil Robinson), told the researcher outright that there would be no access to her husband for any form of interview. She said that life with four children, two of whom have autism and significant communication needs, is hard and when her husband comes home from his '*hard days*' work, he has too many other family commitments. She said that this time is the only slight reprieve she gets from being fully hands on. She stated that they have become terribly isolated as a couple because no one will mind the children and they (family) are on a strict prescribed diet so they can't visit or eat in anyone else's house. Sophie P's mother Mary (Scoil Robinson) also offered reasons for her husband's

non-availability as issues in relation to family dynamics. Mary has three other older children all diagnosed on the autism spectrum. She says that in her instance autism is mostly genetic. She relates that now, (day of interview) her younger daughter is going through the process of an autism diagnosis too.

5.7 Pupil Participants

The following tables: Table 5.8 to Table 5.13 set out the data generated via the parent interviews relating to each pupil case within the bounded case of the schools. Each table is introduced in a cross-case analysis of the information per school drawing attention to specific findings for later discussion.

Scoil Hyde

Table 5.8 below sets out the participant pupil case studies from Scoil Hyde. This information presents the families' interpretation of early symptoms such as 'quiet' child and the difficulties from the outset in feeding and soothing their baby. It also points to the instinct that something is not quite right and directs attention also to the importance of early supports and assessments being made available. Two of the three families sought private assessment to access early services, as the public lists were too long.

TABLE 5.8 SCOIL HYDE PUPIL INFORMATION

Scoil Hyde	Position in family	Age at onset of autism traits or diagnosis	Autism History	Siblings with autism or other disabilities	Age at time of research
ED	Middle child, older brother and	14 months, sudden onset of screaming	'quiet child' lost all speech, difficult to	Older brother had speech and language delay	7 years

	younger sister		sooth and manage		
Cal	Only child	Age 2 parents were exhausted and sought help, and brought Cal for private assessment	Issues from the get go, difficult to feed and settle, high pitched screams	No other family members diagnosed	6 years
Bert	Middle child, older brother and younger sister	Private diagnosis, Mum wasn't happy with progress	Quiet, not speaking, Restrictive repetitive behaviours	No other family members diagnosed	6 years

Scoil Ó Ceallaigh

Table 5.9 represents the data collected at the parent interviews relating to the pupil case participants in Scoil Ó Ceallaigh. In both Ethan and Barbara's case the parents describe their child as typical in development and that they were 'picked up' for assessment later by the HSE health nurse (in Ethan's case) and the school/class teacher (in Barbara's case)

TABLE 5.9. SCOIL Ó CEALLAIGH PUPIL INFORMATION

Scoil Ó Ceallaigh	Position in family	Age at onset of autism traits or diagnosis	Autism History	Siblings with autism or other disabilities	Age at time of research
Ethan	Only child	None – picked up by HSE 3year check and referred, diagnosed late at age	No real indication appeared, typical in development but only just made milestones	No siblings	9 years

Barbara	Youngest of three children. Older brother and older sister.	Typically developing, demonstrated elaborate language abilities from a young age	Sectioned delivery, induction didn't work	No other family members diagnosed - Brother is described as extremely bright but experienced serious issues in third level	10 years of age
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Scoil Childers

Table 5.10 presents data obtained from the parent interviews regarding the case study pupils from Scoil Childers. In this case, it is important to note that the mothers of Izzy and Kaden both identify that there is a family similarity to certain autism traits. Kaden and Fabia have no other siblings and live in one-parent families. Fabia has significant co-morbid disabilities and this is important to understand within the context of this study.

TABLE 5.10 SCOIL CHILDERS PUPIL INFORMATION

Scoil Childers	Position in family	Age at onset of autism traits or diagnosis	Autism History	Siblings with autism or other disabilities	Age at time of research
Izzy	3 rd child of 4 children, he has 2 older brothers and a younger sister	3 year developmental check, HSE picked up on developmental milestones missed, diagnosed at age 5 following a two year assessment wait and diagnose time frame-private	Quiet child, babyish in behaviour, Speech & Language (S&L) issue.	No other family members diagnosed. Mother describes father as 'super-intelligent'	7 years

		assessment sought			
Kaden	Only child	3years of age when diagnosed, very difficult issues, HSE identified need to assess	Emergency section, Low muscle tone from beginning, very anxious child, rapid onset of illness requiring hospitalisation, from birth he would stim with his hands, Epilepsy occurring at night during sleep	No siblings, but mother mentions Granddad (her father) as a man with stimming behaviours	8 years
Ken	Eldest child of two. Has a younger sister	Assessment of need sought by mother at age 2 + years, 3 ½ years of age when diagnosed	Preschool identified lack of speech or communication, his mum says it is his restrictive repetitive likes and routines that indicate his autism	No other family members diagnosed	8 years
Fabia	Only child	Assessed at 3 year milestones	Hearing and Visual impairment and multiple complications at birth, heart complaint, repetitive stereotypical behaviour	No siblings	8 years

Scoil Ó Dalaigh

Table 5.11 presents the data of each pupil participant as a case study within the bounded case of Scoil Ó Dalaigh. It provides an overview of the development of the child and the position of the child within the family. In three of the four cases,

parents indicate that there were immediate signs of abnormal development and wellbeing.

TABLE 5.11 SCOIL Ó DALAIGH PUPIL INFORMATION

Scoil Ó Dalaigh	Position in family	Age at onset of autism traits or diagnosis	Autism History	Siblings with autism or other disabilities	Age at time of research
Mat	Middle child, older sister and younger sister	Immediately at birth, difficult to settle, cried a lot, difficult to sooth, blank facial expression. Early intervention started at 14 months	Emergency section at birth, constant rocking, feeding issues, no connection with others, blank expression	Older sister has an AS diagnosis, younger brother is reportedly very bright but no current diagnosis	8 years (nearly 9)
Barry	Youngest of three children	Very sick baby from prenatal and postnatal, no speech at age 2, at 2 years 6 months put on list, assessed and supports from Early Intervention team at 3 years but parent not informed till 1 month off age 5 years	Emergency sectioned at birth, inducement didn't work, baby went into distress. No speech, then at age 3 ½ spoke with an English accent, became difficult to manage, could not bring shopping etc.	Siblings reported as 'Neurotypical'	9 years
Kyle	4 th child	Different from the beginning, mum realised that he was not similar to her three older children. Diagnosed at age 6 years	Quiet but rigid in routine, self-contained. Began self-injurious behaviour in junior infants	All siblings and nephew described by mum as 'Neurotypical'	8 years

Fintan	Older brother and older sister	Never spoke until the age of three, Parents sought speech and language, diagnosed with mild general learning disability and then autism at age 5 on starting school	Quiet child just speech and language issues	No other family members diagnosed	9 years
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Scoil Hillery

Table 5.12 below represents the case study participant data from Scoil Hillery. It is also an important table of information as it also identifies the need for early interventions. In two of the three cases outlined the mothers sought support for their child in the 1st developmental year and had received a diagnosis by age 2 ½ years, while Ewan’s mother sought support at age 2 but Ewan didn’t receive his diagnosis till he was 4 years of age. This is interesting when considering the onset of early intervention services and supports in early-years educational placements and school.

TABLE 5.12 SCOIL HILLERY PUPIL INFORMATION

Scoil Hillery	Position in family	Age at onset of autism traits or diagnosis	Autism History	Siblings with autism or other disabilities	Age at time of research
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Brian	3 rd child, older brother and older sister	Age 1 the HSE nurse, referred him because of lack of responses, diagnosed at age 2 ½	Appeared typical in development to parents, quiet, inappropriate play skills, poor language, easily frustrated	Older sibling diagnosed with OCD at age 8, HSE suggested she be assessed for autism but she has not agreed	7 years
Eric	3 rd child in family of four, one older brother and sister and younger sister	At age 1 mum was very concerned brought to HSE nurse and sent for referral, diagnosed at age 2 ½ years	Floppy baby, needed intense physio and OT, very sick early years, no real language	No other family member diagnosed	10 years
Ewan	2 nd eldest of family of 4, one older sister, one younger brother and sister	Mother became concerned at age 2, diagnosed at age 4 ½ years	Poor eye contact, erratic behaviours, hyperactive, high number of meltdowns, poor language	No other family member diagnosed	9 years

Scoil Robinson

Table 5.13 also presents the data pertaining to the child participant case studies and circumstances relating to each child in Scoil Robinson. This school presents a somewhat different profile of each pupil case, as there is a significant family link to autism. Fred and Kevin are brothers on the autism spectrum and Sophie P is the fourth child of five children and all her siblings now have a diagnosis of autism. This is essential information for the school and community as it reveals the family context and resources needed to support the family and the learning needs for better literacy outcomes.

TABLE 5.13 SCOIL ROBINSON PUPIL INFORMATION

Scoil Robinson	Position in family	Age at onset of autism traits	Autism History	Siblings with autism or other disabilities	Age at time of research
Fred	2 nd eldest of four, 1 older brother and two younger sisters	Age 24 months, immediately became 'floppy, a sack of potatoes'	Appeared typical until vaccination, projectile vomited for 7 months after, very distressed baby, floppy, no language	Older brother has mild autism	7 years
Faith	1 older sister	15 month check, not meeting milestones, 12 months later diagnosed	Induced pregnancy. Difficult to sooth 'moaner, constantly groaning', 'happy baby'	Older sister reported as 'typical'	7 years
Sophie P	3 older brothers 1 younger sister	Late diagnosis, age 4 became frustrated in communicating	Active capable child, reasoned thinker, auditory gaps leading to frustrations in communication and relationships	3 older brothers 2 have autism, 1 AS and younger sister being assessed at time of research	10 years
Kevin	Eldest brother (of Fred) of four, 1 younger brother and 2 younger sisters	3years, mum noticed he was quiet and not playing appropriately with his toys as he had previously done. Diagnosed at age 4 years	Quiet, typical development reported, change on vaccination, quiet, lack of imaginative play	Younger brother has autism	9 years

Vincent	Eldest child of two children	Check up at age 2 referred for assessment, 1 year 6 month later diagnosed	Cried for first 2/3 months, difficult to settle, became a quiet child only spoke two words	Sibling has no reported disabilities	10 years
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5.8 Teachers Interviewed

All teachers in autism specific classrooms were interviewed (n=7). In Scoil Robinson, 4 teachers were interviewed. Fred’s class teacher Charleigh (substitute teacher covering a maternity leave), Kevin’s class teacher Norah, and Vincent’s class teacher Denise opted out of being interviewed. They determined their workload and other personal commitments did not permit time to engage in the interview process. At the time of the observations and interview schedule the L/S teacher (Natalie), for personal reasons was also not available for interview, this teacher did however insist on being part of the classroom observations. Loraine from Scoil Robinson and Marie from Scoil deValera are both substitute teachers covering a maternity leave.

Teacher Experience

Data gathered from teacher interviews provides information on teacher length of service and experience in each case site. Teacher experience in both mainstream, and autism specific classrooms varies across the eleven teachers interviewed. The following table 5.14 outlines by case site, each teacher’s length of service since graduation and years appointed to the autism class. Following this table Figure 10 provides a cross case observation of the distribution of experience in a bar chart.

TABLE 5.14 ALL TEACHER PARTICIPANT INFORMATION

School	Teacher Name	Length of service in general	Length of service in Autism unit/class
Scoil Hyde	Bernie	22 years	2 years plus
Scoil Ó Ceallaigh	Tina	14 years	1 year plus resource to Autism pupils
Scoil de Valera	Marie	4 years temporary and sub positions	Less than 1 year
Scoil Childers	Leah	10 years, trained outside the state	4 years plus
Scoil Ó Dalaigh	Bea	15 years	9 years plus
	Dawn	24 years	4 years plus
Scoil Hillery	Susan	35 years	16 years plus
Scoil Robinson	Diane	6 years	3 years as resource less than 1 year autism
	Donna	11 years	None specific – mainstream class teacher only
	Kristine	33 years	LS/Resource 12 years and autism 9 years
	Lorraine	NQT 1st year	Less than 1 year

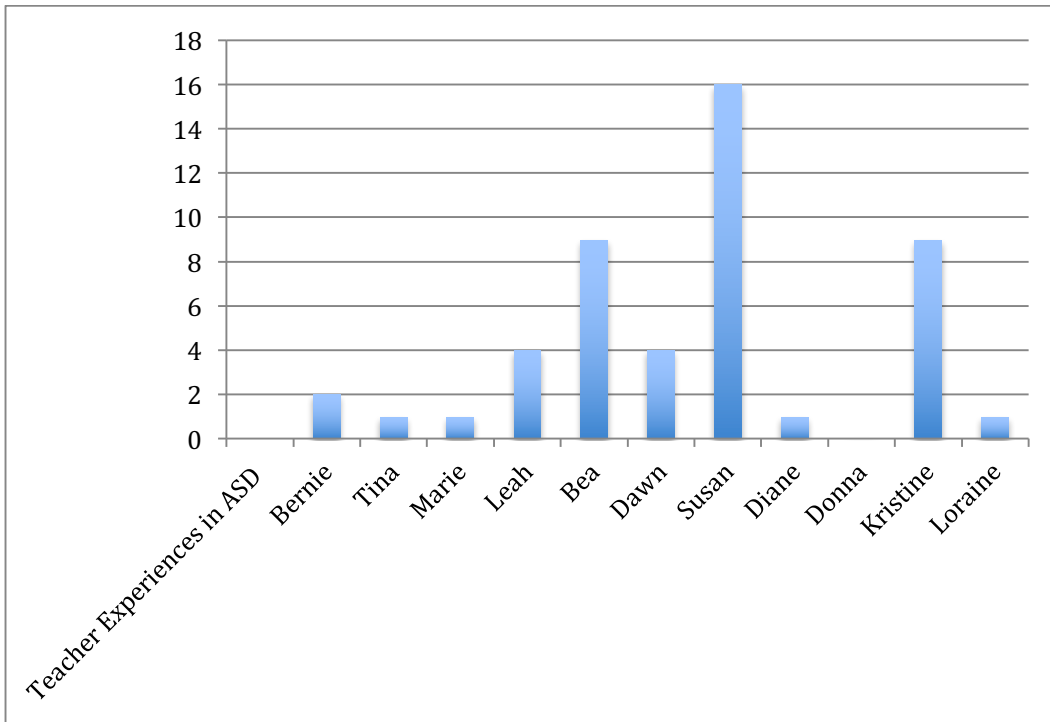


FIG. 10 BAR CHART OF TEACHER EXPERIENCE

Analysis of Teacher Experience

Collectively this group of participant teachers interviewed has 46.66 years of experience in teaching pupils with autism. However, there are significant variations in the amounts of specific teaching experience with pupils who have autism among the teaching cohort. Bernie (Scoil Hyde), for example has been teaching for 22 years but has only been teaching pupils with autism for 2 of those years, while Bea (Scoil O’Dalaigh) has been teaching 15 years and 9 of these years has been spent teaching pupils with autism.

Scoil Robinson

Scoil Robinson as discussed previously does not have an autism specific class and so is not entitled to the extra support staff assigned to this type of provision. Diane and Kristine are Learning Support/Resources teachers and take pupils with autism on a one-to-one instructional basis. Donna and Loraine are mainstream class teachers with a pupil from the study with a diagnosis of autism. Loraine is a ‘Newly

Qualified Teacher' (NQT) and as this is her first employment, she is currently engaged with the Inspectorate completing her teaching certificate.

While Banks et al. (2016), McCoy et al. (2014) and the National Council for Special Education (2015) provide an in-depth review of current practice and provision, a national profile of qualifications and service experience of teachers working in autism specific classes is not currently available. Hence, it is difficult to identify how the participant profile from this research project and other similar projects can relate to the national picture of qualification and service experience among this cohort of teachers.

5.9 Themes to emerge

This section (as discussed in the introduction to this chapter) explores the narratives of teachers and parents from the interview data set. The section is presented via cross-case analysis and presents the themes to emerge from interviews. Themes such as inclusion, policy and provision, being literate, challenges/rewards, identity, relationships, and pedagogy were evident as teachers and parents explored their roles in the education of pupils with autism. The parent interviews provide us with some challenging issues and their emotional perspectives on the impact of the diagnosis is essential understanding for the role of parents as partners in education to their children who have autism. The parent participants revealed their perception of the true nature of autism as an ability and disability that has a profound effect on the family structure.

The teacher participants presented their philosophy of teaching and learning, the reality of teaching within the setting of the classroom and the needs for support to maintain good practice and personal health and wellbeing. The section also

provides an exploration of the themes that emerged in relation to the concepts of autism and literacy. The conclusion of this section draws together the findings to present a more succinct picture of the evidence relating to the research questions.

Inclusion

The literature review presented key research in inclusion of learners with autism in mainstream settings. Parsons et al. (2009) pointedly call for qualitative and contextual research that provides evidence of what constitutes inclusive education for learners with autism. Further, a particularly significant and relevant finding from McCoy et al. (2014) indicate that more than 50% of learners with SEN spend most of their week in their special classroom with a further 21% of learners with SEN spending all their week together. Their research also identifies that there exists an ‘unclear understanding of how special classes operate’ (McCoy et al. 2014, p. 121). Further they argue and reinforce the claim by the NCSE policy advice paper (2013) and Rix et al. (2103) that specialist knowledge and an inclusive pedagogue is needed to support learners with autism in mainstream provision. This and the principles of inclusion set by the World Health Organisations (2011) calls for a significant exploration of the realities of inclusion for learners with autism in mainstream primary schools.

Physical and Policy Factors to Consider in Relation to Inclusion

Table 5.15 presents details of physical and enrolment policies that impact on the ideology of inclusion including the age and architecture of the building and the number of pupils and staff allocated to support inclusion. It is important to note a number of issues; firstly, the Board of Management (BOM) in Scoil deValera have decided to close their autism class and are no longer accepting enrolment since the time of observations. Secondly in Scoil Ó Dalaigh and Scoil Robinson both schools

were built in the 1970's and until quite recently had PortaKabin like structures. Thirdly and most significantly the enrolment of pupils with autism into each school does not mean that they are all enrolled in the autism unit. Each school has a cohort of other children diagnosed with autism but placed within the mainstream classes.

TABLE 5.15 FACTORS RELATING TO INCLUSION

School	Scoil Hyde	Scoil Ó Ceallaigh	Scoil deValera	Scoil Childers	Scoil Ó Dalaigh	Scoil Hillery	Scoil Robinson
Enrolment	Open policy and SENO	Waiting list and interview	Class closing, no future enrolments, BOM decision	Waiting list and interview	Open policy, all disabilities welcome	Closed only via referral from HSE Disability service and SENO	Open policy, long history of special education provision, pupils with multiple disabilities enrolled. 34% of staff assigned to special and additional needs/learning support
Age of building	1950, with purpose build prefabricated Porto cabins add on over the years.	Modern 2 story, purpose built in the early 2000's	1970's with wing extensions from the late 80's	Original building dates from 1994 and has additional classes built on as pods.	1970's build with new wing built on for special educational need classrooms	1950's two storey building, modernized and refurbished	1970's single storey building, with additional classrooms built on as wings and pods
Number of pupils (in autism class)	6 boys	4 boys 2 girls	3 boys 2 girls	5 boys 1 girl	11 boys 1 girl	6 boys	3 boys 2 girls
Number of staff in class	1 teacher 2 SNAs 1 part-time SNA	1 teacher 3 SNAs	1 teacher 3/4SNAs	1 teacher 2 SNAs	2 teachers 10 SNAs supporting the whole school with scheduled times in the unit	1 teacher 2 SNAs 1 part-time SNA	5 class teachers 4 learning support 5 SNAs

This table provides valuable information for further discussion on the profile of school enrolments and the architecture of the building relating to inclusion. Another important feature of Table 5.15, in regard to the allocation of staff, is that it reflects the Circular 0038/2010 from the Department of Education and Skills (2010, p. 5) guidelines on pupil teacher ratios, and the national findings by McCoy et al. (2014). In almost all cases the resource ration of 1 teacher and 2 SNAs to 6 pupils applies except in circumstances where there are additional SNA resource hours needed due to physical care needs.

Inclusion In Practice

Table 5.16 presents the data regarding inclusion in practice within each school. This includes; the availability of an inclusion statement or policy, the position of the autism class within the physical structure of the school building, the transports availed of by these pupils, and their entry to the school building compared to their 'typical' peers and the movement and participation of pupils with autism among the general school population for both academic and non-academic activities.

TABLE 5.16 INCLUSION IN PRACTICE

School	Scoil Hyde	Scoil Ó Ceallaigh	Scoil deValera	Scoil Childers	Scoil Ó Dalaigh	Scoil Hillery	Scoil Robinson
Inclusion policy	On school website	On school website	No	On school website	On wall on notice board inside classroom	On the school website	On school website
Position of autism class	Positioned on ground floor at end of mainstream building with separate entrance and yards	Ground floor. End of corridor beside Learning Support rooms	Ground floor. End of corridor in a vacant wing of the school, beside two empty classrooms	Ground floor. Two pods built on to the end of the building, positioned next to other mainstream classrooms	New building, ground floor at end of old building, attached to old school with interconnecting corridor	Top floor of the building has been allocated to the unit	Ground floor. School has special classes but not for autism specific
Transport and entry	Separate entrance for unit. Pupils bused to school and collected by SNA	Separate entrance for all pupils. Parents/guardians bring pupils to school. Teacher collects all from sensory garden and transitions in to class	Separate entrance, some pupils walk across the road to school, some are bused, long and short distances SNAs and teacher take off bus and escort into school	School bus transport system and parent delivery, learners line up with other peer classes and enter via side door	Three buses from the school transport system bring learners with special educational and physical needs to the entrance of the unit. Learners come into the unit and have their homework checked before going to mainstream	Pupils are delivered to school via the school bus transport system. They are greeted by SNAs and teacher at a separate entrance from mainstream and escorted to their classes within the unit.	Pupils arrive to school via the school bus transport system and via parent transport. All learners in this school are assigned different entrances depending on the class position within the complex. Pupils arriving on School transport are met by SNAs and escorted to class.

Movement	Locked doors, long corridors separate from rest of school, no contact with mainstream	Unlocked doors, Free movement throughout school, scheduled and unscheduled inclusion, next to mainstream classes and PE hall	Locked doors, no movement outside of area, no contact with mainstream	Unlocked doors and free movement throughout school, scheduled and unscheduled inclusion	Unlocked doors with free movement, extensive scheduling of SNA and pupil movements, all academic lessons held in mainstream class, social and language learning in unit.	Unlocked doors, senior pupils are integrated for non-curriculum lessons. Junior pupils remain within the class.	All pupils assigned to mainstream class and removed to learning support/resource as timetabled. All learners have SNA provision
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Interpretations of Inclusion from Case Site Visits

Each school within this research project presents its ideology and practice of inclusion as individual responses to the needs of the community they serve. The schools' professional capacity, availability and distribution of resource and their shared values suggests each school stands uniquely in terms of inclusion practice. Scoil Hyde and Scoil de Valera consider the addition of the autism unit/classroom to be an adequate response to inclusion and have very little or no integration of the pupils within this project with the mainstream section of the school. Their stated rationale for this is based on how they perceive the severity of the diagnosis of autism, being non-verbal/minimally verbal and, the intensity of the behavioural and sensory processing difficulties demonstrated by the pupils. Scoil de Valera is unique among the schools involved in this study, as it does not have a permanent class teacher appointed to the autism class. For more than 5 years in succession there has been a variety of substitute teachers employed in a temporary capacity. The principal has not been able to appoint from within staff as they have declared that they feel unprepared for this type of provision. This school is also quite unique in that 3 of pupils enrolled within this autism class have additional physical/emotional and social economic needs and there is almost a one-to-one level of support (.833 of support personnel to every 1 pupil). Scoil Hyde does have an inclusion policy, which is available for inspection. On occasions (observed twice during nine observation days) they use a buddy system for play and yard times where buddies come down from mainstream and play alongside their assigned peer in a private yard space. During the 9 observation sessions in Scoil Hyde none of the pupils moved out of the autism classroom to other mainstream classes and there was no evidence of reverse integration. On one occasion a teacher from a

mainstream class did ‘deposit’ a pupil with Bernie (class teacher) ‘to hold on to’ while a teaching inspection took place. This mainstream pupil had specific behaviour and learning needs and required Bernie and the SNAs to provide teaching and learning tasks to sustain him during his time in the unit.

In Scoil Ó Ceallaigh and Scoil Childers (both Educate Together Schools) the inclusion policy is available on their websites and states that all pupils enrolled in the school with/without a special learning need will engage socially and academically together. The autism unit teachers liaise with the mainstream class teachers and they determine a timetable for academic and social learning experiences. Pupils move freely throughout the school and there is evidence of reverse integration. In Scoil Childers the teaching staff have put in place a reading project where all pupils are assessed as to reading levels and capabilities and then grouped accordingly. Each group consists of a variety of ages and lessons are planned to advance key skills within the group. All pupils from the autism classes are included in this reading project and they move in and out of mainstream as timetabled (this was evidenced in the observation records). During the observations in this school, it was also noted that as events took place across the school, class teachers could send for the pupils with autism to come and join their mainstream peers at impromptu/unscheduled times. This approach of including pupils with autism in mainstream classes is also evident in Scoil Ó Ceallaigh. They also provide a collection of different wheelchairs for able-bodied pupils to use during yard time with their wheelchair user peers. This is designed to provide authentic learning and understanding of diversity within the community. ‘Buddies’ arrive to the autism class at various times during the day to collect a pupil for academic and social learning experiences.

An example of divergent thinking and practice is evident in Scoil Ó Dálaigh. The principal and unit teachers decided in the school year 2013/2014 to change their approach to the management and function of the 6-9 years and 9-12 years autism class groups. They decided to amalgamate these pupils and to team teach for communication and social skills training only. All academic work is prepared and completed by the mainstream class teacher through a differentiated approach. On arrival to school these pupils ‘check in’ with the autism unit teachers (Bea and Dawn) with their homework from the previous evening. Bea and Dawn ‘check in’ with each pupil and review the pupil home/school journals. They look for any issues arising and provide immediate support if required before sending the pupil on to the integration and academic timetable. The pupils attend mainstream for all core subjects and the mainstream teachers collaborate with Bea and Dawn to provide insights and direction for future learning and support. The unit is used as a resource to all pupils with communication and social learning difficulties not just for pupils with an autism diagnosis. Pupils with autism are expected to invite their peers to join them in the unit for both learning and play tasks. This means that there is a constant flow of pupils coming and going to the unit. The school also decided to utilise the SNA provision in a different manner. All SNAs are used as learner resources both in the unit and mainstream, none are attached specifically to the same pupil in any given day. They are constantly moving from class to class and pupil to pupil. Bea and Dawn meet each morning with the SNAs and provide detailed timetables and directions for learner support.

Scoil Robinson is another school with a similarly divergent approach to including pupils with autism in mainstream activities. This school, as highlighted in table 5.15 (p. 161), is a very large vertical school with a high number of children with

varying disabilities. The principal reported that this school as a community decided not to have a designated unit for pupils with autism but to use the additional space and staff for more active inclusion in mainstream activities. The staff are supported and encouraged by the principal and Board of Management to access training from the Special Education Support Service (SESS) and other agencies to advance their own professionalism in supporting pupils with autism within their mainstream and learning support classes. Each member of the learning support team is allocated a number of pupils with autism to include in their group and individual support timetables. The academic work of pupils with autism is the responsibility of the mainstream class teacher with advice and support from the learning support/resource/special education team. The school has prioritised this area through the designation of a Post of Responsibility (middle management position) to oversee all special education and inclusion activities within the school. This lead teacher also provides additional support to teachers and families via face-to-face meetings and telephone calls. The principal identifies an important and seemingly successful aspect of this role as liaising and accessing multidisciplinary support such as, educational and behaviour psychologists, occupational therapy and speech and language therapy. This teacher acts as the link between the class teacher, learning support/resource teachers, the parent/guardians and the health sector providers. In addition, all individual education plans (IEPs) are created, implemented and tracked by regular review and assessment in case review meetings. The principal also spoke about a decision made by this school to advance successful inclusion by recognising the limited availability of public sector practitioners (therapists, for example) due to the down turn in the economy and their heavy workload. They reached out to access additional supports from local people

trained in speech and language therapy, occupational therapy, play therapy etc. The principal and board of management provide the rental of a room (converted storeroom) in the school at a low cost for these practitioners to provide private additional therapy at a reduced cost to families and pupils of the school. This initiative is viewed as a key element in their inclusion practice.

Scoil Hillery is yet another school with a focused approach to fostering inclusion for pupils with autism especially in the 6-9 years and 9-12 years autism classrooms. This school sees the role of the unit as a stepping-stone to full inclusion and participation within mainstream classes. The main goal as discussed by Susan (class teacher) is to try and get full inclusion within the first two years of placement in the autism class. Each pupil is monitored and the inclusion process regularly evaluated and adapted to address issues as they arise. Susan, the class teacher, recently updated the researcher (November 2015) that two participant pupils (Ewan and Ger) from the research project have been successfully integrated into mainstream class since October 2015. When examining and questioning how they can achieve this Susan admits that it is because their enrolment policy restricts access to pupils with autism that are not under the care of the local health board services. This service caters for pupils with autism who have an average to mild general learning disability. Scoil Hillery, Susan reports, has consistently over time, actively controlled enrolment and the school does not accept enrolments of pupils from other services for pupils with autism and moderate/profound learning difficulties as they do not believe they have the capacity to develop appropriate programmes for this cohort.

Literacy: How is the definition of literacy constructed/deconstructed?

The literature relevant to defining literacy and the concepts of what it is to be literate revealed the complexity of concepts and theories around this topic. The dearth of research on literacy and autism also positions the following questions as a significant area for exploration within this research;

What is literacy?

What does it mean to be literate?

Parents and teachers were asked to define literacy; they were asked what does it mean to be literate? Finally, they were asked about literacy practices and support systems within the home and school. A cross-case analysis from this data set is presented below.

Parent Interpretation of the Concept of Literacy and Being Literate

It could be interpreted that parents voiced an educational response to ‘what is literacy?’ Fabia’s mother Mo (Scoil Childers) represents most immediate parental responses as; reading, writing and spelling. However, parents also mentioned mathematics. Fintan’s mother Fern (Scoil Ó Dalaigh), Mat’s mother Magda (Scoil Ó Dalaigh), Brian’s mother Ursula (Scoil Hillery) and Kaden’s mother Lulu (Scoil Childers) all agree that understanding and using mathematics is also an important aspect of being literate. Bert’s father Henry (Scoil Hyde) said ‘*literacy is golden*’ and his mother Therese said, ‘*it is the key to knowledge*’. When questioned further parents, like teachers, identified literacy as identity and connecting with other

people and their environment. Therese goes on to stress literacy for her son Bert as;

being able to connect, to be able to connect with other people, to have the knowledge to be able to interact in conversation, to have an understanding of the world, to be able to sit and read a book and understand the words

Ed's mother Doireann (Scoil Hyde), when talking about literacy also referred to the importance of connecting and building strong communicative relationships. Ethan's mother Noeleen (Scoil Ó Ceallaigh) stated that *'literacy is unlocking the world for him'*, which, was reinforced by his father Keith: *'it's understanding how the world works, it's how we interact with everything'*.

Family Literacy: what are the influences on how literacy practices for children with autism are constructed in the home?

The literature review explored the importance of family culture and perceptions of literacy and drew attention to the role of the family in the social process of literacy learning. It also raised attention to the structure of the family, and the importance of the 'intergenerational learning framework' (the roles of the extended family members) on literacy practices and outcomes (Gadsden, 1998). Particularly it identified family culture as a critical indicator of literacy practices in young children. In this research project to ascertain whether 'capital' supports literacy, parents were asked about:

- Their home literacy practices
- How they support literacy practices for their child?
- Who in the family helps them as a literate model to their child?

Family culture around literacy practices, roles and responsibilities and skills development

Parents indicated the importance of following their child's lead, and using a whole language approach. While Ed's class teacher Bernie (Scoil Hyde) describes him as minimally verbal and engaged in echoic behaviours, his mum Doireann reports that at home they actively prompt his speech, use visuals and when he tries to communicate non-verbally, she prompts and waits for his verbal response. Doireann, like most of the parents has employed additional support at home whether in a private capacity such as an Applied Behaviour Analysis (ABA) tutor, or a supportive older family member (grandparent). Cal's mother Tara (also from Scoil Hyde) reflects on all the activities herself and her husband does to boost Cal's literacy:

'we're big readers...I have stickers on everything...we're always buying books and magazines...anything that he shows half an interest in... it's just being there... he has games on his iPad with a lot of word games, filling the missing letter'.

Brian's mother Ursula (Scoil Hillery) says the school has taught her how to communicate effectively with her son. She recommends the use of the Picture Exchange Communication System (PECS). She recalls the difficulties she and Brian had in basic personal skills acquisition but once she learned how to communicate with Brian through objects and pictures Brian had much more comprehension and became more independent.

Ewan's mother Penny (Scoil Hillery) reports that they play a lot of board games at home especially Junior Monopoly and Ewan is fully engaged in the activity. She says he is really tuned in to the money aspect of the game and monitors his financial situation, keeping a close eye on monies owed to his rental properties. Izzy's

mother Betty (Scoil Childers) has purchased all the Peter and Jane Ladybird Key Word Readers to support Izzy's vocabulary and sight-reading ability. Faith's mother Bríd (Scoil Robinson) has invested in the Edmark Reading Scheme and the Numicon maths resources. She has paid for a trained tutor to teach her and the LS team (in school) how to use this equipment with Faith. Bríd has donated these to the school for them to deliver the programmes to other children. Barry's mother Barb (Scoil Ó Dalaigh) identifies herself as a home teacher, she considers herself 'lucky' that they have the financial ability to resource additional supports and to access training to teach her son when he comes home from school. She says she is 'constantly teaching', everyday reading and 'getting board games out and teaching him how to win and lose'. Mat's mother Magda (Scoil Ó Dalaigh) reports that the family use Social Stories™ with him to enable him to regulate and to understand the concepts of time.

Parents as Partners in Education?

Parents also expressed a concern as to their own lack of understanding or knowledge of the literacy skills of their children. Bert's father Henry (Scoil Hyde) stated that he receives very limited information from the school about his son's progress or development. He acknowledges the importance of the home/school communication journal but believes that the journal content doesn't actually give him any indication as to the academic outcomes or progress of his son. He says if he wants to know something he has to telephone the school and ask to speak to the teacher. Henry acknowledges that the school is very supportive and they will tell him what he wants to know but he has to ask for specific information. Fabia's mother Mo (Scoil Childers), and Barbara's mother and father (Scoil Ó Ceallaigh)

shared this perception of the limited effectiveness of the home-school journal in conveying the academic progress of their children.

Intergenerational learning framework

At interview parents were asked specifically ‘who helps you with your child’s literacy?’ The responses present a further insight into family roles and responsibilities. Only seven of the twenty-three parents (n=20 mothers and n=3 fathers) said that an extended family member or friend supports them in explicitly teaching their child by doing some literacy activity such as reading to their child. Six of the parents (mothers) said that absolutely no other person engages in any form of support for either homework or reading to their child. The other 10 parents (n=8 mothers and n=2 fathers) buy in additional support via a home tutor or send their child to an after-school club. This creates a point for exploration in the intergenerational practice of literacy in the family structure, roles and responsibilities, and expectations.

What Changes are Needed to Support Better Literacy Outcomes?

At interview parents were asked if they could ‘change one thing about how their child is taught literacy, what would it be?’ In general, they stated they were happy with their child’s enrolment and current learning in school and most were satisfied that the school and the class teacher were doing as much as possible. Bert’s father Henry (Scoil Hyde) says he wouldn’t change one thing and ‘*whatever they are doing they’re doing it brilliant*’. He like so many of the other parents, reports that he sees such a difference in his child now in comparison to two years ago and credits the teacher and the school for such progress. However, he does believe his son would have benefitted from an earlier intervention followed by appropriate school placement. Another message reiterated by Cal’s mother also, is ‘*parents being*

more part of it'. Other parents, (Barbara's mother Dharma (Scoil Ó Ceallaigh), Fabia's mother Mo (Scoil Childers)) supported early intervention and specifically recommended that children should be enabled to access HSE support services at an earlier age.

Some parents did however present curricular ideas for consideration. Izzy's mother Betty (Scoil Childers) says *'drama, is just the key to autism, it just ticks all the boxes, social skills, non-verbal language, imagination, creativity...puppetry is wonderful...there could be more of that'*. Kaden's mother Lulu (Scoil Childers) recommends building on and extending typing skills, which, Ethan's father Keith (Scoil Ó Ceallaigh) believes would take the pressure and anxiety off penmanship and it would level the playing field. Ethan's mother on the other hand is quite conflicted and not convinced that the way we teach reading is supporting Ethan's literacy. Ed's mother Doireann (Scoil Hyde) also highlights issues around reading and suggests a *'shared reading'* approach; building literate relationships and more focused reading homework. Faith's mother Bríd (Scoil Robinson) comments that all teachers should be trained in the ABA approach, she also observed that reading approaches such as the Edmark Reading Scheme and Ruth Miskin's Read, Write Inc. needs to be used in schools not just for pupils with autism but for *'neurotypical'* children also. Sophie P's mother Mary (Scoil Robinson) says that we need to have higher expectations and challenge children with autism more *'but not so much that they fail and lose confidence'*. She says teaching needs to be *'very creative'* and she indicates that a more problem-based learning approach in that children should be allowed *'express their opinions...find their own way...and motivate themselves'*.

Literacy is ‘Identity and Connecting’

Both parents and teachers define literacy as encompassing reading, writing and oral language. The predominant theme to emerge when probed further about literacy, from both teachers and parents, was the concept of literacy being about identity with the people around you and the connections to others through ‘communication’. Sophie P’s mother Mary (Scoil Robinson) says literacy is also about us (adults) making connection with children and giving them the security to become communicative.

Teacher’s Interpretations of the Concept of Literacy and Being Literate

Teachers, in general, initially responded to the question ‘what is literacy?’ in a formal educational manner. Marie’s statement (Scoil deValera) presents the general responses that it is ‘being able to read, and write, communicate and understand’. When questioned further about how learners demonstrate their literate ability the emphasis shifted from reading and writing to communication and understanding. Susan (Scoil Hillery) presents an interpretation of literacy and being literate as identity and connecting. She states that literacy is *‘stories, their stories... their response to stories they hear and if they record their responses in drawings, that’s their literacy as well’*. Susan explains how literacy skills can emerge in the autistic learner’s ability to connect with a text, to connect to the self and to connect with characters/others when she engages artistically by dramatising a story. She conceptualises literacy as ‘their own vocal responses’:

...like since doing the Mr Men (series of short novelettes) one of my most challenging boys has decided he’s Mr Greedy, which means he robs my jellies at every available opportunity, the whole box!’ He then calls out ““Look Susan, look what Mr Greedy is doing in the corner”, and I’m going “Oh!”... but that’s his drama... that’s

what literacy is...it's communicating, it's books they are surrounded with, it's do they want to play with ideas they come in contact with.

Challenges and Rewards

The interview data sets generated the theme 'challenges and rewards' as parents and teachers narrated their experiences of parenting and teaching children with autism.

Parenting a Child with Autism is Challenging

'When you have a child with autism you're on your own a huge amount' was Ewan's mother Penny's comment. Parents were asked to define/describe autism and the language used also provides an insight into the challenges parents face. Words such as *'heart-breaking', 'hard', 'scary', 'trapped', 'frustrating' and 'tough', 'autism is a long journey'* were used in personal statements. Izzy's mother Betty (Scoil Childers) provides us with a very poignant picture of her situation as a parent, she called autism *'A pain in the h... I hate it! So maybe I'm the one who needs therapy. Really, I wonder about this... I try to convince myself that it's wonderful, but I do wish he didn't have it'*. She presents the hopelessness she felt

when my psychiatrist gave me the diagnosis, you know, if you had cancer they'd give you the T & M (treatment and management)...you know, tumour 1, nodes 2, mets 3 (a medical term for metastatic disease)...you know? And you'd just know where you are at... and she just kind of said "Well, it's autism", I needed a number and I find it really hard to accept I don't have a number.

She expanded on this perspective

I just don't want the label, I just don't want people to judge him or look at him differently...I really find it hard that he has the same label as someone who's banging a head off a wall, but that's my problem and I accept that's my problem.

Fabia's mother Mo (also Scoil Childers) said autism is *'tough, honestly, as a mother if I could take it away in the morning I would'*. She narrates the experience of receiving the diagnosis of autism and draws attention to the fact that other ailments and diagnosis are treatable but autism doesn't fit into that schema, she relates a type of helplessness:

I could deal with the sight thing, you know? But for me it was just like a rollercoaster, you know? It was like her hearing, her sight, her heart? Yeah. You know, her hearing might be affected, just "oh phew" you know? And then it was like.... "ok she has autism"

For some parents the difficulties and challenges of parenting began on the birth of their child, and they expressed that isolation and lack of support were the most challenging aspects. Mothers reported a sense of abandonment where no one in the family could help because of the severity of the condition as it presented itself prior to diagnosis. Ewan's mother Penny (Scoil Hillery) discusses the fact that her family refer to her son's autism diagnosis as *'her business'* and that they can't relate to her situation because they don't *'walk in my shoes'*. A number of mothers also identified a sense of guilt for not noticing that there were issues or a lack of progress in their child not achieving developmental milestones. Kaden's mother Lulu (Scoil Childers) said she felt guilty that she *'didn't pick up on things a wee bit earlier myself'*. Cal's mother Tara (Scoil Hyde) recalls how the first two years of Cal's life were so challenging, he never slept, he had a high-pitched scream, he was rigid in routines like feeding and changing, and no one in her extended family could support her. She in fact couldn't go back to work and had to become a *'stay at home'* mother. Kaden's mother Lulu (Scoil Childers) presents her sense of the loss of a *'fairylane'* ideal, as a continuous challenge; *'just to have a normal day like everyone else does... I suppose you kind of feel robbed of that and angry'*. Fred

and Kevin's mother Anita (Scoil Robinson) says they have had to create a very different family dynamic, she says they have had to isolate themselves from others to protect family members and to *'regroup'*. She says that dealing with the autism aspects of their lives means *'you're locking the world out until you get yourself into a better place'*. Faith's mother Bríd (Scoil Robinson) describes the impact of realising that Faith's development had plateaued and how her personality changed as a result *'you automatically go into flight mode, you know, my personality now is "get it done, I need to get it sorted, it needs to be fixed, whatever the cost"'*. She also indicates the financial cost of pursuing a private diagnosis and additional supports and how this impacts on family life *'it's mountainous journey, if you ever want proof of where our €120,000 or €150,000 went, it's in folders in the attic, with documentation'*. Ken's mother Mia (Scoil Childers) mentions managing special interests and supporting appropriate play or management of these interests before they become *'unmanageable obsessions'*.

Parents also identified the decision to enrol in a unit or to opt for a mainstream placement as a challenging experience. Many of them relied on the advice and support of the principal of their local primary school. Fred and Kevin's mother Anita (Scoil Robinson) found the structure of autism classes (units) as *'horrific'*. She visited schools with units and found them to be unacceptably isolated, with what she perceived to be an inadequate curriculum and inappropriate learning standards. She contends that the system is *'complicit'* in creating *'holding areas'* where children are given what she considers to be inappropriate educational tasks that failed to recognise the child's capacity. For this reason, Anita and her husband preferred to enrol their children in a mainstream class.

Special education placement for some parents was initially harrowing and some described their immediate reactions to the environment as *'heart-breaking'*, *'sectioned'* (as in isolated), *'a disappointment'*, and *'a locked-down unit'*. Bert's mother Therese (Scoil Hyde) said *'daunting at first, very closed...a little bit clinical...not very warm, but then I got to understand why'*. In general, once parents received the diagnosis and were given support to access an appropriate local school and once transport was arranged the challenges lessened. All parents believe that the current placement is the most appropriate environment for their child and they used words such as *"a godsend, spiritual, calm, open, safe, comfortable, predictable, structured, constantly learning"* to describe how they see the classroom now. Izzy's mother Betty (Scoil Childers) describes the sense of security she feels about Izzy's placement: *'he's lovely, he's seven, he's in a little fluffy cloud in Educate Together for the next six years'*. Almost all parents appear happy with their child's current physical placement and believe that the teacher and school are making good progress with their child.

Another challenge raised by some parents is the distance their children must travel to school or time spent on the school transport system. This seemed to be a particularly significant issue for the parents and pupils in Scoil Hillery. Ewan lives 13 kilometres away from the school and this involves a prolonged journey through morning traffic. The bus also has a detour to pick up his classmate Brian (who lives 7 kilometres away from the school) on the way. Brian's mother Ursula also mentioned that because there is no direct bus route to the school she must get a taxi there and back if she gets a call to pick Brian up because he is unwell.

Some parents described homework as *'an absolute nightmare'*, while for others it wasn't an issue and that was mostly because there was no regular homework or

formalised structure. Communication was also identified as a challenge, while the ‘home/school’ journal is a success; parents felt they didn’t really know how learning is progressing in school. Barbara’s parents, Dharma and Lochlann (Scoil Ó Ceallaigh) say they don’t get academic information home in the journal and their concern about Barbara’s lack of progress in reading skills is a serious concern. Fabia’s mother Mo (Scoil Childers) says she only gets a brief account of Fabia’s day but she doesn’t know anything about what or how she is learning outside of the annual IEP meeting. As a result, this information deficit she believes that she was not as knowledgeable as she should be about her daughter’s educational progress particularly when interacting with relevant therapists.

The Challenges of Being a Single Parent

The six mothers in a single parent role mentioned the challenges of lone parenting a child with autism in the early years. Kaden’s mother Lulu (Scoil Childers) *‘I’ve done it all by myself, I’ve had no support...I’ve been there every night, every time something happens’*. Fabia’s mother Mo (Scoil Childers) raises this issue also when she talks about her own mental health, she suggests being a constant sole carer makes you more vulnerable and when school finishes for the summer holidays things get more challenging; *‘I just had a complete breakdown...it was a tough, tough time in the summertime because you’re with her constantly’*. She also reports increased pressure on relationships and she states *‘you can see, you know, there’s quite a bit of relationship breakdown and you know single parents and people under pressure’*. Mo also informs us that she gets some support from a social media outlet aimed at single mothers of children with autism. Bert’s father Henry also discusses the challenges of being a lone parent to three children; while he only has them on alternate weekends he describes the importance of routine and management of

behaviours as challenging. His language could be misinterpreted when he says *'you have to rule with an iron fist'* but what he intends in this statement is that as a parent of a child with autism he has to be rigid in his approach. He has to follow a strictness of timetabling and routines when he says 'no' he means 'no' and when its bedtime then its bedtime.

Parenting a Child with Autism is Rewarding

Similarly, to the teacher's views (presented below), many of the parents found the challenges of having a child with autism to be rewarding in describing their parenting role. Challenges were also seen as positive experiences and as having positive outcomes. Parents presented the challenges of their child's autism alongside the strengths and exceptional abilities of their child. Ken's mother Mia (Scoil Childers) draws attention to the importance of a positive attitude to autism: *'I think our children surprise us all the time with what they are capable of... and if given the opportunities and the right support and accommodation, they can really thrive'*. Ewan's mother Penny (Scoil Hillery) says that Ewan is *'quite smart'* but that he needs to *'unlock that capability a bit more'*. Bert's father, Henry presents a positive aspect to Bert's lack of Theory of Mind (ToM) (Baron-Cohen, 2008), when he says that Bert is the easiest of all his children because *'he doesn't lie, he's pleasant and has good manners'*. Ethan's mother Noeleen (Scoil Ó Ceallaigh) says he will only tell the truth and when he relates a story *'it's exactly as it was'*. Bert's mother Therese (Scoil Hyde) also believes that Bert will progress on and in some way, change the world for the better. She describes him as *'very intelligent...technology wise he's fantastic...I think he'll just soar...I'd love to think of him as that kind of person, working out mathematical calculations for something...I can see him doing that'*.

Fintan's mother Fern (Scoil Ó Dalaigh) refers to Fintan as a *'little devil'*, and says she doesn't define Fintan by autism and she pointedly remarks that she doesn't call him *'an autistic child'*. She identifies that Fintan has strengths including language capacity. According to Fern, Fintan might be a quiet child with some speech and language issues but she says he can speak Irish and can use some Irish words. Sophie P's mother Mary (Scoil Robinson) calls her daughter a *'fireball'* and recognises her ability to use her autism to suit herself and how she is in tune with her environment and peers. Brian's mother Ursula (Scoil Hillery) says she doesn't see Brian *'as a child with a disability in any way, I wouldn't even say Brian had special needs, to me he just has some extra care needs'*. Brian, she says has never struggled with academics but maybe: *'sums are a bit hard for him to grasp'*, but she reflects *'I see him now doing it...working them out in his head...it is brilliant to watch'*. Ed's mum Doireann (Scoil Hyde) says Ed *'is cute'* and will *'chance his arm with anything to get out of doing something'*. She says you have to *'stick to your guns'* with him and he'll surprise you with his capabilities. Fred and Kevin's mother Anita (Scoil Robinson) presents how challenges become rewards and how hope can emerge from despair:

...when you access that child...on the worst days, and absolute days when your (sic) down on your knees with it all, there is one point in the day when the clouds just part and the sun shines through and you can see your child for who they are and I can see that they're so capable and that's what you have to focus on

Teaching is Challenging

In all cases teachers describe the teaching role as challenging, mainly because the presentation of the spectrum of autism is so vast and each learner/pupil presents so differently that no one strategy or mode of teaching is most effective. For example,

what worked well one day may not work again and the observation, assessment and planning cycle begin again daily. Bea (Scoil Ó Dalaigh) sums up the opinion of all teacher participants well when she said; *'like there is not any two children in the room here that you would say "this is exactly what they need" ...you can't just tick that box and say "yes, done"*. The nature of these classrooms is that they are ever changing and must be responsive to the pupil's immediate needs.

The definition of autism itself emerges as a challenge for some teachers. While some teachers identified it in a somewhat clinical/medical model presenting a DSM 5 type definition, others referred to it as a social communication difficulty, and some also admit to not understanding it because of the nebulous nature of autism. Marie (Scoil deValera), for example in defining autism, finds it difficult to grasp an understanding of the children in her classroom. On the surface, it appears like a 'within child disability attitude' but in reality, the serious difficulties she experiences in her classroom has resulted in this perception: *'it's the children themselves...the way they communicate and their needs...I don't understand...I find hard to understand...I don't understand them'*.

A 'Specialist in Isolation'

Teaching in an autism unit was also described as challenging because of the perceived isolation/separation of the 'specialist' teacher in 'a unit' from her peers in the mainstream school. Throughout the interviews the language of exclusion was also noted such as *'up there'* or *'up in mainstream'*, *'down here'*, and *'when they come down here'*. Nearly all teachers said they don't have a mentor or a peer teacher they can talk to for advice or support. They must problem-solve issues that arise independently. Susan (Scoil Hillery and the most experienced teacher)

doesn't think she needs someone while Leah, Bernie, Tina and Marie specifically stated they would welcome and value the support of a mentor.

Staff Management

Another area of challenge for class teachers is the management of additional auxiliary staff. Most agree and recognise the importance of the supports that Special Needs Assistants (SNAs) provide and the importance of a team approach to teaching and learning. The leadership and management aspect of their teaching role presented major issues, this was also a finding in McCoy et al. (2014) and Banks et al. (2016). Marie (Scoil de Valera) identifies a level of frustration with the amount of communication and constant observation and direction that is needed to manage SNA staff within the classroom *'eats up into (my) time an awful lot'*. Being able to respond to pupil needs means thinking, responding and to make immediate changes to plans, making quick decisions or abandoning the plan completely. This must be communicated to all other staff working in the room so that a consistency of approach and direction is adhered to for the benefit of the pupil's immediate needs. Bernie (Scoil Hyde) and Susan (Scoil Hillery) also identify as a challenge the importance of including the SNAs in the planning for teaching and learning process. For SNAs, the school day begins and ends when the pupils arrive and leave, there is no time built into their contracted day for in-depth collaboration. Despite this observation both teachers draw attention to the experience and commitment that SNAs bring to the class and the responsibility of the teacher in empowering and supporting their sense of duty to the pupils, school and community.

Teaching is Rewarding

In all cases the teachers stated they really enjoy working with children on the autism spectrum. It can also be noted that the challenges mentioned above are also mentioned in a positive way. The intense detection work needed to identify a method or approach to use is considered a positive element of the role. Teachers reported that close engagement with families is an essential requirement of this work, and the teamwork involved was a very positive aspect of their work. Teachers particularly identified the intrinsic rewards of positive learning outcomes for their pupils. Seeing a planned objective that they have been working on for a long period come to fruition or discovering a strength, or an emerging skill, as Susan (Scoil Hillery) says *'that gem that was there for that child'*. Tina (Scoil Ó Ceallaigh) encapsulates the overall teacher perspective when she says; *'The children really are...they make it worthwhile...they're really good to work with.'*

Teaching and Learning

The dearth in research relating to teaching and learning for better literacy outcomes for learners with autism in the literature review provides the rationale for this question;

What, if any, distinct pedagogies are used to enhance literacy practices among pupils in autism specific classrooms?

Teachers provided examples of how inclusive pedagogy can support emergent literacy. Susan, demonstrates her skills as an inclusive teacher; valuing learning diversity, supporting all learners while holding high expectations, working with others (SNAs) and her professional attitude. For example, she reported using a diorama (a model representing a scene created from paper and card of "Rosie's Walk") and says *'Sam made most of that display because he was motivated to do it'*. Sam used the diorama to re-create the narrative. Susan advised *'you need to be*

flexible because there's no point in turning a literacy or writing lesson into total torture'. Leah (Scoil Childers) also advocated a flexible approach and mind-set, she also suggested the importance of following the child's lead and being able to work intuitively. She particularly advocated for a whole language approach (focus on meaning and strategy) and again emphasised the importance of making connections '*connections to their life...to school...to their friends*'. In planning literacy learning Leah stated that she relies on the learner's personal preferences and a thematic approach with a focus on the expressive arts. Kristine (Scoil Robinson) also suggested that literacy is about connecting, she stated that as a Learning Support (LS) teacher she deals regularly with children who may be pre-verbal and the emphasis on being literate is, for her, supporting communication, '*building a rapport with the child and get the child to communicate with me*'. Tina (Scoil Ó Ceallaigh) stated '*if you're literate you can extract meaning from language, basically you can construct meaning out of language*'. Tina like Susan advocated for the use of stories as a teaching and learning strategy, which will '*captivate something...and help to process...my theory is that that process will lead to ...reading*'. She asserted that stories enable learners with autism to amass words, building receptive vocabulary, grow in word identification and with the use of technology they can '*communicate very effectively through typing*'.

Themes Derived from Observations

The observations of teaching and learning closely followed the administrative guidelines of the High/Scope Educational Research Foundation and the International Association of Evaluation of Educational Achievements Child and Adult Observation System (HighScope Educational Research Foundation & International Association for Evaluation of Educational Achievement, 2007b;

HighScope Educational Research Foundation & International Association for Evaluation of Educational Achievement, 2007a). Observations took place across the school year 2014/2015 within the first, second and third terms as was feasible given the school and teacher/pupil availability. This section presents the major themes to emerge from the observation schedules. Adult and child observation categories were adhered to as set out by the observation tool. The second day of observations from term one, two and three across all schools except Scoil de Valera were coded in detail to provide a consistent picture of teaching and learning across all schools. In the case of Scoil deValera observations were only possible from term 1 and all three observations were used to explore teaching and learning in this case. The major themes to emerge were:

- Pedagogy – movement activities to support self-regulation, teaching strategies, methodologies espoused in the Primary School Curriculum (1999) (talk and discussion, active learning, collaborative/co-operative learning, language learning and learning through language, authentic learning/use of the environment, skills through content and problem solving)
- Communication partners – language and learning, both verbal and non-verbal communications, opportunities to engage in formal and social classroom discourse
- Provision and Policy – inclusion with mainstream peers, timetabling, Individual Education Plans (IEPs), lesson planning and delivery, Evidenced-Based Practices (EBP) and classroom management such as transitional activities

- Relationships – establishing a rapport for learning, encouraging/nurturing learning, providing positive feedback
- Identification – Teacher/SNA in management, teaching, care role

These categories present the major themes for discussion relating to the teaching and learning environments. In this section schools will not be identified but are randomly assigned as School (A), (B), (C) etc. This is to ensure they remain anonymous and unidentified throughout this section of the findings. Case examples from practice will be used to provide an insight into the teaching practices of the teacher participants. Key components of structured teaching (TEACCH) are also presented to examine whether literacy learning is a focused target. The section will then outline the literacy practices of learners with autism on a case-by-case basis. The presentation of literacy practices will be set out as a reflection on the National Council for Curriculum and Assessment (2016) Primary Language Curriculum Progression Milestones in oral language, reading and writing. It is important to point out that there are few observations of independent writing and therefore it can be stated that more purposeful observations are required in this area.

Pedagogy: The art, science and profession of teaching

While coding the observations for themes and subthemes the colour green was used to highlight teaching moments, where the teacher or the SNA provide personalised instruction, direct small group instruction, whole group instruction, and opportunities for peer-to-peer learning and conversational partner exchanges with instruction. It is interesting to note that two of the seven schools (School (G) and School (D)) had very few green codes and were mainly relationship/care, classroom management and conversational partner codes. In School (G) and School (F) a typical 3-hour period saw the pupils transitioned to eleven different scheduled

activities. In school (B) a typical 3-hour period also saw the pupils transitioned to twelve different scheduled activities. Examples of these periods are set out in the table below (Table 5.17). Green represents periods where the teacher or SNA engaged in direct teaching/instruction. The word 'Routine' is applied to an activity that occurs daily and does not necessarily include direct instruction, the word 'Functional' is used to describe an independent activity with a practical, skill-enforcing task. Pupils (P) and teachers (T) will not be named in this table or in this section but are referenced by T = teacher and pupils = Pa, Pb, Pc, Pd, Pe, and Pf. School (E) is also included in this table from the observation set 1 session 2, it indicates how a co-teaching/team-teaching model is used and the pedagogical practices observed.

TABLE 5.17 OBSERVATION OF THE TEACHING SCHEDULE IN CASE SCHOOLS G, F, B AND E

Case Example School (G)			Case Example School (F)			Case Example School (B)			Case Example School (E)		
Time	Activity	Learning, routine or functional	Time	Activity	Learning, routine or functional	Time	Activity	Learning, routine or functional	Time	Activity	Learning, routine or functional
9am	Free play area	Functional	9.05 am	'Movement' class	Motor skill instruction	9.05	Morning assembly	Preparing for today's tasks. Connecting to understanding by scaffolding and connecting	9am	Researcher interviews with parents as classes held across school Observation starts late	
9.10	Morning Song/Role call	Routine	9.25 am	Therapy activity for P(c)	Functional with instruction	9.10	Home work review with P(e)	Supporting completion of tasks, one-to-one	11.45	Group Maths work with P(a), P(b), P(e) and peer from mainstream T2 leads 1 SNA supporting	Peer-to-peer learning seconds in minutes in hour, T2 reviews time spent this morning
9.15	Free Choice	Functional	9.32	Reading class P(d), P(e), P(b)	Reading and comprehension instruction	9.15	Breakfast club	Routine		Maths cont. T1 leads	Personal schedules and locating current time and task, SNA schedules, T schedules, pupil

											schedules
9.23	Motor sensory class for P(a)	Motor Skills development-Learning	9.43	Free play	Functional	9.25	Improv Social Story with P(d)	T draws story and relates consequences		Maths continued T1 and T2 co-teach	Bus and Rail timetable and linking with personal experiences
9.35	Independent desk work	Functional	9.50	Writing class with P(c) and P(a)	Formation of the letter 's' instruction	9.30	Movement Class and Music	T instructs and models movements, T instructs on tempo (speed and pace)		Maths continued P(c) and P(d) join group 2 more SNAs join	Peer group recap with T and Transitions to independent work stations with task specific
9.50	Free play area	Functional	10am	Bingo word game-sight word task	Word identification task	9.40	Group time	Prepositions, using bean bag and body awareness	12.30	Observation ends	
10am	Lunch	Functional/routine	10.10	Yard time followed by small lunch	Routine	9.50	Maths class	Time, clocks and time in day			
10.20	Yard	Functional	10.45	'Circle time' roll, weather, song	Routine, T uses questioning to check comprehension	10.20	Free play SNA distributes treats	Functional and sentence completion task – describe treat			
10.40	Music time	Listening and responding-Learning	11.05	'Story time'	Reading strategies modelled	10.30	Yard and small snack time	Routine			
10.50	Phonics	Listening and responding	11.15	Home work review	One-to-one direct	10.50	Planned GAA	GAA coach provides			

		g, reading - Learning		with P(d), Maths instruction	instructi on		trainin g with peers	instructi on. T and SNA encourage play			
11a m	Indepe ndent desk work	Functional	11.5 0	Yard and big lunch	Routine	11. 40	Readi ng class	SNA and P(b) Compreh ension check			
11.1 5	Ball Pool	Sensory support, Functional	12.0 0	Observ ation ends		11. 50	Readi ng class cont.	T with P(a), P(e) and P(f) Word recogniti on, capital letters, writing explanati on texts			
11.3 0	Free play area	Functional				12. 10		Observat ion ends			
11.4 0	Music Time	Using instrument s and following instruction									
12n oon	Observ ation ends										

This table is significant in the findings as it relates the realities of the teaching and learning experiences for the pupils in individual setting. These observations occurred in the first term and on the second day of the classroom observation schedules. It demonstrates that the timetabling of direct teaching in School (F), School (B) and School (E) are focused on skills development, while the teacher in School (G) has focused on the components of a structured teaching approach (TEACCH): physical structure, schedules, work systems and visual structure and information.

Classroom Observations and Pedagogical Practices:

In this section, the use of movement for learning, pedagogical practices such as; teaching strategies and methodologies employed, along with observed shared learning experiences, transitional activities and nurturing of literacy practices will be explored. As the case of inclusion was observed as a spectrum of practice in each setting so too was the act of teaching. In the most part the observations provided a regular observable pattern of activities to the school day and in the formation of the schedules to deliver the lessons to the learners.

Using movement to support learning

In three of the seven classes observed, each day began with a scheduled physical, motor training or sensory stimulating session. In two case examples these sessions were very highly planned and provide the learners with intense vestibular (balance and eye movement) and proprioceptive (position and movement of the body) sensory support. In both classes the pupils eagerly sought confirmation from the teachers that these sessions were going as scheduled. In one case example, School (F), these sessions were therapeutic in nature and followed the advice of the occupational therapist. Pupils in this instance followed a visual schedule and

moved from activity station to activity station, while being supported by the teacher and/or the SNAs. Activity stations included using a wobble cone, a balance board, a peanut ball, a tunnel, mats and benches. These sessions were held in the school hall each morning. Communication occurred between conversation partners and was specific to the tasks being performed. Language used repetitively for instruction within these sessions included 'right', 'left', 'count to ten', 'count again', 'count slowly', 'ready, touch my feet', 'roll', and 'crawl through the tunnel'. The teacher and SNAs used praise and complimentary statements often to encourage and motivate the pupils to complete the tasks. This teacher also included in a scheduled after lunch activity, a daily outdoor run around a running pitch, with pupils setting personal targets and rewards. In School (B) the teacher transitioned all the learners to the outdoors every morning after breakfast club and with the help of the SNAs set up different physical activities based on the strands within the Physical Education (PE) curriculum guidelines. Athletics, dance, gymnastics, games, and outdoor activities were all observed across the three terms. A variety of activities occurred and these in contrast to School (G), were team-based. Language use was based on group dynamics and collaboration.

All other schools had a specialised movement and sensory programme built into the pupil's daily schedules. These were either performed in a small space within the classroom or in an allocated space outside the classroom door but still within the confines of the unit or PE hall. Pupils from some units did transition and engage with their mainstream class for scheduled PE classes.

Pedagogical Practices

The Primary School Curriculum in Ireland (National Council for Curriculum and Assessment, 1999) directs teachers towards the sixteen guiding principles of

pedagogical practice, these include: Activity and discovery methods, an integrated curriculum and environment based learning. The six central teaching methodologies espoused in the curriculum guide the teacher in the long and short term planning for successful outcomes. These include: talk and discussion, cooperative and collaborative learning, active learning, skills through content, use of the environment and problem solving and they uphold the centrality of language within the curriculum. With this in mind, and the previously discussed advice for a curriculum for learners with autism with an emphasis on communication, interpersonal skills, cultural norms and meanings (Powell & Jordan, 2012) and the categories of adult teaching behaviours from the IEA/Highscope observation coding system, the following observations were made.

Looking closely across the observation data sets it is evident that patterns have been established. For example, in the case of School (A) the teacher is seen to structure her lessons consistently with the development of an introduction (in oral format) utilising talk and discussion to support concepts or skills being targeted. This leads the pupils into the task and she refers constantly to what the pupils know about the idea/topic, encouraging thinking and welcoming responses to her questions. Pupils are strategically seated in a circle format and they are supported in listening and communication skills. The teacher then physically transitions the pupils from the group circle to the group table; this facilitates the need for movement and self-regulation. At the group table (collaborative learning) she recaps on her introduction and states clearly the next set task providing where necessary a definition of the concept and scaffold support (problem solving). The lesson is then moved from a group task to an independent task and she scaffolds each pupil's comprehension with questions to check for understanding and revision of content

and context (skills through content). To conclude the lesson, she provides praise and then quickly transitions learners to a related but different task at their own independent workstations (active learning).

Table 5.18 (below) provides an observation of this lesson with time indicated. It demonstrates the methodology ‘language learning and learning through language’, the use of pace and the transitioning of learners as a pedagogical practice to support attention and repetition of key points within the overall lesson.

TABLE 5.18 OBSERVATION OF LESSON FROM SCHOOL A

School A		
Time	Activity	Learning, routine or function
11.40	<p>Circle activity</p> <p>Literacy: Oral language task</p> <p>'Language learning and learning through language'</p> <p>Talk and discussion: teacher asks each pupil to contribute, she uses prompting and memory support</p>	<p>Teacher initiates metacognitive task, requiring learners to find words associated with their environment</p> <p>Describing words, things you find in the kitchen</p> <p>Things you find in school</p> <p>Something you see in winter</p>
11.50	<p>Transition to group table: Workbook task- nouns</p> <p>Teacher supports learners to take turns in reading and determining the order of importance.</p> <p>Collaborative learning task: one learner answers the question and all mark their copies individually</p>	<p>Describing sentences</p> <p>Rank each sentence in order of importance</p>
12.00	<p>All pupils transition to independent reading tasks at independent desks</p> <p>Problem solving task: Read and answer the questions independently</p>	<p>Reading task based on words and sentences discussed.</p> <p>T moves to P(a) and takes out a specific social skills book (made especially for him by the T) T works on a one-to-one with him, while the other pupils are engaged in task set.</p>
12.25	Yard time	

Similar pedagogical and methodological practices were observed in Schools (C), (E), (B) and (F) and the use of small group teaching is observed regularly. In School (B) and School (F) the teachers maintain a constant teaching role during the 27 hours of observations in each class. Lessons were short and purposeful with a

range of teaching methodologies observed. An example of a short lesson from School (F) can be seen in Table 4.19 below. It is important to note that the researcher joins the lesson two minutes after this lesson has started. The lesson is a small group lesson and the teacher is in the middle of the group desk. In this lesson, the teacher is seen in a Socratic role and is a model of critical thinking, she questions the learners in *'Why does the bell ring?... yes, I think that's right and Conor realised he was late.'* *'Why was he lucky he was wearing a helmet?'* As the lesson progresses the teacher draws attention to the connection between the text and the pictures. She models reading by taking a turn to read a section of the text, then progresses the lesson into a comprehension check, and finally orally seeking the sequence of the story of events in time order *'What's the first thing that happened? What happened next?'*

TABLE 5.19 OBSERVATION OF LESSON FROM SCHOOL F

School F		
Time	Activity	Learning, routine or function
9.32	English Comprehension lesson – text with picture	Direct teaching, small group lesson with T and P(b), P(d) and P(e)
	Problem solving	Teacher in Socratic role: presenting thinking opportunities, why do you think? I wonder...
	Talk and Discussion	Identify the contents of the picture
	Active learning	
	Teacher models reading	Reading task- turn-taking
	Collaborative and co-operative learning	Comprehension check and reading strategy – connect to text and inference
	Skills through content	Oral sequencing of story
9.43	Lesson ends	

Mathematic lessons were also observed during the 27 hours in each of Schools (A), (B), (C), (E) and (F). Teaching of mathematics also took place in small group or whole group sessions initially and then transitioned to individual tasks. Table 5.20 presents the sequence of a maths lesson that occurred during term 2, observation 2 in School (B). In this lesson, the teacher makes critical pedagogical decisions as the lesson develops. She begins with a simple sorting task that allows the learners to feel and become re-acquainted with the concrete materials and connect to prior knowledge about money. She then transitions the lesson to an assessment-for-learning (AFL) task making mental notes of learner responses. On completion of

her assessment she decides to set this task aside and to revisit a foundation activity. She distributes a number line 0-100, a marker and notation board, lollipop sticks and lollipop bundles of ten to each pupil. She informs the learners that she has changed her mind about the lesson and intends to stay with the lollipop sticks to check they can do the task. At one stage during this lesson the teacher moves to her desk and revises her written plan and is observed making notes. This lesson takes forty minutes and has three transitioning activities within it.

TABLE 5.20 OBSERVATION OF LESSON FROM SCHOOL B

School B		
Time	Activity	Learning, routine, function
11.05	Hands on activity Development of discussion skills Problem solving	P(a), P(e) and P(f) working with T in small group Individual task- each learner sorts coins into compartments and takes reference of representational value
11.15	Assessment for learning task	T asks each pupil to give a certain amount in coins to the SNA, each complete this task but take time to do confidently Teacher changes task
11.20	Manipulatives – concrete and abstract activity Talk and discussion Active listening Estimation Problem Solving and positive response to the	T says a number and directs each pupil to allocate the correct number of lollipop sticks to the notation board Examples include ‘What have you made, how many tens in 29?’ ‘Clear the board, find 20, what’s the next 10 on the number line?’ ‘make another 10 hop, where do you land?’ T hands control of activity to pupils, ‘what do you want them to do?’ P(a) ‘make 19, take away 2, what have you got?’

	opinions of others, explain clearly in mathematical terms	
11.35	Individual copy work Practical task with concrete material to support Guided discussion Hands on activity	Pre-planned sums in each pupil's copy T and SNA move around group and ask what did you do there? how did you get that answer? how do you know that's right? T directs to concrete materials
11.50	Lesson ends – free play	

School (G) and School (D) are exceptions to this practice. In these classrooms, the teachers have focused their timetabling and lesson content on primarily functional activities. These activities reflect the TEACCH approach to independent tasks with the pupils working on curriculum subject areas through a highly-structured work system, working from left to right and numerically, on previously taught tasks. It is important to note that during the observations in one of these classes, the researcher did not observe the teacher delivering a lesson or giving direct instruction to a new learning task. All lessons observed were repeated, structured activities. There are 27 hours of observations recorded in this school. It is also the case that there are no 'work with teacher' schedules to be observed in the planning documents. Fig. 11 and 12 show an example of the work systems and literacy tasks from School (G), the child is required to work from basket 1 to basket 2 and then to basket 3. Basket 2 in this case has a sensory pre-writing activity where the pupil draws the letter 'C' with their finger through the paint bag (Fig. 11).



FIG. 11 SENSORY BAG OF WET PAINT

Basket 3 then contains the writing task as in Fig. 11

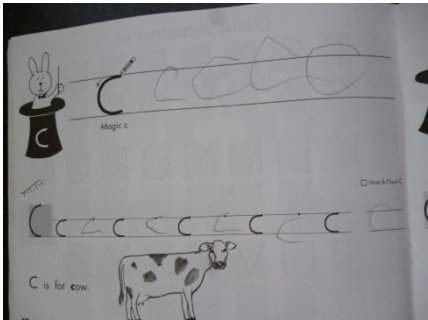


FIG. 12 WRITING WORKSHEET

Communication Partners

Across all classrooms with exception of School (G) and School (D) there was clear evidence of opportunities to engage in classroom discourse both from a formal and social perspective.

Experiences in Formal Language

In all classrooms, during formal periods, positive communications and interactions between the sender and the receiver of verbal and non-verbal messages were observed during teaching and non-teaching periods. Positive language was used to coax, praise and encourage pupils to complete, continue tasks or participate in classroom dialogue. Pupils demonstrated communicative intentions in both verbal and non-verbal messages and the teachers and SNAs both provided safe and secure space and time for these messages to be delivered and interpreted. It was evident that there was a balance of teacher initiated discussion and pupils initiated

discussion. Teachers and SNAs were evidenced in role as communicative leaders initiating conversation, waiting responses and providing feedback. In School (E) the teacher had increased latency to support response opportunity. She set a standard processing 'wait time' for one pupil specifically to enable him to answer questions or respond in conversation. This was adhered to in general for all pupils in that class.

'News' a means of Social Interactionism

The literature review exemplified the importance of meta-functional language, that can occur in adult-child interactions (Halliday, 1993). Teachers in Schools (A), (C), (E) and (F), through an explicit oral language activity called 'News', offered pupils with an opportunity to engage and develop pragmatic function skills such as; joint attention, the use of gesture and use of words. This occurred either first thing in the morning or after a small yard break. The following table (Table 5.21) provides a sample case from School (A) observation term 2, session 2 and demonstrates the pragmatic language practices of the class group. It is important to identify the teacher in role, modelling good practice and, engaged in the Social Interactionist Theory of language development (Carpenter et al. 2002). Her role is clearly to create a social context for successful language exchanges, she is identifiably scaffolding and leading the pupils through a culturally and developmentally appropriate experience. At an early point in the lesson she asks P(b) to have a turn and without pressure provides the latency he requires to process and prepare for the task. She and the pupils are evidenced showing joint attention to the topic, listening and attending to the topic, showing appropriate turn-taking, responding appropriately to the topic, showing appreciation of the listener's needs

and where suitable, sustaining the topic and contributing to the development of it (Shiel et al. 2012).

The Teacher has taken out an A0 blank chart and written across the top was a heading indicating ‘News’, without prompting pupil P(d) offers his news.

TABLE 5.21 SAMPLE CASE FROM SCHOOL (A) OBSERVATION TERM 2, SESSION 2

9.10am

Participant	Contribution	Pragmatic Language Practice
P(d)	<i>Owen is coming to my house for a play date</i>	responds appropriately to the topic showing appreciation of the listener's needs
T	<i>What's he going to do?</i>	
P(d)	<i>I don't know yet</i>	listen and attend to the topic
T	<i>P(b) your turn</i> He looks at her and remains quiet	Requires latency period to reflect on task
T	<i>P(c)</i>	
P(c)	<i>My news is I went to the well</i>	responds appropriately to the topic showing appreciation of the listener's needs
T	<i>Where was that?</i>	shows joint attention, listens and responds to the topic
P(c)	<i>It was a dream, I went to the well and fell down and the fireman saved me, a fireman used a ladder to help me out</i>	sustains the topic and contributes to the development of it
T	<i>When I was going home last night my car broke down! The tow truck had to come and help me</i>	

<p>P(c)</p> <p>T</p>	<p><i>Where did that happen?</i></p> <p><i>Going past Dunnes Stores, the guards had to help me push the car to a garage on the road</i></p>	<p>responds appropriately to the topic showing appreciation of the listener's needs</p> <p>sustain the topic and contribute to developing it</p>
<p>P(e)</p> <p>T</p> <p>P(e)</p>	<p><i>I have some news, I went and bought new shoes yesterday, I went to S(name of nearby town) but there were too many puddlies (puddles), I'm going to K's communion!</i></p> <p><i>When is that?</i></p> <p><i>Soon</i></p>	<p>shows joint attention to the topic</p> <p>listen and attends to the topic</p> <p>sustain the topic and contribute to developing it</p> <p>responds appropriately to the topic showing appreciation of the listener's needs</p>
<p>P(b)</p> <p>T</p> <p>P(b)</p> <p>T</p>	<p><i>I have big news! ...I went to Mammy's school yesterday!</i></p> <p><i>What did you do there?</i></p> <p><i>I was on the computer</i></p> <p><i>What was it like there?</i></p>	<p>shows joint attention to the topic</p> <p>sustain the topic and contribute to developing it</p> <p>responds appropriately to the topic showing appreciation of the listener's needs</p> <p>listen and attends to the topic</p>

P(b)	<i>It has a lift!</i> <i>I got new socks... and I'm going on holidays soon</i>	sustain the topic and contribute to developing it
P(e)	<i>Are you going on an Emirates airplane?</i>	sustain the topic and contribute to developing it
P(b) looks at P(e)		
T	<i>No, probably Ryanair or Aer Lingus</i>	
P(a)	<i>I'm going to Italy on the first of July</i>	shows joint attention to the topic sustain the topic
T	<i>And we are all going swimming today!</i>	contributes to developing it
9.20 T writes the news on the chart with contribution from pupils relating to each others news		

Social communications

Social communication was also observed where the pupils initiated conversations and a reversal of role as communicative leader was observed (this will be explored in section 4 below). An example of social language opportunities was regularly observed in School (B) where the SNA and class teacher provided jovial moments to engage the pupils in language experiences. The following extract from term 2, observation 2 is an example of this, the class were being accompanied back to class by the SNA after breakfast club;

9.20 am

On reaching the class door, SNA 1 stops and turns and places her fingers on her lips. She looks at all the boys and then looks through the window of the door into the classroom and says to the boys '*sh! Let's sneak up on T and see if she's asleep!*' There is a soft squeal of excitement and slowly she opens the door and they sneak in but T looks around. SNA 1 says '*oh no! She was correcting the homework... she's not asleep!*'

During term 3, observation 2 the researcher also recorded the following social exchange between the teacher, SNAs and some of the pupils while they were waiting for a peer to return from breakfast club. One pupil (P(a)) had initiated the conversation asking T if they could have a party day and to make a cake from his new book. The researcher entered the room during this encounter and the following was recorded:

9am

P(a) excitedly *'make them Gruffalo cake, make them Gruffalo crumble'*

T *'How do we make them all brown?'*

P(a) *'melt chocolate'*

T *'How do we put purple prickles all over it's back?'*

P(a) *'What about icing?'*

T referring to the picture in the Gruffalo Crumble and other recipes cook book *'how do we make them like this?'*

P(a) *'we could use tooth picks'*

The whole group begin talking together and at once, arguing about how to make this cake. There are too many dyads happening at once for me to record this so I sit and observe. The volume is high. There is a natural break in the conversation.

P(e) *'We could put icing in it'*

T *'Ok we need icing sugar, how are we going to get chocolate all over it?'*

P(a) *'buy chocolate'*

T *'Ok, we need cooking chocolate, what about purple prickles?'*

SNA referring to an earlier suggestion during the argument *'we could use Smarties, great idea'*

T *'Ok, I need Smarties, how many packets will I need?'*

SNA *'and something to drink?'*

T 'Ok, we need to tell mummies and daddies that we are not going to do any work tomorrow because it will be a Gruffalo party!'

Social Stories™ were used also as a means of communicating, between partners, a future event or to support the comprehension of an event that happened. This was particularly evident in School (B) and School (C) when teachers drew a storyboard of stick men and settings instantly on a wipe-able whiteboard to convey meaning to the pupils. Lámh™ was not observed as a means of communication between partners in any of the classrooms although the teacher in School (B) was observed occasionally using some signing. In School (D) where learners are described as predominantly pre-verbal or non-verbal there was no formal or informal strategy for effective communication. The following is one example extract from similar interactions from School (D), this extract took place in term 1:

9.38am

P(a) and SNA are sitting opposite each other at a workstation, there is a knobbed jigsaw puzzle in front of P(a) and she has the dog piece in her hand.

SNA *'Which colour will we put in your hair? pink or blue?'*

SNA looks behind her to a shelf

P(a) reaches and points to the pink bobbins

SNA turns back to P(a) and says; *'Come on (name), pink or blue?'*

P(a) reaches to pink again and holds SNA's hand

The SNA has looked away at the shelf behind and looks around again and says *'(name), which colour will we put in your hair, pink or blue?'*

P(a) points to blue

SNA *'Ok, we have lots of blue today'*

The SNA combs her hair and puts a blue bobbin in and begins to make plaits, she reaches down and takes out a music toy and says *'here is your music you can put it on anytime you like'*

P(a) reaches down and taps it and the music comes on.

Still doing the plaiting, the SNA says; *'have you any news for me?'* She waits and then says; *'we are getting our holidays this week'*. The SNA sings along with the music

P(a) is obviously enjoying this attention and is making high vocalising sounds and looking up at the SNA's face on occasion.

P(a) puts the music on again

SNA says *'Who is going to be pretty? Who is going to be pretty? (name)'*

SNA sings along with the music and says; *'when this is finished we will go to the hall and do our bench, we have lots to do today'*

P(a) gets up and looks out the window

SNA says; *'the flags are not flying today, it is not windy, it's calm'*

9.42am

Echolalia and Palilalia

There were regular observations of echoic behaviours across all settings. It is important to note that these were almost impossible to record as in most cases they were very quietly expressed. In all schools and in School (G) the teacher and the SNAs primarily ignored the echoic behaviours of the learners and dismissed these as repetitive, stereotypical autism traits. In School (G) one pupil P(c) demonstrated communicative intent via palilalia. Palilalia is when the phrase or sentence is self-constructed and repeated a number of times. P(c) is evidenced frequently, moving from person to person within the autism class and repeatedly restating a self-constructed sentence relating to an important contextual event, experience or his special interest 'Minecraft™'. This activity was ignored and not responded to by the teacher and SNAs in the room, when questioned about it they misinterpreted it

as echolalia and referred to echolalia as a negative autism trait. They had established a strategy of ‘planned ignoring’ of echoic behaviours. His older peers however did respond to his initiations and it was evidenced that P(c) very much engaged in the follow up conversations relating to his self-constructed phrase or conversations on his special interests.

The teacher from School (G) on reading the daily observations began a conversation with the researcher and her SNAs on how best to support P(c) in this act of communicative intent. They informed the researcher of a reconsidered stance on echoic behaviours and palilalia and, at the time of the research being completed, were actively seeking a course of CPD on the subject for future learning. The actions of the teacher and SNAs in this instance are reflective of all classrooms in this study and this finding is pertinent to the CPD needs of teachers in supporting and encouraging purposeful communicative intent via echolalia and palilalia.

Policy and provision

This theme relates to the skills and techniques used by the autism teacher in the day-to-day organisation and management of the classroom. It particularly focuses on classroom management strategies such as timetabling, lesson planning and delivery, management of movement and transitions of pupils before, during and after lessons, management of SNA staff during a typical class day, supervision of pupils, relationships and care/personal issues.

Timetabling

In all case examples the class teacher directed the researcher to a visual schedule of classroom planning and lesson timetabling. Alongside procedural structures for the whole school day teachers also used classroom and pupil planning (schedules) to

support consistency and routine. Fig.13 below represents an example of a work schedule for staff (in pink) and to the left of the pink schedule card is a green envelop with a blue work schedule for the next day. To the left of this green envelop is a picture schedule choice board for a pupil (in yellow). The pupils can, during the course of the day, self-select an activity during ‘free play/free time’ and insert it into their daily routine.



FIG. 13 STAFF SCHEDULE

Fig. 14 below represents a pupil individual timetable using the TEACCH and PECS system of structured work. The pupil’s name appears at the top of the schedule and the list of activities to be completed is presented in a downward linear file. When the pupil has completed each activity they file the PECS card in a finished envelop at the bottom of the schedule.



FIG. 14 PUPIL SCHEDULE

Fig. 15 below represents a different form of whole class scheduling with colour coding to illustrate each pupil’s movement across curriculum areas e.g. literacy, numeracy and movement. The teacher’s schedule is to the left of the colours and indicates exactly what planned practice the teacher will be engaged in.

FIG. 15 STAFF AND PUPIL SCHEDULE

Fig. 16 below presents a daily timetable with each column relating to a particular pupil in the class. This timetable also demonstrates the organic nature of the timetabling process, as it requires regular adaptation to support changes and issues as they arise for the teacher and the pupils during the course of the school day.

FIG. 16 DAILY CLASS TIMETABLE

Fig.17 represents another school’s interpretation of pupil schedules. The pupils, after conferencing with the class teacher fill in their small group schedule. Documents relating to the pupils IEPs and assessment records are positioned under this and are available for inspection and to provide a depth of understanding of how the school policies and procedures are implemented.



FIG. 17 PUPIL SCHEDULES

IEPs

Over the course of the school year all teachers said they were engaged in the coordinating and development of the pupil's individual education plan. While these are private and confidential the researcher did have access to view these and one school gave permission for them to be photographed with identifying information removed. Fig. 18 represents a page from P(c)'s IEP and Fig. 19 from P(d)'s IEP, both are four-page documents from one case example school, names have been blanked out to protect the identity of the pupils and the school.

<p>_____ will attend _____ for social skills, circle time, listening/thinking, gym, fine motor, one to one teaching, life skills, buddy & choice.</p> <p>To integrate daily on the mainstream yard at both breaks</p> <p>To work on decision making by making choices of 3-4 preferred activities.</p> <p>For home & school to liaise with each other through home-school diary.</p> <p>To complete gym work focusing on gross motor skills and do some Brain Gym.</p> <p>To attend swimming sessions, working on developing confidence & competence in the water.</p> <p>To encourage independent dressing after swimming.</p> <p>To sit & have lunch in a real setting with the other children of _____</p>	<p>SNA support, small groups & 1:1 sessions</p> <p>Play with peers will be encouraged. Access to SNA supervision needed.</p> <p>Choice board & words.</p> <p>Confidential home-school diary to be used by both parents & teachers when required.</p> <p>OT /physio based programme Brain Gym programme</p> <p>Swimming gear, arm bands etc.. SNA support required</p> <p>Prompting will be given if required</p> <p>Restaurant in swimming pool. Life skills work, good sitting, waiting etc</p>	<p>Staff of _____</p> <p>Staff of _____ & mainstream class.</p> <p>Staff of _____</p> <p>Teachers of _____ & home</p> <p>Staff of _____</p> <p>Staff of _____</p> <p>Staff of _____</p> <p>_____</p> <p>_____</p>	<p>September 2014</p> <p>September 2014</p> <p>September 2014</p> <p>September 2014</p> <p>September 2014</p> <p>First & last school year</p> <p>As above</p> <p>As above</p> <p>September 2014</p> <p>November Easter 2014</p> <p>As above</p> <p>December 2014</p>
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FIG.18 IEP P(c)

<p>To work on decision making by making choices of 3-4 preferred activities.</p> <p>To work on play skills by inviting a buddy from mainstream to _____ each week.</p> <p>For home & school to liaise with each other through home-school diary.</p> <p>To complete gym work focusing on gross motor skills & work on co-ordination</p> <p>To attend swimming sessions, working on developing confidence & competence in the water.</p> <p>To encourage independent showering & dressing after swimming.</p> <p>To sit & have lunch in a real setting with the other children of _____</p> <p>To incorporate regular exercise breaks to _____'s timetable</p> <p>To partake in a 'life skills' programme which will include visits to the library, doctor's, supermarket etc..</p> <p>To take part in simple</p>	<p>Choice board & words.</p> <p>Reverse integration. Pupils interact & play skills are modelled in a natural environment.</p> <p>Confidential home-school diary to be used by both parents & teachers when required.</p> <p>OT based programme, taken from any OT recommendations. Brain gym</p> <p>Swimming gear, arm bands etc.. SNA support required</p> <p>Prompting will be given if required</p> <p>Restaurant in swimming pool. Life skills work, good sitting, waiting etc</p> <p>SNA support required. Breaks between core subjects.</p> <p>Visits within _____ with teacher & SNA's Incorporating work on road safety awareness.</p> <p>Small group work,</p>	<p>_____</p> <p>_____ & children in 2nd Class.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>September 2014</p> <p>September 2014</p> <p>September 2014</p> <p>First & last school year</p> <p>As above</p> <p>As above</p> <p>September 2014</p> <p>November Easter 2014</p> <p>As above</p> <p>December 2014</p>
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FIG. 19 IEP P(d)

On examination of all the IEPs in this school it is evident that there is a commonality across the targets and outcomes being set. While some differences exist they are minute and it appears that there is a 'one size fits all'. Another important observation is that there are no literacy or numeracy targets within any of the IEPs and this correlates with the parent's feedback when asked if there were literacy or numeracy targets on the IEPs. When teachers were asked 'why this was?' teachers in general said, on reflection, the IEPs were always considered to be for management of personal and social targets and not necessarily academic. This was a common element across most schools and it appears the priorities are on behaviour skills for home and school, and self-management/self-regulation for learning. School (F), School (B) and School (C) do have targets relating to participation in their guided reading programmes but these targets are generic to attendance and engagement and do not provide a measureable outcome.

Supervision

This subtheme/category arises from coding the classroom observations and indicated when the teacher or SNA was in a supervisory role, such as monitoring without interaction, and/or watching pupils from a distance while attending to other tasks. This code is most frequently visible in School (G), and School (D). In School (G) the teacher brought the pupils to a private yard time and stood at a distance monitoring activities while the SNA staff took their breaks. The supervision code was also identified during independent 'free choice' and 'free play' sessions. Over the course of one observation (2:2) this code is applied seven times.

5.10 Lesson Observations and Modes of Delivery

The exploration of the literature relating to ‘best practice provision’, by Parson et al. (2009, p.117), suggest a significant lack of ‘robust, empirical evidence in many areas of practice and provision’. They also contend that well-known evidenced-based interventions ‘may not be as effective as initially thought and there is a need for more explicit research on the appropriateness of these interventions’ (Parsons et al. 2009, p.119). As highlighted in the literature review little research in this area has evolved over the course of ten years and their call for urgent research on interventions and evidenced-based practices across autism specific settings in Ireland is still required. More significantly their research highlighted a need to focus on the early communicative behaviours of children with autism, and a need to explore whether evidenced-based practices could offer more in relation to communication skills development. This provides the rationale for an exploration of the uses of evidenced-based practices such as TEACCH, Contemporary ABA, PECS, Social Stories™ and Lámh in the teaching of literacy for learners with autism. During the observation schedules a variety of lessons were observed ranging from formal to informal lessons, planned to unplanned and spontaneous lessons.

Evidenced-Based Practices (EBP)/ TEACCH

There was little evidence of an eclectic approach to teaching and learning (as discussed below on p.256-258), in almost all classes the emphasis was placed on the TEACCH approach. In all cases, except School (B) and School (C), the classroom environment is laid out with formal individual workstations for each pupil and a small group stations for group work. This follows the TEACCH approach to the advised structure of the physical environmental. As discussed in

the literature review, the physical structure of the classroom is an important element of the ‘structured teaching approach’ espoused by this programme. It requires that the environment be laid out in a predictable, clear manner with independent workstations and a one-to-one teaching table. Fig. 20 (below) provides an example of this structure, which is similar across the settings. In the distance on the notice board are the policies and practices set out by the staff to support consistency in their approach. This is essential if the teacher is absent and if a substitute teacher is brought in to replace him/her.



FIG. 20 PHYSICAL STRUCTURE

Visual structures were also evident in the classrooms and these were also visible in School (G) and School (C). Visible structures include; timetables, diaries, step-by-step guides to activities such as ‘first/then’ cards. In all case schools these visual structures were presented in picture format, and in School (E) in written text.

The work system or activity system is used to deliver curriculum-based, goal-oriented tasks and the learner is trained in the completion of these tasks in a one-to-one teaching session first. These work systems were only visible in a pure form in School (G) and School (D). This system requires the organisation of tasks in numerical or alphabetical order positioned to the left of the independent table with a structured order for completion. The pupil works from left to right and usually in

order of task 1, 2, 3. On completion of each task, they move the task card to a finished pocket and the task basket to the right of the desk. In other case example schools this structure was evident but in a less pure/rigid form. Fig. 21 (below) is an example from School (C). In this school, the task is to complete the three activities and then to claim the reward of the toy Mr. Potato Head. In this instance, the left-right regime is abandoned and top-down regime prevails. There is also no numerical order applied to the tasks and the pupil has free choice as to which task will be completed first.



FIG. 21 VISUAL STRUCTURE

Structured tasks were also only evident in School (G) and School (D), these tasks provided a basic level of support to the pupils and were of a functional nature more so than re-enforcing a concept.

Figure 22 (below) is an example of one of these tasks; the pupil is required to create a three-dimensional structure from a two-dimensional drawing.

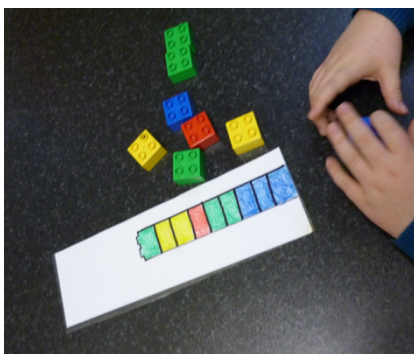


FIG. 22 TASK STRUCTURE

Structured tasks within the TEACCH approach are intended to provide the learner with opportunities to engage with curriculum content or life-skills training.

5.11. Relationship

Relationships as a theme emerged repeatedly across the data sets and it appeared as a quality of the learning environment between teacher and pupil. The inter-personal relationships between the teacher-pupil interactions were observed as rewarding, respectful, playful (as previously discussed), and empowering.

Establishing a rapport for learning

Across all schools and classrooms positive engaging relationships were observed. Teachers and SNAs were observed encouraging and praising pupils for work done or being done. In particular, when pupils became anxious about their work or found a task challenging or frustrating the teachers and SNAs provided immediate praise through verbal interventions to support the pupil remaining on task. Coaxing with soft encouraging tones was used in a respectful manner to enable the pupils to remain self-regulated throughout lessons. The empowering strategy of ‘Catch them being good’ was also regularly observed especially in School G and School B where the teacher and staff shared together the positive feedback to pupils. The following short extract is from term 2, observation set 2, School B and demonstrates the playful, empowering and rewarding comments between teacher and SNA for pupil P(f):

SNA *‘T look he got them all wrong!’* SNA winks at P(f)

T *‘Oh no! Let me look....What’s wrong with you?’* (speaking to SNA) *Look he got them all right! Give that boy a sticker!*

5.12 Communicating Expectations

Across all settings (except School D) teachers communicated expectations to pupils as the lessons began and progressed. This was communicated via the PECS schedule of lessons and was followed in the main with a promise of a free play activity. Teachers clarified tasks to be attended to, checked comprehension of the task component parts and redirected pupils to re-consider or edit their work as it progressed. Homework completion appeared to be a very important element of the standards and expectations of pupil work. All teachers (except teachers in School D and School G, no regular homework was given) gave homework on Monday to Thursday and expected pupils to complete it. Each morning, in Schools (A), (B), (C), (E) and (F), teachers checked with the pupils, and the homework journal for communication from parents on issues arising in the homework from the previous night. For example, in Schools (A), (B), (E) and (F) if homework wasn't completed the teachers took the time to review the homework with the pupil and to assess the gap in knowledge; this was then reviewed before the class started and the pupil supported in completing the homework. In School (C) teachers made note of incomplete homework to review with the SNA, learning support, and with parents at a later date.

Firm but Fair

There is also evidence of a firm but fair responsive approach to work and behaviours for learning both from teachers, and SNAs. In School (C) an SNA is observed guiding the pupil P(b) on in a written task and providing a staged approach to complete the task. This task is a reading and comprehension task and the class teacher has revised the story and orally reviewed each question and the appropriate

answer. The SNA re-reads the section again to P(b) and they are tasked with a sentence completion activity, the following encounter is observed;

SNA *'The crow saw....'*

P(b) to SNA *'why did they write it down'* (referring to the beginning sentence)

SNA *'The crow saw?'* The SNA explains that *'they are giving hints'* and she draws attention to the words in the sentence in the story

P(b) uses a whining voice and asks *'why?'* and she writes the sentence and colours the picture under it.

They work on together through the task, then P(b) objects and says she doesn't want to do any more, the SNA encourages her to write the next sentence. She writes the next sentence and the SNA encourages her to colour the next picture.

P(b) complains that the pencil is hard. The SNA switches the pencil for a crayon and encourages P(b) to write the next sentence and to colour the picture.

This is also observed in School (B) (set 2, observation 2) when the SNA approaches P(a) who is complaining and wanting to go to playtime instead of completing his math activity. She firmly but fairly directs him saying *'you are well able to finish, go and finish them'*. She then continues her task with another pupil but returns to review and direct him to use the number line to support his independence in completing the task. He completes the last three math questions using the number line and the teacher gives him a sticker for completing all his work.

Peer-tutors

When pupils were involved in mainstream classes peers also gave rewarding and encouraging comments and actively supported their peer with autism to remain engaged in the lesson. An example of this can be observed in the following abstract from an observation in School C term 3 set 2. This is a whole class mainstream

lesson on Mathematics and a pupil with autism, who is minimally verbal, is sitting in close proximity (but not too close) to a peer small group, his SNA is sitting beside him;

T distributes concrete money resource to all tables and instructs the class in their small groups to make €1.85c.

The SNA moves P(d)'s chair closer to his group table and encourages him to join his group in making €1.85c.

P(d) reaches for his pencil case and takes out his pencil, he flies it through the air and brings it back to his copy, he shifts his posture to turn slightly away from his left hand peer. He looks away from the group and the SNA. He brings his wrists up to his chest and turns them inwards and outwards.

SNA encourages him to engage. He remains looking on.

T calls class to make €1.90c

Peer (girl) asks P(d) 'come on make €1.90, you need to add €1 (P name). She moves around the table asking each boy to add a coin to the total until €1.90 is made.

This observation clearly demonstrates the connectedness of the class peers to their classmate with autism. Further, this presents evidence that social learning experiences of children with autism are greatly enhanced when they are included in academic learning activities with TD peers. In this instance on seeing that the efforts of the SNA were not working the peer steps in as a tutor and takes command of the lesson to bring it to completion as a group task. It is also important to note that this peer performed the activity with all the boys around the table therefore maintaining an inclusive approach. This was also observed in School (A) and School (E) as pupils with autism moved and worked along-side TD peers in academic lessons. When the pupils with autism required additional support a nearby peer was observed stepping into the support role.

5.13 Identification – Roles

As mentioned previously there was evidence of effective professional communications between the teacher and SNAs in all the classrooms observed. Teachers demonstrated strong transformational leadership qualities. There was evidence of collaboration, co-operation and guiding SNAs in best practice and management of pupils and learning. They liaised, negotiated and encouraged SNA staff to work on their own initiative and they placed trust in the SNAs to communicate issues immediately and effectively. In some schools the relationship between the teacher and the SNAs has been long established and they appear as a very functional team. School B is a case example where two SNAs have worked for a number of years with the teacher and they work in a synchronised way with each other. This is in contrast, to School D where the class teacher depends on the SNAs to guide her in her practice and where the SNAs are the longest serving members in the autism unit and are assigned specific pupils and work only with those pupils on a daily, weekly and termly basis.

SNA as a Teaching Assistant

In all seven class-rooms the Special Needs Assistant (SNA) is observed working harmoniously alongside the teacher in an assistant teaching role. All classroom teachers engage in collaborative planning and open discussion of the directions for teaching and supporting the learners throughout the observation records. Only in School B are tensions noted within the working relationships and these relate to one SNA not following the teacher's stated direction. In this instance, the other SNAs in the room intervene and redirect this SNA to alternative tasks. The activity of the SNA in all classrooms is of a very high standard and their role is notably more supportive than their care based job description. However, while in the main the

work of the SNA is very positive to learning experiences and outcomes, there is also evidence of incidents where the SNA has performed the task instead of the pupil. This is evidenced in nearly all schools when the teacher is at a different work task and the teacher assigns the SNA to support a pupil completing a piece of work. For example, in School B a pupil has a list of words that he has to put into sentences and on completing his last sentence he writes 'I am fine', the SNA rubs out the sentence and says, "*I feel fine or it's a fine day*". The pupil then writes 'I feel fine' and the SNA takes the pencil from him and fixes the hook on the 'f' letter. There is no explanation as to why the first sentence is not acceptable and his attention is not drawn to the curve shape at the beginning formation of the letter 'f'. In School G when the teacher sends the pupils to their independent table tasks the SNAs frequently interrupt the independent work cycle by prompting and requiring the child to complete the task and start the next. This creates urgency about the activity and in most cases the pupils do not attend to fine motor control needed (e.g. holding the pencil correctly), completing the task as a best effort or really having time to think about what they are doing. As mentioned earlier in School C when the teacher had asked the pupils to make €1.37 as a group, the SNA instructed P(d) to make €1.37 himself. From an observation perspective P(d)'s hesitation in doing the task may have been that he was waiting for the natural group leader of his group to begin the activity. The SNA's instruction in this case was very much in conflict to the task set by the class teacher.

5.14 Literacy Practices of Children with Autism

This section of the results chapter presents the observed literacy practices of a random select number of pupils from across the schools. In all schools, except Scoil deValera, Pupil P(c) was selected for coding across the Language Curriculum Progression Milestones (NCCA, 2016) and the Special Educational Needs Pathway (NCCA, 2016). In Scoil deValera Frances was selected as a focused observation as Evan is a second language learner. The rationale for observing and recording literacy practices is, as discussed in the literature review, to relate a more knowledgeable analysis of that ability (Chandler-Olcott and Kluth, 2009).

Evidence, from classroom observations, from across the three terms were used to provide examples of literacy practices and to align these examples with the NCCA (2016) progression milestones. The findings are presented in narrative form in individual case format followed by a statement of skills from the developmental continuum and finally a cross-case analysis. The anonymised pupil names are used; Bert, Niamh, Frances, Karl, Kyle, Ger and Sophie P.

Bert

While the teacher, Bernie, identifies Bert as minimally verbal the observations have provided evidence to the contrary, Bert is evidenced as a chatty child. He always arrives to class in conversation with his teacher or SNA. The conversation is usually based on his special interest or an event that he recalls. He approaches and initiates conversation with his peers and is observed enquiring after them and the class staff if they are not present or have returned from being absent. Bert uses palilalia as a means of initiating conversations. Regularly he approaches staff to ask for assistance and states his needs clearly and precisely. He is responsive to requests sometimes in a negative manner by objecting strongly, but mostly he is

compliant. Bert is very aware and in-tune with his environment and is inclined to ‘rule the roost’ watching his peers for misdemeanours. He is also observed ‘turning the tables’ on the adults by using adult like responses to their requests. For example, during observation 1 set 2 (10am) Bernie tried to transition him to a new task and he responded ‘No! I hate time up!’ Bernie tried to coax him with an opportunity to sit beside a peer but he retorted ‘I’m a bit busy!’ Bert likes the routines established in class but is flexible to change once change is explained. He enjoys outdoor play and instigates play sequences with his pal Cal, he likes chasing and tag games. Bert is also very conscious of his class peers and demonstrates empathy towards them. He asks questions of adults about his peers’ behaviour. Bert’s autism can be evidenced in his anxieties and rigid play pattern but he masters self-regulation well in the class by vocalising his concerns and issues. His rigid play patterns involve printing out pictures of ‘Minecraft™’ ‘mobs’ (characters) and collecting cut outs of ‘resources’ these he gathers in a cardboard shoe book. When ‘free choice’ is offered, Bert goes to his desk, which he calls his ‘crafting table’ and generates ‘gameplay modes’ all of which are associated with Minecraft™. Figure 23 is a photograph of his shoe box and some characters from Super Mario, which is another special interest.



FIG 23 BERT'S SHOEBOX

Bert makes choices based on the environment and the situation of all the classroom members. Bert will ask to sit near a peer who is calm and working, he avoids peers that have unpredictable behaviours.

On no occasion did the observations record Bert reading independently, he is observed reading from the interactive white board and on each occasion, he read fluently. Bert was observed writing and using correct conventions, as he types words into the computer via Google Images and does not seek support for spelling. There are no examples of Bert’s written work apart from workbook tasks.

Table 5.22 provides an interpretation of findings of Bert’s literacy practices on the Language Curriculum Progression Continuum (National Council for Curriculum and Assessment, 2016)

TABLE 5.22 BERT: POSITION ON THE PROGRESSION CONTINUUM

Bert: Position on the Progression Continuum		
Strand	Milestone	Evidence
Oral Language	<p>(e)</p> <p>The child begins to use decontextualized language, such as topic-specific language acquired through text and through interactions with others.</p> <p>He/she recalls unshared experiences, sequences an event for a listener.</p> <p>The child is more aware of audience and uses language differently depending on the listener.</p>	<p>Obs 1:2 9.10am</p> <p>To teacher – ‘I hate morning song! Where is Mrs (SNA)?’</p> <p>Obs 2:3 9.10 am</p> <p>Researcher to Bert- ‘Hi Bert, who is that in your hand?’</p> <p>Bert ‘It’s Creeper, he’s a monster.’</p> <p>R ‘What does he do?’</p> <p>Bert ‘he explodes, when Creeper and Skeleton get together you have a mob.’</p> <p>R ‘who would win the mob?’</p> <p>Bert ‘Creeper’</p>

	<p>He/she speaks with a wider range of vocabulary and detail, uses context to help understand new words and responds to lengthy instructions.</p> <p>The child reflects on experience, gives explanations, considers problems and suggests solutions</p>	<p>R 'why?'</p> <p>Bert 'he is more powerful and he spawns on blocks'</p> <p>R 'what does spawn mean?'</p> <p>Bert 'he drops eggs'</p> <p>T calls pupils to welcome hoop</p> <p>Obs 1:2 11.15am</p> <p>To researcher 'you're writing a book, my mum wrote my name in your book'</p> <p>Obs 1:2 9.50 am</p> <p>To teacher –'hard work, that was hard work!</p> <p>Obs 1:2 10.20am in yard to peers- 'run for your lives he's coming! It's a mob, it's a monster!</p> <p>A peer pushes another, Bert approaches and says 'say sorry to R right now, go on say sorry'</p> <p>Obs 2:2 11am Bert object to work scheduled but follows T instruction to complete tasks</p> <p>Obs1:2 10.20am to teacher- 'Where is Cal? Does he have to finish his work?'</p>
<p>Reading</p>	<p>(d)</p> <p>The child uses book-handling skills and identifies more conventions of print.</p> <p>He/she sounds and names all letters of the alphabet. Begins to blend and segment some</p>	<p>Not observed</p>

	<p>sounds in words, recognises some common letter patterns and generates rhyming words.</p> <p>The child reads a range of high-frequency and CVC words and uses some contextual as well as pictorial cues to aid comprehension. He/she modifies predictions based on new information and shows understanding through discussion of texts** read.</p>	<p>Can name and say sound of all letters of the alphabet – Daily Jolly phonic lesson, combines initial, medial and final blends to word attack</p> <p>Daily Jolly Phonics lesson</p> <p>Reads all words on interactive white board without difficulty</p>
Writing	<p>(c)</p> <p>The child enjoys emergent writing using a variety of implements and shows good muscle control.</p> <p>He/she explains the main messages in their writing.</p> <p>The child uses basic conventions of print, names and sounds some letters and uses random strings of letters in writing.</p> <p>Their attempts show some emerging awareness of sounds. He/she uses new oral and reading vocabulary from texts** read and writes for particular purposes and interacts with the teacher as a scribe.</p>	<p>Uses tri-pod grip with fingers placed in the middle of the pencil shaft, takes interactive pen and demonstrates good control using large movements.</p> <p>Not evidenced – no samples</p> <p>Not evidenced</p> <p>Uses the computer to type words associated with computer games and videos.</p> <p>Reads all words teacher writes on the board relating to the Jolly phonics programme</p>

Figure 24 provides an example of Bert’s writing from basketwork at his independent station.

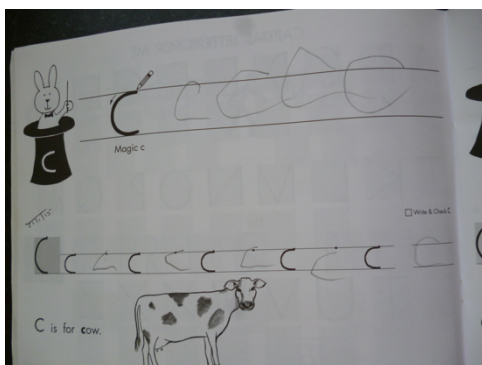


FIG. 24 EXAMPLE OF WRITING

Niamh

Niamh is predominately electively non-verbal with a moderate autism disability. She has intense sensory needs and requires ear defenders and sometimes music to support her regulation. The teacher or the SNA accompanied her at all times during the observation sessions. Niamh prefers to sit in a hunkered position on a soft chair and would spend long periods of time flicking through music videos on the iPad. Niamh's teacher Tina uses a schedule, a timer and motivation reward activities to support Niamh through the learning activities and the school day.

Figure 25 below illustrates the timer settings for I=independent work, G=group work and Reward times.

TIMERS	
Working - I	5 mins
Working - G	5 mins
Rewards	3 mins

FIG 25 TIMER SCHEDULE

Figure 26 below is a photograph example of Niamh's schedule for one day during the observations.



FIG 26 NIAMH'S SCHEDULE

Niamh appears happy most of the time and comes into class every day and goes to the soft chair until called to morning movement classes. She can use her voice and Tina has established a routine latency time for her responses. She is encouraged to communicate verbally through all lessons. Niamh experiences anxiety when she perceives other are distressed. She is observant and watches the movement of her peers as they move around the class and go from lesson to lesson. The SNAs use Theraputty™ to transition Niamh from task to task and this appears to soothe her when she finds transitions difficult or becomes anxious. Niamh does not initiate conversations and does not communicate needs without verbal prompting to use her words, she does have a PECS book and can use it but is not so inclined. Throughout the observations, Niamh only uses her voice when asked to respond, however she is observed singing quietly to herself. She has good comprehension and can follow a short two-step instruction with little prompting. Niamh can read and write under direct guidance from the teacher and the SNA. Niamh was observed reading all words in the SNIP Literacy Programme at level 1, sets 1-4 without difficulty.

Table 5.23 provides an interpretation of findings of Niamh’s literacy practices on the Language Curriculum Progression Continuum (National Council for Curriculum and Assessment, 2016).

TABLE 5.23 NIAMH: POSITION ON PROGRESSION CONTINUUM

Niamh: Position on Progression Continuum		
Strand	Milestone	Evidence
Oral Language	<p>(a)</p> <p>The child gestures to and shares attention of an object with another person.</p> <p>He/she exchanges smiles, vocalises and, in some cases, uses single words to respond.</p> <p>The child relies on the other person to interpret and share their meaning.</p>	<p>Engages with teacher and SNA on most tasks taking turns and following direction</p> <p>Enjoys one-to-one interactions and can respond when prompted</p> <p>Requires SNA and/or PECS support to communicate</p>
Reading	<p>(d)</p> <p>The child uses book-handling skills and identifies more conventions of print.</p> <p>He/she sounds and names all letters of the alphabet. Begins to blend and segment some sounds in words, recognises some common letter patterns and generates rhyming words.</p> <p>The child reads a range of high-frequency and CVC words and uses some contextual as well as pictorial cues to aid comprehension.</p> <p>He/she modifies predictions based on new information and shows understanding through discussion of texts** read.</p>	<p>Evidenced during reading with teacher sessions and using her maths books</p> <p>Can identify all the letter names and sounds</p> <p>Obs 1:2 10am</p> <p>Word bingo with rhyming word family- see fig....</p> <p>Evidenced in read with teacher session in obs1:3 10am</p> <p>Not observed, but indicates with prompt to some understanding</p> <p>Fig 29 is a photograph of the reading scheme and level of reading, answers question with one word responses</p>
Writing	(c)	

	<p>The child enjoys emergent writing using a variety of implements and shows good muscle control.</p> <p>He/she explains the main messages in their writing.</p> <p>The child uses basic conventions of print, names and sounds some letters and uses random strings of letters in writing. Their attempts show some emerging awareness of sounds.</p> <p>He/she uses new oral and reading vocabulary from texts** read and writes for particular purposes and interacts with the teacher as a scribe.</p>	<p>Supported in writing, holds pencil and moves pencil with control</p> <p>Is guided in writing</p> <p>Can write a sentence relating to a story with guidance from the teacher</p> <p>References picture and words from text to support sentence writing</p>
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Figure 27 shows Niamh working in a maths lesson, with the timer at the top of the picture and the teacher by her right-hand side.



FIG 27 NIAMH WORKING AT MATHS

Figure 28 is a photograph of the bingo card Niamh completed during word family bingo in observation 1:2 at 10am

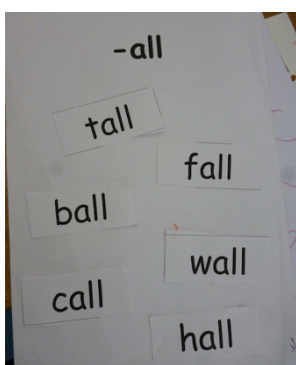


FIG 28 WORD BINGO CARD

Figure 29 below is a photograph of Niamh's reader for homework and in school.



FIG 29 NIAMH'S READER

Frances

Frances is observed as a very alert young girl with significant co-morbid disabilities. She has been diagnosed with autism and cerebral palsy. Her cerebral palsy is evidenced as a movement disorder with spasticity, chorea (involuntary movements of the shoulders, neck, trunk and face) and oral motor dysfunction. She has speech impairment and has difficulty controlling the muscles of the tongue, lips, jaw and vocal tract. As a result, Frances has no speech and communicates with gestures and vocal sounds. She is aided in her walking and movement with the use of calipers, there is a wheelchair available to her but she prefers not to use it. Frances loves school and alights from her transport bus with great energy and excitement. She looks intently at her SNA and teacher and seeks attention through high-pitched vocalising. Frances responds to her name and looks at people when their names are mentioned. It is difficult to measure Frances' expressive language as she has no vocabulary and no organised system of communication either with pictures or objects. She is evidenced approaching others in her classroom and vocalising and gesturing with irregular movements and intense eye contact. She responds to her SNA regarding all tasks set, which demonstrates clearly that she has good oral receptive language skills. It was evidenced during the observations that Frances

enjoyed and responded well to nursery rhymes and songs and made efforts to join in and contribute. Frances can respond and complete a one-part instruction but it is difficult to determine if she can complete two-part instructions, as these were not requested of her during the period of observation. Frances enjoys jigsaw puzzles and music. There is no observational evidence of Frances engaged in a reading activity or writing task. Tasks set for Frances are at a very low manipulative level. She has a daily movement activity, which is centred on supporting development of muscle tone and posture.

Table 5.24 provides an interpretation of findings of Frances’ literacy practices on the Language Curriculum Progression Continuum (National Council for Curriculum and Assessment, 2016)

TABLE 5.24 FRANCES: POSITION ON PROGRESSION CONTINUUM

Frances: Position on Progression Continuum		
Strand	Milestone	Evidence
Oral Language	<p>(a)</p> <p>The child gestures to and shares attention of an object with another person.</p> <p>He/she exchanges smiles, vocalises and in some cases, uses single words to respond.</p> <p>The child relies on the other person to interpret and share their meaning.</p>	<p>Obs 1:1</p> <p>looks out the window at the flag to see if it is a windy day, looks at SNA and SNA discusses that the flag is not blowing today. (Joint Attention)</p> <p>Exchanges smiles and interacts vocally with SNA, teacher and peers</p> <p>Obs 1:2 makes for the basket of balls and vocalises regarding the purple and silver ball, looks to SNA to respond</p>
Reading	(a)	

	<p>The child has fun playing with books and joining in with nursery rhymes.</p> <p>He/she enjoys looking at, listening to and handling books and indicates favourites.</p> <p>The child associates some meaning with pictures and familiar logos, signs, letters and words.</p> <p>He/she sequences familiar stories or personal experiences using objects, marks or mimes to focus on 2-3 key points or events.</p>	<p>Obs 1:1</p> <p>Frances enjoys her personal photograph book of her family and enjoys pointing to photos as the SNA says a name.</p> <p>Frances can identify all the people in her photographs</p> <p>Not Evidenced</p>
Writing	<p>*early (a)</p> <p>The child explores a variety of implements and surfaces to create texts**.</p> <p>He/she engages with the mechanics of mark-making and technology as appropriate.</p> <p>The child uses marks, signs, symbols or texts* to infer meaning.</p> <p>He/she uses gestures, sounds and/or words to share their work.</p>	<p>Not Evidenced</p> <p>Not Evidenced</p> <p>Not Evidenced</p> <p>Could be interpreted but no sufficient evidence</p>

Karl

Karl is a quiet boy with a diagnosis of autism, during the observation period Karl turned 9 years old. On arrival to class he checks in with the teacher handing over his homework journal and engages in small talk. He moves quickly to his independent desk and reviews his schedule for the day ahead. He greets and communicates politely with the SNAs and peers around him. Karl is very friendly with Ken and Kaden his autism class peers that he has transitioned through the

school with. During observation 1:1 Karl is observed coaxing Ken to burp and interrupt the lesson. Karl enjoys yard time with his whole school and travels unaccompanied to his peer mainstream class for academic and social tasks. Karl has a difficulty in the short-term memory process and requires visual/picture clues of people he meets for the first time. This is observed during the classroom observation 2:2 when Karl could not remember the names of the female staff and the researcher. Karl substitutes the name 'Mary' for all females when he cannot remember their names. Karl enjoys the routine of the structured day and refers to his schedule regularly. Karl is quiet in class and waits to be spoken to during lessons, he does not venture to answer a question if it is not his turn or if the teacher is not referring to him. However, Karl enjoys singing. At 'morning welcome' (whole group activity) he was observed bursting into song and leading the group in 'What's the Weather?' Karl enjoys oral language activities and demonstrates good expressive language skills. He can effectively communicate (to his teacher) his wants and needs, thoughts and ideas, he can argue his point and defend his stance by elaborating his point. He enjoys reading and attends to written tasks without difficulty, he is right handed and has a good pencil grip, he uses his left hand appropriately to support his work. Karl's autism is evident when he becomes anxious, is out of routine or when his turn is not observed.

Table 5.25 provides an interpretation of findings of Karl's literacy practices on the Language Curriculum Progression Continuum (National Council for Curriculum and Assessment, 2016).

TABLE 5.25 KARL: POSITION ON PROGRESSION CONTINUUM

Karl: Position on Progression Continuum		
Strand	Milestone	Evidence
Oral Language	<p>Emerging (d)</p> <p>The child uses language to communicate their thoughts, feelings and ideas, and to ask questions.</p> <p>He/she has conversations about things that interest them, personal experiences, topics familiar to them and increasingly unfamiliar.</p> <p>The child engages others in conversation, asking questions and exchanging information.</p> <p>He /she begins to reflect on experience and to explain problems and consider solutions for age-appropriate topics.</p> <p>He/she begins to understand that the audience influences how we communicate.</p> <p>He/she can follow one-three step instructions.</p>	<p>Evidenced in group activities and during lessons when his turn is missed.</p> <p>Ob 1:1 discusses his birthday party and the cake he had.</p> <p>Ob 1:2 approaches researcher and discusses and shows pride in his work</p> <p>Ob 1:1</p> <p>Karl asks the SNA ‘what is the student council?’</p> <p>Ob 1:2 questions the SNA as to the whereabouts of the keys for the computer press</p> <p>Uses group news to discuss anxieties, and seek support in understanding</p> <p>Demonstrate rigidity of rules in turn taking</p> <p>Ob 1:1 expresses gratitude to his peer when presented with a card- identifies himself in the drawing and comments on how good the drawing is.</p> <p>Not evidenced</p>
Reading	Emerging (e)	Ob 1:1

	<p>The child enjoys listening to, reading and exploring text** showing knowledge of the structure of a range of narrative and procedural text** genres.</p> <p>He/she understands messages conveyed in illustrations and uses sight words, rhyming words, syllables, common letter patterns and text** cues to read.</p> <p>The child reads familiar texts** independently using full-stops to punctuate.</p> <p>He/she begins to monitor comprehension, asks questions about texts** and offers some reasons for predictions.</p> <p>With help, the child locates key points in informational texts** using a graphic organiser.</p>	<p>All evidence during reading session with teacher support and guidance</p> <p>Ob 1:2</p> <p>Work book task</p> <p>Reads and re-reads social stories at independent table</p> <p>During workbook tasks of same and different he asks T's opinion and clarifies that 'what seems important to me is there are no bad ones (choices)'.</p> <p>Within text book situations.</p>
Writing	<p>(d)</p> <p>The child continues to write collaboratively with the teacher and begins to write independently about personal experiences and familiar topics.</p> <p>He/she uses some phonetically correct letters and common letter patterns and familiar words while using some correct word order, full-stops and spaces in sentences.</p> <p>The child writes some upper and lower case letters legibly as separate flowing letters. He/she reads and discusses their texts** and chooses ones for display.</p>	<p>Ob 2:2 9.10 am</p> <p>During 'I have news to share' Karl contributed a piece of news as teacher scribed for the class.</p> <p>Karl answered questions in his workbook using simple sentences and single word answers</p> <p>Has good pencil grip and can write independently and presents work to teacher for review</p>

Fig 30 below is a page from the 'reading with teacher' activity. Karl was evidenced reading this with no difficulty in observation 1:1. However, when teacher interrupted him to elaborate on a point of grammar or a phonological pattern, he objected strongly.

Yasmin watched Sarah swimming across the pool. She said to herself, "I'm going to have another try."

Yasmin stood with her back to the wall. Then she pushed off with her hands and started kicking as hard as she could. Her arms went over and over as she moved along. She was going fast!

FIG 30 KARL'S READER

Fig 31 below is a photograph of Karl's work schedule for a Wednesday during the observation schedule 3:3



FIG 31 KARL'S WORK SCHEDULE

Fig 32 below is a photograph of Karl's written schedule in preparation for going home.

Monday	<ol style="list-style-type: none"> 1. Read my homework sheet ✓ 2. What books do I need for homework? ✓ 3. Put them in my bag and pack my bag. ✓ 4. Put on my coat. ✓ 5. Wait at my workstation for Mum or Dad. ✓
Tuesday	<ol style="list-style-type: none"> 1. Read my homework sheet. ✓ 2. What books do I need for homework? ✓ 3. Put them in my bag and pack my bag. ✓ 4. Put on my coat. ✓ 5. Wait at my workstation for Mum or Dad. ✓
Wednesday	<ol style="list-style-type: none"> 1. Read my homework sheet. 2. What books do I need for homework? 3. Put them in my bag and pack my bag. 4. Put on my coat. 5. Wait at my workstation for Mum or Dad.
Thursday	<ol style="list-style-type: none"> 1. Read my homework sheet. 2. What books do I need for homework? 3. Put them in my bag and pack my bag. 4. Put on my coat. 5. Wait at my workstation for Mum or Dad.
Friday	<ol style="list-style-type: none"> 1. No homework today. 2. Put on my coat. 3. Wait at my workstation for Mum or Dad.

FIG 32 KARL'S WEEKLY SCHEDULE

Figure 33 below is a social story card from Karl's desk

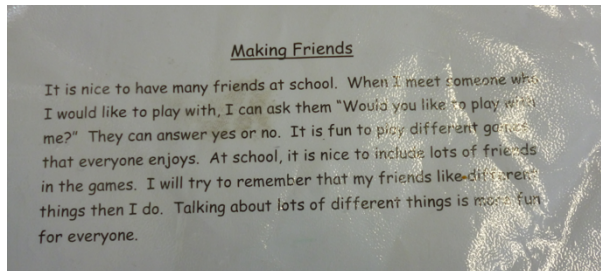


FIG 33 SOCIAL STORY

Kyle

Kyle has a diagnosis of autism and mild general learning disability, he was 8 years of age at the time of the observations. He is a chatty, social boy who has established himself well in school. Kyle arrives to school by bus transport and attends to his schedule immediately, handing his homework over to the autism unit teachers and moving off immediately to his peer class in the company of other pupils and the SNA. Kyle spends most of his day moving from his classroom to the autism unit and relies on his schedule rigidly.

In his mainstream class, Kyle uses a wobble cushion, and is allowed to move about the class as a self-regulatory strategy. He is accompanied by an SNA, the SNA works with all pupils in the class and is seated at a distance from Kyle. Kyle is observed putting up his hand and making efforts to answer the teacher's questions. He attends to the tasks set with commitment and engages well with the teacher and his peers. He attends to the class routines and regulations and follows the lesson in the same manner as his mainstream peers. Kyle has many friends in school and enjoys yard time with his peers. In the autism unit Kyle seeks confirmation that he will be allowed to have his 'free choice activity' on completion of tasks. This indicates that he is conscious that his work efforts lead to intrinsic and external rewards. He is observed selecting 'free style drawing' and peer play as his self-selected rewards. Kyle is also observed in social play situations as an active member of the group. He is observed keeping his play partner engaged in the

discussion by checking in with them that they are following his ideas *‘would you like a saber? I have the perfect colour for you, watch this, it transforms, are you watching?’* Kyle is evidenced using prior language and experiences to support pretend play in a creative imaginative way *‘This is an air-fire hovercraft, these are the engines, you can lift these up and there are two hover guns on them’*. He gives brief explanations and justifications for his decisions and seeks approval from his peers to maintain their willingness to continue in the play event *‘are you happy to be in the game as a jedi?’*. Kyle appears conscious of his peers and relates to the rules of turn-taking well.

Table 5.26 below provides an interpretation of findings of Kyle’s literacy practices on the Language Curriculum Progression Continuum (National Council for Curriculum and Assessment, 2016).

TABLE 5.26 KYLE: POSITION ON THE PROGRESSION CONTINUUM

Kyle: Position on the Progression Continuum		
Strand	Milestone	Evidence
Oral Language	<p>(d)</p> <p>The child uses language to communicate their thoughts, feelings and ideas, and to ask questions.</p> <p>He/she has conversations about things that interest them, personal experiences, topics familiar to them and increasingly unfamiliar.</p> <p>The child engages others in conversation, asking questions and exchanging information.</p> <p>He /she begins to reflect on experience and to explain problems and consider solutions for age-appropriate topics.</p>	<p>Evidenced during class lessons and social play</p> <p>Frequently observed during play</p> <p>As exemplified above, Kyle is very conscious of his audience</p> <p>During Social skills training, Kyle provides reasons for his choices</p> <p>See example above from peer play</p>

	<p>He/she begins to understand that the audience influences how we communicate.</p> <p>He/she can follow one-three step instructions.</p>	<p>Not evidenced as not required of him during the observations</p>
Reading	<p>(d)</p> <p>The child uses book-handling skills and identifies more conventions of print.</p> <p>He/she sounds and names all letters of the alphabet. Begins to blend and segment some sounds in words, recognises some common letter patterns and generates rhyming words.</p> <p>The child reads a range of high-frequency and CVC words and uses some contextual as well as pictorial cues to aid comprehension. He/she modifies predictions based on new information and shows understanding through discussion of texts** read.</p>	<p>Attends to his reader and workbook without difficulty</p> <p>Kyle can read to the same level as his peer group, but has comprehension needs.</p> <p>Uses context and peer related discussion to support meaning - making</p>
Writing	<p>The child enjoys emergent writing using a variety of implements and shows good muscle control.</p> <p>He/she explains the main messages in their writing.</p> <p>The child uses basic conventions of print, names and sounds some letters and uses random strings of letters in writing.</p> <p>Their attempts show some emerging awareness of sounds. He/she uses new oral and reading vocabulary from texts** read and writes for particular purposes and interacts with the teacher as a scribe.</p>	<p>Selects drawing as an activity, has poor muscle control and this is evident in the writing task examples below in fig 35</p> <p>Evidenced in class with teacher support</p> <p>Evidenced in his mainstream class</p> <p>Evidenced in Ob 2:2 10.20am, using a second class workbook that combines reading and activity, works independently and seeks approval from the class teacher on his ideas and understanding, supports teacher as scribe by contributing to the discussion</p>

Figure 34 below is a sample of Kyle’s work at the computer.

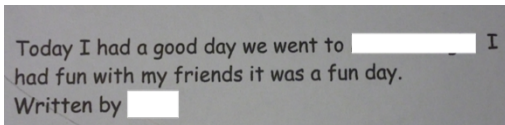


FIG 34 SAMPLE COMPUTER WORK BY KYLE

Figure 35 below is a sample of Kyle's writing when asked to write the ingredients of a recipe

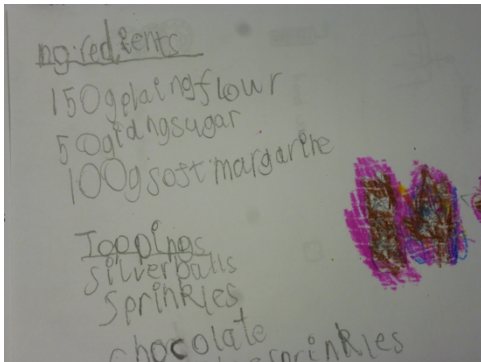


FIG 35 KYLE'S HANDWRITING

Ger

Ger is eight years of age at the time of the observations taking place. He is a very quiet child and attends to his work with diligence and is observed working without the aid of an SNA and only requiring occasional support from the class teacher. Ger only talks when spoken to by his teacher, SNA or peers. When Ger initiates conversations it is usually in a very quiet tone and with a purpose to express a want or need. He has very good receptive language skills and is very alert to the directions of the class teacher. Ger is a happy child in class and enjoys the sudden and impulsive requests of his peers. His teacher is very responsive to requests for movement and fun and, while focused on teaching and learning, she facilitates the needs of the group. Ger has an integration timetable that includes his daily participation in guided reading with his mainstream class. Every morning Ger spends an hour and a half on the bus transport system to bring him to school. Ger is scheduled to transition to mainstream in a fulltime capacity in the school year 2016/2017. The observations of teaching and learning relating to Ger are limited

as he spends a full hour in mainstream every morning. The progression milestones selected are based on the observations alone. Table 5.27 provides an interpretation of findings of Ger’s literacy practices on the Language Curriculum Progression Continuum

TABLE 5.27 GER: POSITION ON PROGRESSION CONTINUUM

Ger: Position on Progression Continuum		
Strand	Milestone	Evidence
Oral Language	<p>Emerging (d)</p> <p>The child uses language to communicate their thoughts, feelings and ideas, and to ask questions.</p> <p>He/she has conversations about things that interest them, personal experiences, topics familiar to them and increasingly unfamiliar.</p> <p>The child engages others in conversation, asking questions and exchanging information.</p> <p>He /she begins to reflect on experience and to explain problems and consider solutions for age-appropriate topics.</p> <p>He/she begins to understand that the audience influences how we communicate.</p> <p>He/she can follow one-three step instructions.</p>	<p>Communicates briefly and consciously.</p> <p>When asked Ger responds clearly but quietly.</p> <p>Rarely but when he needs something.</p> <p>Not evidenced</p> <p>Not evidenced</p> <p>Attends to tasks set by teacher and SNA with little difficulty</p>
Reading	<p>Emerging (d)</p> <p>The child uses book-handling skills and identifies more conventions of print.</p> <p>He/she sounds and names all letters of the alphabet. Begins to blend and segment some sounds in words, recognises some common letter patterns and generates rhyming words.</p> <p>The child reads a range of high-frequency and CVC words and uses some contextual</p>	<p>Ability to work independently and respond without much support.</p> <p>Has achieved this and can read words of four and five letters</p>

	<p>as well as pictorial cues to aid comprehension.</p> <p>He/she modifies predictions based on new information and shows understanding through discussion of texts** read.</p>	<p>Ob 2:2 10am during phonological awareness training on the white board</p> <p>–</p> <p>Works independently on tasks with little support.</p>
Writing	<p>Emerging (d)</p> <p>The child continues to write collaboratively with the teacher and begins to write independently about personal experiences and familiar topics.</p> <p>He/she uses some phonetically correct letters and common letter patterns and familiar words while using some correct word order, full-stops and spaces in sentences.</p> <p>The child writes some upper and lower case letters legibly as separate flowing letters. He/she reads and discusses their texts** and choses ones for display.</p>	<p>Ger writes independently, and supports and contributes to ideas as the teacher engages the group in writing sentences</p> <p>Writes with little support, completes tasks set in workbook with little scaffolding.</p> <p>See example below.</p>

Fig 36 below is an example of Ger's writing homework

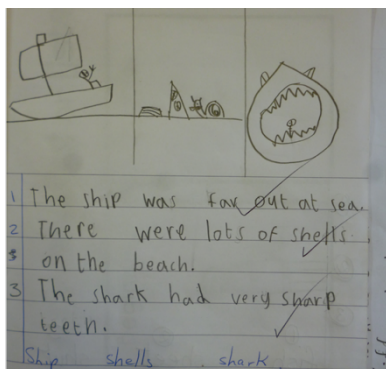


FIG 36 GER'S HANDWRITING

Sophie P

Sophie P was in a mainstream 3rd class at the time of the observations. This is a large class of 30 plus pupils. Sophie was observed as an active learner, she attended to all tasks assigned to the mainstream class and engaged well in group and paired work. Sophie P was responsive to the teacher's requests and demonstrated good

receptive and expressive skills during whole class lessons. Sophie P is timetabled to attend the resource teacher for 30 minutes every day. Both Sophie P's class teacher and her mother agree these times and the lessons. As Sophie has a diagnosis of high-functioning autism with a receptive language difficulty the focus in her resource class is on auditory processing, skills in retaining information, listening to and answering questions and social interaction. Sophie P has been observed engaging in conversations with her resource teacher on topic specific language and de-contextualised language. She enjoys bringing a peer with her to resource class and seeks to ensure the peer is included in activities. Sophie has taken up the idea of learning the craft of knitting and she has employed this skill in supporting herself in self-regulatory activities. Sophie has become a centre of attention in class among both the boys and the girls and has provided those interested in joining her knitting circle with needles and wool. During the resource time Sophie P has engaged in retelling and recalling events in time order, giving detailed explanations and context cues for the listener. Sophie P has a well-established relationship with her class peers, teacher and her resource teacher and she enjoys school. Sophie P performs at the level of her peers and requires no additional support from the class teacher. There is only one photograph of Sophie P's class work as the class were not aware of the identity of the pupil being observed and it would have revealed Sophie's involvement in this study.

Table 5.28 provides an interpretation of findings of Sophie P's literacy practices on the Language Curriculum Progression Continuum (National Council for Curriculum and Assessment, 2016)

TABLE 5.28 SOPHIE P: POSITION ON PROGRESSION CONTINUUM

Sophie P: Position on Progression Continuum		
Strand	Milestone	Evidence
Oral Language	<p>(e)</p> <p>The child begins to use de-contextualised language, such as topic specific language acquired through text and through interactions with others</p> <p>He/she recalls unshared experiences, sequences an event for a listener.</p> <p>The child is more aware of audience and uses language differently depending on the listener.</p> <p>He/she speaks with a wider range of vocabulary and detail, uses context to help understand new words and responds to lengthy instructions.</p> <p>The child reflects on experience, gives explanations, considers problems and suggests solutions</p>	<p>During observation 1:2 Sophie is responding to a social skills question and needs to clarify for 'B'(peer) that she was referring to a different context</p> <p>Observation 1:2 12.40pm shares story from own family dinner times</p> <p>Alters her tone and attention to the speaker/partner as appropriately</p> <p>Demonstrates extended vocabulary on certain subjects, can complete tasks with more than three instruction</p> <p>Ob1:2 reflects on experiences at home and relevant to the discussion</p>
Reading	<p>Emerging (f)</p> <p>The child enjoys choosing and exploring texts** for specific purposes and generates and responds to questions on a range of text** genres, providing justifications for responses.</p> <p>He/she reads a range of words with digraphs, letter patterns and syllables and uses prior knowledge, contextual cues, some punctuation and adds some intonation while reading aloud.</p> <p>The child locates key information using text** features such as table of contents</p>	<p>Moves to class library when finished work and waiting for further instruction from teacher. Selects book appropriate to age and ability.</p> <p>Obs 1:1 Reads alongside peer with no difficulty</p>

	<p>and sub-headings, and begins to use dictionaries for word meanings.</p> <p>He/ she discusses miscomprehension in text.</p>	<p>1:2 Reads and engages with teacher on instructional piece in class</p> <p>Evidenced making mistake in class and revised with teacher</p>
Writing	<p>Emerging (f)</p> <p>The child creates texts** for different audiences and purposes.</p> <p>He/she writes with increasing independence using a wide bank of vocabulary and basic punctuation.</p> <p>The child gathers information and begins to plan and edit their work.</p> <p>The child uses visual along with phonetic strategies for spelling and spells a range of high-frequency words with accuracy.</p>	<p>Teacher provides opportunities for free writing and example below demonstrates a connection across social contexts and personal experiences</p> <p>Looks around at class walls for language and spelling support</p> <p>No Observed</p>

Figure 37 below is an example of Sophie P’s free writing of her news in a structured class time



FIG 37 SAMPLE OF SOPHIE P’S HANDWRITING

5.15 Key Findings

Thematic analysis provided an exploration of the empirical data and the following findings address explicitly the research questions.

- Parents have a broader concept of literacy than teachers, and teachers present an outmoded definition of literacy linked to a pre-technological era
- Mothers identify themselves as invested educators of literacy with their children
- Parents value their child's non-verbal and verbal behaviours (including echolalia and palilalia), and consider all as efforts of communicative intent
- Parents position numeracy as an important literacy practice
- Within the framework of the Primary Language Curriculum progression continuum (National Council for Curriculum and Assessment, 2016) pupils demonstrated oral language and reading skills and practices within the bands of developmental stages. Writing however, was not assessable as it was rarely evidenced and not evidenced from a personal response to learning
- A review of teacher education is required and an opportunity to revisit teacher's conceptual development of literacy and being literate is essential
- The professional role and competencies of the teacher as an eclectic practitioner emerges as a critically important element of effective literacy outcomes
- A more intense focus is needed to improve the literacy experiences and practices of children with autism in autism specific classrooms
- There is an over emphasis on mechanistic approaches in restricted repetitive routines of practice that do not advance the engagement of the pupil in literacy experiences. Explicit and implicit teaching of literacy is required with an emphasis on multimodal approaches

- Deliberate inclusive practice through policy and planning supports social and educational literacy outcomes for children with autism
- The establishment of units and the physical architecture of these units does not guarantee or safeguard quality or effective inclusive provision or participation. However, where a school-wide culture of accepting and valuing all members of the school community is evidenced there was a notable progressive development of inclusive practice. While these schools did maintain the ‘unit’ as a social skills training and additional support resource they did not restrict the teaching and learning to within the unit.

Chapter Summary

This chapter has presented the key findings in themes as they emerged from the analysis of data in case study format. It set out clearly to provide evidence of the reality of everyday teaching and learning for pupils with autism and further presented the skills and practices observed. A concern worthy of further exploration is the lack of evidenced practice in writing either in traditional multimodal methods or through modern technological methods. Another fundamental concern to emerge from the findings indicates that three of the seven schools involved in this research project have not engaged in actions to promote academic inclusion. In contrast the four other schools have placed a significant value on supporting the pupils with autism in literacy activities with their non-disabled peers. Pupils from these four schools are observed engaging on a higher level with the tasks set by the class teacher, peer-to-peer relationships and over all communicative intent.

CHAPTER 6: DISCUSSION

6.1 Introduction

As this thesis concludes it is essential to reiterate the objective of the research:

‘To gain an emic perspective of, and an appreciation of, literacy within education settings, and to communicate the reality of the teaching and learning of literacy in autism specific classrooms in mainstream primary schools in the Republic of Ireland’. The purpose of this chapter is to discuss the findings in relation to current research, seeking in the main, to identify equivalent and divergent issues in terms of theory and practice relating to the research questions. This study set out to explore the natural settings and situations where pupils with autism demonstrate their literacy practices.

This chapter is structured to provide a re-engagement with the purpose and focus of the study, followed by a discussion on the over-arching themes presented in the results chapter, a discussion on ‘what works and why’ concludes the chapter.

6.2 Purpose and Focus of the Study

The theoretical framework underpinning this thesis sets literacy within the sociocultural and constructionist paradigms. Sociocultural theory describes learning as a social process and holds that cognitive development is embedded within the social experience of partners in collaborative, structured environments. It acknowledges that the school and classroom are not the only domains where literacy is practiced and that there exist other domains that have a role in the social ecology of the child and the complex process of literacy development (Vygotsky, 1997). Further it recognises the integral role of family, culture, community and

identity (Pahl & Rowsell, 2012). Literacy is defined within this thesis as a social practice and can be evidenced in literacy events and literacy practices.

This research study focused on an inquiry into the literacy practices of children with autism within their nested environment of the school and classroom and to acknowledge the impact of the family/home environment on these practices. The literature review has demonstrated the dearth of literature and research in this area. This study explored the teaching situations and examined the literacy practices and experiences of children aged 6-10 years with autism in mainstream primary schools in the Republic of Ireland. The findings presented an interpretation of the observations of practice and classroom experiences, and the contributions of parents and teachers. Key themes to be explored in this discussion include: Literacy, structured and semi-structured environments, play, 'literacy is unlocking the world', inclusion and connecting, and leadership.

6.3 Literacy and Being Literate

How learners with autism demonstrate their literacy practices, and how teachers perceive and interact with learners with autism, is knowledge that is critical to our social constructions of child centeredness within decision making processes and is at the core of this research project.

As presented in the findings, teacher's interpretation of literacy referred to oral language, reading and writing. There was evidence of a developing ideology and evolving understanding as the interviews progressed and teachers reflected on the concept. This was evident as the discussion/interviews developed towards having autism and being literate and the planning and teaching activities that support the development of literacy.

The Concept of Literacy and Being Literate

Findings from this research project indicate that some teachers were operating from an outmoded understanding of literacy and what it means to be literate. Parents however, validated literacy as a broader set of skills and practices with multimodal styles. As set out in the literature review ‘literacy’ can only be defined when it relates particularly to the social and cultural context of the child (Freire & Macedo, 1987). The findings have provided a clear and unambiguous presentation of the concepts of literacy across families and teachers. The definitions of literacy provided by the teacher and the parent participants indicate a disparity exists in the ideology of literacy practices and of being literate. The collective understanding of teachers, in the main, presented literacy in an anachronistic mode of reading, writing and oral language, dating back to pre-technological times. This provides evidence that as a professional body, teachers need to consider a multimodal approach to teaching and learning literacy and to resources required by the child to be expressive. Pahl and Rowsell (2012) argue that the restrictions of curriculum and an over emphasis on fulfilling learning objectives restrict ideologies of literacy and keep the teacher within the traditional skills-based model of teaching. Feiler et al. (2007, p. 1) have argued that children live and learn in ‘two different worlds’ home and school, and experience ‘two different kinds of learning’. This they contend may establish a gap in transferring skills learned across settings. From a sociocultural perspective this suggests an interruption in the systematic interrelationships and interdependencies between development and learning especially for the child with additional needs such as autism (Kozulin et al., 2003). It is well researched, as set out in the literature review, that children with autism may have difficulty constructing meaning and transferring learning from different

environments (Carnahan & Williamson, 2010; Powell & Jordan, 2012; Reed & Gibson, 2005). Learning that is not supported across the environments is argued by Powell and Jordan (2012, p. 6) to become 'habitual and rote'. This research project indicates that the failure to transfer learning across home and school environments is potentially very damaging for literacy development for the children in question. Parents in this study stated that they were not fully aware of what was happening in school and had no real information relating to their child's current level of literacy. This provides evidence that supports the assertions of Kennedy et al. (2012) that the link between home literacy practices and school literacy learning should be connected and emphasis placed on transferring skills. Knowledge exchange between home and school, Feiler et al. (2007) argue would also enhance teacher-knowledge of concepts about literacy and literacy learning.

Class-room Based Literacy Practices for Children with Autism

There was evidence as set out in the findings of innovative practice and it is essential to highlight the use of movement as a pedagogical strategy, structured teaching and planning, and positive relationships for sustained engagement with learning (Sousa & Tomlinson, 2011). Literacy lessons and content has been evidenced in most settings as progressive and appropriate. Some teachers were evidenced as 'effective teachers of literacy' (Farrell, 2012; Kennedy et al., 2012); using an assortment of methodologies such as; teaching direct skills, integrating literacy across the curriculum and extending it beyond the classroom environment. There was evidence of one-to-one teaching and focused small group teaching along with whole class teaching. Teachers provided differentiated instruction and teaching approaches depending on learner needs and immediate circumstances. Highly scheduled work agendas were evidenced and routine systems using the

TEACCH approach were also evidenced. Teachers used small group morning assemblies and circle times to orient learners and engage them with a context for the lesson, also identified in the findings of Daly et al. (2016).

Modelling and reinforcement of content was also evidenced as a regular teaching strategy to support learner engagement. Oral sequencing for comprehension of the learning event also appeared as an important teaching strategy. Positive communications and interactions between the teacher and the pupils indicate the importance of positive verbal interaction and feedback for learning outcomes. In almost all cases the teacher as a role model (or ‘the more capable other’ (Vygotsky, 1978)) of initiating and prompting literacy practices supported the learner in sustaining and maintaining themselves in the learning process. Teachers also modelled using visual strategies and structures to support learners in observing others using self-regulatory tasks and activities. Mesibov et al. (2016) argue that a structured framework from the TEACCH approach supports the blending of other approaches and strategies to support individual learning needs and outcomes, and expands the opportunities for access to the curriculum.

Maintaining high but reasonable expectations of pupil involvement in the learning task was also evidenced and where the teachers considered the pupils competent regardless of the challenges to the teacher and the staff relating to time, effort and energy. In these classrooms learners with autism engaged with the teacher in conferences about their best efforts and it was evidenced that they were considered by their teachers to be autonomous learners. These teachers did not facilitate an ‘opt out’ option; though they did alter the approach to the task or the time for the task to be completed when complications or issues arose. This finding is vitally important to an argument for a strengths-based approach to teaching and learning

for pupils with autism and provides evidence to suggest that positive attitudes towards learner's ability, and a flexible and differentiated approach supports better learning outcomes (Kluth & Chandler-Olcott, 2008; Powell & Jordan, 2012).

As mentioned in the findings, in two schools there was also evidence of a lack of any explicit instruction in literacy. One of these teachers was new to the autism classroom but the other was not so it could not be reasoned that a lack of experienced practice is the cause. It could be suggested, thoughtfully, from the findings that the over-emphasis on regimes and structured activities impede the creative lesson delivery of these teachers. As Mesibov et al. (2016) contend an overly rigid structure and its application results in limited opportunities to engage with new learning and problem solving. Being flexible and responsive to individual needs remains paramount in teaching learners with autism (Kluth & Chandler-Olcott, 2008).

Social Communication

The findings presented evidence of use of a range of visual schedules across settings and each teacher in each setting managed these uniquely. As evidenced in the literature review children with autism may experience difficulties in social communication and tend to learn through visual methods (Bondy & Frost, 2001; Kalyva, 2011; Powell & Jordan, 2012; Tutt et al., 2006). The use of visual schedules for pupils was evident in some classrooms, and it must be acknowledged that these were used effectively. However, there was an evidenced absence of the use of PECS or Lámh™ as a communication system. Across all seven schools only one child was witnessed using PECS to communicate and one teacher Susan was witnessed using Lámh™. It has already been established that children with autism may need support in being motivated to request objects or engage in reciprocal

exchanges. If communication is a cornerstone of literacy and being literate then the teacher must engage and practice as a key communication partner with learners and entice the learner in advancing non-verbal communication along-side verbal methods. The literature review provided evidence that the role of social dialogue in the acquisition of language and communication supports social understanding and social competence (Egan & Gajdamaschoko, 2003; Halliday, 1978; Kozulin et al., 2003; Marks Greenfield, 2016; Vygotsky, 1976; Wells, 2012). If as suggested that learning through visual methods supports pragmatic communication skills (Bondy & Frost, 2001), then the use of low-tech strategies such a PECS should to be a practiced pedagogical strategy of the teacher.

Echolalia was a feature in nearly every classroom and as argued in the literature review presents a possible entry into supporting communication. Valentino, Shillingsburg, Conine, and Powell (2012) state that children who engage in high rates of echolalia during language learning may be experiencing a confusion in which vocalisation is important. Prizant and Fields-Meyer (2015) suggest echoic behaviours are a cognitive processing mechanism to interpreting past experiences. They determine that this vocalisation impacts on future language learning as the child progresses in Skinner's (1957) six verbal operants; mand, tact, echoic, intraverbal, textual and transcription. PECS and sign-language as an augmentative and alternative communication (AAC) can scaffold learners towards purposeful verbal exchanges and provides them with a visual demonstration as to 'how communication works' (Kalyva, 2011, p. 71). Kluth and Chandler-Olcott (2008) also advocate the use of computer programmes such as PowerPoint as an AAC. They argue that pupils with autism would find organising slides with visual material and text interesting. They further debate the importance of interweaving literacy

with daily activities such as personal hygiene or journeying from place to place. As Kalyva (2011) argues the value is in the process. Even though some research suggests that children with autism may never use AACs fully themselves they can engage in a process of communication with a communicating partner.

Reading and Oral language

As presented in the findings on the framework of developmental progression continuum Reading and Oral language (Government of Ireland, 2016), pupils demonstrated skills and practices within the bands of developmental stages. Each pupil presented skills and practices unique to their own functioning ability within the context of the classroom and environment of the school. Effective teachers of literacy scaffolded and supported these skills offering a print rich environment, dialogic reading, metacognitive strategy instruction, collaboration, choice and control and the opportunity to engage in small group work (Kennedy et al., 2012). These teachers also engaged the learners in being literate by enabling them to access the world through the arts, they used motivators and preferences and used an inclusive philosophy to promote being literate within group settings.

Writing

A significant and not unexpected finding was the lack of writing evidenced and the lack of ICT for instructional and learning engagement. Attention must be drawn to the lack of alternatives in writing tools. It is well researched that children with autism can find the mechanics of the task difficult and especially the consistent need for neatness and legibility (Kluth & Chandler-Olcott, 2008). Shore (2003), a person with Asperger Syndrome, argues that the computer 'serves as a wonderful assistive device' and enabled him to create 'good looking documents' because the structure was inherent in the computer programme and he didn't need to focus on keeping

pen and paper in order (Shore, 2003, p. 144) cited in Kluth and Chandler-Olcott (2008). As discussed in the literature review, it is well established that pupils with autism find the ‘cotropical’ interactions with technology more predictable and safe than interactions with people (Murray, 2012). It is essentially important that we address the use of technology in education for pupils with autism, and in particular enabling communication and literacy practices through the use of non-conventional modes. Murray (2012, p. 95) argues that the use of computers in the classroom for pupils with autism not only supports agency and self-awareness but can also ‘reveal unobvious purposeful intelligence’.

Literacy Targets within the IEP

As presented in the findings there was an evidenced lack of literacy targets within the Individual Education Plan (IEP) observed (National Council for Special Education, 2006). This has significant implications for pupil learning outcomes, and local and national policy objectives. It also draws attention to the values and roles placed on the IEP. As stated in the literature review the need for a functioning IEP is not a legal requirement due to the restricted enactment of the EPSEN Act (2004) (Government of Ireland, 2004b). Teachers were evidenced having literacy targets and teaching tasks set out in their own class plans but these class plans did not connect to the ultimate learning objectives of the IEP. As discussed in the literature review there is a dearth of literature on literacy among learners with autism and this may be a reflection on historical attitudes and approaches among research teams and practitioners that have a focus on compliant behaviour for learning rather than academic learning styles and outcomes. Questions arise ‘why are so few academic targets set in IEPs?’ Does this relate to an emphasis on management of positive behaviour for learning? The evidence from this project

indicates there is a direct influence between the research literature and the practice behaviour of schools and class teachers relating to expected learning outcomes. Intervention programmes such as ABA and TEACCH, discussed in the literature review, are acknowledged for their emphasis on fostering positive behaviour management. Parents when questioned about the literacy targets within the IEP were also unsure if there were any. R. Rose, Shevlin, Winter, and O'Raw (2015) in their research also found that parents had less involvement in the development of the content of the IEP. Again, this identifies a disconnect between research and practice, and communications between the school and the parents. A review is needed to explore specifically what elements are needed in the IEP to support children with autism with wider perspectives of being literate.

6.4 Structured, Semi-structured Environments

In nearly all classrooms within this research project, the layout of the room supported the TEACCH approach to environmental structure and lesson delivery. Evidence was provided of labelled sections set out and identified for individual work, small group and whole class work. There was in most classrooms a designated table for one-to-one work with teacher. As discussed there was evidence of the use of visual schedules and established weekly plans. Pupils transitioned effectively and efficiently from task to task, place to place with little difficulty. It can therefore be stated that the structured environment of the TEACCH approach appears to support the effective implementation of class plans. Even in the two classrooms where little explicit teaching was evidenced it was noted that the pupils moved without difficulty or issues from task to task. In one classroom, the learning environment was evidenced as being significantly different from all other

classrooms in the project. The classroom was significantly smaller than other classrooms in the project and space was limited. The teacher held that maintaining the environment in strict layout hindered her manipulation of the environment to respond immediately to learner needs. She moved furniture and equipment quickly and efficiently depending on her scheduled plan. This teacher did not have a visual plan/schedule for each learner in the class but used oral and verbal communication to support learner understanding. She frequently told the learners what tasks were set for the day and referred to time by looking to the wall clock. These learners as stated in the findings are pupils with high-functioning autism and as Mesibov et al. (2016) assert the use of visual schedules may also hinder access to the curriculum if not appropriate to the learner's learning style. Schedules are a strategy to increase access to understanding the environment and activities but if they are not needed because the learner can comprehend then the question is how appropriate is their use? This may be the reason why the teacher could work in a less structured manner.

Overly Structured Environments and Lessons

An overly structured environment was observed in two classrooms, where there was evidenced lack of movement and flexibility among the teacher, the SNA staff and the learners. Over-reliance on schedules and routines that were not made relevant to the child dominated and this was extended into teaching and learning experiences. In one class-room the same set of songs and action activities were used across the whole school year, leading to repetitive, stereotypical and restricted behaviours by the teacher and SNAs. Every day at group time, the same child was given the same symbol to attach to the same template in the same running order. The ineffectiveness of an overly mechanistic practice of this nature needs

immediate intervention as it creates an over-dependence on compliance and lacks relevant, child focused educational content. During these morning group activities, few moments of communication between peers was evidenced, while the teacher and pupils engaged in the activity it became evident that it was not promoting group engagement or interaction and the control never passed from the teacher to the learner.

As presented in the literature review quality literacy experiences, according to Smidt (2003), require playful exchanges with a widening exposure to songs, stories, music, so that children can make sense of their world. This inflexibility and over-reliance on repetitive structures was also evidenced in other classrooms where scheduled activities appeared to be focused on compliance to the same appropriate behavioural responses e.g. morning circle; Hello song, the days of the week or weather songs/activities. Golding (2012, p. 41) warns against this practice and holds that it prevents learners from generalising their skills into new environments and creates in effect 'passive' learners. She contends that the lack of choice and decision-making in this type of group work prevents learners from experiencing democratic decision-making, interpersonal activities such as pro-active roles, peer relationships such as peer tutoring, and the development of friendships.

Overloaded schedules: Containment or Education?

Reviewing classroom observation with the teachers concerned provided some valuable insights and reflections. An interesting outcome from the classroom observations was the extent of the work schedules of the pupils. There is in most cases constant change in task and movement from lesson to lesson. The observations revealed the extent of the on-task activities. An exception in one case exists where the teacher realised that there was too much 'wait time' between tasks

and learners were being left 'off task' for too long. The teacher in this instance acknowledged she needed to be more organised and to focus the auxiliary staff in pre-preparation of the environment, this indicates that a teaching team approach to reflection would be of benefit to future practice. Many of the classrooms are evidenced as being very busy and, apart from one situation, there are few moments of pupils being 'off task'. Again Golding (2012, p. 50) highlights issues relating to this practice and raises concerns as to the objectives of the task activity. She suggests we reflect on whether this is 'education or containment'. She posits that the tasks need to have meaning and functional transferable skills that matter across the life tasks of the child. An important argument she raises is in the perceived need to schedule tasks in close succession and she questions whether this is about making the learner compliant to perform tasks as we see fit and within our timetable with little reference to the learner.

6.5 Play or lack of: 'Poverty of a Stimulus'

The findings from classroom observations provide little evidence of structured play as a teaching and learning strategy. As discussed in the literature review Conn (2016), Powell and Jordan (2012), Kalyva (2011) and Guldborg (2010) argue that play is an important activity for learners with autism in experiencing their world and in knowing that they have experienced it. These authors contend that play has a significant position in the curriculum. The literature review presented the theory of Mesibov et al. (2016) who suggest that play time should be part of the scheduling within the TEACCH programme. The findings of this project reveal that there is a significant lack of play time either structured or un-structured happening in autism classrooms. This raises the argument presented by Powell and Jordan (2012) that

play is poorly positioned within the curriculum and the evidence asks the question is 'work' valued more than play?

Where play was observed, it was as part of a reward for 'work' completed and considered 'free time'. In one school learners were observed taking themselves to individual computers where they remained engaged in solitary activities. The same happened in all schools in the project and some children were seen wandering and engaging in self-stimulating behaviours. Mesibov et al. (2016) and Golding (2012) present the importance of recognising the need for children with autism to be alone when they seek space and acknowledge some self-stimulating behaviours as self-regulating. However, Mesibov et al. (2016, p. 94) also caution against children with autism being left in solitary wandering for too long as they may 'become distressed and frustrated'. Findings from this study appear to support Powell and Jordan (2012) that play ought to be a component of the curriculum when teaching literacy to learners with autism. This research project presented evidence that when adults engage with the child in a social drama experience or in supportive play that this engages the learner in reflecting on the experience. Revisiting play sequences or elements should not be considered repetitive and restricted, and language used and repeated is not necessarily echoic but can help with temporal awareness and positionality. The findings from this research appear to accord with the argument by Wetherby and Prizant (2005) that this could be determined as a cognitive process. There were brief moments of pretend play evidenced, but there was no parallel play evidenced apart from an observation from one school. The evidence presented on the language and communication exchanges between the pupil and his non-autistic peer during this shared playtime demonstrates how important play is in the development of language, social relationships and peer friendships. Guldberg

(2010) identified four key development areas for ‘best practice’ and these could be addressed through structured play-based opportunities; ‘language and communication, social understanding and skills, learning with and through peers and the overt teaching of play behaviours’ (Guldberg, 2010, p. 172). Conn (2016) makes the argument also that when TD peers engage in play experiences with autistic peers they too learn more about how people with autism experience their world.

Teachers should be ‘play partners’!

As discussed above, it was observed that learners could briefly engage in playful special interests or ritualistic routines during free time but these were not a scheduled or lesson-incorporated activity. In general, this behaviour was not encouraged and as stated earlier, the pupils were in most cases allowed to engage in this behaviour in isolation and as a reward for work completed. Teachers, in the main, in this research, were not observed promoting natural play learning situations or as ‘supporters’, ‘mediators’ or ‘play partners’ (Theodorou & Nind, 2010). Again this supports the thesis of Powell and Jordan (2012) that play is not ‘valued’ sufficiently for pupils with autism. Conn (2016) argues for play as a pedagogical tool in inclusive autism education. She maintains that teachers should schedule and participate in ‘finding ways of producing socially sharable, ‘symbolic’ meaning out of a child’s sensory-based, pre-symbolic play experiences’ (Conn, 2016, p. 108). She asserts the importance of the adult as a partner is in the level of support they can offer for; ‘communication and social attunement’, creative ways of engaging in the special interest and to maintain the flow of interaction (Conn, 2016). As argued by Jordan and Libby (2012) the teacher’s role is vital in the prompting and guidance of play sessions and supports the development of motivation for learning.

6.6 “Literacy is Unlocking the World”

Parents in this study conceptualise literacy as part of the learning identity of their children with autism. This mind-set empowered parents to have wider perspectives on literacy practices and to explore opportunities for communication through playful family interactions, games, stories and daily family activities such as watching television programmes or playing computer games. Parents mentioned following their child’s lead and interests even if they were restricted and stereotypical in nature. The use of iPads and language games were mentioned along-side traditional modes of literacy practices such as book reading and sight words in the environment of the home/kitchen. They also mentioned mathematics as an integral part of being literate and in supporting their child in later independent life. The theme of identity emerged strongly from parents in their understanding of the fact of being literate and in the definition of literacy. Their language pointed directly to the ‘literate child’ and their role as ‘teachers’. Verbal and non-verbal language competencies emerged as the most important literacy skills for parents as they revealed that being connected to people, being able to connect by being able to understand the world in which their children exist means building strong communicative relationships. Parents value their child’s echolalia and see it as an entry point to reciprocity and shared understanding. The findings have revealed that teachers consider echoic behaviours as part of the restricted, repetitive behaviours of autism and place little value in exploring it for communicative intent and cognitive exploration. Wyse et al. (2013, p. 69) have argued that adults play a key role as they naturally model, guide and provide feedback to the child in language use/practices, language performances (in songs and rhymes) and language conventions.

Children engage in systems of communication and representation with their immediate care-givers, and care-givers provide an interplay in language interaction. The findings of this research project maintain that teachers in teaching literacy should understand and value the child's home experiences and to explore all utterances for communicative intent and concept development.

Parents as Literacy Teachers and Educators

Parents in this study emerged as vital role models and teachers of literacy. As discussed in the literature review Alexander (2006), a life-span developmental theorist, argues that reading skills begin from 'womb to tomb', and this gives weight to the debate that early literacy life-stories of children with autism need to be explored. It is essential that parents relate and recall for us the patterns to being literate within the family. Parents have demonstrated that they have invested heavily from a practical and economic level in teaching and practicing literacy skills and competencies with their children. They have engaged home tutors to teach them how to communicate with their child and how to progress verbal and non-verbal communications. They use games such as Monopoly to teach turn-taking and arithmetic. They have purchased outside help to facilitate Continuous Professional Development (CPD) sessions for teachers on specific programmes they have purchased for their child's use.

Matriarchal Leadership

Mothers within this research project discussed family patterns of literacy, expectations, attitudes and support systems, roles and responsibilities. An unlooked for but volunteered finding from this research project was that mothers unanimously present the impact of becoming separated from the supports of the extended family, where they have had to take the full responsibility of the diagnosis,

the management and the 24-hour caring needs of their child because other family members feel helpless and powerless. Mothers in the main, throughout this project, present their life histories of being a parent of a child with a disability, in all cases they have become the main carer and responder to their child's needs and issues that arise within the school.

S. Donaldson, Elder, Self, and Christie (2011), McStay, Trembath, and Dissanayake (2014) confirm the research on the negative impact on families of raising a child with an autism diagnosis. Specifically, they draw upon evidence that indicates that mothers of children with autism report higher levels of stress compared to mothers of children with other disabilities. As presented in the literature review, McGoldrick et al. (2014) contend that family life cycle and functions influence the individuals development over time. They maintain that a family life cycle framework provides flexibility in understanding the family in culturally diverse contexts. As discussed in the literature review, they propose that the family is impacted upon by life challenges of vertical and horizontal stressors. Further they argue the importance of responding to the life-long implications that a child with a disability has on the siblings of the family. They draw attention to the impact of carrying responsibility not just for the child with disabilities but in their need to be responsive to the stresses their parent/s experience. It is important to note the fact revealed by parents that six of the twenty-one sets of parents have experienced marital breakdown. According to the Central Statistics Office (2015), Ireland has the lowest separation and divorce rates in the EU and data suggests the national figure is at 13% approximately. As discussed in the literature review this was also a feature in research by Preece (2014) and correlates with his call for further research. Particularly this research project calls for research to explore

whether separation and/or divorce impacts on the cultural and social aspects of literacy practices of children with autism.

Changes to these patterns of historical family life present the ‘vertical stressors’ that McGoldrick et al. (2014) suggest create a ‘dysfunction of system’. As presented in the findings some of the mothers spoke specifically but not judgmentally about the difficulties fathers have in relation to supporting their children through homework tasks or general management.

The research findings do not suggest that fathers are abdicating their responsibility relating to their child’s education. It is however, presenting the fact that there is insufficient information about how fathers of children with autism interact with their children and this correlates with the research findings of S. Donaldson et al. (2011, p. 200) and Preece (2014). Rivard, Terroux, Parent-Boursier, and Mercier (2014) propose that father’s due to their work commitments spend less time with their child and therefore experience high levels of stress. S. Donaldson et al. (2011, p. 200) cite research noting that fathers are more concerned with ‘implications for childrearing, cost of care, developmental milestones and securing provision for the child’s future, (while they claim) mothers are more concerned with the child’s happiness and wellbeing’, a finding also noted by Preece (2014). In the findings in this research project some mothers suggest that their husbands wouldn’t have anything to offer relating to school or literacy because it wasn’t their role. Dardas and Ahmad (2015) and Preece (2014) suggest that fathers in dealing with the prolonged stress of having a child with autism become more focused on their provider role as an effective coping strategy. They cite research that suggests that the process of coping can alter the connection between stressors and health and wellbeing.

Further parental crises emerge within this research project as parents discuss the literacy practices they valued themselves and the differences now in supporting a child with autism within the structure of a single-parent family, the nuclear family and the larger extended family. Homework has been identified by some of the parents as an additional stress on the family system. McGoldrick et al. (2014) identifies 'horizontal stressors' as developmental transitions and unpredictable events that occur through social and cultural avenues. These can be explored as mothers within this project mention the impact of having a child diagnosed with a life-long condition, chronic illnesses, mental health issues, social isolation of their child and themselves and, a sense of loss and not belonging. They relay the impact on their lives from a social, emotional, economic, cultural and psychological perspective.

6.7 Inclusion and Connecting

The evidence from the physical structure and placement of the autism classrooms is of vital importance to the concept of inclusive practice and being literate. While answering the 'rights-based' need to enable children with autism to access education in mainstream environments has been very successful, it is also evidenced that segregation remains a significant issue for a significant proportion of the pupils involved in this research. A question emerges from this research 'what value/ethos is being established by the school community in erecting and attaching pre-fabricated, portable buildings to the end of/side of purpose-built, permanently structured mainstream schools?' The findings presented within this research project indicate clearly that the structure of the classrooms and positioning of the units happen before the enrolment of the pupils and therefore set in motion a

persistent negative expectation for problematic behaviours associated with autism traits. This research has evidenced, through classroom observations, the daily learning experiences of children with autism, and has documented how the needs of learners with autism is not articulated in some of the design structures of these classrooms. Imrie and Kumar (1998, p. 363) propose that this type of placement is ‘perpetuating the concept’ that ‘being different’ aligns with being ‘unable’ and therefore requires a differently built environment. While children with autism may have specific challenges, such as sensory issues, it surely doesn’t warrant what Imrie and Kumar (1998, p. 365) call ‘back door treatment’? A more extensive review is required of the barriers created by the architecture of portable cabin structures to the ethos and ideology of inclusion in practice. A major finding from this research that parents and some teachers identified being literate with ‘connecting’; connecting to people and environments supports this. If we continue in the practice of setting up ‘autism units’ with limited movement and participation across school communities (as Banks et al. (2016); McCoy et al. (2014) also claim) we run the risk of developing what Imrie and Kumar (1998) termed ‘apartheid by design’ and as a result maintain a barrier to literacy, social interaction and inclusion (cited in Mitchell (2014, p. 238).

6.8 Leadership for Inclusion

The findings of this research project present the concept and daily practice of inclusive education as variable across the schools in the project. As presented in the literature review inclusive education has evolved considerably in its operation and a proscriptive and homogenous ‘top down’ approach would not be progressive (Ravet, 2011; Shevlin, Kenny, & Loxley, 2008). Evidence has been presented from

one school demonstrating how complex and contentious the establishment of an autism classroom can be for a whole school and its community. In a social context, this presents significant dilemmas and the management of choices, priorities, allocation of resources including human resources requires serious long-term consideration. Other classrooms have provided us with evidence of the ethical sinkholes that can be created when little introspection occurs when considering whether the approach to inclusion is a 'rights based' or a 'needs based' approach or whether gaps have arisen between the ideology and the practice. It is well established that providing an inclusive learning experience for learners with SEN is challenging and consideration of capacity within staff is an important feature (R. Rose et al., 2015). There is evidence within this research project that how we conceptualise inclusion for learners with autism and how we decide to act presents the 'dilemmas' and/or 'contradictory perspectives' that arise from knowledge and practice gaps in a 'rights-based' and a 'needs-based' approach (Norwich, 2007; Ravet, 2011).

School leadership has and is still a critical factor in ensuring that schools provide appropriate levels of support to enable pupils with SEN and autism to achieve socially and academically. The findings from this research support this argument and have provided clear examples from two schools, Scoil Robinson and Scoil Ó Dalaigh, of the role of the principal in transformational leadership, and in Scoil Ó Dalaigh the role of teachers in transactional leadership for inclusion and better learning outcomes. Both principals are evidenced as being pro-active in encouraging change and supporting creative and responsive ideas to local needs and local parental wishes. The teachers are evidenced emphasising participation and full enrolment within the mainstream system while providing high levels of support

across the schools not just in educational supports to the pupils with autism and SEN but in management and lesson planning to their teacher colleagues and in effective communication with the parent body. The evidenced outcomes present pupils with autism as valued, full and active ‘members of the ordinary classroom in a regular school’ (Couper, 2015, p. 297) with additional support for social language and skills development. The implications of this finding demonstrate that transitioning professional power for reflection on practice supports greater inclusive experiences for learners with autism.

6.9 To Conclude: What Works and Why? ‘Connecting’

This chapter has presented a discussion of key research findings and will now establish a summary of the key points from this discussion of ‘what works and why?’.

In conclusion it is well accepted within the education and autism communities in Ireland that an eclectic approach to teaching children with autism is best practice (Government of Ireland, 2001, 2006). Alongside this accepted practice is the extensive research by Powell and Jordan (2012, p. ix) on the ‘essential principles of good autism teaching’. The findings presented from this research project reinforce this approach to practice and draw specifically upon the following essential elements to what works and why:

- A social, cultural and family oriented/informed learning environment
- Firm but fair pedagogical practice
- Self-regulated learning through quality relationships
- Learning to be literate through play

Social, Cultural and Family Oriented Learning Environment

The research findings from this research indicate that some children are limited in their literacy practices by the 'bounded' nature of the 'autism built' environment and the pedagogical practices of the teacher. This concurs with research by Twomey (2013) who asserts, from her exploration of educational intervention experiences of children with autism in the early year, that 'normality and difference were reinforced through social and physical space, mainstream and segregated schooling' (Twomey, 2013, p. 221). Retrofitting spaces and places, policies and practices is reinforcing the 'otherness' of autism and further excludes the voices of parents as key stakeholders and educators of their children. To establish quality inclusion and equity of opportunity for learners with autism we need to acknowledge that they belong with their peers and not 'fit' them in according to the school's capacity to maintain 'normal'. The maternal voices are clear within this research and they position their child's autism as a distinct characteristic of 'being' and of being a literate person. Educating children with autism should begin with the significant involvement of the parents in the teaching and planning of literacy activities and in the policy developments of the establishment of inclusive autism settings.

Firm but Fair Pedagogical Practice

The findings from the classroom observations conducted during this research demonstrate that 'good autism practice' (Powell & Jordan, 2012) does exist where a quality curriculum based on quality teaching with a focus on flexible strategies to support the learner with autism was evident. Teachers with high expectations of pupil engagement and with effective differentiation strategies support better

literacy outcomes for the pupils in their care. The ‘five non-negotiables’ of effective instruction by Sousa and Tomlinson (2011, p. 10) were evident in these classrooms:

- The environment promoted active engagement and positioned the learner within a small social learning group or one-to one explicit teaching
- The curriculum was engaging and invited learners to share an interest and contribute to the lesson
- Teacher expectations were high and teachers provided activities and lessons to challenge the learner and to create disequilibrium. Scaffolding and encouragement (pause, prompt, praise) were used to support the learner to the end of the task, enabling the learner to complete the task set
- Formative assessment provided the teacher with direction and enabled the teacher to maintain the learning at the point of comprehension and disequilibrium and not confusion
- Teachers demonstrated flexibility in approach to the lesson delivery, the time for participation and the mode of responses

Self-Regulated Learning Through Quality Relationships

Teachers used pupil conferencing to establish standards expected from the learner and the task set, this enabled the learner to self-monitor their work and to feed-back to the teacher when they were having difficulties or when they needed praise and encouragement. The quality of this ‘scaffolding’ relationship among staff and pupils was also identified in the findings as a positive reinforcement of engagement with the task, and with positive outcomes for the pupils. Daniels (2016) theorises that this level of support enables a release of responsibility to the learner over time. Importantly, he further suggests, that this practice also supports non-verbal modalities and this could be very important for pupils with autism. It was evident

that teachers did not allow a deficit characteristic of autism (discussed in the literature review) Theory of Mind (ToM) (Baron-Cohen, 2008) to hinder their approach to teaching and learning. Playful exchanges were evident and provided the learners with motivation to be successful for themselves and their teachers. Learners were evidenced stepping forward to inform the teacher of an impending sensory over-load and seeking to self-regulate to return to the task.

Learning to be Literate Through Play

Playfulness is defined and characterised by Conn (2016) as being different from the definition of play. She contends that playfulness is an ‘internal state such as spontaneity, creativity, emotional expressiveness and a feeling of personal investment’ (Conn, 2016, p. 29). This is an important definition as it anchors the importance of ‘playfulness’ and what Powell and Jordan (2012) call ‘mutuality in engagement in learning’ in sociocultural aspects of learning experiences. Conn (2016) contends that playfulness is a higher internal state of mind. Therefore, this draws the argument that if children with autism can engage in playfulness with the teacher then their play abilities with peers can be nurtured. As evidenced in the findings and discussion there was a noteworthy lack of play-based practices to support the development of social skills, literacy or any other subject. While some free-play was evidenced it was noted as a solitary experience. The literature review and the discussion of findings within this thesis has established the importance of play, and questioned the lack of value placed on play in autism education. It is urgent therefore that attention to play-based learning experiences for children with autism be positioned as an important area for teacher training and CPD.

In the final chapter these key research findings will be discussed in relation to applying this new knowledge to current thinking, direction and policy.

CHAPTER 7: CONCLUDING CHAPTER

7.1 Introduction

This concluding chapter will be organised as follows: the chapter begins with a the most powerful finding ‘Parents and Parental Involvement’ (section 7.2) followed by a presentation on the practical application of the findings of this study, and the need to generate a professional dialogue to engage reflectively on current practice. Then, the limitations of the study and future directions are presented. The issue of gender is discussed as an area not explored but prominent in emerging research on how girls with autism learn and may require a different approach to boys. A personal reflection on professionalism and a concluding paragraph bring the thesis to a close.

7.2 Parents and Parental Involvement

The most powerful finding from this study relates to parents of children with autism. The research literature highlighted that parents of children with disabilities experience ‘chronic vulnerability’ (Griffin & Shevlin, 2011, p. 244) and policy advice suggests greater levels of support should be offered to parents of children with autism (National Council for Special Education, 2015). The findings from this research add significantly to the research on family life and the emotional, financial and relationship hardship which impacts on the processes and literacy practices of families especial in the early years. Urgent intervention and supports are needed to enable families to maintain an intergenerational framework to family support and to education. This research augments the literature and legislative stance that parental involvement, and particularly the acknowledgement of the parents as prime literacy educators, will provide more valuable insights into the practices of the child

with autism within the framework of his/her sociocultural life. Acknowledging parental roles in the construction and scaffolding of a literate world, and involving parents in the constructions of literacy and numeracy targets within the IEP may provide a more focused approach to literacy learning and draw upon the parents' knowledge of what enables their child to be playful in a literate sense.

7.3 Communicative Intent

This research projects amplifies the call for greater exploration of echoic behaviours as communicative intent in learners with autism. The use of echoic behaviours is valued by parents as a communicative intent and teacher professional development is needed in this area to support the cognitive processing possibilities of this behaviour (Wetherby & Prizant, 2005). The role of qualitative observations in autism classroom practice needs urgent attention. Observation of echoic behaviours may present insights into the child's learning experiences and garner more informed evidence of skills and practices (Wetherby & Prizant, 2005). The findings in this project identified that echolalia was a feature in nearly all classrooms but it also presented findings that teachers were not aware nor were they evidenced tracking these behaviours for content. Teacher education, ITE and CPD, must include modules on the development of language and communication (for pupils with autism) through thought processes (complex associations), actions on/with objects (play and manipulation) and mechanical practices such as echoic behaviours (Kozulin et al., 2003).

7.4 Practical Applications of Findings

These findings contribute to the research and knowledge on literacy practices for pupils with autism, and in the general education of young children with autism in Ireland. It is the first study of its kind to present profiles of literacy practice of young children with autism against the framework of the Primary Language Curriculum (National Council for Curriculum and Assessment, 2016). There is consistency in the literature and within these findings to argue for a review of professional development programmes for teachers in autism units. Teacher education is first and foremost the priority. An important and unexpected finding from this research is that programme rigidity can inhibit and limit creative teaching and learning. Mechanistic practice was evidenced as the most restrictive practice where programmatic behaviour strategies replace effective teaching strategies. Knowledge of ‘good autism teaching’ (Powell & Jordan, 2012) that incorporates autism specific programmes as a flexible application of strategies will advance the learning experiences of pupils with autism.

Professional development is also needed in expanding the concept of literacy to include numeracy and connecting to the social world of childhood via the greater school community and non-disabled peers. While theoretical knowledge of autism and programme interventions for better learner behaviour outcomes provides a ‘constructed concept’ of literacy, this research project revealed the need to advance the ‘craft knowledge’ of teachers (McLachlan et al., 2013, p. 105). Teachers need significant support also to embrace digital technologies as a teaching tool/resource and to use computers and learner-preferred computer programmes and games such as Minecraft™ to motivate and expand literacy experiences. Literacy has emerged in this research project as a life pattern of connected experiences and meaning

making within the sociocultural context of the child with autism. The quality of the inter-relationships of structural environments, resources, processes and context are important to language development and peer sociability. Play and playfulness has been identified, as a learning strategy for learners with autism and the need to incorporate explicit playtime into the timetable or schedule is essential. The role of the teacher as a play partner has been identified as an important development.

7.5 Communities of Practice

This research project contributes to the literature in drawing attention to the issue of how to develop a more effective and meaningful inclusive education for learners with autism. Inclusion of children with autism is evidenced as one of the biggest challenges facing our education system. While the establishment of autism units continues to grow and the demand for placements continues to put pressure on an existing stressed system, it is essential that we continue to question the organisation, practices and policies of these autism units within the larger structures of the school and community. This research demonstrates that schools with autism units, and those contemplating establishing a unit, need support and time to take account of the collective social process of learning, and the possibilities of continuous creative problem solving for success in practice as a community rather than the micro system of the autism class. Schools, as communities of practitioners, need support to create space for reappraisal and making changes by regularly reflecting and suspending practice that has become mechanistic to implement an ‘inquiring’ style to alternative practices and approaches. The role of the school principal is crucial in leading and generating the process of social learning among the community to advance the inclusive experiences of learners with autism. Whole school

development planning is needed to support a shared strategic plan for the development of inclusion beyond autism unit establishment and function. The findings from this project present an argument that high level inclusive practice and provision yields high levels of achievement and participation of pupils with autism among their non-autistic peers. The literature review along with the findings from this research provide evidence on the lack of movement within and across schools of learners with special educational needs and draws attention to the need for a more collective approach to effective inclusion and inclusive pedagogy. While inclusion of children with autism among their mainstream non-disabled peers may be fraught with ‘within school’ complications, the findings from this research project have highlighted the importance of ‘leaders for inclusion’, within the community of practitioners, who value parental involvement, and position accountability for quality of provision and access to the curriculum as a within staff capacity and capability.

7.6 Methods Employed

The methods employed within this research project adds to the qualitative literature available on teaching and learning, and literacy of pupils with autism both nationally and internationally (Carnahan & Williamson, 2010; Cullinan, 2017; Daly et al., 2016; Howley, 2015; Parsons et al., 2009; Powell & Jordan, 2012), and validates the call by Parsons et al. (2009) for further qualitative research in this field. The use of observations and semi-structured interviews in the natural setting of the classroom provides evidence that there is a need for professional dialogue to address:

- Problem-solving practical approaches to supporting learners with autism

- The poverty of play experiences and
- The need to improve the social constructs of ‘being’ and ‘being connected’.

This could be achieved by facilitated in-school professional development sessions or via CPD sessions in institutes of education or local teacher education centre workshops.

The use of a ‘voice-centred relational model’ (Byrne, Canavan, & Millar, 2009; Gilligan et al., 2006; Gosselin, 2003)

This is the first study of its kind in the Republic of Ireland to seek to inquire into the literacy practices of children with autism. Its strength lies in the breadth of information gathered through semi-structured interviews, naturalistic observations and the profiling of literacy practices of children with autism across schools.

7.7 Realities of the research

There are some important points to note in this research project. Firstly, as stated earlier in the methods chapter, there is a lack of pupil voice, and this impacts on the interpretations presented within the project. There is also, as stated, a lack of father voice and this needs to be addressed to ensure their experiences and roles in education are valued and appreciated. Secondly, being interpretive and qualitative in design presents contextual difficulties in the ever-changing landscape of education and particularly the changing landscape of education provision for children with autism. While every effort was made to gain a national perspective of autism provision and literacy practices and learning, the following issues may limit the interpretation of findings:

- Schools and classes that opted into the study may have done so because the children with autism enrolled did not present as challenging or ‘severe’ as some other schools or classrooms may experience.
- As stated in the methods section, the fact that the research was focused on literacy may have limited the number of schools/classrooms taking part in the study
- Certain parts of the country with a greater population of autism classroom are served by a small sample of schools in this study. As a result, generalisability is not an option and reference to findings in regional areas is not possible.

7.8 Further directions for research

The findings and discussion indicate a need to regularly, and forensically explore the national and international policy developments and changes of educational provision and placement for pupils with autism. Particularly, a continuous focus on examinations of autism specific units and a comparison of inclusive approaches and practices nationally would yield greater insight and debate on the architecture of unit provision. This research could contribute to the debate relating to the continuance or discontinuance of ‘special education’ provision and the need for ‘specialists’ or ‘quality’ pedagogues.

On a micro level, the inclusive practices and policies impacting on access to the academic curriculum and social learning opportunities for pupils with autism needs to be further explored. There is evidenced need to explore the; curriculum for pupils with autism, and the construction and implementation of IEPs for better literacy outcomes. An exploration of the initial and continuing career development modules

within training colleges is needed with a focus on; conceptualising inclusion and autism, teachers' competence in leading inclusion, teacher concepts and attitudes toward literacy and autism, literacy and the family, and the role of play in the development of communication and being literate.

A greater focus is needed to investigate and explore more fully the parent's experiences of their child's literacy practices, with observations of the child within their own home. Research is also needed to explore the impact of family life stressors on the educational outcomes of pupils with autism. Research on the voices of fathers on a range of issues relating to parenting a child with autism is needed, and research is needed on their experiences as an educator of their child. More research in the literacy practices of children with autism, to include numeracy, is required to establish a more detailed insight into current skills and abilities and to provide advanced guidance to differentiating the curriculum. As discussed under the heading of gender (below), it would be imperative to recognise the current research on gender learning differences and to include an investigation on gender learning styles and preferences of learners with autism in literacy learning.

Emerging research on gender differences in diagnosis is becoming a significantly important area in autism education. Researchers have identified that girls are under-diagnosed or in some cases misdiagnosed and their learning styles and preferences differ from their male counterparts (Attwood, 2006; Dean, Harwood, & Kasari, 2016; Gould & Aston-Smith, 2011; Kauschke, van der Beek, & Kamp-Becker, 2016). An interesting point within this research project is that the male: female ratio probably reflects this concern and attention must be drawn to the fact that gender differences were not explored within the project. It would be very important to seek to include more female participants in future studies and to explore via

student voice their own interpretations of differences from a literacy perspective. It would also be pertinent to observe literacy skills for gender differences, while this was not a focus of this project it could be explored at a post-doctoral level.

7.9 Reflection

If there is one message from this research it is:

“We have to make a difference!”

Starting out on this project was personally and professionally exciting but I didn't expect to find it so difficult to gain access into schools and classrooms. On reflection, of my experiences and engagement with the schools, this was naïve. It is not easy letting a teacher/researcher into an already challenging environment. The findings and discussion have demonstrated that teaching children with autism is challenging and more challenging when a greater emphasis is placed on implementing programme specific intervention methods to support the learners to conform than on the quality of curriculum and experiences. The most professionally influential finding from this research has been that quality experiences in teaching and learning happen when the teacher enables a quality relationship to develop and maintains a firm but fair approach, with high but realistic expectations of learners and the school structure.

Conclusion

The overall findings of this study have addressed the research questions and generated an insight into the everyday teaching and learning experiences, and literacy practices of children with autism in mainstream primary schools in the Republic of Ireland. The study highlights the success of teaching and learning, and

the progress of literacy skills obtained by the pupils within effective learning environments. It also highlights the challenges that need to be continuously addressed from a school-wide, community and national policy level for a truly inclusive learning experience for children with autism. It cannot be emphasised enough that on-going reflection of practice and policy is needed in this area, and more attention to effective autism focused teaching approaches for lifelong literacy skills attainment needs precedent over programmatic behavioural methods.

This research project must let parents have the final say and in remembering Anita's words when challenges bring rewards and hope emerges from despair

*...when you access that child...on the worse days, and absolute days when your (sic) down on your knees with it all, there is one point in the day when the clouds just part and the sun shines through and you see your child for who they are and I can see that **they're so capable and that's what you have to focus on.***

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APPENDICES

Appendix A: Call for expression of interest

Culleenamore House,
Mount Prospect Ave.
Clontarf,
Dublin 3.
October 2014
087-6147336

Dear Principal/Teacher

I am undertaking a PhD in the School of Education, Trinity College, Dublin, under the supervision of Professor Michael Shevlin. The title of my research is 'An Inquiry into Literacy Skills Development of Pupils with Autism in an Irish Context'.

This study seeks initially to examine classroom practice with critical and analytical exploration to support a deeper understanding of how pupils with AUTISM gain in key skills development across the subject of literacy. This in turn should support the teacher practitioner within autism units with opportunities to reflect, evaluate, adapt and engage in relevant, effective and efficient practice. It should also support raising awareness among the teaching profession of current research in the field of literacy development for pupils with AUTISM and it should generate discussion on career-long professional development requirements.

A key question within the research is, 'How is literacy development supported for pupils with AUTISM in special classes attached to mainstream primary schools?'

A case study approach to the research will allow a qualitative interpretation of whether collaboration, actions and reflection support improvements in pedagogical approaches and learning outcomes for pupils with AUTISM. The participants will include, teachers, pupils aged 6-10 years old with a diagnosis of AUTISM and parent/caregivers. Issues that challenge this case study are centred on the ethical issues involving the pupil participants.

This research will provide a unique example of national emerging standards and trends in teaching and learning among pupils with AUTISM in units in mainstream primary schools. In particular, it will portray the phenomenon of teaching literacy in a 'real-life' context and therefore add to the debate on raising literacy levels and achieving realistic national targets for pupils with special educational needs.

This letter seeks to call for an expression of interest in being involved as a participant in this study. I would greatly appreciate an opportunity to engage with you in further exploring your involvement in this study.

Please contact me at osiorac@tcd.ie or 087-6147336.

Regards

Carol-Ann O'Síoráin
M.Ed., BA., H. Dip (primary), Nat. Dip. Mont.

Appendix B: Consent form 2 Teachers/Principals



TRINITY COLLEGE DUBLIN
COLÁISTE NA TRÍONÓIDE

THE
UNIVERSITY
OF DUBLIN

“An Inquiry into Literacy Skills Development of Pupils with Autism in an Irish Context”
(this project has been approved by the Ethics Committee of The School Of Education,
TCD)

Dear Principal and Teacher

Many thanks for the expression of interest in my PhD research project. I would like to take this opportunity to provide you with more detailed information. This research project seeks to look at literacy skills development among pupils aged 6-10 years with autism and to explore the distinct pedagogies used to enhance literacy learning.

What I Propose To Do

It is proposed that the researcher will be in class for an agreed observation period for the duration of between three days to one week per term.

A semi-structured interview will be held with the class teacher at the beginning of the process.

What I Will Gather

Observations will be recorded in written format. Literacy teaching and learning will be recorded through portfolio collections to support the identification of literacy skills. Samples of work will be used to identify literacy skills on developmental indicators. It is proposed to use, in consultation with the class teacher, either the Drumcondra English Profiles (ERC, 2000) or the draft Primary Language Curriculum learning outcomes for English-medium schools (NCCA, 2014). A portfolio may include: examples of planning for literacy, IEP's, examples of pupil work, noted teacher observations and any documents the teacher identifies. All portfolios will remain with the class teacher and the researcher will hold scanned copies for inclusion into the research report.

What The Teacher Will Be Expected To Do

The teacher will gather products for the creation of portfolios. The classroom observation records and assessment records will be sent to the teacher for interpretation and discussion. The teacher and researcher will liaise briefly at the end of the termly observation periods.

Ethical Issues

All participants will remain anonymous throughout the project and in the written report. Pseudonyms will be assigned to participants and original identities withheld by the

researcher. Participants will not be photographed or any facial images used in the project. Digital recording will only take place with the consent of the participants and these recordings will only be used for transcribing data. The digital recordings will be destroyed following completion of the project. Full consent from all parties is required.

Regards

Carol-Ann O'Síoráin

PhD Candidate TCD

osioraic@tcd.ie

0876147336

Please complete the following consent form attached and return to the researcher



TRINITY COLLEGE DUBLIN
COLÁISTE NA TRÍONÓIDE

THE
UNIVERSITY
OF DUBLIN

“An Inquiry into Literacy Skills Development of Pupils with Autism in an Irish Context”
(this project has been approved by the Ethics Committee of The School Of Education,
TCD)

School Name _____

Principal

I _____ consent to Carol-Ann O'Síoráin conducting this research project in this school. I am aware that we can withdraw from this project at any time.

Date _____

Class teacher

I _____ consent to participate in this research project. I am aware that I can withdraw from this project at any time.

Date _____

Appendix C: Consent form 2 for parents



TRINITY COLLEGE DUBLIN
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OF DUBLIN

“An Inquiry into Literacy Skills Development of Pupils with Autism in an Irish Context”
(this project has been approved by the Ethics Committee of The School Of Education,
TCD)

Dear Parents/Guardians

Your child’s teacher has agreed to support me in my PhD project (titled above). This research project seeks to look at literacy skills development among pupils aged 6-10 years with autism and to explore the distinct pedagogies used to enhance literacy learning.

What I Propose To Do

It is proposed that the researcher will be in class for an agreed observation period for the duration of between three days to one week per term.

A semi-structured interview will be held with the class teacher and each parent at the beginning of the process.

What I Will Gather

Observations will be recorded in written format. Literacy teaching and learning will be recorded through portfolio collections to support the identification of literacy skills. Samples of work will be used to identify literacy skills on developmental indicators. It is proposed to use, in consultation with the class teacher, either the Drumcondra English Profiles (ERC, 2000) or the draft Primary Language Curriculum learning outcomes for English-medium schools (NCCA, 2014). A portfolio may include: examples of planning for literacy, IEP’s, examples of pupil work, noted teacher observations and any documents the teacher identifies. All portfolios will remain with the class teacher and the researcher will hold scanned copies for inclusion into the research report.

What is Expected of You as A Parent/Guardian

- To allow an hour for the semi-structured interview with the researcher at the beginning of the project.
- Discuss the research with your child, using the social story provided (see attached). Provide an indication from your child that he/she gives consent for the researcher to be present in their class.
- Provide or refuse consent to the researcher observing the teaching and learning in your child’s class.

What The Teacher Will Be Expected To Do

The teacher will gather products for the creation of portfolios. The classroom observation records and assessment records will be sent to the teacher for interpretation and discussion. The teacher and researcher will liaise briefly at the end of the termly observation periods.

Ethical Issues

All participants will remain anonymous throughout the project and in the written report. Pseudonyms will be assigned to participants and original identities withheld by the researcher. Participants will not be photographed or any facial images used in the project. Digital recording will only take place with the consent of the participants and these recordings will only be used for transcribing data. The digital recordings will be destroyed following completion of the project. Full consent from all parties is required .

Regards

Carol-Ann O'Síoráin

PhD Candidate TCD

osioraic@tcd.ie

Please complete the following consent form and return to the researcher



TRINITY COLLEGE DUBLIN
COLÁISTE NA TRÍONÓIDE

THE
UNIVERSITY
OF DUBLIN

“An Inquiry into Literacy Skills Development of Pupils with Autism in an Irish Context”
(this project has been approved by the Ethics Committee of The School Of Education,
TCD)

Please complete this form circling the words you wish to communicate to the researcher

I/We the parents/ guardians of
_____ consent/do not consent to
our child’s learning journey being included in this research project. I/We are aware that
I/we can withdraw our child from this project at any time.

Signed _____, Date _____

Signed _____, Date _____

Appendix D: Consent form Pupils



My name is Carol-Ann. I am a teacher/ researcher.



I like to read lots of books and I like to write stories.



I would like to write a story about how you and your friends learn in your classroom.



Can I come and watch you and your friends in the class while you do your work?



I will be very quiet because I will be writing my story for teacher to read.


You can help me write my story too, if you like? I will need lovely drawings and pictures to put in my story.

If it is ok for me to write my story can you draw me a picture or write your name in this box?

Thank you *Carol-Ann O'Sioráin* osioraic@tcd.ie

School of Education

Appendix E: Poster for schools involved in the study



TRINITY COLLEGE DUBLIN
COLÁISTE NA TRÍONÓIDE, BAILE ÁTHA CLIATH


THE UNIVERSITY OF DUBLIN

Research Title

An Inquiry Into Literacy Skills Development of Pupils With Autism in an Irish Context

This project will use a 'collective case study' approach to explore and generate an understanding of how key skills in literacy are supported/developed for 6-9 year old children with ASD in mainstream autism classrooms (Creswell, 2008; Stake, 2010). A collective case according to Stake (2005) is where a number of cases are considered to explore a general phenomenon. The focus of attention in this case study is literacy.

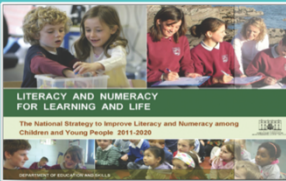
Carol-Ann O'Sioráin PhD candidate, School of Education
Supervisor: Professor Michael Shevlin



Researcher Carol-Ann O'Sioráin

'Literacy and numeracy are urgent national priorities for our education system' (Ireland, 2011, p.16)

The strategy *Literacy and Numeracy For Learning and Life* (2011-2020) includes the raising of literacy and numeracy outcomes of pupils with special educational needs. Significantly it prioritises the role of 'assessment' along with 'differentiation and personalisation in teaching and learning as vital skills for all teachers and Early Childhood Care and Education (ECCE) practitioners in all contexts but particularly important in the case of children and students with special educational needs' (Ireland, 2011:66).



LITERACY AND NUMERACY FOR LEARNING AND LIFE

The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020

Autism prevalence rates in Ireland in 2013

1:100

Professor Anthony Staines and Dr. Mary Rose Sweeney have provided evidence from a study of 5000 children within an Irish context.

<http://www4.dcu.ie/marketing/staffnews/2013/jul/irishautism.shtml>

Over the past twenty years

1993 = 290 special education classrooms
2013 = 629 special education classrooms
2013 = of the 628, 412 are ASD specific
65% of specialist classroom provision is dedicated to ASD www.education.ie full list of special classes in Ireland (2012/2013)

In 20 years there has been an increase of 238 classrooms for pupils with special educational needs. On average 12 classrooms per year. In the past five years there has been an increase of 73 ASD specific classrooms leading to an average increase of just under 15 classroom per year.


Rationale for the project:
Research in the area of literacy and autism is predominately focused on reading skills in pupils with high functioning autism. There is a dearth in research relating to pupils with classical autism and skills across literacy. Lanter et al. (2012, p.309) determine that 'few studies have examined emergent literacy skill development in young children with ASD'. A key finding of empirical and expert research from the NCSE report (2) suggests that additional research is needed 'on the impact of specific educational settings and interventions across a range of ages and subgroups within autism' (Parsons, et al. 2008, p.6).

Questions to emerge are:
How do teachers effectively plan and implement for the holistic development of oral language, reading and writing skills for the purpose of advancing key literacy skills for pupils with ASD in autism specific 6-9 year classes/units attached to mainstream primary schools?

- How do teachers adapt their communication styles, learning environments, approaches, methodologies and resources?
- How do teachers assess literacy skills and what aspects of these assessments influence their pedagogical decisions?
- What if any distinct pedagogy is used to affect advancement of key literacy skills?
- Do pupils with Autistic Spectrum Disorder require 'specialist' teaching to advance literacy skills?
- What career-long professional development will teachers require to support literacy skills development for pupils with ASD?

This researcher would like to invite teachers to engage in this project so that the voice of teachers and their students have a platform in the literacy debate.

To express an interest or to engage in this project please contact casiorain@yahoo.co.uk



Appendix F: Individual Interviews – Semi-structured interview for parents

Equipment required by researcher – Phone for voice recorder, scanner, camera for samples of work, pen and paper, proposal and consent forms.

Seek permission to record the interview again and remind the parent we will not mention names and at all times we will protect the identity of the school, class teachers, auxiliary staff, parents and pupils.

Introductions and clarification of the research:

- Introduce myself and the research – length of service and experiences, areas of interest
- Ask the parent to introduce themselves – allow for free discussion

Tell me a little bit about your child...

age, place in family, enjoy, dislike, what does.. find difficult, tell me about his/her early years

I am now going to ask you some questions relating to the literacy and >>>>>, can we continue?

	Questions	Responses
1	How did your child come to be placed in's class?	
2	How would you describe this setting? Explain what you mean by...	
3	What are the positive aspects of having your child enrolled in this setting?	
4	What challenges do you experience as a parent relating to your child and school	
5	I'm going to say two phrases and I want you to say the first thing that comes into your mind for each phrase	Autism is..... Literacy is.....
6	What does it mean to be literate in your family?	
7	How do you support your child's literacy? Parent may use examples to support discussion	

8	Who helps you support your child's literacy?	
9	What literacy skills does have?	
10	What would you like to be able to do (literacy wise)? Are these stated in the IEP?	
11	Tell me what the most important factors are that enable to demonstrate his/her literacy Allow 3 and select one and ask to discuss	
12	Tell me about the literacy homework your child gets..	
13	How important is family literacy? Can you tell me more about that?	
14	If you could change one thing about how literacy is taught what would that be?	

Thank you for your support.

Appendix G: Individual Interviews – Semi-structured interview for teachers

Equipment required by researcher – Dictaphone, scanner, camera for samples of work, pen and paper, proposal and consent forms.

Seek permission to record the interview again and remind the teacher we will not mention names and at all times we will protect the identity of the school, class teachers, auxiliary staff, parents and pupils.

Introductions and clarification of the research:

- introduce myself and the research – length of service and experiences, areas of interest
- ask the teacher to introduce themselves – length of service and experiences, areas of interest

I am now going to ask you specific questions relating to teaching in an autism specific classroom and the teaching of literacy, can we continue?

	Questions	Responses
1	How long have you been teaching in this setting?	
2	What adjective would you use to describe what it's like to teach in this setting? Explain what you mean by...	
3	What are the positive aspects of teaching in this setting?	
4	Provide an overview of the types of challenges that you experience while teaching in this setting	
5	I'm going to say two phrases and I want you to say the first thing that comes into your mind for each phrase	Autism is..... Literacy is.....
6	What does it mean to be literate in this classroom?	
7	How do you teach literacy? Teacher may use examples to support discussion	
8	How do you plan for literacy teaching?	

9	<p>Tell me about individual literacy needs within this class</p> <p>Are these needs included in an IEP?</p>	
10	<p>Where would you place them literacy wise in relation to their peers in mainstream?</p>	
11	<p>On reflection of past lessons and planning, are you happy with how you teach literacy in this class?</p> <p>Please elaborate</p>	
12	<p>What do you need to help you be more effective?</p>	
13	<p>Tell me what the most important factors are that enable the pupil to be literate</p> <p>Allow 3 and select one and ask to discuss</p>	
14	<p>Tell me about the literacy homework you send home..</p>	
15	<p>How important is family literacy for the learner with AUTISM?</p> <p>Can you tell me more about that?</p>	
16	<p>If you could change one thing about how literacy is taught in this setting what would that be?</p>	
17	<p>Do you have a mentor or someone who supports you in your profession?</p>	

Thank you

Appendix H: Coding book

Coding Book – Teacher and Parent interviews and observation schedules

Colour	Theme	Sub-theme
	AUTISM	<ul style="list-style-type: none"> • perception/understanding • traits and characteristics
	Pedagogy/Teaching	<ul style="list-style-type: none"> • Act of teaching • Team teaching • Classroom Management • Planning
	Identity <ul style="list-style-type: none"> •Teacher as •Pupil as •parents as 	<ul style="list-style-type: none"> • Characteristics • Personal traits • CPD
	Education	<ul style="list-style-type: none"> • Curriculum • Placement/enrolment • Environment • School structure
	Relationships	<ul style="list-style-type: none"> • Home school communications and relationships • Community of support
	Literacy	<ul style="list-style-type: none"> • Family literacy • Definitions of
	Model of Disability	<ul style="list-style-type: none"> • medical • social • integrative • affirmation
	Participant world view	<ul style="list-style-type: none"> • philosophy of

Appendix I: Example of hand coding of teacher interview Scoil Hillery

'Getting down to the 'Nuts + Bolts'

We have just experienced a day without a child who is extremely challenging and was like a holiday and it was extremely interesting because the whole place was relaxed enough to actually look more closely at another child who may have dyspraxia, getting down to the nuts and bolts of how to help that child.

It's an interesting day then in a sense because you got to take a breather and a step back and a fresh look at something in the room that you might not have had a moment to look at.

Communication
Catering
with parents

Yeah we got a lot of videos done today on the Flickr, one for a parent who is having difficulty with their child at home and she wants to improve his social skills and didn't quite believe that he could play board games for maths and card games for maths and that he could kick a football and that he could do a relay so she's got all that on video and she can show it to him on evidence because that's part of it.

Home
School
links

It is yeah.

What happens at school doesn't happen at home, that's part of how they seem to put us in compartments.

Autism
trait
not connect-
ing

Yeah and never extend then those skill sets.

Exactly.

Yeah they keep them to themselves.

Yeah.

When you say challenging and I know like if I was to talk about challenges myself challenges sometimes are in the classroom management aspect but are there challenges to the curriculum that you deliver here for these children?

Yeah that's kind of what I meant when actually getting time to look at this child. Like even that child how do you convince a parent you take a video, you show as much as you can and that was the challenge for that child today. The challenge for this other child is I think he needs to learn multisensory but it also needs to be hugely targeted and he has been working on the numbers one to two and appears to be getting them but once three came into the bracket he lost one and two.

Pedagog-
ical
observation
+
assessment

Yeah so the working memory is one of the major issues there, he's got to try and embed.

Working memory issue. Skills not embedded.

example
of
differentiation

Yeah and so we were getting him to use his fingers and I was using my fingers rather than my mouth, sometimes I know I'm using my mouth, I'm going 'One' almost making the word for him, instead of that I just put my finger up and I put my finger up and we used four different types of material. We used number strips, teddies to see if he could grip three, go for the number three. We used dots like a dice space on a card and the Numicon and then we had one, two and three on card. Over time it was great to get that video because each child in this class has a memory stick so that video is now gone home.

Example of evidence of learning

challenging

at the expense of child (severe) ASD onset.

We have just experienced a day without a child who is extremely challenging and was like a holiday and it was extremely interesting because the whole place was relaxed enough to actually look more closely at another child who may have dyspraxia, getting down to the nuts and bolts of how to help that child.

personal identity

It's an interesting day then in a sense because you got to take a breather and a step back and a fresh look at something in the room that you might not have had a moment to look at.

not familiar with ICT

excellent strategy

Yeah we got a lot of videos done today on the Flickr, one for a parent who is having difficulty with their child at home and she wants to improve his social skills and didn't quite believe that he could play board games for maths and card games for maths and that he could kick a football and that he could do a relay so she's got all that on video and she can show it to him on evidence because that's part of it.

Positive or videos!

Part of space of teaching strategy

It is yeah.

Kids or parents??

What happens at school doesn't happen at home, that's part of how they seem to put us in lack of compartments.

one point isolating to group role = child's life of generalisation of skills

Yeah and never extend then those skill sets.

Exactly.

Yeah they keep them to themselves.

Yeah.

When you say challenging and I know like if I was to talk about challenges myself challenges sometimes are in the classroom management aspect but are there challenges to the curriculum that you deliver here for these children?

P11 Minaret of Impaired

Yeah that's kind of what I meant when actually getting time to look at this child. Like even that child how do you convince a parent, you take a video, you show as much as you can and that was the challenge for that child today. The challenge for this other child is I think he needs to learn multisensory but it also needs to be hugely targeted and he has been working on the numbers one to two and appears to be getting them but once three came into the bracket he lost one and two.

Challenges! having multi sensory

1+1 = 2
1+1+1 = 3

Yeah so the working memory is one of the major issues there, he's got to try and embed.

Yeah and so we were getting him to use his fingers and I was using my fingers rather than my mouth, sometimes I know I'm using my mouth, I'm going 'One' almost making the word for him, instead of that I just put my finger up and I put my finger up and we used four different types of material. We used number strips, teddies to see if he could grip three, go for the number three. We used dots like a dice space on a card and the Numicon and then we had one, two and three on card. Over time it was great to get that video because each child in this class has a memory stick so that video is now gone home.

oral demo Kinesthetic visual Numicon

3

Appendix J: Example of the collation of data Autism is..

Autism is?		
School name	Teacher responses	Parent responses
Scoil Hyde	Bernie ‘different’	<p>Henry Bert’s Dad ‘Autism is, you know what? I think people with Autism and people like that are here for a reason that was always my view on it.</p> <p>Therese Bert’s Mum ‘Autism is being different but not less’</p> <p>Tara Cal’s mum ‘I’d say, other than his speech, you wouldn’t really get that he has any autistic tendencies. Where before... it was very challenging. It was tough but we got there in the end so he’s fabulous now, he is a wee dote so he is.</p> <p>Doireann Ed’s Mum ‘Autism is extremely challenging, but at some stage we are privileged to have a child with autism’</p>
Scoil Ó Ceallaigh	Tina ‘Indefinable, it’s language, its social skills, it’s deficits’	<p>Lochlann Barbara’s Dad ‘Well to me it’s a very nebulous thing’</p> <p>Dharma Barbara’s Mum ‘If I were honest I would say autism is a bit scary. That’s just the truth, that’s how I feel - a bit scary’</p> <p>Keith Ethan’s Dad ‘let’s start with the negative part of it. Heart-breaking; just frustrating; thought-provoking; hard work; and challenging. But it’s a reality</p> <p>Noleen Ethan’s Mum ‘challenging. But it’s honest. We don’t get anything but honesty. He can’t lie to save his life; so it’s so honest there, you get what it is. He tells you like it is’</p>
Scoil deValera	<p>Marie ‘it’s the children themselves, the way they communicate their needs.</p> <p>I don’t understand it, I find it hard, I don’t understand them’</p>	No parent interviews
Scoil Childers	Leah ‘developmental delay, effects your communication, your	Mo Fabia’s Mum ‘Tough, honestly? As a mother if I could take it away in the morning I would’

	<p>imagination, your social connection to the outside world'</p>	<p>Betty Izzy's mum 'A pain in the hole. I hate it. So, maybe I'm the one that needs a bit of therapy. Really I wonder about this. Why have I got? I still have a bee in my bonnet about it. I try to convince myself that it's wonderful, but I do wish he didn't have it'</p> <p>Lulu Kaden's Mum 'Being different. Being unique, just maybe being a sensitive person'</p> <p>Mia Jack's Mum 'It's a neuro-developmental condition; it affects how somebody interacts with the world around them. I mean, I could give you all the DSM criteria, because that's my field'</p>
Scoil Ó Dalaigh	<p>Bea 'Oh Good God! It's communication, it's social, it's a life-long challenge'</p> <p>Dawn 'Oh no! I don't know, Ignorance is bliss'</p>	<p>Barb Barry's Mum 'communications, wires in their head not operating the way that you want them to. Sometimes I think Barry's trapped in a body, you know, he just can't communicate to the world what he's thinking'</p> <p>Fern Fintan's Mum 'I don't define Fintan by autism, this is Fintan, he just happens to have autism because every child is different. I don't see him as an autistic child, he just has things that he does differently to others. It's a social thing really with him</p> <p>Kelly Kyle's Mum 'Different, hard, scary... It's frightening for children, it's frightening for parents because there is no – I think, and I could be totally wrong but I think no two kids are the same'</p> <p>Magda Mat's Mum (laughter) 'is, was...autism is a journey...It's long, definitely long. It's hard at times. It's a new life, it's a different life. It's kind of a journey I think is the big one, because that's really what it is. It's an experience... it's déjà vu...it's Groundhog day'</p>
Scoil Hillery	<p>Susan 'Oh my heaven, oh man, God knows, it's not the child'</p>	<p>Ursula Brian's Mum 'I can't really put a thing on that...I don't see him as a child with a disability in any way, I wouldn't even say Brian is special needs, to me he has a few extra care needs...when we got Brian diagnosed and like 'what does it mean', 'it just means he is wired slightly different than us, so he doesn't always get to the same</p>

		<p>conclusions as we do the same way, he has to go in a round about way’</p> <p>Betty 2 Eric’s Mum ‘He has a learning disability so he is behind, he has an IQ of 65. So he is behind, I would say he has a moderate level of autism, sometimes it seems severe but they are on the bad days. I think moderate would be a good indicator. Definitely mild</p> <p>Penny Ewan’s Mum ‘a neurological disorder and it can cause impairments for social interactions. It can lead to repetitive behaviours. It can lead to impairments in social interactions with other peers. It’s, I think it is genetic...I have a scientific background, it’s not connected to any vaccines’</p>
<p>Scoil Robinson</p>	<p>Kristine ‘a neurological delay, a different way of understanding, a different way of relating... communicating, slightly rigid in behaviours’</p> <p>Diane ‘ A different way of living and being’</p> <p>Donna ‘Autism I suppose is just how we, it is just a different way of learning is how I would see it at and just another way of you know looking at the world and dealing with what we might consider every day issues like I can’t find my coat or I am after losing my pencil’</p> <p>Lorraine ‘I just say like it’s a spectrum, I don’t know how to even define it’</p>	<p>Anita Fred and Kevin’s Mum ‘it’s a toxic overload, that something happened that their whole systems just went into downfall, and it’s the only explanation I can have for it. Obviously it manifests differently in different people because they have different systems, they have different thoughts, they have different emotions, they have a different outlook. Everybody does, so of course it’s going to manifest differently. Some people wear it better than others’</p> <p>Eithne Vincent’s Mum ‘problem with the speech, his eye, eyes contact’</p> <p>Brid Faith’s Mum struggled with the diagnosis and still feels very distressed by the word and it’s attachment to her daughter. She said ‘It is very hurtful. I would love to destroy those reports’</p> <p>Mary Sophie P’s Mum ‘OK, to be very honest, the triad of impairment is really it. The three things come together in varying degrees and individual amounts. Some of my kids have lots of sensory issues, some have none. All of them have social issues, social issues in the sense that their ability to make relationships is definitely impaired, all of them. But they’re not insurmountable things. They can be taught’</p>