



# Creating an Evidence-Based Digital Curation Curriculum for Ireland: Case Study at University College Dublin

Kalpana Shankar and Amber Cushing

## Abstract

Digital curation is an ongoing set of processes for selecting, preserving, archiving, describing, and sharing born-digital and digitised resources, such as documents, data, photos, sound, and film. The importance of digital curation for identifying and preserving digital materials for the future is of increasing importance to cultural and commercial institutions. Although digital curation as a profession is still in its infancy, library and information professionals are increasingly tasked with meeting these demands. In this article, the authors briefly outline digital curation as a practice, discuss digital curation in the Irish context, and describe how University College Dublin's School of Information and Communication Studies new educational initiatives in digital curation are addressing these challenges.

**Keywords:** *Digital Curation Curriculum, Ireland*

## Introduction

In September 2015, UCD's School of Information and Communication Studies launched the first evidence-based, dedicated professional education programmes in digital curation in Ireland. Current offerings include a Graduate Diploma, Master of Science, and Graduate Certificate (for working professionals with a postgraduate degree in a relevant subject). A Continuing Professional Development certificate in Digital Curation is planned for launch in September 2017. These courses offer a flexible range of training in digital curation for the Irish sector and beyond. The innovative programmes include classroom education, applied research, and training that allows students to develop conceptual as well as hands-on skills. Internships, international partnerships, and outreach to community organisations are also in development.

In this article, we introduce the role of digital curation in creating and maintaining digital objects over time, the Irish context for digital curation, and UCD's motivation for creating curricula to fulfill an important professional need.

## What is Digital Curation?

The Digital Curation Center ([www.dcc.ac.uk/about/](http://www.dcc.ac.uk/about/)) in the United Kingdom defines digital curation as the act of 'maintaining and adding value to a trusted body of digital information for current and future use' (Digital Curation Centre, 2016). The DCC created and uses the widely adopted 'digital curation lifecycle' to show how processes at all stages of data creation and use require decision-making, working with digital object creators, ingest of data into a repository, appraisal and description, and the publication and subsequent tracking of use of data require expertise. The data curation professional who engages in these activities also considers and addresses higher-level functions such as repository management, digital preservation, governance, and funding. In short, the entire suite of activities that comprise digital curation ensures 'the maintenance of authenticity, reliability, integrity and usability of digital material' and the organisations that house these repositories.

Digital curation is often mistakenly defined as backing up or 'archiving' data

to appropriate servers (though planning for and backing up digital objects are an important part of the digital curation lifecycle). Furthermore, digital curation does not equal digitisation (though digitised materials will likely fall into the remit of the curation process). Digital curators work with both born-digital and digitised objects and with those who are creating them at the inception of the project (ideally) to insure longevity over time. Effectively done, digital curation can mitigate the risk of software and hardware obsolescence, reduces threats to the longevity of digital information, and makes the re-use of digital resources more possible (and potentially more likely since digital resources can be more easily found and analysed).

## Why Curate?

If the users of the digital information are to be able to find and use the data, the data needs to be 'curated'. 'Active management' means just that – those who create data and those who curate it need to take an active role in making curation happen. Those who create digital information cannot trust to vaguely defined processes downstream and hope that 'somehow' digital information will be available when needed. Also, digital curators cannot passively wait for digital information to come to them in well-formed, well-described, and useful packets. Instead, digital curators need to be active managers of digital materials (often working in tandem with data creators, a point not explicitly made in this formulation of digital curation in the way that others who have defined the term have included it). These are activities that take place over time for a potentially unknown future. Yakei (2007) argues that this scope and scale means that digital curation is an umbrella term that includes digital preservation, data curation, digital archiving, and digital asset and electronic records management.

However, digital curation is not just for arcane and specialized research data and resources. Archives, libraries, and museums have also invested heavily in developing digital collections, including digitising paper-based collections and creating mechanisms for managing born-digital materials. Their efforts have resulted in audiences all over the world being able to access specialized information that used to require visits to these physical spaces. Social media



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(Welshons, 2006)

also provide the means by which users can interact with each other about such materials with or without the oversight of archival and library professionals.

Without the work of digital curation, our increasingly digitally mediated societies face a loss of cultural and social heritage. In 2006, the American Council of Learned Societies proclaimed that 'digital technology can offer us new ways of seeing art, new ways of bearing witness to history, new ways of hearing and remembering human languages, new ways of reading texts, ancient and modern' (Welshons, 2006). In their report, the ACLS argued that without investments in curation infrastructure, intelligent policies for openness and accessibility, for cooperation across sectors, and for leadership in the field, the future of our collective digital present and future are at stake.

### **The Irish Context**

An analysis of digital curation needs in Ireland began in March 2014 with a research grant from the Archives and Records Association of the UK and Ireland (Principal Investigators: Cushing and Shankar). Although the Digital Repository of Ireland documented current digital archiving processes and needs for the social sciences and humanities in Ireland (O'Carroll and Webb, 2012), there was no existing research that specifically focused on digital curation education needs in Ireland. The researchers gathered background from existing literature and relevant professional societies to develop a list of core digital curation competencies. We used these to develop initial programme learning objectives as well as an online questionnaire, building on the work of Sophie Bury, a Canadian academic librarian at York University who had developed and deployed a study of CPD needs for librarians in Ireland (Bury, 2010). The online questionnaire was made available from July-September 2015 to educators, information professionals, and community organisations. We then completed data analysis and used results to revise the curriculum, as well as to begin development of the CPD certificate. A current digital curation MSc student is conducting needs analysis interviews with stakeholders in the Irish sector based on questionnaire findings.

Our survey analysis has allowed us to develop insight into the ways in which

digital curation skills are most needed within Ireland. Apart from the university, archives, and museums, the technology and tourism sectors face many digital curation challenges. Local heritage and community organisations and even many local authority libraries in Ireland face issues associated with digital curation. There has been almost no research that has focused on digital curation in public libraries. Thus, we have sought to develop relationships with public libraries and local history librarians to understand their digital curation needs. How public libraries might provide digital curation training to the public via outreach events is an interesting area for development.

### Application of Findings

Analysis is ongoing but initial findings have been incorporated into the UCD curricula. For example, few questionnaire respondents reported that they have a good understanding of the digital curation lifecycle. Respondents said that while they did not manage technology issues directly, they required some knowledge to complete their daily tasks. Most respondents selected 'another unit is responsible for this task' in prompts asking about how often one completes virus checks or works with databases. We know from existing literature that digital curation professionals require a significant understanding of technology to complete their work tasks (Ray, 2009), but we had not considered the role of an IT services department in completion of these tasks and how it might influence digital curation education. We also found that research data management is of growing concern to researchers, academic libraries, and funding agencies (both in Ireland and the European) but few Irish information professionals had knowledge of the field. We have introduced new modules in all of these areas and are teaching them in intensive formats (several days to a week) where possible to accommodate working professionals. Future iterations will involve more online education.

### Conclusion

Digital curation is an institutional, technical, and organisational activity. Firstly, the work of digital curation is teamwork and institutionally bound. Secondly, digital curation has social implications for all of us because what is kept and

what is curated influence what we, as a society and culture, remember. Lastly, it requires knowledge of legal issues, technology, and policy (as well as content). For these and other reasons, digital curation requires trained professionals who advocate for their increasing role in safeguarding our digital futures and their professional status while being willing and able to learn on the job. In Ireland, like elsewhere, these skills will only become more important.

To learn more about our graduate programmes in digital curation, please go to: <https://www.ucd.ie/ics/study/mastersanddiplomaprogrammes/>

*Kalpna Shankar, PhD is Professor of Information and Communication Studies and Amber Cushing, MLIS, PhD is Lecturer, School of Information and Communication Studies, University College Dublin, Ireland*

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