In the Contact Zone: A Reflective Evaluation of Open Online Digital Curation Education

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Abstract

This article focuses on two UK based online courses in the field of digital curation and preservation; Introduction to Digital Curation, run by University College London, and The Beginner's Guide to the OAIS Reference Model Course, run by the University of London Computer Centre. The courses are considered not against the frame of MOOCs (Massive Open Online Courses) as a revolutionary force in education, but against the metaphor of the 'contact zone' (adopted from the work of Costis Dallas [2015]), as part of the ongoing development and establishment of digital curation as a field of study. Two dimensions of difference are examined; firstly that between face to face and online learning, and secondly that between different groups of learners (such as current professionals and future professionals). It concludes that open online education is best seen as a contact zone less in the sense of being the teaching of a professional field of practice and more in the sense of advocacy and the provision of informative resources and enlightening experiences that pique the interest, increase awareness and most of all, make contact.

Introduction

In a recent article, Helen Tibbo reviewed the development of digital and data curation education and training, tracing it back as far as 1995. In constructing this review, she makes a distinction between 'professional workshops and continuing education programs' ('for current information professionals') and 'graduate level education' ('for future information professionals'). She also discusses the arrival of MOOCs:

> 'MOOCs or Massively Open Online Courses are also appearing in the digital curation arena. University College London (UCL) offered a free Digital Curation MOOC in May 2014 and UNC-Chapel Hill is producing one for Research Data Management for the CRADLE project in 2015' (Tibbo, 2015).

This article offers a reflection on this new development in digital curation education by considering two UK based open online courses; the UCL course mentioned above, and The Beginner's Guide to the OAIS Reference Model course developed by the University of London Computer Centre, ULCC (now part of CoSector, University of London). The UCL course, Introduction to Digital Curation (hereafter referred to as IDC), was first run in May and June 2014 with an active phase over eight weeks and then a passive phase until the end of the year. It ran again in 2015, with the active phase between 19th January and 15th March, and 2016, with the active phase between 18th January and 13th March. It has now been withdrawn. The Beginner's Guide to the OAIS Reference Model course was launched on 2 November 2015 at the URL http://info.ulcc.ac.uk/oais. It has since been updated and moved to https://dptp.london.ac.uk/.

The Appearance of MOOCs

The appearance of MOOCs has been a much discussed trend in the field of education for a number of years and attempts have been made to analyse this discussion, as it has manifested both in the scholarly (Ebben and Murphy, 2014; Saadatdoost et al., 2015) and popular (Kovanovic et al., 2015) literature. Amongst other things, this analysis suggests:

- A peak in public interest in MOOCs in 2013, particularly with regards to the emergence of major MOOC providers such as Coursera, Udacity and FutureLearn and the potential (increasingly felt to have been unrealised) of MOOCs as a disruptive technology that could revolutionise education.

- An emerging distinction between different pedagogical approaches, formalised through the division of MOOCs into the two categories of cMOOC and xMOOC. This distinction emerged to distinguish the early experiments with MOOCs undertaken by those interested in a connectivist pedagogy (cMOOCs) from the slightly later development of MOOCs on institutional platforms such as

EdX and Udacity (xMOOCs). More recently, it has received some criticism as being too simplistic a binary and useful only in the way it allows for the demarcation of MOOC development into different phases (Bayne and Ross, 2014).

- Concern with issues including; sustainability, quality assurance, assessment, dropout rates and learning analytics.

The following reflection however is not situated in the field of education, but in that of digital curation. The above context and terms are not therefore entirely applicable and as such will not be a focus in the following discussion. Indeed both the courses under discussion do not fit well with the prevailing MOOC prototype. For example, neither was hosted by one of the major MOOC providers. Rather, both were delivered via small institutional VLE (Virtual Learning Environment) instances built using the open source Moodle software. Then again, neither of the courses under discussion was particularly massive as the numbers in Table 1 show when compared, for example, to the numbers on the first two MOOCs run by the University of Glasgow (via the Futurelearn Platform in the summer of 2014); of 5,855 and 7,765 respectively (Kerr et al., 2015).

Table 1. Number of participants enrolled on the courses.

Course	Number of enrolled participants
IDC 2014	910
IDC 2015	460
IDC 2016	654
Beginner's Guide 15/16	233

The courses under discussion aimed to contribute to the establishment of digital curation as a field of study and practice. In the process of their development issues were encountered around the diversity of participation that shaped the forms of contact these courses afforded. While the courses were not on the MOOC scale, the authors believe their reflections are relevant to digital curation educators considering the forms of contact they want to engender through their design.

The Ongoing Evolution and Establishment of Digital Curation

Costis Dallas has recently suggested that 'Digital Curation appears […] to have come of age' and 'is now established as a recognizable interdisciplinary field of knowledge and professional specialization'. And yet, he also argues that 'ambiguity still persists as to what digital curation *is*, what it is *of*, *how* it manifests itself , and what may be its distinct identity as a domain of intellectual inquiry and professional competence' (2015). In the case of IDC, this ambiguity was actively embraced. For example, the question of what digital curation was, was left as open as possible, and an exploration of that question was part of the course, as shown by this extract from the course materials:

'This course aims to introduce you to digital curation and so, part of what you will be doing over the next few weeks is trying to work out your own

personal definition or view on what it is' (UCLeXtend, 2016).

Then again, although the question was not explicitly raised within The Beginner's Guide to the OAIS Reference Model, it is still evident in the following comments from those introducing themselves on the course. For, what becomes apparent is that each individual has their own nuanced, slightly different, understanding of, in this case, digital preservation and what aspects of it should be prioritised or foregrounded.

'Digital preservation is a vital topic to get your head around if you are interested in a career in archives (which I am).'

'For me, digital preservation is about making sure that today's digital artefacts are kept available and usable to as wide an audience as possible for as long as they are useful.'

'To me digital preservation means creating a legacy and ensuring that our valuable works are conserved for future generations.'

'Digital preservation to me means an extension of the custodial duties Archives and Archive staff have towards their records, as the format and technology changes and develops.'

'I produce and curate photographic exhibitions, and hope to digitally preserve images, materials and programs I develop.'

'Whilst I have some awareness of digital preservation I am keen to reinforce my knowledge and apply this to our digital asset management.'

What is also evident though, within the broader ambiguity of the comments above, is a strong connection with the long established field of archives management and 'custodial duties'. The developer of IDC is definitely from and embedded in this background – her day job being to teach on the MA in Archives and Records Management that is one of the accredited routes into that profession in the UK - and the background of the participants on The Beginner's Guide to the OAIS Reference Model, whilst somewhat more diverse, also shows a fairly large number of individuals with titles such as Archivist, Digital Archivist, Records Manager and so on – see Figure 2.

In his recent article, Dallas asserted 'a dominant, custodial view on digital curation' at odds with 'the diversity and pervasiveness of digital curation practices "in the wild"' (2015). He sees that the term digital curation is used:

'...predominantly to brand a professional field of practice which seeks to develop a normative, prescriptive set of rules, established procedures, systems, etc., in order to serve the future fitness for purpose of digital data

objects through digital preservation...'

...and argues instead for digital curation 'as contact zone based on a position of epistemic humility vis-à-vis the grounded practice of digital curation "in the wild"' (2015). The focus of this evaluation therefore, will be to consider what can be learned about the possibility and perhaps, more interestingly, the actuality of using open online digital curation education to engender digital curation more in this later form.
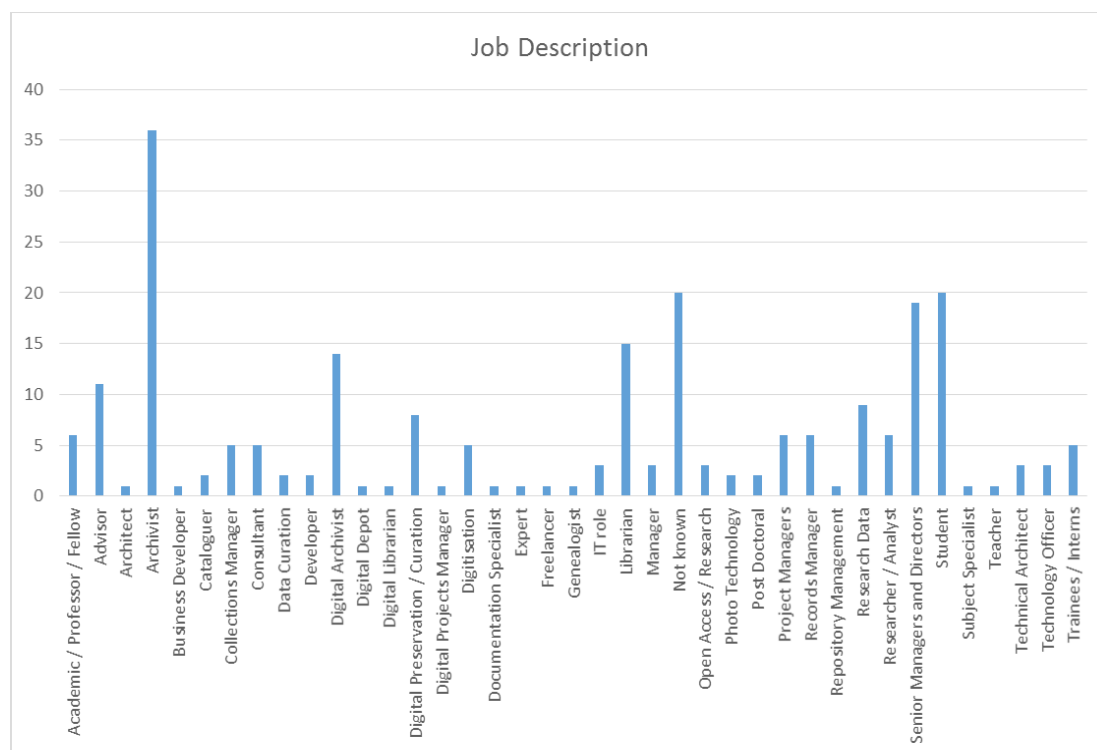
Figure 2. Job descriptions of those on The Beginner's Guide to the OAIS Reference Model course. The **job description** data has been aggregated to some degree; for instance several Senior Manager roles were consolidated into a single response. Archivists represent the single largest user group, followed by Students, Librarians, and Digital Archivists. It would be possible to further aggregate all the technical / IT roles to give a total of 11, which would place them just behind the Digital Archivists. It is also interesting to see Digitisation Managers and Research Data Managers represented. There are 20 Unknowns in 233 responses.

In the Contact Zone

The idea of using open online digital curation education to produce a contact zone would on the face of it seem to be a sensible one. After all, as the numbers in Table 1 show, removing the need to either be physically present in the zone or to pay to enter it, does allow for a larger zone. In her discussion of this form of digital curation education, Tibbo suggests that it 'may prove to be highly effective in reaching large and geographically diverse audiences' and the cases of IDC and Beginner's Guide would

seem to support that view (2015). Table 3 provides additional evidence for this in the form of the large numbers of different countries from which the participants on the courses came.

Table 3. Number of countries represented on the courses.

Course	Number of countries represented (outside UK)
IDC 2014	36
IDC 2015	43
IDC 2016	46
Beginner's Guide 15/16	31

Does a larger number of more geographically diverse individuals within the contact zone necessarily imply a better contact zone? To start to examine this question, the authors will reflect along different lines to highlight a number of different dimensions pertaining to the idea of open online digital curation education as a contact zone. The Beginner's Guide to the OAIS Reference Model Course was created by staff at the University of London Computer Centre (ULCC), which is described as a leading IT services provider, who had been offering a professional workshop – the Digital Preservation Training Programme (DPTP) – since 2005. In this case therefore, the author will reflect along the line of difference between online and face to face modes of engagement for continuing professional development. IDC on the other hand was developed to run alongside a module within a graduate level programme in Archives and Records Management. The line of difference along which the reflection will take place in this case is therefore that between different groups of learners.

Face-to-Face Versus Online

ULCC's Beginner's Guide to the OAIS Reference Model was designed to be a "taster" for an online learning version of the face-to-face DPTP course which ULCC have been teaching since 2005. The decision to release this "taster" course was taken mainly because the developers were unfamiliar with this new way of delivering learning and wanted to test the waters, acclimatise themselves and their audience to virtual learning, and learn about the pitfalls of managing online enrolments.

ULCC's face-to-face DPTP courses were (and still are) usually attended by professionals from a mix of disciplines (archives, libraries and museums) and a very wide range of sectors (memory institutions, county archives, local government, central government, charities, business, banks, media). These professionals come to DPTP for many different reasons and engage with digital preservation at many different stages of development. Feedback indicates that participants enjoy sharing experiences with the others who attend their course. The way in which this, perhaps more social and informal, sharing with others, is highlighted as an important take-away by participants on DPTP, is in line with findings reported by Duff, Marshall, Limkilde and van Ballegooie in respect of digital preservation training arranged under the aegis of ERPANET (the Electronic Resource Preservation and Access Network) in the early 2000s. In this case, participants reported that 'the informal discussion with individuals who were facing similar problems, or the opportunity to network with colleagues, was the best feature of the workshops' (Duff, Marshall, Limkilde and van Ballegooie, 2006).

The DPTP face-to-face courses have always provided a platform for useful and informal discussions of "what-if" scenarios, where people clearly feel relaxed enough to do some blue-sky thinking about difficult preservation problems. In particular, one of the most useful and engaging activities in DPTP was the *paper exercise* where participants were invited to map their own organisation to the workings of the OAIS Model, and report back to the class. This always involved much table discussion and debate and opened up lines of enquiry beyond the scope of the OAIS and its information packages and functional entities. People thought about their actual processes and workflows, and looked for gaps. Steph Taylor, one of the facilitators of the DPTP course, has described this exercise in the following terms:

> 'Working in three teams, our participants took three real-life case studies and assessed them against the OAIS model. The feedback showed some very interesting outcomes, with delegates identifying gaps in the case studies where DP could be 'broken' – that is, where the DP cycle would not work smoothly, and where risks loomed large. […] Although the teams couldn't offer immediate fixes for everything, by identifying the problems and risk areas in each case study using everything they had learned over the past three days, they were able to suggest useful ways forward in each instance' (Taylor, 2013).

One question for the developers of the new Beginner's Guide course was therefore, the extent to which it would be possible to foster this sort of lively and informal engagement in the context of online learning.

The OAIS Course has a number of forums which invite students to initiate a discussion. In many cases a particular aspect of the Model (e.g. Access and User Engagement) is proposed as a topic for that discussion. The following outlines the sort of responses that these forums received. For example, eight students responded to the question "Does the OAIS Model mean anything to you?" This forum topic prompted many detailed responses to key components of the model – Consumers, Producers, Functional Entities – and some learners performed a quick gap analysis of their operation against OAIS, explaining who does what and which parts are currently missing. Then again, seven students discussed "Information Packages" and, when asked if they wanted to conform to the OAIS Model, six students discussed the idea. The trend here was that most organisations find the idea of OAIS conformance (linked to TDR compliance) challenging:

> 'I think it's unrealistic to try and achieve all the core functions at once. Strict compliance with OAIS seems a gargantuan task, and perhaps most suited for large organisations hoping to gain the status of a Trusted Repository' COSECTOR (2015).

Three students talked about "Engaging with Depositors", three also discussed "Ingest" and two students talked about how to make material accessible to users.

In terms of levels of engagement, these declining figures could be taken to indicate a sharp decline in enthusiasm for participation as the course progresses. As has been stated above, a concern with levels of engagement, often framed in terms of dropout rates, is a theme within the education literature around MOOCs. And, in their evaluation of their MOOCs, the University of Glasgow further broke down the total numbers of students enrolled into the further categories of leavers, learners (an individual who

viewed at least one step), active learners (learners who marked at least one step complete), returning learners (learners who completed steps in more than one week), social learners (learners who made at least one comment) and fully participating learners (learners who completed a majority of steps). In these terms the number of participants regarded as fully participating, rather than just enrolled, dropped from 5855 to 736 and 7765 to 536 (Kerr et al., 2015).

The forum within The Beginner's Guide to the OAIS Reference Model course that engendered the highest level of participation (in these strictly numerical terms) was the one in which participants were asked to introduce themselves. In total 39 people took part, some also taking the opportunity to discuss their background and explain why they were interested in digital preservation. This disparity in response prompts reflection not so much on levels of engagement, but on one of the main differences between face to face and online education, namely the effect of the environment on engagement. Face to face, the sort of educational activity such as the OAIS one outlined earlier, is also a social exercise, online and through the formal medium of writing, rather than speech, it is perhaps more purely an educational exercise and less enjoyable and rewarding to undertake as a result. It is this difference that was the most apparent and troubling for the developers of The Beginner's Guide to the OAIS Reference Model in their move to online learning models, and its implications and possible resolution are matters of ongoing consideration.

Different Groups of Learners

The motivation behind IDC was similar to that behind The Beginner's Guide to the OAIS Reference Model, in that its designer was also interested in exploring what it was like to run a course in an online environment, rather than a face to face one. Beyond that however, an additional and more significant motivation was the desire to use the affordances of online education to blur, if not bridge, the boundaries between different groups of learners. With her background in professional education, one of the main lines of difference along which she was used to operating was that, highlighted by Tibbo, between groups of learners consisting of current professionals (those already recognised as 'professionally qualified' often by virtue of having successfully completed a programme of graduate level education) and those consisting of future professionals. Consequently this was a relatively easy boundary to see and to blur, but as the IDC online course took shape, what became apparent was a number of less obvious boundaries that had previously lain implicit in the unspoken framing around the word 'professionals.'

As has already been mentioned, IDC was developed alongside the development of a separate module to be taught face-to-face as an option on the MA in Archives and Records Management. In this joint development it was vital to pay attention to the differences between the groups of individuals who would, or might, enrol on each course. For example, whereas the face-to-face course would only be available to 30-40 individuals, intent on becoming qualified as Archivists and/or Records Managers, the online course would be available to anyone with internet access and a passing interest in digital curation. These individuals might be intent on entering the archives and records management profession, or they might not be. They might already be members of that profession, or they might be members of other professions such as librarianship, engineering or law. They might be interested in digital curation in a professional

capacity, or only in a personal capacity. What was being devised with the online course was neither continuing professional or graduate level education and any implicit framing around the idea of those undertaking it as 'professionals' was blown wide open.

Working without this framing led to the course being conceived (and hence designed) differently. Conceived as a place where those interested in digital curation could come to find out more about one particular perspective on digital curation and what informed that perspective, it has already been shown how the question of what digital curation was, was left as open as possible. Then again, given the potential diversity of the participants' contexts, the only way in which it was felt that they could be expected to share an experience of digital curation was personally. As such, after a general introduction, participants were introduced to ideas around file formats, strategies for digital curation and audit/certification standards in a section entitled 'Digital curation begins at home' which quite deliberately emphasised the commonality/universality of digital curation concerns by placing them in a setting that everyone shared (albeit in their own individual ways). Equally, professional models and frameworks (e.g. curricula ones such as DigCurv) were introduced, but always in the context of being tools to help participants to think about how these frameworks were shaping digital curation and how that shape fitted with the participant's own view.

The potential for anyone to take the course was obviously limited however to those who had heard of it. Advertising of the course was undertaken in a piecemeal and unplanned fashion and was mostly through existing professional networks. The exact relationship between where the course was advertised and who then enrolled on it cannot be traced - participants were not asked where they had heard about it – but it could sometimes be felt. For example, it seems possible to suggest a link between the comparatively large number of individuals enrolled on the course from the United States in 2014 (104 as opposed to 45 in 2015 and 37 in 2016) and the fact that the developer had spoken about its forthcoming launch at a major academic conference in Indianapolis earlier that year. More could, and probably should, have been done to reach individuals outside the developer's existing networks, but nevertheless, over the three years that it ran, the course did attract participants from a wide range of backgrounds including; teaching, computer science, librarianship, photography, archaeology, museums, information science, cultural heritage management, palaeontology, public history, digital humanities, radio, social anthropology, archives and records management and of course digital curation. This list has been devised from going through all the introductions participants posted to the three courses and, going through, it was very noticeable that only one or two people chose to introduce themselves in personal terms, e.g. as a 'mother' suggesting that the vast majority of those enrolled did seem to want to engage with digital curation in a professional capacity of some kind.

The final point to be made when analysing along the line of difference between groups of learners which is under consideration here, is that of contract and exchange. Another difference between the group of learners on the online course and those on the face-to-face one, was what these different groups could expect to get from their participation. Those on the face-to-face course could potentially gain (following the successful completion of an assessed piece of coursework) 15 credits to count towards their MA, those on the online course could expect to gain nothing of this sort, not even a certificate of participation. Then again, those on the face-to-face course had paid to undertake their course, those on the online course had not. These differences were particularly felt by their developer, in that they affected the role that she had to take on (e.g. as an assessor/not an assessor) and the rules and constraints that she was bound by (UCL in common with all universities has detailed academic regulations governing

assessment and what is required of a student to acquire its accreditation). Operating without these constraints was in many ways a liberating experience, and the fact that she did not need to act as an assessor certainly made it easier to adopt the sort of 'epistemic humility' that Dallas discussed (2015).

Conclusions

This article has reflected on open online digital education along two lines of difference. Firstly that between different modalities – face-to-face versus online – and secondly that between different groups of learners – those undertaking an MA in Archives and Records Management as a means to enter that profession versus potentially anyone. As a result of this reflection it is now possible to return to the central question about the possibility and actuality of using open online digital curation education to support the evolution of digital curation more as a 'contact zone based on a position of epistemic humility' and less as 'a professional field of practice which seeks to develop a normative, prescriptive set of rules, established procedures, systems, etc' (Dallas, 2015).

   In response to this question, it is clear that being open and online does allow for contact to be made with more people across a greater geographic area than not being open or online. And yet, the cases under consideration also show that the differences between the nature (in particular the social nature) of face-to-face and online contact are important variables and worthy of further study. Then again, they also suggest that greater geographic diversity does not necessarily imply greater diversity in other ways (such as diversity of professional background or interest). Moving from the general (of being open and online) to the specifics of an open online course in digital curation, who is attracted to contact that course will depend on other variables such as where the course is advertised, how it is 'sold' or framed in that advertising, and how attractive the 'offer' is to potential participants in terms of what they can expect in return for what they put in (in terms of time and attention).

   This response, in turn, perhaps suggests one further conclusion; namely that, if digital curation is going to evolve more as a 'contact zone based on a position of epistemic humility', those interested in its evolution (and survival) will need to see themselves as operating more in the open market and less in 'a [particular or singular] professional field of practice' (Dallas, 2015). The education in open online digital curation education becomes therefore less about that professional field of practice (and the teaching of its 'normative, prescriptive set of rules, established procedures, systems, etc.') and more about advocacy and the provision of informative resources and enlightening experiences that pique the interest, increase awareness and most of all, make contact (Dallas, 2015). Education of this kind, is not just the purview of traditional educators, but of all who want to see digital curation concerns connect with as many people as possible.

Acknowledgements

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