Teaching TEI to Undergraduates: A Case Study in Digital Humanities

Curriculum

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This case study describes two iterations of a Digital Humanities “Studio” course on scholarly text encoding as a model for Digital Humanities curriculum at a small liberal arts college. Designed to accompany a three-credit humanities course, the one-credit DH Studios are taught by library faculty. The paired courses share a final project – a digital edition of a short work of literature encoded in the Text Encoding Initiative. The DH Studio creates a methodology-focused environment for students to practice information and digital literacies.

Keywords: digital humanities; digital pedagogy; Text Encoding Initiative; information literacy; librarian-faculty collaboration

Introduction

For the pragmatic librarian, the acknowledgement and acceptance that Digital Humanities (DH), however you define it, belongs in the library is a relief. Instead of campaigning for involvement or arguing for relevancy, we can move forward with the work of doing Digital Humanities. Part of that work is documenting and sharing the ways that faculty-library partnerships can operate at a variety of institutions. What works for large research libraries may not translate to the small liberal arts college (SLAC) library or a community college. This is not just a scale issue. Libraries can share the values of DH, but have different goals and desired outcomes. At a small undergraduate library, DH can serve as a vehicle to expand library instruction by drawing on the variety of skills within its staff.

Our focus on undergraduate education and pedagogy means that we must find creative ways to translate scholarly activity to students, most of whom will not end up in
academia. In some ways, DH makes this easy. Projects are often public-facing, using the familiar medium of the web to present their material or arguments. For students, a website is easier to parse than a lengthy scholarly journal article. In other ways, the ease at which anyone can publish online can obscure the real scholarly and technological work that goes into creating a DH project. This is especially true in the creation of digital editions. Although it is in many ways a “classic” DH project, to an undergraduate’s eyes, the digital edition might seem like little more than a copy and paste job. To a librarian, the digital edition is an exercise in digitization and XML. To a literary scholar, the digital edition presents issues of editorial theory and remediation. But within the digital edition lie pedagogical opportunities for both librarians and disciplinary faculty to reach their learning objectives.

This case study documents two iterations of a one-credit Digital Humanities “Studio” course on scholarly text encoding taught by a metadata librarian. Often referred to as a “lab course for the humanities,” these one-credit DH courses are designed to accompany a three-credit humanities course. Both iterations, taught in winter of 2015 and 2016, were co-requisites to an advanced French literature course. The courses shared a final project - a digital edition of a short work of medieval French literature encoded in the Text Encoding Initiative (TEI). The DH Studio provided a methodology-focused environment for students to learn the theory and mechanics of digital editions without detracting from the time required to teach French literature, language, and manuscript culture.

In addition to details about course structure and assignments, this case study will share the ways in which learning objectives and course work fit into information and digital literacy practices. It will discuss the successes and challenges of developing DH curriculum with library-faculty at the helm.

Literature Review
As there is an active conversation on the relationship between libraries and Digital Humanities, this literature review will focus on DH as it relates to small college libraries and text encoding pedagogy. For a survey of the broader issues at play, the *Journal of Library Administration*’s 2013 special issue on “Digital Humanities in Libraries: New Models for Scholarly Engagement” contains several pieces by influential members of the field. DH in the library may seem like a natural fit (Vandegrift and Varner 2013), but administrative support is essential to creating an environment in which librarians are collaborators in DH, not merely service providers (Posner 2013). A recent special issue of *dh+lib* proves that the conversation has developed quickly, now including topics like critical librarianship (Potvin, Christian-Lamb, and Padilla 2016). Librarians working in DH bring their values and expertise to disciplinary faculty and courses, but large research universities dominate the conversation (Locke and Mapes 2016).

When it comes to small liberal arts colleges, DH has not been such an obvious pursuit. A 2012 assessment points out the low number of small college contributions to DH conferences and literature (Alexander and Davis 2012). However, in many cases due to funding from the Andrew W. Mellon Foundation in the last ten years, the SLAC representation in the field is growing. In recognition of their unique issues, these colleges have formed their own DH or digital scholarship conferences, such as the Bucknell Digital Scholarship Conference, the Digital Library Federation’s Liberal Arts Pre-conference, and the Institute for Liberal Arts Digital Scholarship. The conversation in these venues focuses on faculty-student collaboration, digital pedagogy, and models of DH infrastructure for small colleges (McFall et al. 2016). DH in the undergraduate classroom can be a way to teach disciplinary research methods (Buurma and Levine 2016) while building technology skills.

The types of librarian positions involved in DH will vary by institution, though those with “digital” in their job title are the first targets. A recent title from ACRL covers the
“challenges and opportunities” for subject specialists (Hartsell-Gundy, Braunstein, and Golomb 2015). As the metadata librarian position emerged from technical services departments (Han and Hswe 2010), the accompanying skill set found use in DH projects. Metadata librarians may still feel the baggage of the “backroom,” but they have not gone unnoticed by the DH community (Wilson and Alexander 2016). Their broad knowledge of metadata standards can improve the discoverability of projects and their deep study of controlled vocabularies can inform careful selection of descriptive terms (McFall 2015). For the purpose of this case study, their knowledge of XML and its manipulation is essential. Even the colloquial “cataloger’s judgment” is useful when making encoding decisions for digital editions.

Scholarly text encoding is one of the DH methods to successfully enter the undergraduate classroom, due in part to the longevity of the TEI. Substantial credit belongs to the Women Writers Project for their longstanding and extensive workshop series and online documentation. Those seeking to learn the TEI will find a healthy assortment of online tutorials (Dee 2014). But for many, just learning the TEI is not the primary goal. History faculty, librarians, and archivists at Wheaton College introduced the TEI in courses in 2004 as a way to teach students how to “do history” (Tomasek et al. 2014). In the literature classroom, the TEI serves as a method of close reading (Singer 2013). It can even help students “understand the trajectory of a digital textual recovery project” (Ives et al. 2013). Regardless of preferred outcome, publishing options for TEI-encoded texts are a concern (Flanders and Hamlin 2013). It is within this landscape of developing DH pedagogy that our library began developing curriculum.

Context

Washington and Lee University is a small liberal arts school in rural Virginia. Undergraduate enrollment is approximately 1800 and Leyburn Library employs twenty-five staff members.
The library defines itself as a teaching organization - librarians have faculty status and are encouraged to teach in a variety of forms. There is some precedent for library faculty teaching one-credit courses, notably a research methods course for the journalism department. We do not offer credit-bearing information literacy courses. Instead, subject liaisons work with disciplinary faculty to arrange information literacy sessions. In addition to their disciplinary expertise, library faculty provide teaching on specialized topics like visual literacy or copyright and intellectual property.

In 2013, a series of staffing changes produced a new group of library faculty who were actively interested in participating in more DH-related initiatives, including the following positions: Associate University Librarian, Director of Library Technology, Digital Scholarship Librarian, Metadata Librarian, and Data Support Specialist. A more detailed history of the beginnings of DH @ WLU can be found elsewhere (Barry et al. 2014). By 2014, structures were in place for DH to blossom at W&L. The Digital Humanities Working Group (DHWG), made up of faculty, librarians, and IT professionals, promotes DH on campus through incentive grants, a speaker series, and simple word-of-mouth. The Digital Humanities Action Team (DHAT), made up of librarians and IT professionals, serves as the boots on the ground. DHAT members provide training and advice on using technology in the classroom. At a small liberal arts college, pedagogy drives our imagining of what DH could look like on campus. The DHWG is responsible for thinking creatively about ways that DH can fit into the curriculum. Through incentive grants and other methods, DH-inspired assignments were making their way into humanities and social science courses. But what would an entire DH course look like? What about a DH credential like a minor or a certificate?

In the spring of 2014, we offered the first “Introduction to Digital Humanities” course, co-taught by the chairs of the DHWG. It was a successful course, but there were
concerns about the demand on the disciplinary faculty’s small departments. The DHWG turned to library faculty as potential instructors. The next DH 101 course, offered in Spring 2015, was taught by two library faculty members: the Associate University Librarian and the Metadata Librarian.

Obviously, full DH courses are ideal for maximizing the amount of exposure a student has to DH methods and theories. DH 101 is very much a survey of all the different types of DH projects and experiences. But there is value in giving students a deep dive into discipline-specific methods. The same way that librarians adjust their information literacy instruction to meet a discipline’s specific practices and communication style, DH practitioners use different techniques depending on the subject matter.

The DHWG received feedback from disciplinary faculty that while they saw the benefits of including digital projects in their courses, the time required to teach the skills and execute the projects detracted from course content. If we wanted DH to succeed with disciplinary faculty, we needed other models for integrating digital projects into courses. Our solution: one-credit “humanities lab” courses. The one-credit courses could be taught by library faculty, which would lessen the burden on disciplinary faculty while also giving library faculty an opportunity to teach a credit-bearing course. As an aside, the interdisciplinary nature of our team definitely enhanced our creative problem-solving skills on this matter. For those outside the humanities, the lab solution was obvious.

Fortunately, while our curriculum ideas percolated, we learned of a new hire in the French department with a recently awarded NEH-funded digital edition project: “Edition and Translation of Huon d’Auvergne, Pre-Modern Franco-Italian Epic.” Initial conversations with the professor indicated that he was interested in student involvement in the project, ideally a student research assistant for the summer. With departmental approval, we decided to pursue the idea of a one-credit course to accompany an advanced French literature course taught by
The one-credit course, or “studio” as we named it, would teach students the process of creating a digital edition, using the Text Encoding Initiative, with the secondary goal of generating student interest in a summer research opportunity.

In September 2014, we proposed DH 190: Scholarly Text Encoding as a “special topics” course to the Curriculum and Degrees Committee with the following course description:

This course explores the Text Encoding Initiative (TEI), a standardized markup language for humanities texts. In wide use for more than twenty years, TEI describes attributes such as marginalia, annotations, textual variants, and other features as well as structure such as chapters, acts, and scenes. The course also situates TEI within the context of the humanities by examining digital editions from a variety of disciplines. Students will produce their own encoded text and contribute to the scholarly community by creating content for the W&L TEI Web site.

The course was approved and added to the catalog as DH 190. As other DH topics arose, we could offer the DH Studio without needing full approval for a new course from the Courses and Degrees Committee. DH 190 was offered as a co-requisite to FREN 341: La Légende Arthurienne, but it was also open to students to enroll without the co-requisite. For students in FREN 341, their final project was shared by both courses. Students who enrolled independently would have other options for their coursework. The methods section will detail the course schedule and assignments, while the discussion section will connect the courses with broader information literacy concepts.

**Method 1: Winter 2015**

*Preparation*

The first iteration of DH 190: Scholarly Text Encoding was offered in the winter of 2015 and co-taught by an Assistant Professor and Metadata Librarian and an Associate University Librarian.
Librarian. During the fall of 2014, we worked with the professor to develop the course content as well as get up to speed on the TEI knowledge necessary to encode a set of Franco-Italian manuscripts. We met on a weekly basis to gather readings, create assignments, sync schedules, and learn the curriculum proposal process at our university. It was essential that all instructors understood the breakdown between assignments and grading between the two courses. While the final project grade was to be determined by all instructors, each course had auxiliary project assignments that would be graded individually.

One of our first steps in the creation of this course was to determine our learning objectives, which are as follows:

• Explore the composition of digital editions through examples of online scholarly projects in different disciplines that utilize TEI, such as The Map of Early Modern London, Shakespeare’s Plays from Folger Digital Texts, The World of Dante, The Papers of George Washington, Perseus Digital Library, Rossetti Archive.

• Demonstrate knowledge of the relationship of TEI to other XML markup languages and document formats, which will significantly help students when they encounter HTML, CSS, and other forms of XML.

• Understand the role of markup languages in enabling an infrastructure that enhances the teaching and scholarly use of primary sources.

• Learn how to represent manuscripts and books as digital objects. Document modeling requires analytical and critical thinking skills to determine markup tags appropriate for describing the structure and content of texts.

• Develop proficiency in the basic use of TEI, including the understanding that TEI is both a standards organization and a markup language that facilitates the analysis of texts.
As referenced in the literature review, online TEI workshop materials were a great aid in course design. In the DH spirit of working in public, we published all our course content online at: http://tei.academic.wlu.edu/dh-190-w15/.

**Enrollment**

The course met once a week at the unfortunate time of 8-10am. This block lined up with the FREN 341 block (MW 8:35-10:00am), ensuring that the students would have the time available in their schedule. Although we worked with the University Registrar to determine the most suitable time, student engagement suffered due to the early morning schedule. The co-requisite requirement was enforced in the registration system and the course was advertised via posters and targeted faculty contact. As the additional course requirement confused students, we made an effort to explain its experimental nature.

We had seven students from FREN 341, and three students who enrolled in the class independently. FREN 341 students were French majors or minors and many had a second major or minor. The independent students came from humanities or computer science disciplines. Only one student had previous experience with DH. The majority of the students were unfamiliar with markup languages, including HTML or CSS.

**Structure**

Our plan for this first iteration of DH 190 was to spend the first half of the course introducing the context and technology required to execute a digital edition. Through lectures, readings, in-class activities, and blog posts, students became familiar with the what and why of markup languages, including HTML and XML. A full schedule with readings and presentations is available on the course website: http://tei.academic.wlu.edu/dh-190-w15/schedule/

The collaborative nature of DH work compelled us to bring in guest speakers on several occasions. In the second week, the French professor gave a short lecture on the *Huon d’Auvergne* project to provide a concrete example of the scholarly weight of this type of
digital edition project. For our fourth meeting, we brought the class to our own Special Collections and Archives for an introduction to primary sources and document analysis. In addition to hearing from our engaging Head of Special Collections and Archives, students learned about research with print primary sources. Once students understand that “not everything is online,” their projects take on new meaning. In DH 190, as well as other classes, we have found that students respond strongly to the idea that they are helping create broader access to materials. For the three independent students, this time in Special Collections provided them with potential project topics. In week five, we brought in a research programmer from the Maryland Institute for Technology in the Humanities (MITH) to discuss his work on the Music Encoding Initiative and the Shelley-Godwin Archive. We have found that the Shelley-Godwin Archive is one of the best TEI projects to show the uninitiated.

By week eight, students had been introduced to the technology and content necessary to begin work on their digital edition. Initially, we divided the FREN 341 students into two groups. But as the course progressed, these groups merged back into one, with students working collaboratively on two texts. In consultation with the professor, we decided that a “lai” of Marie de France would be an appropriate unit of text for the projects. The lais were less than 1000 words and in verse, with a variety of potential encoding elements. At the time, there was not room in FREN 341 to teach the paleography skills necessary to work directly from a manuscript facsimile. Ultimately, the students worked with an edition of the text that was modernized by the professor himself. While this was not ideal from an encoding perspective, it did give us a chance to discuss copyright and web publishing with students. The independent students formed one group and worked on a set of thirteen Civil War-era letters between a Washington College student and his sister.

**Assignments**
We published the full assignment details on the course WordPress site: http://tei.academic.wlu.edu/dh-190-w15/assignments. To assess student understanding of the contextual aspects of the course, we required three blog posts to the course website. An added benefit of this assignment was that students became familiar with the WordPress content management system. They could see the results of their markup in action as they formatted blog posts.

The bulk of the coursework was a series of assignments related to the digital edition and necessary group work. We required a two-part project proposal and group charter. The project proposal contained the research agenda and technical details of the digital edition. We hoped that the group charters would ease student anxiety about group work. Although the digital edition was the nominal central project of the course, we deliberately kept the grade percentage low for the actual project product - a TEI-encoded XML document and web representation of their text. We were uncertain as to how quickly students would grasp the TEI and did not set unreasonable expectations. Instead, we weighted their post-project analysis at 25% of their final grade to encourage awareness and reflection on the actual process of learning about and writing TEI. Finally, groups gave presentations on their digital edition during the final class meeting. We invited members of the DH community to attend in order to raise the stakes for presenters.

Outcomes

As the first credit-bearing teaching experience for the DH 190 instructors, this course was a positive first step in DH curriculum. Students left positive course evaluations and indicated that the course helped them understand TEI, digital editions, and markup languages in general. The majority of their open-ended responses suggested that they found their instructors helpful and knowledgeable. Some students indicated a desire for more hands-on practice earlier in the semester as well as a desire for more structure within class time. These
were fair criticisms. Since both instructors are independent learners, this course was a useful reminder to break down the learning process to accommodate a variety of learning styles. Further experience in the classroom has helped us figure out the optimal amounts of structure.

In their post-project analyses, students mentioned the usefulness of digital editions, including the encoding process, in understanding assigned texts. They demonstrated an awareness of the value of digital editions, both to expand access and to conduct analysis. The literary interpretation necessary to determine appropriate tags forced students to read their texts very closely. The professor concluded that this class had a better understanding of the lais of Marie de France than any other semester.

From the project perspective, the digital editions were solid, but not necessarily sophisticated. Students focused on encoding names of people and places, document structure, and stylistic elements. Collectively, we realized that our desired level of literary analysis was not necessarily a good fit for the TEI. However, the process of selecting tags forced students to critically evaluate the text and their own analysis. One student even applied advanced CSS skills learned in another course to create pop up boxes containing additional information in the Web presentation. Finally, we were successful in identifying two students who were interested in working further with the professor on the Huon d’Auvergne project in subsequent semesters.

Method 2: Winter 2016

Preparation

The success of the first iteration of DH 190: Scholarly Text Encoding meant we were able to repeat the course in winter of 2016, again alongside the FREN 341 course. This second iteration gave us the chance to improve on the shortcomings of the first DH 190. Our presentation, “Text Encoding with Marie de France,” at the Bucknell Digital Scholarship
Conference gave us the opportunity for DH community feedback. Additionally, over the summer, the author transitioned into the role of Digital Humanities Librarian. This newly-created position came with a teaching load expectation of no more than one course per term, as a way to provide dedicated teaching resources to the DH curriculum.

The librarian and professor worked in the late fall of 2015 to update both courses. The professor was eager to integrate manuscript studies into FREN 341. Students were to select a manuscript page from the digital collections of Bibliothèque nationale de France (BnF). Manuscript transcription and bibliography were added as assignments for FREN 341.

In DH 190, the instructor added scaffolding to the digital edition project by dividing each part of the process into individual assignments. In addition to reviewing the course evaluations, a former student provided verbal, qualitative feedback on the new version.

**Enrollment**

Due to department scheduling demands, the FREN 341 course had to be offered in the early afternoon on Tuesday/Thursdays. This meant that the DH Studio could not fall in the same block on a different day. Instead of trying to guess student schedules, we sent out a Doodle poll to determine availability. For better or worse, the result was that DH 190 would have three sections on the same day at 85 minutes each. While this was a demanding load for one day, it had the advantage of creating small sections of students. Students received individual attention, which was particularly useful when it came time to troubleshoot software issues.

DH 190 was again open to students outside FREN 341. Only one student enrolled independently - a first-year interested in manuscript studies. He worked independently on an antiphonal manuscript from Special Collections. His familiarity with markup languages meant that he often became an impromptu teaching assistant, jumping in to help students if the instructor was occupied.

**Structure**
The second iteration of DH 190 retained a similar schedule (http://tei.academic.wlu.edu/dh-190-w16/schedule/), but it condensed the contextual content to make room for more hands-on exercises. Class began with a short lecture and discussion of any readings, then moved into lab time. The course met in a computer lab so that individual student laptop issues would not cause a problem. By week four, students were familiar with the basics of TEI and oXygen. A manuscript analysis assignment in week five ensured that students had an idea of what to encode early on. For the rest of the course, students completed a piece of the project each week so that they could receive feedback before the final project was due. FREN 341 students worked in groups of two or three on a single manuscript page from the BnF.

Guest speakers visited class twice. The Mellon Digital Humanities Fellow at W&L introduced methods for publishing TEI in week seven. As part of the web development team for the Huon d’Auvergne project, he was able to set realistic expectations for what the students could achieve with TEI Boilerplate. In week eleven, a Digital Scholarship Coordinator from Bucknell University provided teams with feedback on their TEI and web presentation decisions. As an English scholar and instructor of TEI herself, she brought an informed external perspective on the students’ work. Finally, students presented their work in front of the whole class during the final meeting of FREN 341.

Assignments

The addition of lab exercises in the second iteration of DH 190 changed the grading breakdown (http://tei.academic.wlu.edu/dh-190-w16/assignments/). Lab exercises were graded pass/fail and counted toward the participation grade. Students were occasionally asked to complete small in-class activities for their participation grade, such as a reading quiz or informal presentation on a topic researched in class.

The digital edition project itself represented a much larger portion of the final grade, but was divided into individual assignments, such as teiHeader or web presentation (in this
case, students used TEI Boilerplate as a publishing framework). These smaller assignments were returned with feedback before the final due date. Improved project pieces were factored into the final grade. Finally, we retained the post-project analysis, but with less weight toward the final grade. Overall, this assignment structure produced less unease about expectations. From the instructor perspective, because every project was different, regular feedback on their text encoding was preferable to a strict rubric.

Finally, it should be noted that in both courses, we were looking forward to using the TEI Archiving, Publishing, and Access Service (TAPAS) for web publishing. Unfortunately, TAPAS underwent major technical upgrades during both winter semesters. Anyone seeking to teach TEI workshops should investigate this platform for potential use, as it allows students to share their work with the wider TEI community.

Outcomes

From the instructor’s perspective, this second DH 190 course was far more successful. Small teams and class sizes meant that the instructor could verify that each student was progressing. The final projects demonstrated a deeper understanding of TEI, including complete teiHeaders with manuscript descriptions. Each team showed creativity with CSS in their web presentations. Even though we modified the course to include more hands-on exercises early in the course, students commented that there was not enough. Otherwise, course evaluations were strong and students indicated they felt they met the learning objectives.

The professor appreciated the ability to test out manuscript studies content in a course, though he did find that it took away time that could be spent on literary analysis. Just like DH, teaching paleography and medieval dialects takes more time than expected. We did succeed in our secondary goal of identifying a student willing to work on the Huon d’Auvergne project. In fact, this student is now a Mellon Digital Humanities Undergraduate Fellow and is incorporating text encoding into his honors thesis.
Discussion

Information and Digital Literacies

Beyond the creation of a valid and thoughtful TEI, students in DH 190 demonstrated a variety of information and digital literacies, sometimes in unanticipated ways.

Despite their reputation as “digital natives,” many undergraduates do not understand the fundamentals of the web. By beginning with HTML and CSS, students learn the basics of markup and its function. Students were thrilled to create their first website and to learn that one can “view source” on any website. Our students often label themselves as “bad at technology” and might avoid a dedicated coding class. Presenting web publishing as part of the scholarly process provides context and lowers the stakes for apprehensive students. One student later shared that she stood out in a summer internship because of the HTML skills she gained in DH 190. The vast majority of students will not use the TEI again, but having a conceptual model of servers and web publishing will be useful in many other pursuits.

Sifting through lengthy and technical documentation is a daily task for a metadata librarian. For any librarian, it is easy to forget how easily overwhelmed students are by lengthy and complex documentation. The TEI Guidelines consist of sixteen modules representing almost 2000 pages in PDF form. The guidelines can be prescriptive or open-ended, depending on your goals. Students did not necessarily appreciate their questions being answered with other questions like, “what do the Guidelines say?” or “which elements do you want to privilege in your encoding?” Just as we teach students to study a book, not read it cover to cover, we must also teach students how to consult web-based documentation without reading it from beginning to end. Since librarians are often frustrated by the one-shot instruction delivery method, this course was an exciting opportunity to model search strategies and other research skills for students for a whole semester. Students learned how the organization of the guidelines could help them, not overwhelm them.
In both iterations of DH 190, students became very familiar with the underlying practices of the ACRL Framework “Information Creation as Process” (Association for College and Research Libraries 2015). Whether it was the modern translation of the lais of Marie de France, or their own transcription of an Occitan poem, students began to understand “that their choices impact the purposes for which the information product will be used and the message it conveys” (Association for College and Research Libraries). Scholarly text encoding is not just a transcription project. Deciding what to encode is just that - a decision that requires an awareness of one’s audience and an understanding of the principles in the field. One of the benefits of this co-teaching model was that we could rely on the professor’s subject expertise to guide us in disciplinary specifics related to the treatment of medieval French literature. We also used the article, “Cracking the Code: Reflections on Manuscripts in the Age of Digital Books” (Szpiech 2014), to spur student discussion on the differences between interacting with the original physical artifact and its digital form. Szpiech’s emotional exploration of “the meaning of manuscripts in an Internet age” gave students perspective on the impact of full-text searchable texts and Google Books - something that is easy for them to take for granted. This article gave them a sense of the stakes of remediation. Students also had to recognize their role in the scholarly publishing process. At first, they were hesitant to record themselves as the transcribers, editors, and encoders of their text.

Finally, a solid understanding of metadata was required to complete the project. In a TEI document, all the document metadata is stored in the teiHeader. In addition to bibliographic description, one can describe project work and editorial decisions such as revision history or tag usage. Both courses dedicated a class session to metadata as a broad concept and its specific usage within the TEI. Students rely on metadata on a daily basis, but do not necessarily understand the value in creating it. In the second iteration of DH 190, students relied on the bibliographic metadata in the BnF to learn about their selected
manuscripts. In some cases, incomplete metadata was a real hindrance to their assignment. Since students often requested templates as examples, we used The Digital Walters website as an exercise in converting a prose manuscript description to the teiHeader. Students had to select the appropriate TEI tags to use for the content in the HTML page. Later, they checked their work against the existing TEI. For the metadata librarian, this was a chance to develop and test instructional materials on metadata for an undergraduate audience.

**Successes**

Broadly, these courses were valuable teaching experiences for all parties involved. For library faculty new to teaching full courses, the opportunity to work long-term with a member of the disciplinary faculty was an extremely positive experience. Having another instructor who was fully aware of the dynamics of a particular set of students made it easy to discuss classroom management issues and grading. Outside the classroom, this sustained working relationship improved collaboration on the *Huon d’Auvergne* digital edition project. Directing student projects gave the instructors more experience with the TEI that could be applied to the project. Individually, the DH Studio gave the professor a chance to introduce new concepts and methods into his course, including manuscript studies. The digital edition project forced students to read closely and understand textual mobility. For the library faculty, this was a chance to debut DH curriculum and integrate information and digital literacies into a full course. Both the Metadata Librarian and the Associate University Librarian have gone on to teach other courses on their own or with another member of the disciplinary faculty. The job transition from Metadata Librarian to Digital Humanities was due in part to the success of this course. While the DH Studios did not convert every student into a DH enthusiast, several students have gone on to other DH courses or the undergraduate fellowship program.

**Challenges**
There are a few challenges that should be addressed. First, we recognize that not every academic library is in the position to have librarians teaching credit-bearing courses. For the first DH Studio, neither librarian had a teaching load expectation in their job description. Administration encouraged this course as an experiment, but it should be noted that course development and teaching did take time away from normal work duties. At this time, the Metadata Librarian managed three staff members in the Collection Services Department and oversaw all electronic resource management. It is important to acknowledge that while librarians are fully capable of teaching full courses, their day-to-day work life is different than that of disciplinary faculty. Typically, librarians are twelve-month employees and spend their summers on internal projects. Administrators must work to ensure that teaching loads are properly balanced with other work duties.

Second, although there were a number of successes to the DH Studio model, the scheduling challenges are significant. Our humanities course schedules are not designed to accommodate a lab component as they are in the sciences. The Registrar was willing to work with us, but we still had to manage student expectations. The one-credit addition was too much of a surprise for students who very carefully plan their academic careers. There is concern that the DH Studio co-requisite could cause the humanities course not to reach enrollment minimums. While we were fortunate to have administrators and department heads who accommodated experimentation, it is essential to understand the particulars of one’s curriculum and student body. Currently, we are exploring other teaching models for DH curriculum, such as librarians teaching courses on their own or with another member of the disciplinary faculty.

Conclusion

There are a number of emerging models for Digital Humanities initiatives and curriculum at the undergraduate level. For those wishing to develop their DH offerings, particularly with
librarian leadership, it is worth examining the efforts of many other institutions. This case study provided an in-depth look at one curricular model for teaching the Text Encoding Initiative alongside a French literature course. History, Classics, or English are other disciplines in which TEI projects could flourish. This case study demonstrates that the skills and expertise of so-called “backroom” librarians can find opportunity in the DH classroom to improve student information and digital literacies. Co-teaching, in whatever form, provides mutually beneficial development for all instructors involved and shifts the library’s reputation from service provider to collaborator.

Bibliography


