Introduction

As we entered a presentation room in the UCLA Library in June 2013, we passed library spaces overflowing with students feverishly studying and completing final papers. We were attending the end-of-term presentations for the class Ancient Near East 105: Archaeology of Egypt and Sudan, an undergraduate course taught by Professor Willeke Wendrich with which we both had been closely involved. In Spring 2013, the course was cross-listed as a qualifying elective for students pursuing a minor in digital humanities. We were excited to see the students’ final projects, but we did not anticipate that this finals session would be as rigorous as a professional conference panel, and we were completely unaware that we would be observing a vibrant celebration of learning, including students’ emotional displays of excitement and pride.
As we watched, we were thrilled at the level of engagement these students demonstrated, and we realized that we had contributed to a transformative learning experience. Something special had happened in this course. We knew instantly that we wanted to do more work like this, and we wanted to understand why this course had resonated so much with the students. Soon after, we learned that Wendrich planned to teach the course in the same way the following year—as a digital humanities elective and within the library. We deemed the course a success and began a more thorough analysis of which factors had contributed to that success. This chapter presents our findings from this analysis as a case study and concludes with suggestions for using this model in other environments. We also note the further development that we plan to undertake in the upcoming academic year.

What Makes For Success

Through our analysis, we identified two key elements that contributed to the course’s success. The first, most important factor was that the subject matter was the central concern of the course rather than digital methodology. The second factor was that the course was located in the library, both physically and intellectually. Several library staff members participated in different activities to teach specific skills, provide appropriate research materials, and support student work. The staff included a subject specialist in Middle Eastern Studies (Hirsch), a subject specialist in art and architec-

* We have not yet collected quantitative indicators of the course’s success, and our evaluation at this point is preliminary. Our future work will include developing instruments to allow for quantitative assessment.
† We presented preliminary findings on the role of instructional space for this course during a panel discussion at the Digital Library Forum 2013 in Austin, Texas (see Trevor Muñoz et al., “Past the First Bend in the Road: Reflections on the Development of Digital Scholarship Programs from Five Institutions” [panel presentation, DLF Forum, Austin, TX, November 4–6, 2013]). We are grateful to our co-panelists and to Trevor Muñoz, who moderated the session, for their observations and helpful cross-pollination.
‡ During an informational interview with Alex Gil of Columbia University Libraries following the first iteration of the course, he confirmed that he too had found that subject specialization was key to making digital humanities activities within the library successful.
tecture (Henri), a digital humanities librarian (Borovskiy), a digital librarian (McAulay), a programmer/analyst (Chiong), and student staff to assist with technology support. These two critical elements to success indicated that the library’s role in this course was much more than support or provision of technical assistance. Instead, subject librarians were critical partners in expanding this collaboration.

In this chapter, we present a methodology and a rationale for collaborating with faculty in digital humanities (DH) curriculum development and classroom instruction. We begin by presenting the details of the course, and then we discuss ways in which librarians and library staff are qualified for this type of engagement, no matter their DH experience level. In addition, we outline a wide range of methods for engagement with DH that can be pursued in many different settings. In conclusion, we present some suggestions of how to measure more effectively the impact of collaboration and how to scale this type of work to a larger number of courses.

**The Course and the Methodology**

The University of California, Los Angeles is a large, public research institution with 109 academic departments and 42,000 students. The UCLA Library is an academic research library, currently ranked eleventh among its peers. The library has a staff of circa three hundred working in several buildings. The Charles E. Young Research Library is one of the largest libraries on campus and houses collections and staff related to the humanities, arts, and social sciences. The Young Research Library was built in 1964 and underwent a significant renovation of its first floor and the floor below in 2009 and 2010. One key component of the renovation was a remodel of the first floor to include a conference center and a large space called the Research Commons. The Research Commons includes small-group study rooms, a laptop-lending office, a traditional classroom, and a large open area furnished with a variety of group work areas for digital collaboration. The group work areas all have digital displays that can connect to multiple laptops at a time, each with lounge or table seating arranged around the displays—we call these work areas “pods.”
At the same time that the Research Commons was being designed and built in the library, several UCLA faculty members were at work establishing an official DH curriculum, which included a new academic minor for undergraduates and a certificate program for graduate students. The DH program launched in Fall 2011 and has a core faculty of thirty-five. Since that time, faculty have taught undergraduate and graduate classes in the Research Commons, and each class has been an experiment to discover the best uses for the new space.

Wendrich offered the course in the DH format for the first time in Spring 2013 and subsequently in Winter 2014. In this DH-oriented course, students were organized into groups to produce a sophisticated digital encyclopedia article with cross-references, illustrations, and semantic encoding. The underlying digital architecture for the course was a web application cloned from the *UCLA Encyclopedia of Egyptology (UEE)*. The clone web application was dubbed “Shadow UEE,” and students were introduced to this publication tool very early in the term.

Wendrich is the editor-in-chief of the *UEE* and served as co-principal investigator on two grants from the National Endowment for the Humanities that were instrumental in developing the *UEE* publication as both a scholarly endeavor and a web application. Therefore, when Wendrich had the idea to reuse the *UEE* infrastructure for teaching, she drew together the project team that created the *UEE* and enlisted their support to implement the Shadow UEE. Programmers worked in advance of the spring term to

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** The *UCLA Encyclopedia of Egyptology* is available online at www.uee.ucla.edu. Access to the articles and different browse pages is open, but a user needs to log in using one of numerous ID services (Google, Yahoo, etc.) to see those pages. The Shadow UEE is available at http://shadowuee.idre.ucla.edu.

†† The project, which began officially in 2006, was funded by two grants from the National Endowment of the Humanities and contributions from UCLA’s Digital Library Program, the Center for Digital Humanities and Academic Technology Services. Although the *UEE* was designed as a professional scholarly publication platform, Wendrich was involved in other projects, such as Digital Karnak, that focused on creating classroom materials. Since Borovsky worked as *UEE’s* project coordinator and McAulay worked as markup specialist, we were familiar with those roles and had taught these skills to graduate students working on the project.
clone the web application and prepare it for students to use. Meanwhile, Borovsky collaborated with Wendrich to develop the group assignment, the course syllabus, and the logistics of the course, including where the class would be held and which library resources could be used to enhance the lab time. Then Wendrich requested that an art history and architecture librarian, Janine Henri, teach a special session on methods for finding images to illustrate the students’ articles. Henri also taught students how to evaluate copyright status and how to seek permission from publishers or creators. Another guest speaker was McAulay, who lectured on the Text Encoding Initiative (TEI) and demonstrated the way it is used in the *UEE*. Thus, the course design and instruction were truly collaborative, and no one instructor was an expert on all the concepts and methods that the students were learning.

This collaboration was an essential component of the course’s success for several reasons. During a retrospective review of the two courses,‡‡ Wendrich identified one of our most important decisions as actually being Borovsky’s suggestion. Wendrich planned to divide the class into groups, with each group focused on a topic from a list that she and the TA prepared in advance. In order to divide up the work within each of the groups, Borovsky suggested that each member of the group assume a role. The roles were modeled upon ones from the *UEE*: a project coordinator, a content developer, a copy editor, an image coordinator, a metadata specialist, and a markup specialist. Wendrich opted to allow the students to choose roles within their groups.

In addition, since several librarians contributed to the course, each librarian was able to provide a specialized instructional session, which meant more librarians could participate and divide the work. In particular, the course benefited from having three different subject librarians involved. Their subject knowledge was crucial to providing students with the resources and methods they needed to do their research. Meanwhile, metadata, instructions on how to use the *UEE* web application, databases,

‡‡ We met with Wendrich in May 2014 to review our observations about the two iterations of the course.
and TEI markup were handled by McAulay. This specialization allowed for significant DH engagement between the library and the faculty without having every librarian trained in DH.

Another important feature of the course was that it was taught inside the library. Lectures were held one morning a week in the research library’s newly renovated conference room, and later that day, students met for a three-hour lab in the library’s Research Commons. This environment allowed students to collaborate with each other, Wendrich, the teaching assistant, and the librarian liaisons to make progress on their digital research projects. During lab time, students had access to a special book cart of reserve materials (selected before the term began by Hirsch), and laptops from the lending service. By holding the class and lab in the library, we were able to consistently highlight services and collections that were available.

Having the physical setting of the course in the library, as well as having undergraduates publish their essays online, helped to embed students in the research process and scholarly workflow. They were not merely consumers of scholarly products—with librarians to assist in that transaction—but were deeply engaged with their peers, faculty, and librarians in the process of learning and producing digital research projects. Although the students’ articles were published online in a separate version of the \textit{UEE}, their process closely mirrored the production cycle of the scholarly \textit{UEE}, from commissioning articles from authors, through peer-review, and finally, publication. Students voiced their pride and enthusiasm for their projects, and we hypothesized that sentiment arose in part from giving their articles the same presentation on the web in the Shadow UEE as the expert scholars received in the main \textit{UEE}. In addition, students were better able to perceive scholarship as a conversation in which they could

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\footnote{The \textit{UEE} articles are written by international experts, and thus, the students’ articles could not replicate the same depth. Therefore, the articles were not integrated with the full \textit{UEE}, but they were published in the clone platform. The student UEE, though, is not restricted and is as widely available as the main \textit{UEE}. The student work is visible to everyone in the class, and was throughout the development process, and students and others can easily alert friends, family, and colleagues about their work. While the online publication might not have been significant to students who are “digital natives,” the unique opportunity to work with the application that had been designed for scholars seemed to bestow on the students a sense of worth on their work that was unfamiliar.}
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participate. With this realization, they started to see the library as more than a mere repository of books and a quiet place to study. It was a site of both discovery and production. Librarians were viewed not merely as gatekeepers, but as active partners in producing scholarship.

**Impact and Innovation**

As we watched students present their work in Spring 2013, their engagement with the course content and with their fellow students, faculty, librarians, and the tools was evidence enough to convince us that our effort had been worth the time we had invested in realizing the course. We marveled at the students’ ability to take the eccentricities of TEI markup in stride and with passion. Even more astonishing was their willingness, after an introduction to finding images that included the complexities of copyright, to write to publishers seeking permission to use images in their projects. It was gratifying that our colleagues also thought that the library’s effort had been worthwhile. They, too, remarked that the final presentations demonstrated that students had a deeper understanding of the research process and scholarly communication.

At the outset, we feared that providing an on-site print collection and no formal instruction of how to make use of the material might discourage students from finding resources on their own. However, students began retrieving books from the stacks and taught others in their pods to do the same. Students were also surprised to learn about the roles the library played in digitizing resources, making those resources discoverable, and developing projects such as the *Encyclopedia of Egyptology*. Holding the final presentations in the main conference room of the library and inviting other faculty, librarians, and the students’ friends to the presentations was a powerful demonstration of connecting and opening the classroom to the broader community. Just as students valued making their essays available online to the public, they viewed the library as an open space for creating and displaying scholarly works and discussions.

We realized, however, that the amount of time we spent on this course was more than librarians usually spend on instructing undergraduates in courses focused on a traditional research paper. We discussed whether this
approach was scalable, and those discussions informed our plans for the course the following year. When the course was offered in Winter 2014, the TA for the course taught the guest lecture on TEI markup. While McAulay still attended some lab sessions for troubleshooting, we were able to reduce the amount of time spent preparing and the need for our physical presence during lab sessions. The TA, an Egyptology graduate student who had learned TEI markup to work as a content editor for the UEE, was now teaching those skills as part of an undergraduate course in her subject area. Rather than viewing those skills as separate from her academic training, the course provided her with an opportunity to integrate her digital skills with instruction and research.

We also began to assess and articulate the benefits of the course from the librarian perspective. In addition to measuring the impact on student learning, we saw a value in longer-term engagements with librarians outside our home departments. While we had worked together in a production environment on the UEE, our work was inward-facing and shared largely with the project team. The course, in contrast, made our teamwork very visible and demonstrated the productive partnerships among faculty, graduate students, librarians, and technologists. By making the final presentations open and extending invitations to all librarians, we worked to alleviate anxieties that participation in DH projects devalued the traditional skills of subject librarians. Several of our library colleagues have expressed dismay when an article or report mentions “re-skilling” or “re-tooling” librarians to meet the needs of scholars doing digital projects.*** Instead, we

encouraged librarians to participate as an extension of their subject expertise and offered a chance to learn more about digital scholarship methods. Moreover, we fostered the idea that investing time in longer-term curricular engagements provides cross-training opportunities that would build toward a more diverse and sustainable ecosystem of librarians. Librarians do not need to learn DH skills to be involved in DH courses. We are working in increasingly collaborative methods, and digital scholarship is an excellent area to bring differently skilled team members together. Librarians can work with a team engaged in digital research without being DH-trained or even digitally inclined. At most institutions, there are willing collaborators who can provide the technology expertise while librarians can provide research guidance, curricular input, and curation of research materials. Librarians can seek out these opportunities as part of their usual outreach, while library leaders should foster collaboration and team-based approaches to curricular support.

Variations

While we have presented a detailed case study of the way this course collaboration worked, we also are interested in sharing some ways we feel this approach can be varied and still yield significant benefits. It is possible to teach a similar course in a classroom or lab outside the library. The decision to host the course in the library was a strategic step that we decided to take. Because both labs and lectures for the course were located in the library, students and librarians benefitted. Students’ notions of the library transformed, and librarians’ notions of digital scholarship became more informed. We were pleased and astonished by the former, which encouraged us to take bolder strides towards the latter. In doing so, we first realized that in designing the UCLA Library Research Commons for digital scholarship, we had created a “digital divide” that affected how students and librarians viewed these recently renovated spaces. As we planned the lab sessions in the pod area, we realized there were no bookshelves in the Research Commons. Across the hall in the Reading Room, students could bring their laptops and work alongside the reference collection. To inte-
grate books into the digital environment of the pods, we opted for a mobile book cart that could be wheeled in each week.

Secondly, hosting the course in the library brought librarians, even those not involved in the course, into contact with students, faculty, and librarians engaged in digital scholarship. Because the class met every week in the pod area—a location that is not only open and visible, but also conveniently located near a very popular cafe—librarians who would not otherwise work closely with a DH course could pass through and see students working in the pods, using the collection, and engaging their peers to produce digital projects. Hosting the course in the library reduced anxieties about digital scholarship and, through the students, demonstrated the value of DH.

Finally (and this was an unexpected outcome), we saw that the undergraduate student employees in the Research Commons connected the work they were being paid to perform—helping students check out laptops and use the pods—to learning and the library. These students began to view themselves as partners in the process of performing digital scholarship in the Research Commons.

**Conclusion and Recommendations**

Based on our experience with this course at UCLA, we believe there are several avenues for adapting this method to a wide range of other library and DH collaborations. We will conclude by suggesting a few different approaches to achieving similar results in other institutions as well as presenting the future activities we intend to undertake at UCLA to continue this collaboration with undergraduate instruction.

For ANE 105, we converted a DH research project into a platform for undergraduate instruction. While this exact scenario may be rare, the general principle is widely applicable: repurpose pre-existing web or software applications for use in the classroom. When the *UEE* was under development, the project team did not intend it to be used for instruction. Yet the web application turned out to be a perfect framework for students to use for complex group projects. We also believe that by reusing a scholarly
platform, the students felt that their projects were more meaningful and that they were getting access to an authentic publishing experience. There are many small and large technology tools or frameworks that are used for normal workflow or for research projects, and these frameworks can serve as tools to enable students to do more sophisticated work.†††

Prior to Spring 2013, we had been running workshops in the library and teaching special sessions for DH courses. In those instances, students were learning about DH methodology, but they often struggled to understand its utility because they were not assigned projects that required them to apply what they had learned. These workshops and even special class presentations felt ancillary to the work of the course itself. In Wendrich’s class, though, Ancient Egypt’s 25th Dynasty was the focus, and the DH methods were a way to engage with the subject matter rather than vice versa. Subject knowledge, therefore, was more important than the DH skills. In addition, the non-DH subject librarians were an integral part of making this course a success because they could select the right resources and guide students in doing online research.

In our case, both subject and digital librarians supported the course. However, we believe that the same success could be achieved without any digital specialists from the library. Digital expertise or technical support could be provided by other campus partners. The best approach is to work in a team that has both subject expertise and digital experience.

As we have noted earlier, this course took a significant dedication of time from multiple librarians and additional university staff. We were motivated to experiment with that level of commitment because it was also an opportunity to host a class in the library’s new study space, the Research Commons. Hosting the class in the library has many advantages. Most notably, it made the library physically the center of students’ research and

††† We view the development of workshops or sessions that focus on pedagogy at digital humanities institutes and conferences as evidence that other examples of integrating digital humanities research projects into courses are emerging at other institutions. See, for example, information on the Digital Humanities Summer Institute (DHSI) on the Digital Pedagogy website (Katherine D. Harris, Diane Jakacki, and Jentery Sayers, Digital Pedagogy home page, 2012, http://web.uvic.ca/~engblog/pedagogydhsi.)
class work, and with the variety of staff supporting the class, the students got to experience the wide range of services available from the library.

Having a new, inviting space for students to work in was just incidental. We believe that students will still gain a greater understanding of the library and its services if a class is hosted in the library in any type of space. We posit that the number of resources and the time dedicated to the course could also be scaled back and it could still be effective. Staff or librarians could drop in on the course rather than staying for the full lab period and still give students the sense that they were working in a place where staff members were interested in helping. Likewise, one of the simplest services we provided was a book cart of relevant materials, like a moveable reserves shelf. Whether there were one hundred or twenty books on the cart was somewhat immaterial; the fact that the books came to the students encouraged them to use the reserves materials more heavily and to pursue additional resources on their own. One student exclaimed during a lab session after searching the library catalog, “They have the book right upstairs! I’m going to go get it!” This moment was one of many where a student showed true enthusiasm for his or her work and shared it openly with the rest of the class.

After the course was held for the second time, we met with Wendrich and compared our observations. We all agreed that the course had been a tremendous success. In our discussions, we worked together to isolate which features had made the biggest impact. We also made plans to do further quantitative and qualitative analysis to gain a better insight into the impact the course has on students’ learning and research experiences. From further work, we plan to develop a set of new measurements for recording librarian impact on undergraduate instruction. Currently, library instructional metrics are biased toward transactional statistics—how many thousands served?—as opposed to measures of student impact or student success. Following students’ progress after the course by reconvening their project teams as focus groups would allow us to better measure the impact of this type of course. We believe that these types of initiatives will be exciting avenues for subject librarians, who can bring core research content to students and enable active learning that digital humanities experts alone cannot support.
Bibliography


