



## **Out of the Ivory Tower Endlessly Rocking: Collaborating across Disciplines and Professions to Promote Student Learning in the Digital Archive**

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Out of the cradle endlessly rocking,  
Out of the mocking-bird's throat, the musical shuttle,  
Out of the Ninth-month midnight,  
Over the sterile sands and fields beyond, where the child leaving his bed  
wander'd alone, bareheaded, barefoot  
—Walt Whitman, “Out of the Cradle Endlessly Rocking”

The ivory tower has long been a trope deployed by critics to categorize academia as a self-isolating space populated by absentminded professors whose scholarly contributions are disconnected from the life of the surrounding community. The production of scholarship has been perceived as an individual act targeting a specific, specialized audience — a move Jerome McGann (2001: 1416) refers to as “educational microprocessing.” Digital technologies, however, offer us the opportunity to change this perception, proposing instead a vision of the scholar as part of an engaged community of learners occupying the nexus between the preservation of archival texts and the production of knowledge about those texts. By reaching across disciplinary lines to forge knowledge partnerships with special collections librarians, admin-

istrators, digital librarians, technology professionals, and a cadre of interdisciplinary faculty, we can improve and enhance the opportunities for student learning in the digital age while simultaneously articulating the importance of the skills and tools that the scholar brings to the classroom and that the students' experiences in the classroom extend to the community.

Though long advocated for use in the composition classroom,<sup>1</sup> this collaborative approach, drawing on technology and the richness of primary resources, presents a paradigm shift from the lone scholar model and offers rich fruit for students engaged in literary studies. As a fellow in the Council on Library and Information Resources' (CLIR) project to produce "new information professionals" who engage with digital and archival issues in innovative ways, I experienced the production of scholarship in which multiple constituencies have a stake, gaining a different perspective on the academy and engaging students with these questions; I have also been able to reexamine my role as a productive member of a university and the larger academic community, to consider issues like preservation, access, management of information, and the sustainability of resources, and to reimagine the possibilities of a classroom community enriched by digital assets. Bringing my classroom experience to bear on this endeavor, I collaborated with these different groups to build an archive at Lehigh University for improved research, teaching, and learning. This collaboration demonstrates how classroom learning can be informed and enriched by different university knowledge holders.<sup>2</sup>

In seeking to develop what Randy Bass, Teresa Derrickson, Bret Eynon, and Mark Sample (1998: 57) identify as "authentic, participatory pedagogies," I forged collaborative partnerships across disciplinary and professional lines. Collaboration with librarians proved particularly useful and vital; with the advent of electronic journals, the need for rich metadata,<sup>3</sup> and the possibilities of electronic delivery of print materials, librarians are critically aware of the changes in the way information is processed and preserved—after all, their disciplinary memory acknowledges that the book itself is a comparatively new technology in the history of the world. Through collaborations with these information professionals, we can use our disciplinary perspectives to think on a larger scale about the methodologies and tools that will be useful to our students both in their careers and in the development of their power to assess information, create connections, and participate in critical dialogues.

The goal of this article, then, is to provide a perspective on the production and utility of digital archives to enrich student learning. I will chron-

icle my involvement with the I Remain: A Digital Archive of Letters, Manuscripts, and Ephemera ([digital.lib.lehigh.edu/remain](http://digital.lib.lehigh.edu/remain)) digital project, from its inception to collaborations with librarians and information technology professionals on material selection, scope, and site design, to the promotion and “opening” of the archive, to collaboration with other humanities faculty on the incorporation and implementation of the archive for use in a course on early American studies. In this course we saw that technology enables students to find new meanings in old texts; offers a model of scholarly intervention in ongoing critical discussions; engages students of different learning styles by reinvigorating the writing and research process; and causes them ultimately to question how history is represented, framed, and processed in the present moment. Though our project was narrowly focused on six particular items in the archive, a broader approach would allow students to use the robust searching tools developed to support the archive; these tools allow users to browse across the diverse body of life writing in the archive (letters, journals, manuscripts, and ephemera) and to discover connections and relationships among these items that would not be possible or probable in an examination of the print analogues of these letters in the space of a semester course.<sup>4</sup>

Modeling the collaborative approach we used to create the archive, students in the early American studies course worked in groups to create historical and social frameworks for letters in the archive written by John Adams, Benjamin Franklin, Thomas Jefferson, John Jay, and George Washington. Within the Blackboard (Bb) Teams environment, students created interlinked Web pages and established a discursive community of their own based on the distance-learning model; rather than face-to-face meetings, the course members met only in the CENTRA digital environment. Students collaborated on their group’s letter through the use of discussion boards, e-mail, and the Bb Teams comment feature. Each group worked closely with a librarian guide to identify digital and paper sources to support the contexts they were building for their letter.

Student work both informed and was informed by the archive; students were alerted to the possibility that the most rigorous work would be migrated and incorporated into the archive itself to offer a research trail to other scholars, as well as to preserve a record of this digital experiment for future pedagogical purposes. In this way, students were encouraged to view their work as a public act, a contribution with real stakes for historical figures and archival objects beyond the end-of-semester grade. Through the crafting of Web pages anchored around the digital JPEG of their chosen

letter, students effectively deformed their relationship to the past and placed it definitively within their own context, their own created workshop for exploration and dissection. At times unwittingly, students engaged in sophisticated historiography, asking questions about the nature of representation of the past, establishing authority in relation to a historical object, and considering issues of audience, especially how to contextualize this material for future users. The movement of the raw digital object from the archive to students' own created environments is more than a matter of geography; it allows instead a hermeneutic ownership of the material as students consider how best to present, contextualize, and link their letter to ongoing scholarly conversations about the early American republic. Student work was then transferred back to the archive to underscore for them that in their exchange with the archive, their work had utility and sustainability. Now when searchers encounter one of these six letters in the archive, they also see a link to the students' coursework on the letter with a preface explaining the course and the assignment. The archive also has a separate point of entry, a "contributions" tab for those interested in searching through the pedagogical contributions as a body.

In addition, working online met practical considerations. Students use digital sources already, such as online journals and specialized databases like the *Early English Books Online* or the *New York Times Historical Archive* (see Hanlon 2005). Rather than transfer this digital experience back to a traditional paper format, they would practice writing digitally by creating Web pages to prepare them for a world in which they will be asked to present arguments using visual media. As the students' anonymous survey responses demonstrate, their level of interest and engagement was increased through the use of digital tools.

Using digital archives also accommodates students' multiple learning styles and work schedules. It appeals to a wider variety of student skill sets, encouraging us as educators to acknowledge the value of different talents and abilities; setting a value on these abilities models the collaboration among librarians, humanities scholars, and information technology professionals who built the archive in the first place. While the budding student scholar will be engaged in both the paper and the digital environments, the larger contingent of students who will not pursue futures in academia require projects that go the extra mile to engage their interests, minds, and fingers. We can continue to stick to well-tested methodologies like the research paper and the final exam, but we run the risk of losing these students whom we may otherwise engage and draw into the conversation by appealing to their inter-

est in technology and their adeptness in presenting and working with images. Students have honed these skills for social purposes — to communicate with their friends over IM, to present themselves to the public (in the blogosphere or on the Web at sites like MySpace or Facebook), or to polish their own digital pictures. Why shouldn't these communication strategies be juxtaposed with eighteenth-century approaches to discourse and social connection? It is a short step from engaging their minds and fingers to inspiring their curiosity and interest. In the process we can draw their attention to larger questions in addition to mechanics or aesthetics; if there's a chance of reaching students through an appeal to their divergent skill sets, it is worth the commitment of our time and energy. The long-term stakes of constructivist projects that encourage students to engage, shape, and participate in a digital archive ultimately place these citizens in a more direct relation to participatory democracy; they gain both the agency and the subjectivity to rethink history and their own relationship to it. In effect they are rehearsing the very issues the letter writers are addressing while simultaneously making a Foucauldian move to question the disciplinary power relations that structure knowledge.

Incorporation of digital archives in traditional classroom settings also encourages faculty not only to collaborate as discussed above, but also to innovate and reinvest themselves in their craft. As the former president of Lehigh University, Greg Farrington, has observed, at the start of the fall term, everyone arrives back on campus to hear about the new buildings, facilities, wireless connectivity, and parking garages; despite these changes in the structure and function of the campus, are we still doing the same things in our classrooms as we have in previous years? Or are we constantly innovating in our approaches, rigorously interrogating our methodologies, keeping our own skills sharp and fresh, reexamining course texts from alternative perspectives, and evolving to adapt to new opportunities such as those offered by technology and interdisciplinary and interprofessional collaborations? If we are, we avoid intellectual and pedagogical fatigue and burnout by being continually engaged and challenged.

The growth of rich online archives like Ed Ayers's Valley of the Shadow ([valley.vcdh.virginia.edu/cwhome.html](http://valley.vcdh.virginia.edu/cwhome.html)) as well as the other Institute for Advanced Technology in the Humanities (IATH) projects at the University of Virginia ([www.iath.virginia.edu](http://www.iath.virginia.edu)) presents scholar-teachers with the opportunity to fulfill Janet Murray's vision of a hacker-bard hybrid figure that will use humanities skills to negotiate digital technology. Though acknowledging the anxieties surrounding new technologies that threaten established practices of reading and knowing, scholar-teachers can expand Murray's

hacker-bard model to explore new possibilities for using digital technology in the teaching of literature.

Engagement with these issues also enables faculty to remain aware of current trends, issues, and debates affecting the larger university community. Current digital projects promise democratized access to a range of primary source material: to the chagrin or delight of members of the academic community, Google is actively scanning books in warehouses, and projects like the Library of Congress's American Memory ([memory.loc.gov/ammem](http://memory.loc.gov/ammem)), Cornell/Michigan's Making of America ([www.hti.umich.edu/m/moagr](http://www.hti.umich.edu/m/moagr)), and the British Library's Online Newspaper Archive ([www.uk.olivesoftware.com](http://www.uk.olivesoftware.com)) are throwing open the doors of the archives to the world. Freely available, these resources can enhance the learning experience of students by enabling them to "handle" the materials traditionally available only to scholars with the proper credentials and the funds to travel to sometimes distant archives. Our digital archive provides democratized access to fragile and rare texts that will not bear too much handling. Working with these primary sources provides students with a more nuanced experience of the past as well as the thrill of experiencing resuscitated material in a reproduction of its original context, rather than seeing primary documents reset, presented in an orderly typeface, dehydrated, and placed in their anthologies. Through this intimate experience with ordering history, students see how the past is profoundly present; their framing of the letters bears traces of this present for future study.

The counterargument to this approach is that students could each be provided with a high-quality color photocopy of the letter to serve the same purpose. While this would accommodate student schedules and work habits, the digital version of the letter provides additional benefits its paper incarnation does not. Not only is using digital archives as course texts scalable for the growing distance-learning community, but the digital environment presents tools that allow students to "handle" fragile items; the "zoom" and "stretch" features enable students to closely examine cross-outs, notes, emendations, or marginalia, empowering them to study the digital incarnation of these letters with more accuracy and confidence than they can with the print analogues. As a learning object, the digital image of the letter offers students the opportunity to crop out sections and reproduce them within their essays to support their points about the writer or the topic; when viewing a range of letters by a single author, students can present visual samples of different letters to contrast the writer's haste, care, or revision, discussing the relationship of the writing to the topic of the letter. This not only provides students with the opportunity to manipulate the quality of visual images (a skill increasingly in

demand in our digital age), but it continually pushes them back to the text, encouraging thoughtful close readings. In addition to using interface tools to examine the writer's penmanship, stylistic flourishes, cross-outs, and marginalia, students can also consider later additions to the letter such as sellers' or researchers' notes, which add another layer to the life of the text and invite discussion about the function and utility of the archive.

With digital tools, students can discover new meaning in old letters; for example, the archive contains a wonderful "crossed" letter written by Robert E. Lee's aunt to his wife ([digital.lib.lehigh.edu/remain/03334](http://digital.lib.lehigh.edu/remain/03334)). The letter presents a delightful instance in which new tools can help us decipher a letter that is otherwise unreadable (how Mrs. Lee read it is certainly a question!). The archive contains a link to the stretched and doctored version of the letter as well as a partial transcript of its text. Another instance in which students can bring technologies to bear on the archive is in the study of the cross-outs and changes in manuscripts like Wilkie Collins's "Fatal Fortune" ([digital.lib.lehigh.edu/remain/0114](http://digital.lib.lehigh.edu/remain/0114)); by zooming in and adjusting the color contrast, students can track Collins's changes and then compare the manuscript with the published version, discussing the effects of these alterations. The manuscript also offers an excellent visual example of Collins's active writing process with its emphasis on revision, a valuable model to put before student writers.

To deliver these resources to students digitally, specialists are needed at every stage of the process. By their very nature, these projects require a phenomenal amount of labor for materials location and selection and then for scanning, processing, digitizing, managing the information to produce searchable metadata, and designing an interface that is accessible and information rich. Engaged in such a project, one must always consider the project's value for the student community of learners and advocate ways in which the project can enhance their educational experience.

Our project offers a model for how special collections material can be used in classroom communities of practice; demonstrates how digital initiatives can connect productively to teaching, research, and learning; and surmises that techno-pedagogy offers students the opportunity to conceptualize their writing as a public act. I offer this survey of the cultural and academic landscape upon which we began to construct our archive to demonstrate how the project was informed by our concerns that it should be useful to both scholars and students; in short, the archive should not only provide access to primary source materials, but it also had to be useful in the classroom to foster student engagement by presenting these learners with the opportunity to make lasting contributions to the life of the archive.



### **Building and Framing a Searchable and Sustainable Archive**

As a CLIR fellow newly arrived at Lehigh University in the summer of 2004, I was eager to collaborate on digitizing special collections material to make it more accessible for teaching and scholarship. Phil Metzger, curator of special collections, suggested that I delve into the largely uncataloged autographed letters collection. The collection was a treasure trove of over seven hundred letters, manuscripts, and ephemera spanning five centuries and over four hundred writers: seventeenth-century scientists and philosophers, eighteenth-century American revolutionaries, nineteenth-century writers and artists in Europe and the United States, as well as twentieth-century Cold War correspondence and correspondence from all the presidents through Richard Nixon. The manuscripts included drafts by American writers like Walt Whitman and Ralph Waldo Emerson as well as British writers like Wilkie Collins. Among the ephemera were fascinating items like a scrapbook compiled in 1865 when Abraham Lincoln was assassinated, an old ship's logbook with doggerel poetry in the margins, and a journal from the French and Indian wars. The collection represented a range of life—from ordinary citizens to presidents, literary luminaries, movie stars, soldiers, and politicians.

In short, “archive fever” ensued;<sup>5</sup> having been a sufferer before, working at the British Library and the University of Florida's Baldwin Collection ([www.uflib.ufl.edu/spec/baldwin/baldwin.html](http://www.uflib.ufl.edu/spec/baldwin/baldwin.html)), I recognized the symptoms. With rapid heartbeat and bleary eyes, I typed up my copious, cramped pencil notes to share with the Digital Library Team (DLT), ably overseen by Julia Maserjian. The DLT was interested in the possibility of making this material more accessible, and we began discussing an organizational scheme for the interface. Christine Roysdon, the director of library collections and systems, suggested a series of topic clusters to facilitate browsing. Here the digital project became a site of active collaboration, drawing on the disciplinary skills of traditional librarianship as well as humanities scholarship; we envisioned that student-users would have the option to search directly for letters by date or author utilizing the Library of Congress's subject headings, or to browse through category clusters to find letters on particular topics or themes that interested them.

To promote searching, I designated and described a series of themed clusters including “The Working Writer,” “Honor,” “War and Politics,” and “Writing through the Centuries.” These search features enable users to identify common themes across a body of diverse texts. They can then use the advanced search feature to narrow their search by searching particular centuries, languages, or authors. Within the clusters, users can draw connections



between the development of social and political networks of patronage and referral in the eighteenth and nineteenth centuries in the “War and Politics” cluster; in the “Working Writer” cluster, students can assess the experience of a working writer in an age of handwritten manuscripts and speculate on how technology has changed the process and the product of composition.

The DLT supported the project with the full weight of its excellent resources, personnel, and expertise. The cataloging of the collection was a cooperative effort by librarians from special collections (Phil Metzger and Ilhan Citak), humanities (Kathe Morrow), and software/systems (Rob Weidman). Together we created rich, searchable metadata for the collection using CONTENTdm software; this program associates the digital image with a number of searchable fields designated by the creator. With an eye on how scholars and students would be using the collection, we developed a list of fields including author name, material type, sender, recipient, Library of Congress subject headings, dates, abstracts, etc. By including all this rich information beneath the digital letter, users could search the collection for keywords or terms like *communism* or *Revolutionary War*. If these terms appear anywhere in the abstract or subject heading fields, the letter will appear as a “hit” for the search query. Since we had provided brief descriptions of both the author’s biography and the content of the letter, even cursory searches produced interesting results and relationships among different letters that would not be immediately apparent.

With our different perspectives and knowledge bases, Rob Weidman and I brought our separate strengths to the project: Weidman’s cataloging background and software expertise enabled him to establish a framework in which to contain the fields; my classroom experience and familiarity with the breadth of the collection helped me to anticipate how these letters could be used by students and scholars. Once we began the process of entering metadata, one of the team members suggested including the recipient of the letter as a searchable field to establish patterns of correspondence among the letters; everyone’s input resulted in a long list of searchable fields.

All 723 letters were uploaded as of June 2005. In a future phase of the project, the CONTENTdm records for the letters will be converted to MARC format (Machine-Readable Cataloging format) and uploaded to Lehigh University’s local library catalog as well as to WorldCAT. This will allow users of our local online SIRSI catalog as well as WorldCAT’s worldwide subscribers to search and access these titles. Currently, these letters are already available on the open Web for the worldwide community of learners. Classroom use of these letters can foster an active learning experience, meeting what Arthur

Levine (2003: 38) identifies as the essential functions of university education: “creation, preservation, transmission, and application of knowledge.” In its digital incarnation, the archive offers scholars the opportunity to study the evolution of communication, examine material culture and ephemeral objects, and gain insight into the way communities of scholars, scientists, and writers shaped their ideas and shared their thoughts.

We had achieved our initial goal: to offer access to these valuable and interesting materials. We had collaborated on the library and technology side in order to establish standards for metadata entry, to design a usable interface, and to render the collection searchable. The next step was to partner with faculty to pilot the use of this collection in the classroom, fostering exchanges among instructor, screen, and student; our goal was not only to provide access but to enable new student engagements and interactions with these texts. To suggest uses for the collection, I designed sample syllabi and assignments with preidentified sets of letters, emphasizing how the research component would enable students to hone their information literacy skills as well as providing them the opportunity to engage in group work in a digital environment. As research has shown, this approach is in keeping with the shift in student learning styles:

Today’s students expect, indeed demand, interaction. They approach learning as a “plug-and-play” experience; they are unaccustomed and unwilling to learn sequentially — to read the manual — and, instead, are inclined to plunge in and learn through participation and experimentation. Although this type of learning is quite different from the sequential, pyramidal approach of the traditional college curriculum, it may be more effective for this generation, particularly when provided through a media-rich environment. (Duderstadt and Womack 2003: 63)

A constructivist approach provides students with the plug-and-play experience that Duderstadt and Womack advocate. Undergraduates here experienced the liberatory process of “doing” history usually available only to graduate students with advanced subject expertise; though the undergraduates did not have this expertise, they nonetheless were able to ask sophisticated questions and grapple with complex matters of representation, context, and analysis by using the expertise they did possess — digital know-how, media savvy, and the ability to process and present information. This dismantles the “pyramidal” approach to knowledge making referred to above; students approach the assignment not only as neophytes, but as knowledge holders in their own rights.

I suggested that working with the letters would be a constructivist learning experience for students; learner-doers would synthesize archival material and digital technology, engaging in active, hands-on learning. Students would approach these old texts with new tools: using the online archive in cooperation with their digital course management system, they would be “discovering and representing relationships among knowledge objects” (Bass et al. 1998: 57). Students’ contextual work could then become part of the larger archive that told the story of the primary documents.

### **The Archive in Ed Gallagher’s Early American Course**

From the point-of-view of history and culture faculty, the rapid growth of digital archives is among the most valuable trends in the development of the World Wide Web over the past seven years. Primary documents or primary sources—letters, diaries, period newspapers, court records, photographs, military records, oral history interviews, and so on—are vital to the study of history and culture.

—Randy Bass, Teresa Derrickson, Bret Eynon, and Mark Sample

The *importance* of the archive as a means to preserve shared history and cultural experience is well documented; yet the *vitality* of the archive is in its usefulness and usability for communities of learners. An archive should be a forum where the past and the present not only meet but engage and interact. As Bass et al. note above, the growth of digital archives is indeed “among the most valuable trends” in that this growth reveals increasing opportunities to meet the past and to engage with it through innovative, constructive classroom assignments.

Yet neither the existence nor the utility of the archive would make itself apparent on its own; the collection requires marketing and advocates who will raise interest in, and awareness of, its possibilities. As a fellow working with Library and Technology Services daily, I was uniquely situated to appreciate the mutual benefits LTS and humanities faculty could offer one another, and I began working to develop alliances and foster collaborations. The letters themselves tend to dictate the type of engagement— independent study, small seminar, group work, or faculty grant research. With this in mind, I began searching for partners who might be interested in implementing a pilot project using the letters in a course assignment. The Digital Projects coordinator Maserjian and I met with faculty in the modern languages department to discuss having students work on translations of the non-English-language letters; the students would benefit by connecting with real-world materials and assisting us in building useful metadata for the letter.

We also met with English faculty to discuss how the letters could be used in a senior seminar, as a capstone experience for majors.

Administrators at Lehigh University had created a climate in which these connections could be made across disciplinary and professional lines and in which collaboration was not only possible but inevitable. Since the success of any digital endeavor is contingent upon institutional support, we were fortunate beneficiaries of the university's commitment to fostering an environment in which such collaborations and experimentations are welcomed and encouraged. Beneath the umbrella of Library and Technology Services ([www.lehigh.edu/lts](http://www.lehigh.edu/lts)), the skills of technology professionals, librarians, and faculty are integrated through faculty development programs, the Lehigh Lab, and the Digital Library. The Digital Library at Lehigh is well supported, with the digital library project and technical coordinators integrated into Library Collections and Systems. This answers Michael McRobbie's (2003) assertion that "building the digital library must be a central, core part of the library's future with base-budget funding and of equal—or perhaps even more than equal—standing with the library's more traditional mission and activities."

This integrated institutional framework enabled the DLT to locate faculty partners to collaborate on the I Remain project. After hearing Maserjian and me speak about the collection at a faculty development workshop, Ed Gallagher generously sought our collaboration in designing an assignment for his Early American course that would incorporate letters by John Adams, Benjamin Franklin, Thomas Jefferson, John Jay, and George Washington. The assignment would be the culminating research experience for the course, which sought to increase students' engagement with technology as well as primary documents.

A Lehigh Lab Fellow and a distinguished and experienced professor from the English department who had already been engaged in mapping the territory of digital pedagogy, Gallagher was the ideal partner for this project. He is an innovative and engaging teacher with an impressive commitment to enhancing the learning experience of his students through the use of technology (for more on his pedagogy, see Gallagher 2004). His track record in the English department includes *Reel American History*, a course in which students interrogate the film industry's interpretation of American historical events and personages; *Virtual Americana*, a course whose "text" includes segments of the vast Library of Congress American Memory Project; and his early American course, which used a distance-learning model for on-campus students. In this class, Gallagher met the students virtually once a week in an

online synchronous CENTRA environment; during the week he recorded “radio addresses” to respond to students’ posts, to prompt them on due dates, and to reflect on the class readings. These addresses were located in CENTRA and students then accessed them according to their own schedules. In his description of the course to students, Gallagher (2005) notes that there are “revolutionary things happening via the new technologies that have the potential to radically change the nature of education.” He invites students to explore and to test those technologies.

The I Remain assignment in his early American course followed a unit in which students studied eighteenth-century paintings and wrote essays online alongside detailed images from these visual texts. The letters assignment would similarly call for students to examine primary documents and to analyze them within the larger historical context. The goals of the assignment were to take an “old texts/new tools” approach to

- show the continuing relevance of primary source documents
- provide greater access to special collections archival material
- offer the opportunity for undergraduate students to “do” history and to reshape, reframe, and rethink the representation of history in a digital and contemporary context
- enable students to frame old letters in a digital environment<sup>6</sup>
- use course management collaborative technology (the nonsynchronous Blackboard Teams feature and the synchronous CENTRA virtual classroom environment) tools to foster team building and peer learning
- partner with librarians to extend and engage students’ knowledge of research practices.

The project unit would extend over two weeks, including two meetings online in CENTRA. In one of these sessions, the class was joined by librarian guides who met with an assigned group in a small breakout session online to discuss the best way to research and contextualize each group’s letter; the librarian then guided the students into the vast paper and electronic resources available on the letter writers. To keep the class on task during this period, Gallagher and I collaborated on five “radio addresses” to note progress, trends, and due dates across the different groups. After the semester ended, we held a wrap-up meeting with everyone involved to assess the success of the project.

To begin, Gallagher sorted students into groups while the DLT uploaded copies of the letters to the Blackboard Teams sites created within the class’s Blackboard environment;<sup>7</sup> using this area as a staging ground,

students would research their letters and together produce contextual frames that would ultimately be incorporated into the archive. We created a home page for each team featuring an image of the letter from the archive and bulleted assignment tasks. Each task was linked to a blank page where students would complete their work. Team members had editing rights to all pages in their team space; they would be able to edit and polish one another's work. The Blackboard Teams site also offered an "undo" feature so that we could revert to an earlier version of the page in case students mistakenly erased any of their content (this came in handy when one group inadvertently erased their home page—twice).

The assignment included five tasks that would require students to hone their reading, evaluation, research, and synthesis skills:

1) *Complete a transcription of the letter.*

The first step was to have students transcribe the letter; in rendering the swirling eighteenth-century handwriting into a readable text, students began to take ownership of their letters by internalizing and then reproducing the content. We asked them especially to note curious abbreviations, spellings, forms of address, or words that remained unreadable.

2) *Identify the "hooks" in the letter.*

"Hooks" are significant people, events, dates, or places; we asked students to review their transcriptions online and to identify which words readers would want to click on to get an explanation. Choosing hooks helped to establish the grounds for formulating research questions, and it offered a teachable moment in which to address issues of writing for an audience as well as conceptualizing how to position material in a hypertext environment.

3) *Formulate research questions.*

Using the hooks as a starting point, students considered what further information readers would need to know about particular names, places, events, people, or dates to understand the letter. After reviewing their hooks, students employed a journalistic model (How did . . . ; Who was . . . ; Why did . . . ; If . . . then . . . ; What was . . . ; Where did . . . ) to brainstorm and build a list of questions about the letter and about the era in which it was written. Student groups then partnered with librarians who reviewed the research questions and suggested library and Internet resources as good starting places for research. The librarians then met with the small groups in the next class session to review the results of their research, to discuss any challenges or problems that arose, and to suggest alternative search strategies or additional resources.

4) *Establish context for the letter.*

Utilizing the results of their research, students were next asked to build a context around the letter. We offered them four possible contexts: social, biographical, literary, and scholarly. Using their research questions and library resources as a starting ground, students developed rich historical frameworks for their letters, identifying how the letter's content challenged or supported the way the writer had traditionally been historicized.

Working online with a digital archive also promotes the idea to students that they are making interventions in an ongoing scholarly conversation; by making their work public (even if only to their peers), students participate in this critical dialogue. An emphasis on this point helps them to take their work more seriously and to increase their engagement. Building a digital context for the letter enabled students to experiment with "framing" a historical object. They were also able to participate in scholarly conversations about the letter and the colonial world; by linking their contentions to other digital collections on the open Web, students saw how scholarly networks of reference and referral enrich an argument; this models and enacts the activities students engage in when writing research papers. Students were also able to recognize one another's contributions and to collaborate actively with one another by interlinking their individual arguments to other group members' topics and ideas. In their transcriptions of the letters, some students linked the names or significant places in the letters to explanations in one another's writing.

5) *Write a process narrative reflecting on this research experience.*

At each stage of the experience, students were prompted to respond to the process of "doing" history: reading, researching, and contextualizing their letter. Responses to these prompts comprised a process narrative addressing the choices the group and the individual researcher had made in transcribing the letter, identifying hooks, formulating research questions, and establishing a context for the letter. The process narrative helped to identify, for both the students and the project team, the specific challenges of working with special collections material, collaborating in a digital environment, and constructing a historical context. This exercise aimed to strengthen students' awareness of their own research methodologies and to target "the major goals of education, such as the need to expand students' horizons, expose students to the basic concepts in a field, foster an appreciation for research, and enhance analytical skills" (Tomlinson-Keasey 2002: 148). Students could begin to examine the historiographic implications of how the past is written, processed, and ultimately made meaningful to address the concerns, crises, and issues of the present moment. Students came to know the representation of history as a live



inquiry that engages the past through the filter of the present. Through their self-reflexive writing about their own research experiences with the letters, the students themselves would be constructing primary resources for future scholars, examples of how twenty-first-century pedagogy began its nascent experiences with digital learning. The students' research would become part of the I Remain archive as well, and their process narrative would leave a trail for future historians to follow; in effect, they too would remain alongside the writers of their letters. This offers a possibility as well for thinking about the role of the institutional repository as a self-archiving function of the university (see also Lynch 2003).

### **Assessing How the Project Met Our Goals**

At our wrap-up meeting a few months later, everyone involved in the project met to evaluate the students' survey responses and to discuss how well the assignment had met our goals. Our findings included analysis of the research component, the structure of the assignment, and the writing and collaboration process.

#### *Research*

Through observation and the student responses, we discovered that there is still magic in the archive. Students called the content "extremely interesting" and "fascinating," and one even rhapsodized, "I really got the almost Indiana Jones sense that we were reading documents that had not been read by many before. Although this probably isn't exactly true I did feel kind of like blowing dust off of the Franklin letter when I was transcribing it. Maybe this is a little Hollywood but who cares!" This positive approbation affirms Bass et al.'s (1998: 44) contention:

Primary documents help give students a sense of the reality and the complexity of the past; they represent an opportunity to go beyond the predigested, seamless quality of most textbooks to engage with real people and real problems. The fragmentary and contradictory nature of primary sources can be challenging and frustrating, but also intriguing and ultimately rewarding, helping students understand the problematic nature of evidence and the constructed quality of historical and social interpretations.

We saw this happen in every group; as students became engaged more deeply in their research, their interest level in their letter rose, and the experience evolved from challenging to rewarding. One student observed that initially the content of the letter appeared unexciting, but as he or she delved deeply,

“there’s just so much hidden underneath that seemingly insignificant correspondence” and “once we found our hooks and formed questions we were able to find a lot of relevant information that made it worthwhile.” In both these survey responses and the process narratives, students disclosed initial intimidation and ennui; however, the process of research rendered the letters quite rich and engaging both in terms of material and in the students’ self-image of themselves as scholar-adventurers blowing dust off documents that could contain mysteries, answers, or maps of the past.

Those involved in the project had the same experience of finding more significance to the letters than was initially apparent. The librarians and faculty learned about the letters and the process of contextualizing them right alongside the students. The Washington group’s librarian, Christine Roysdon, located additional correspondence to bookend our particular letter; she urged students to consider the model of leadership that Washington was seeking to cultivate by ordering specific books in his letter. Students in turn praised the involvement of the librarians and benefited from their collaboration with faculty: “[The project] was a great deal of work, but terribly interesting with all the aid that the librarians offered. It allowed me to sink my teeth into some actual books at the library.” Another student noted that “the librarian was extremely helpful. It was nice to have practice doing research.” The input of the librarians in designing significant portions of the assignment and then participating in the practice of student research was invaluable both to the students and to Gallagher and me. This offers support for Hans Roes’s (2001) contention that “learning environments of the future will be designed by multi-disciplinary teams of experts,” each member bringing his or her specific and separate skills to bear on student learning.

In terms of the research process, we observed that students gravitate toward online sources, eschewing for the most part the print resources their librarian guides offered them; considering the online context of the course, this was unsurprising. During the research process, the librarian guides mentioned that it was difficult to gauge how much information the students should be given or to what extent they should be led along the research trail. We debated usefully over how much stumbling was productive.

Another issue we confronted in the research process was background information: how much do students need to know about the historical period, their chosen writer, and eighteenth-century correspondence styles before “meeting” their letter? In a future iteration of the course, we all agreed that students should have a class session introducing them to standard abbreviations and stylistic conventions in the early American republic. Humanities

librarian Kathe Morrow found some excellent online resources to support a class on this topic. We also discussed supplementing this with a historical overview and a discussion of the mechanics of the postal system: How long did a letter take to arrive? What was the process of delivery? How much did it cost the sender?

We also decided that it might be helpful to dedicate a class session to the problems of historical editorial work, attempting to gain a group consensus on when to use footnotes, how to make insertions in brackets, and when and where links to other online material should be used. Scholarly models of introductions and prefaces could be incorporated to show students examples of how scholars frame primary source documents. This apprentice model enables students to practice “the strategic knowledge and methods of expert learners, through . . . a process that begins with modeling, and moves through a scaffolded and sequenced process of student rehearsal and reflection, leading to the point where the learner takes on more and more of the expert tasks” (Bass et al. 1998). The students could study scholarly models to learn how to use critical resources in support of their own primary evidence as they begin to “do” history themselves.

#### *Structure of the Assignment*

While students confirmed that the pace of the assignment and the breakdown of tasks were well plotted, their survey responses and discussion among collaborators affirmed that the assignment was too involved and complex to place at the end of a long semester. Students would have benefited from having more time to delve into their letters; there was enough material in each letter to afford a semester-long project. Alternately, to keep the assignment within the time frame allotted, one of the librarian guides suggested that the assignment’s focus could be narrowed so that students could focus on producing robust transcriptions of their letters, heavily annotated, rather than attempting to produce a contextualization of the letter.

#### *Writing Process and Collaboration*

We began the assignment interested to see how the digital environment might affect students’ writing strategies, especially in terms of collaborative writing. Though traditional writing problems, such as lack of consistent citation and failure to proofread work for mechanical errors, carry over from the traditional classroom environment, the virtual classroom presents its own challenges. The librarian guides mentioned the difficulty of operating in the virtual environment without visual cues; in addition, the virtual environment

posed the challenge of keeping students on task and prompting them to meet deadlines without the constant reinforcement of regular face-to-face contact.<sup>8</sup> The assignment might work best in a traditional classroom, supplemented by visits to the library, and/or classroom online access to the library's databases and Internet resources.

In addition, contrary to our expectations, students seemed to experience shyness about revising each other's writing. They offered suggestions to one another using the Comments feature in Teams, and the librarians modeled the strategy of inserting remarks and questions into drafts using different color fonts, but the students were reluctant to move beyond offering suggestions to actually making changes to one another's prose, especially in the essay-length contexts. Thanks to a feature that enabled us to track changes, we discovered that only in the Franklin group did one member edit another writer's finished product. Despite this seeming reluctance to revise one another's finished drafts, the students themselves praised the Blackboard Teams as a tool for assisting with draft work: "I liked that we could add to or edit each others' work and jump in whenever we wanted to. It was a great way to share our contributions with each other and polish them instead of having to email or reply to each others' posts." In the Washington group, the members produced contexts with structural similarities: each context essay featured numbered anchor tags within the text that linked to endnotes at the bottom of the essay. This seems to indicate a group motivation to produce a cohesive product, which suggests that the group agreed to produce documents with a similar look and feel.

While students could have worked alone on individual letters, the interaction of a team allowed them to discover many more connections and contextual possibilities than solo work would have enabled. What Kip Strasma (2001: 272) has argued about the production of hypertext fiction in the classroom is adaptable for the project of students' investigations into the archives: "We need to collectively negotiate the meaning of the text through our different perspectives while determining patterns of interpretations." Through group work on a particular letter, students began to collectively construct the "story" of that text, confirming Strasma's stance that electronic texts are both actions *and* words, constituting a "rejuncture—a new perspective on the identity of textuality" (272). I would add that these texts afforded students both action and activity in that they provided both a field of inquiry and a means of interactive engagement.

To facilitate more collaboration, a future course using the letters might allow a more lengthy time period for completing the assignment, require stu-

dents to engage in more formal peer review of one another's drafts, and implement instant messaging (IM) to increase their ability to communicate quickly and effectively about editorial decisions. Future iterations of this assignment could also enable students to choose their letter and their groups, promoting their investment in the material and increasing the chance of group cohesion because the members would be pursuing similar interests.

Though we have identified ways to improve the implementation of the course in terms of timing, development, and contact, the project was a success in meeting its overall goals: familiarizing students with primary documents, encouraging them to take ownership of a research project, enabling them to frame their research in a digital environment, and what is ultimately difficult to quantify, inspiring in them the magic of discovery and the thrill of archival research. A student stated that his or her letter "offered a glimpse into the time period from a different angle. I enjoyed placing the letter in current scholarly context as well because it really allowed me to see the way that letters and other primary documents shape the way we respond to time periods as a whole." If every university student were to handle the original primary documents, their quality would soon degrade; the new technology, however, allows for preservation of the original and simultaneous "handling" of the digital object on demand. Our students handled these primary source materials and situated them within historical, social, political, and critical contexts.

The immediacy and the applicability of this work were not lost on the students. One asserted that "I enjoyed the archive project because we were actually doing work that could be looked at by others in the future and it made me feel like I was doing this assignment for a larger purpose than just for a grade." This answered the charge that Gallagher and I put to the students at the start of the assignment: we encouraged them to see their work as contributing to a larger scholarly dialogue. Their research trail, however imperfect or rude, would offer a map into comparatively unknown terrain, indicating possible dangers as well as areas for further exploration, a model in keeping with their early American course reading.

### **Coda**

Digital archives offer an opportunity for scholars to engage in cross-disciplinary, collaborative work with other knowledge partners; in the process scholars can assist librarians in the construction of these archives, assisting in the creation of contextualizing materials to frame and enrich the archive and to

point out its salient features for the end users: the student constituency with whose needs and abilities the scholar is intimately familiar through classroom experience. Through digital collaborations, scholars assist in the production of material ripe for classroom use, creating an opportunity to incorporate technology into the classroom to enhance pedagogical goals and to reach students with different learning styles.

Collaborating across disciplinary and professional lines fosters the development of integrated, healthy learning communities, strong “social ecosystems” interacting in a “mature and reflective recognition of intersecting nodes of interest, activity, and mission” (Martin 2003). In this way, learning truly becomes a constructivist partnership in which, as Alison Cook-Sather (2001: 124) proposes, “students and professors [are] co-constructing knowledge together. In this model, roles, responsibilities, and relationships are not so clearly delineated: instructors and students can be both teachers and learners.” The “pyramidal” approach to learning is dismantled and students are recognized as knowledge holders in their own right; they bring their digital expertise to bear on their investigation and representation of history. After my experience at Lehigh University, I would also add that the participation of librarians and technology professionals within an institutionally supportive framework can enhance and increase student and faculty learning, enabling them to teach one another and to create new knowledge using old texts, new tools, and present partnerships.

As this project demonstrates, active constructivist learning benefits both faculty and students by creating a more engaged atmosphere for learning; the “pay-off for students is an increase in information literacy and critical thinking skills, core competencies for knowledge workers” (Roes 2001). The I Remain digital project at Lehigh shows how collaboration can operate in professional, as well as pedagogical, practice. Like Whitman’s boy narrator, we can emerge from our digital cradles and seek actively to fulfill the prophecies and promises surrounding these new technologies. By evolving our own pedagogies and methodologies, we can demonstrate that the ivory tower is situated at such heights not so that its inhabitants may breathe rarefied air, but so that it can command a view of the surrounding landscape to glimpse and prepare for the coming changes.

## Notes

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1. Technology has been a growing presence in the composition classroom and in scholarship discussing the use of digital tools like blogs and MOOs to enhance the writing process; the study of nonlinear hypertext fiction by members of the creative writing community has also been well documented. The current movement in the digital evolution is the growing use of technology in the field of literary studies. In discussing Janet Murray's now-foundational *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (1997), Kevin Swafford (2002) cites Murray's vision: a hacker-bard hybrid figure who will mediate the traditional realms of printed scholarship with the opportunities of digital technology.
2. Lehigh University's Library and Technology Services (LTS) provided a great model; LTS is an integrated unit of services, meeting Duderstadt and Womack's (2003: 70) contention that "a technology strategy must be systemic, drawing together diverse applications such as instruction, research, libraries, museums, archives, academic computing, and university presses."
3. Metadata is the information attached to a digital object that enables users to access it from a number of different points: author's name, material type, publication date, and in our case we added topical metadata so that users could search for "Presidential Papers" or "Working Writers." Rich metadata "supplying context and interpretation [helps to] . . . truly develop synergy" (see Martin 2003).
4. While this project worked well for the goals of this particular class, which used a distance-learning model, it did not fully exploit the rich potential of the archive with its robust search features. In future assignments students can explore the search features of the archive to search across the body of texts and identify and investigate relationships between these items. For example, in the "Networking" cluster, students could review the letters of recommendation supplied by figures like Abraham Lincoln to endorse candidates' requests for military or government positions; a study of the methods employed by the writers could yield rich speculations about the power of social networks. Because of the rich metadata operating "underneath" the letters onscreen, students can search across the collection to develop arguments about how the letter writers coped with death, viewed the writing process, formed political alliances, or managed their social lives.
5. For a more detailed description of the pathology of this condition, see Jacques Derrida's *Archive Fever* (1995), in which he discusses the archive as institution as well as the scholar's personal investment in the archive; for more on the archive's



- connection to nationalist structures, see Benedict Anderson’s work on the museum, the map, and the census in *Imagined Communities* (1983).
6. For an example of classroom pedagogy invigorated by innovative online praxis to model early American print culture, see Ellis 2003.
  7. Blackboard Teams offers a WYSIWYG editor for quick-and-dirty Web page editing. It operates like a word processor, and students are able to incorporate images and hyperlinks.
  8. In his article “Digital Libraries and Education,” Roes cites the 1999 study of Noriko Hara and Rob Kling that found that students themselves experience frustrations with purely Web-based learning environments; the students “miss the direct feedback inherent to the class room situations where even the body language of the teacher gives important clues.” Though our project team, rather than our students, expressed this concern, it is an important consideration. The possibilities of online learning continue to develop; Theodore Humphrey (1999) contends in his article “Literature On-Line: The Best of All Possible Worlds?” that “the ability to extend the class conversation beyond the confines of time and place creates exciting possibilities for generating on-going communities of learning.” This may allow students to experience scholarly engagement while modeling the practice of an active life of the mind.

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