

# USING DIGITAL CONTENT TO PROVIDE STUDENTS WITH VIRTUAL EXPERIENCES IN AN ONLINE HISTORY OF THE BOOK COURSE

Lisl Zach<sup>1</sup>, Shawn Martin<sup>2</sup>

<sup>1</sup>*Drexel University, College of Computing and Informatics, Philadelphia, PA (USA)*

<sup>2</sup>*University of Pennsylvania, Van Pelt-Dietrich Library Center, Philadelphia, PA (USA)*

## Abstract

The History of the Book course is a traditional mainstay of library and information science (LIS) education and a perennial favorite among students valuing contact with physical artifacts. In the digital age, knowledge representation has become independent of individual objects and such classes need to reflect these changes. Working collaboratively with experts from the University of Pennsylvania Libraries' Kislak Center for Special Collections, Rare Books, and Manuscripts, Drexel University and UPenn faculty have developed a new online version of this discussion based course offered as part of the MS(LIS) degree in the College of Computing and Informatics. This new version, augmented with video created specifically for the course and other digital materials available on the Internet, draws on traditional content but situates it in the context of knowledge representation through the ages, with a special emphasis on the role of information in the 21st century and beyond.

The new online version of the course was beta tested in the winter 2014 term with 26 students; a companion section of the traditional face-to-face version of the course was also offered in the winter 2014 term. Only eleven students registered for the face-to-face version of the course, suggesting that the online format appeals to many students on the basis of convenience. The challenge for the two instructors was to keep the two sections of the course aligned in terms of the intellectual content and provide similar educational experiences for both groups of students. For example, students in the online version of the course "visited" virtual collections of rare books while students in the face-to-face section visited the physical collections held at the University of Pennsylvania. Both groups of students wrote and presented research projects on some aspect of the history of the book; presentations delivered by the online group were done through video using a variety of presentation media including Jing, iMovie, and YouTube.

The wealth of digital content related to the history of the book now available from many of the major libraries and museum worldwide offers students in the online environment new opportunities for exploring the development of knowledge representation. While the digital content does not provide the same experience as the physical artifacts (e.g., the smell and feel of old manuscripts), it can often facilitate a higher level of detailed examination than would be allowed to students working with the physical artifacts. The following paper will discuss the process involved with developing, delivering, and evaluating the beta test of the online version of the course compared with the traditional version. Data from student feedback throughout the term was analyzed to identify what aspects of the new version were most/least successful, including the use of technology both for the delivery of educational content and student presentations. Recommendations for future changes/enhancement will be presented. The experiences described will be relevant not only for educators in the LIS field but also for those interested in delivering online content in the areas of museum studies, art history, archeology and any other discipline in which face-to-face classes have traditionally involved field trips and visits to view physical artifacts.

Keywords: Museum informatics, digital libraries, collaboration, innovation, technology, research

## 1 INTRODUCTION

### 1.1 Background

The history of the book as an academic field dates to around 1980. One of the early scholars within the discipline, Robert Darnton, describes the field as "the social and cultural history of communication by print."<sup>1</sup> About ten years later, the Society for the History of Authorship, Reading, and Publishing (SHARP) in its inaugural volume stated that their mission was to study "the creation, dissemination, and uses of script and print in any medium ... the social, cultural, and economic history of authorship, publishing, printing, the book arts, copyright, censorship, bookselling and distribution, libraries, literary

criticism, reading habits, and reader response.”<sup>2</sup> In more recent years, the field has broadened even more with a push to study not just physical artifacts, but also the nature of knowledge and how it is represented in both oral and written cultures as well as graphically and digitally. According to Toni Weller, modern book history ought to be about “the study of information in past societies – how it was understood, used, organized, managed, collected, censored, feared, revered, published, disseminated, presented, displayed.”<sup>3</sup> This study of the past also informs our understanding of ways in which knowledge is and can be represented in the digital age.

Generally speaking, pedagogy about the history of the book has reflected the broader trends within the field itself. Traditionally, history of the book courses have been taught as straight history courses (in departments of History), as well as courses in English, Comparative Literature, and Art History departments; most commonly, however, they have been taught as part of a LIS curriculum to students who aspired to work in rare books or manuscript collections. Scholars working in the discipline of history of the book typically came with backgrounds in history, literature, languages, and art. Curators of rare book and manuscript collections were often drawn from the same backgrounds. More recently, scholars working sociology, history of science and technology, and media arts and design have become more interested in ways in which knowledge has been represented and disseminated. Reflecting this shift in the field, many history of the book courses in LIS programs have also been repositioned to attract students with backgrounds in, or who are interested in, humanistic modes of inquiry.

## **1.2 History of the Book courses in library and information science programs**

Teaching the history of the book has had a complicated evolution both within academe generally and within LIS programs specifically and reflects the changes that have been going on in research and pedagogical approaches to the subject. Originally conceived as a hands-on course to train future rare books and manuscript librarians, the content focused on bibliographic study, in which contact with the physical book played a dominant role. In other words, the focus of study according to many LIS educators was, and still should be, to prepare librarians to identify, describe, and preserve the past. To categorize and catalogue rare books, one had to have some idea of the history and structure of books themselves. So, the study of bibliography, paleography, and in-depth research on the structure and composition of books themselves was incredibly important.<sup>4</sup> An attractive part of the traditional learning experience for students was a “field trip” to look at old manuscripts in a special collections library.

While some current teachers of the history of the book stress that this kind of study is still essential because “librarians will have to decide which materials to preserve in their original format, which to transfer to new media, and which to leave behind,”<sup>5</sup> other teachers are now focusing more of the sociological aspects of the discipline. History of the book courses have shifted their focus to investigate how technology and knowledge representation have changed the ways humans disseminate, perceive, and process information. As a result, the history of the book courses now often focus more on the social and political forces that shape the evolution of written communication than on bibliographic study, yet many of them still retain some of the characteristics of the original courses, such as the visit to a special collections library.

Although the field of librarianship is changing, students interested in rare books and manuscripts are often among the most traditional. Many of the students are concerned with preservation of rare materials and want to learn about the ways “books” (including early codices, scrolls, and other formats) have been created. Additionally, students want to learn about the ways to describe these books and how they might learn to catalog and classify early formats of information in a way that is useful to researchers. Bringing these students to a working special collections library and actually demonstrating current practices in rare books libraries provides them with tangible examples of the kinds of materials that they may one day have to describe, select, and preserve. In this environment, the instructor needs to balance the hands-on activities with class discussions on how societies focused on collecting, maintaining, and preserving their heritage in previous generations and how their methodologies do, or do not continue into the present day.

## **1.3 The History of the Book course at Drexel**

Drexel University is home to one of the oldest library schools in North America (founded 1892). However, with an increasing emphasis in LIS programs in general on information technology and the rise of the iSchool movement (of which Drexel was a founding member) at the beginning of the 21<sup>st</sup> century, the

focus of many LIS programs has moved towards the intersection of information, users, and technology. In this environment, the traditional hands-on approach to teaching history of the book was considered an anomaly at Drexel, although it continued to be popular among students, largely because of the field trip aspect of the course and the potential interaction with the physical artifacts. Nevertheless, such an approach limited the course in many ways. By focusing on material artifacts, students often missed the opportunity to explore the ways in which knowledge is and can be represented in the digital age. Furthermore, by focusing on bibliographic issues, it positioned itself to appeal primarily to students who saw themselves as potential cataloguers of rare book collections. Finally, by requiring students to be present in a face-to-face classroom setting, the course was not being made available to the largest segment of the Drexel LIS student body—the online student.

In 2012 the decision was made to develop an online version of the existing history of the book course and to offer it in parallel with the traditional face-to-face section. Such a move had been contemplated earlier, but only in 2012 was it felt that adequate digital content related to the history of the book was available from many of the major libraries and museums worldwide so that online students would have appropriate opportunities for exploring the development of knowledge representation in a virtual environment.

## **2 MOVING THE HISTORY OF THE BOOK COURSE ONLINE**

### **2.1 Revising and updating the face-to-face version**

At Drexel, the face-to-face version of the history of the book course offered prior to 2012 displayed many of the same characteristics found in similar courses at other library schools. Learning objectives for the course stated that students would be able to:

- Develop a sense of typical styles of book design, including both text and graphics
- Recognize the continuities and discontinuities in the book as a physical object from the ninth to the twentieth centuries
- Think critically about issues of authority, legality, originality, innovation, and tradition in present-day text construction and use of graphic representations

A single lecture out of the 10-week terms was devoted to 20th-century innovation in the reproduction of text and graphics, including technological, intellectual, social, and economic issues.

In 2012, the course syllabus was revised by the authors to reflect the increased importance of teaching the history of the book within the larger context of knowledge representation and dissemination. The course learning objectives were updated to state that students would be able to:

- Identify the social impact of texts and the transmission of knowledge in an historical context
- Recognize the continuities and discontinuities in written knowledge representations from the classical age to the present day
- Understand the nature of 20<sup>th</sup> and 21<sup>st</sup> century innovation in the reproduction of text and graphics, including technological, intellectual, social, and economic issues

During 2012 and 2013, the history of the book course continued to be offered only in the face-to-face version. However, substantive changes were made to the core content of the course in preparation for the development of the online version. Most significantly, the textbook was changed from one that focused on bibliographic description to a collection of topical readings by scholars in the history of the book field. An additional lecture was added on 20<sup>th</sup> and 21<sup>st</sup> century innovation in the reproduction of text and graphics, including technological, intellectual, social, and economic issues.

During 2013 the authors continued to review existing history of the book courses offered by other programs (both within and outside of LIS programs) and identified digital resources to be included in the new online version. Some of these resources were made available to students in the face-to-face section.

### **2.2 Designing the new online version**

The standard format for online courses offered by in the LIS program at Drexel is an asynchronous discussion-based model managed through Blackboard Learn. The format of the face-to-face version

of the history of the book course is a weekly seminar-style class session. One priority for the design of the new online version was that both it and the face-to-face version should cover the same basic content on the same schedule, so that students in both versions of the course would be reading the same materials at the same time and addressing (more or less) the same questions in their class discussions. The syllabi for the two versions of the course were coordinated, and the task of selecting appropriate digital resources to replicate the physical experience of hands-on demonstrations of selected materials began.

From the start it was understood that students in the two versions of the course would be receiving comparable, but different learning experiences. The face-to-face group had the opportunity to meet with the instructor on a regular basis; the instructor had the opportunity to guide and amend the course materials being presented in real time if the students missed a key concept or had specific questions. In the online version, discussion questions and course content was determined in advance, and students were able to work through the content at their own pace. Discussion topics were posted weekly on the Blackboard course site, and students responded first to the discussion topics and then commented on each other's posts. There were two major assignments in the online version—first an individual presentation of a research topic of their choice related to the theme of the course; second a group presentation and report identifying a core collection for a library of the future. The proposed collection was to be based on criteria that take into account both the value of the intellectual content of the items as well as their physical attributes. The presentations made by the students in the online version were PowerPoint presentations augmented with audio and recorded using Jing or another appropriate screen capture software tool. The major project for the face-to-face version of the course was a traditional research paper and presentation made during a class session.

### **3 USING DIGITAL CONTENT TO PROVIDE VIRTUAL EXPERIENCES**

#### **3.1 Using existing content from the web**

Key to the success of the project was the wealth of digital content related to the history of the book now available from many of the major libraries and museum worldwide. These resources offer students in the online environment new opportunities for exploring the development of knowledge representation through the ages. For each week's assignment, students in the online version were directed to specific websites to see examples of the materials that were being discussed in the course readings and lecture materials. A list of web resources used in the online version of the course is shown in Appendix A.

While viewing the digital content did not provide the online students with the same experience as the face-to-face students had with the physical artifacts (e.g., the smell and feel of old manuscripts), the online students had the advantage of being able to "visit" some of the greatest rare book collections in the world from the comfort of their own homes. Because students were using digital content, they were not limited by having only a single example of a certain type of artifact; they could look at several different versions of a Gutenberg bible and think about the difference.

#### **3.2 Creating new content**

In addition to using existing digital content from the web, the authors had the opportunity to work with experts from the University of Pennsylvania Libraries' Kislak Center for Special Collections, Rare Books, and Manuscripts to develop customized content for use in the online version of the course. On two occasions during the term, students from the face-to-face version of the course visited the University of Pennsylvania's rare book collection. The first session focused on the history of material texts prior to the advent of print in the mid-fifteenth century. This first trip to the Kislak center the students worked with scrolls, clay tablets, manuscripts, and early printed books. The second session focused primarily on printed books and manuscripts. The point of the second session in many ways was to show the continuities and discontinuities of knowledge representation through the centuries. Though manuscripts as a format are less utilized in later periods, aspects of manuscript culture survive even into the twenty-first century. Additionally, print culture tries to mimic manuscript culture even when printing technology is well advanced. For example, one of the students' favorite books in the Kislak center is the Kelmscott edition of Geoffrey Chaucer, an edition printed by the Kelmscott Press in 1896 which looks very similar to a sixteenth century printed book.

Highlighting the continuities and discontinuities between print and manuscript forms of knowledge representation was an important aspect of a series of videos that were developed for the online version of the history of the book course. There are many examples of videos on the web which highlight features of a particular book in a certain library's collection, but few of these videos place materials side by side and display differences. For the new online version Drexel instructors and Kislak Center staff created a series of videos doing exactly this. For example, one video focused on legal materials, showing how a will from the ninth century bore remarkable resemblances to printed legal forms from the sixteenth century; another video highlighted religious books which relied heavily on the ability to annotate and move back and forth between non-sequential parts of the book. Finally, a third series of videos looked at Jonathan Swift and how his stories were transmitted (and changed) over time through different versions including expensive collectible imprints, pamphlets, children's editions, and mass market paperbacks.

Though the medium of these lessons (field trip and video) may be different, the lesson is the same. Namely, the way knowledge is represented helps historians and future librarians understand more fully the creators of information, their readers, and the wider society in which they lived. The tactile experience, the smell of the book, and the pleasure of being in a room surrounded by materials hundreds of years old may not be replicable. Nevertheless, the intellectual lessons of those experiences can be replicated, and students can be exposed to the essential elements and structures of rare books and special collections in a virtual environment.

## **4 EVALUATING THE ONLINE COURSE**

### **4.1 Collecting feedback from students**

The new online version of the course was beta tested in the winter 2014 term with 26 students; a companion section of the traditional face-to-face version of the course was also offered in the winter 2014 term. Drexel University routinely collects course evaluation data from students at the end of each term. In addition, the instructor for the online version collected feedback from students both before and after final grades were posted. Feedback from all evaluation sources was positive. One online student wrote, "Instead of this class being an elective it should really be required. Everyone in this major should not only learn how the modern book has come about but how the consumption of knowledge has changed."

Feedback specifically on the effectiveness of the online environment to teach history of the book was also positive. An online survey was sent to 25 out of 26 of the students in the winter 2014 online section of the course (one student's email bounced back). Twelve of the 25 students contacted (48%) responded. Below is a summary of questions and responses:

1. The online environment is an effective way to teach History of the book
  - a. Strongly agree 7/12
  - b. Agree 5/12
2. I would not/could not have taken this course unless it was offered online
  - a. Strongly agree 10/12
  - b. Agree 1/12
  - c. Neutral 1/12
3. I would have preferred to take this course in a face-to-face environment
  - a. Strongly agree 0/12
  - b. Agree 1/12
  - c. Neutral 8/12
  - d. Disagree 1/12
  - e. Strongly disagree 2/12
4. Digital content (online resources) are a good substitute for face-to-face library visits
  - a. Strongly agree 6/12

- |          |      |
|----------|------|
| b. Agree | 6/12 |
|----------|------|
5. Digital content (online resources) provide access to collections that I would not be able to visit easily
- |                   |       |
|-------------------|-------|
| a. Strongly agree | 12/12 |
|-------------------|-------|

Students responding to the survey were unanimous in feeling that digital content provides access to otherwise hard to visit collections. This access is a valuable contribution of the online environment. While the same access to digital content is available to students in the face-to-face version of the course, fewer take advantage of the resources available.

## 4.2 Instructor perspectives on course effectiveness

In general, students in the online course were positive about the experience. Several commented that the immediacy of face-to-face interactions has value that an online course cannot offer, and that in-class discussion would always be superior to the online discussion board format, but (as one student put it), “that cannot always be helped.” Interestingly, lack of access to the physical artifacts was not mentioned in any of the student feedback regarding “what I missed most about taking this course online.” This evidence suggests that the use of digital content can be made very attractive to students not only in history of the book courses but also in similar courses for which field trips have been used.

## 5 CONCLUSIONS

Both the face-to-face and newly created online course have an emphasis on digital representations of knowledge and the tools that created them. Both the online and face-to-face version also utilize video, audio, and other asynchronous forms of learning which in some ways emulate the very historical changes discussed in class. Somewhat ironically, the online environment may be an even more fruitful way to explore new developments in the history of knowledge, since in the more traditional format of a history of the book course, the discussion of digital knowledge can seem ancillary, and often is relegated to one session at the very end of the course. The ability to make a more abstract argument about knowledge and how it has been represented and disseminated throughout time, often in multiple formats simultaneously, can be difficult when you are focusing on physical “books” laid out in front of the class. Online formats, where one can view images of old manuscripts, scrolls, and books along with webpages and databases can help to make that abstract argument more concrete. So, in a rather roundabout way, online pedagogical formats actually help reflect the way researchers wish to discuss information history. Toni Weller argued that “information should be defined and understood in relation to the historical context ... what matters is not what information *is* but *how* society perceives it and how and why this can change over time.”<sup>6</sup> By discussing these very changes in an online environment and by showing both historical and modern knowledge representations side by side, such contexts can become even more apparent and more explainable pedagogically. So utilizing digital representation may help us teach the history of the book and other courses in areas such as museum studies, art history, archeology in which face-to-face classes have traditionally involved field trips and visits to view physical artifacts.

## REFERENCES

- [1] Darnton, Robert. “What Is the History of Books?,” in *The Kiss of the Lamourette: Reflections on Cultural History*, ed. Robert Darnton. (New York: Norton, 1990), 107.
- [2] Greenspan, Ezra and Jonathan Rose. “An Introduction to Book History.” *Book History* 1 (1998): ix.
- [3] Weller, Toni. *Information History – An Introduction: Exploring an Emergent Field*. (Oxford: Chandos Publishing, 2008), 4.
- [4] Stam, Deirdre. “Preparing Library School Graduate Students for Rare Book and Special Collections Jobs: Assignments and Exercises that Work,” in *Teaching Bibliography, Textual Criticism, and Book History*, ed. Ann R. Hawkins. (London: Pickering & Chatto, 2006), 72-73.

- [5] Delfino, Erik. "Book History and Librarian Education in the Twenty-first century," in *Teaching Bibliography, Textual Criticism, and Book History*, ed. Ann R. Hawkins. (London: Pickering & Chatto, 2006), 81.
- [6] Weller, Toni. *Information History*, 17.