Digital Preservation Education in iSchools

Kaitlin Light Costello (kaitcost@email.unc.edu)
School of Information and Library Science, University of North Carolina at Chapel Hill

UNC SCHOOL OF INFORMATION AND LIBRARY SCIENCE

DigCCurr say: dij-seeker

Introduction

The core mission of the iSchool movement is to connect people, information, and technology [1]. Digital curation supports this mission by shaping technologies and human practices to ensure continuing use of resources that reflect the needs of various stakeholders. It is an interdisciplinary set of processes which hinge on expertise from many different fields, including computer science, information and library science, informatics, management, and education. iSchools are a natural home for digital library education [2], and there are significant overlaps between digital library and digital curation education [3]. It follows that iSchools are an excellent venue for research on the topic of digital curation education. Digital preservation constitutes a core subset of digital curation activities, which ensure meaningful access and use of digital resources over the long term.

Methods

Course catalogs from 2006-2009 for each of the 26 iSchools were examined for courses focused solely on the topic of digital preservation. In 2 cases, only the most recent catalog or an undated "master list" of courses was available.

Searches of the catalogs were performed for the following keywords in course titles and available course descriptions: **digital preservation**, **digital curation**, **preservation**, and **curation**. If these searches yielded no results, the catalogs were examined manually. If results were found, the descriptions were checked to ensure that the course was focused on digital preservation. Schools with non-English websites were translated using Google Translate.

Websites for each school identified as offering at least one course in digital preservation were then searched for available syllabi. A combination of browsing the course pages, faculty homepages, and targeted site searches were used to locate seven syllabi on the open web. In cases where multiple syllabi were found for the same course, only the most recent syllabus was used.

In order to analyze course content, terms from the Matrix of Digital Curation Knowledge and Competencies were run against the syllabi using batch file commands. The matrix, last revised in June 2009, was developed to identify, define, and organize key concepts to be covered in a digital curation curriculum [4]. The first two dimensions of the matrix (Mandates, Values, and Principles; Functions and Skills) were used in this analysis. The automated analysis was manually verified for terms and phrases found in the syllabi to ensure that their context was applicable to the matrix.

Why Digital Preservation courses?

Digital preservation is a central component of digital curation. Digital curation focuses on a lifecycle model for the creation, management, and preservation of digital materials for long-term use. In the examination of course catalogs, no courses were identified that used the term **digital curation** or **curation** in their title or short description. In this study, the term digital preservation applies to a specific area of professional education essential to the practice of digital curation.

Number of Digital Preservation Courses by School

- No courses — 17
- One course — 6
- Two or more courses — 3

Approximately one third of the iSchools offer at least one course focused solely on digital preservation.

Topics and concepts covered in digital preservation coursework:

Mandates, Values, and Principles

Terms that appeared most frequently
- Standardization (7/7 syllabi)
- Authenticity (6/7)
- Long-term or long term (6/7)
- Trust (5/7)

Terms that were not found in any syllabi
- Adaptability
- Critical inquiry
- Diversity
- Encapsulation or encapsulate
- Modularity or modular
- Open architecture
- Organizational learning

Functions and Skills
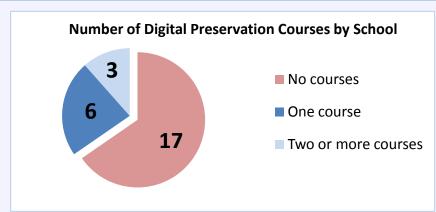
Terms that appeared most frequently
- Access (7/7 syllabi)
- Administration (7/7)
- Management (7/7)
- Use, re-use, and adding value (7/7)
- Selection and appraisal (6/7)
- Description, organization, and intellectual control (5/7)

Terms that were not found in any syllabi
- Analysis and characterization of digital objects or packages
- Destruction and removal
- Systems engineering and development

Conclusions

Based on the analysis of syllabi, digital preservation courses in the iSchools appear to focus on theoretical concepts and not technical competencies.

Although destruction of data and records is a normal and necessary component of the lifecycle of digital resources [5], no digital preservation classes mentioned the destruction or removal of records in their syllabi.

Future Research

- Determining whether the technical competencies and other topics essential for the practice of digital curation are covered in other coursework by widening the scope of the sample of courses
- Examination of course content in more detail is necessary; for example, assignments, discussion questions, and weekly readings for courses may not have been covered in the syllabi

References

[1] iSchools Caucus. (2009). About the iSchools. Retrieved October 20, 2009. http://www.ischools.org/site/about/.

[2] Wildemuth, B., Pomerantz, J., Oh, S., Yang, S., & Fox, E. (2009). I-schools as a natural home for digital libraries education. Presented at the iConference 2009, Chapel Hill, NC. http://nora.lis.uiuc.edu/images/iConferences/DL_in_i-schoolspaper-final2009-01-27.pdf.

[3] Pomerantz, J., Oh, S., Wildemuth, B., Hank, C., Tibbo, H., Fox, E., et al. (2009). Comparing curricula for digital library and digital curation education. In *Proceedings of DigCCurr 2009. Digital Curation: Practice, Promise & Prospects, Chapel Hill, NC, April 2009. H*. Tibbo, C. Hank, C. Lee, and R. Clemens, Eds. SILS: Chapel Hill, NC, 2-3.

[4] Lee, C. (2009, June 17). Matrix of digital curation knowledge and competencies, Version 13. Retrieved October 26, 2009. http://www.ils.unc.edu/digccurr/digccurr-matrix.html.

[5] National Archives and Records Administration (NARA). Records Management: Figure 4-1. Records Life Cycle and Major Problem Areas. Retrieved October 26, 2009. http://www.archives.gov/records-mgmt/initiatives/fig4-1.html.