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Experiential Learning in the Archives

Case Studies in Digital Humanities Pedagogy for Undergraduate Research

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This article explores experiential learning in archives and special collections as an emerging area of digital humanities pedagogy within which librarians can take a central role. The case studies presented cover a range of undergraduate research projects that incorporated active and inquiry-based learning exercises with digital archives as a pedagogical approach to digital humanities instruction. The research projects include an honors project to create an online exhibit of medieval manuscript leaves, a capstone experience in the library to explore the relationship between archives and social justice, and a course project that used the University Archives to research the University of Scranton's Black history.

Introduction

Academic archives and special collections have long been valued as experimental spaces for undergraduate research instruction, particularly at small institutions with teaching missions and a focus on undergraduate education. The Society of American Archivists' *Guidelines for College and University Archives* advance this idea: "Academic archives should also serve as an educational laboratory where students may learn about: a particular subject; the different types of available resources; and the proper procedures and techniques for using primary archival resources in their research projects" (Society of American Archivists,1999). Conceived as laboratory spaces, archives and special collections create opportunities for students to conduct empirical research by analyzing and interpreting primary sources. The literature on information literacy and undergraduate research instruction demonstrates the value of archives and special collections for inquiry-based teaching and learning that asks students to critically analyze primary sources to answer a research question (Hensley & Davis-Kahl, 2017; Mitchell et al., 2012; Rockenbach, 2011; Ruelle, 2020).

There has been a recent shift in archives instruction away from one-shot lectures, focused on collection overviews and search strategies, towards hands-on experiential learning with primary sources. Active learning techniques, like inquiry-based learning, have been shown to increase student engagement, develop critical thinking skills, and impact students' cognitive and affective domains (Carino, 2018; Rockenbach, 2011). The shift in instructional approaches is partially tied to an increase in digital humanities (DH) pedagogy in undergraduate classrooms by

disciplinary faculty. Course-integrated DH exercises often engage students in interpretive learning activities with primary sources from library and archives collections.

Like print archives and special collections, digital archives provide an exploratory environment for undergraduate research instruction. Brannock et al. (2018) observe that "digital archives have become both a hub and source for innovation, collaboration, and experimentation, even more so when it comes to implementing skill-based literacies in the digital humanities and archival research" (p. 166). Instructional approaches by librarians involved in digital humanities pedagogy often include training sessions that focus on skill building with technology and emphasize technical abilities.

Moving beyond skills-based instruction, academic librarians are exploring how digital archives represent a pedagogical opportunity for innovative approaches to undergraduate instruction in the digital humanities. Archives instruction that focuses on critical engagement with digital archives can enable students to confront epistemic questions around the representation of archival records in a digital environment and what it means to organize, describe, and publish cultural materials online. This pedagogical approach to DH instruction extends the analysis of primary sources to include an interrogation of their digital representations. It engages students in archival processes including digitization, organization, description, and online publication.

This article explores how digital humanities pedagogy in undergraduate education can include experiential learning with digital archives that focuses on archival processes. It considers how students might pedagogically benefit from learning exercises in archival tasks to complement instructional approaches focused on technical skills. This pedagogical approach moves beyond "a reinforcement of tools-based thinking" towards critical engagement with information processes (Giannetti, 2017, p. 263). The author sought to design meaningful learning experiences that integrated archival theory and practice in DH instruction to enhance both digital literacy and critical thinking skills. The case studies presented within foregrounded archival work in order to contextualize and explore knowledge production in digital collections as the basis for humanities research. One of the pedagogical goals was to highlight how digital archives are mediated by the knowledge work of libraries and librarians.

This article contributes to the expanding conversation among librarians and faculty about cross-disciplinary approaches to digital humanities pedagogy. The case studies demonstrate how academic librarians are expanding their roles in digital humanities pedagogy by engaging students in experiential learning in the library. It considers how students can pedagogically benefit from active learning in the library to support student learning outcomes in the digital humanities.

Literature Review

The literature review considers examples of academic librarian support for undergraduate research, provides a general overview of the relationship between academic libraries and the digital humanities, and explores recent debates in digital humanities pedagogy.

There are abundant examples in the literature that describe the pedagogical benefits of archives instruction and undergraduate research with primary sources (Carino, 2018; Clayton & Widener, 2017; Daniels & Yakel, 2013; Grimm, 2017; Lach & Pollard, 2019; Mitchell et al., 2012; Rockenbach, 2011; Stamatoplos, 2009). In particular, Hensley & Davis-Kahl's edited volume (2017), *Undergraduate Research and the Academic Librarian,* is a valuable resource for case studies and best practices. Brannock et al. (2018) point out that a common practice in archives instruction is to provide "a cursory glimpse of the unique materials held in the library through a single 'show and tell' class, which usually involves a brief survey of guidelines for collection use, an overview of collection formats and subjects, and a look at primary sources available online" (p. 173).

Archives instruction, in recent years, has shifted away from "traditional lecture-based show-and-tell approaches to more active hands-on strategies that fall within the realm of active or inquiry-based instruction" (Carino, 2018, p. 483). Responding to this shift, "archivists transitioned from perceiving themselves as solely facilitating access to primary resources, to educators with pedagogical strategies behind the instructional support they provide" (Carino, 2018, p. 483). Carino presents research findings that demonstrate inquiry-based learning with archives as an effective strategy for undergraduate teaching. This approach led to "increased engagement, improved critical-thinking skills, and greater confidence among students using primary sources within an archival repository" (Carino, 2018, p. 484). Rockenbach (2011) describes how "archivists and librarians can work with faculty to create assignments and active learning exercises that highlight their collections, and, more importantly, foster students' cognitive development and critical thinking skills" (p. 298).

The case studies in Mitchell et al. (2012), *Past or Portal?: Enhancing Undergraduate Learning through Special Collections and Archives,* provide practical examples of undergraduate research using archives and special collections from nearly fifty institutions. Many of the case studies advocate for active learning approaches by librarians and offer evidence of cognitive skill development among the student learning outcomes. The final section of *Past or Portal?*, titled "The Work," discusses undergraduate work in archives and special collections, such as service learning activities, work-study positions, and internships, as opportunities for experiential learning in libraries. Archives and special collections are natural laboratories to facilitate "high-impact educational practices, such as undergraduate research and experiential learning for college and university students" (Grimm, 2017, p. 293). Experiential and active learning techniques can support a variety of pedagogical goals and focus on discovery in the learning process and not solely a transfer of knowledge from faculty to students (Russell & Hensley, 2017; Reed et al., 2017).

Academic librarians continue to take leadership roles to advance the digital humanities at their institutions (Kear & Joranson, 2018; White & Gilbert, 2016). The field of digital humanities has varied definitions, but it is generally characterized by approaches to humanities research and scholarship that utilize digital tools and methodologies, either for the analysis or publication of digital data and resources. There is no one unifying definition or application of the digital humanities, and yet it has ever-growing significance in higher education as new technologies for answering humanist questions are developed. Bell (2015) succinctly explains that "as there is no singular way to practice DH, there is then no one true way for libraries to be involved with DH" and that librarians can "engage with DH along a continuum of investment" (p. 108).

With the emergence of the digital humanities an "interest in archives has only increased, drawing attention to the entangled relationship between humanities, archival collections, and digital technologies" (Brannock et al., 2018, p. 165). Bell & Kennan (2021) point out that the digital humanities have a sustained connection to academic libraries as the field was "initially developed and supported by [libraries'] work to create digital libraries which gained momentum with technological developments in the 1990s" (p. 159). The authors further address how the digital humanities and libraries share "the most basic goal" of accessibility to information and an increase in the "digital accessibility and research potential of cultural materials" (Bell & Kennan, 2021, p. 163). Brannock et al. (2018) consider that "from a more practical and institutional perspective, however, the digital humanities also includes the digital curation, preservation, and dissemination of archival materials, especially those located within the special collections of libraries" (p. 165).

Hauck (2017) describes innovative library approaches at smaller institutions on digital humanities projects and details practical strategies for incorporating the ACRL Framework for Information Literacy in Higher Education. The author describes a DH partnership in course-integrated instruction that encompassed "the overlapping elements of digital humanities, information literacy instruction, and instructional technology" to effectively apply the ACRL frame "Information Creation as a Process" (p. 439). While exploring the power dynamics between teaching faculty and librarians, Giannetti (2017) states that "librarians are commonly understood to perform a subordinate, service role in

the academic hierarchy and thus may struggle to engage with their disciplinary colleagues as equal partners in pedagogical collaborations" (p. 259).

Varner (2016) argues that "digital humanities pedagogy is clearly an extension of research instruction – the established domain of expertise for librarians within the academy" (p. 208). However, there is still substantial debate in the digital humanities about what undergraduate students should be learning from DH instruction. Clement (2012) describes how "debates on defining the theory and practice of digital humanities have so far failed to adequately define *what* students should learn and *how* students should immerse themselves in these theoretical perspectives" (p. 371, emphasis in original).

In the introduction to *Digital Humanities Pedagogy: Practices, Principles, and Politics*, Hirsch (2012) points out that in digital humanities discourse "teaching" is often relegated to an afterthought in favor of "research" (p. 5). Hirsch argues that "we should be […] concerned about the pervasiveness with which pedagogy is excluded from discussions of digital humanities entirely" (2012, p. 5). The author further argues that "it is prudent for us, as a field, to start thinking critically not only about what we teach under the banner of 'digital humanities' and how we teach it, but also to consider the broader institutional implications and political consequences, of doing so" (p.13). Russell & Hensley (2017) contend that "for all the literature on digital humanities and libraries, librarians have only just begun exploring their teaching role in the digital humanities" (p. 588). The authors explain that DH instruction is "often tutorial-based […] with a focus on how best to present digital tools" (2017, p. 588).

Christian-Lamb & Shrout (2017) examine new models for undergraduate digital humanities initiatives. The authors argue that DH coursework should not only teach technical skills but also "critically examine those skills, digital scholarship as a whole, and the situation of [students'] own work in a digital space" (Christian-Lamb & Shrout, 2017, para. 19). Locke (2017) presents a framework for digital humanities pedagogy that focuses "on literacies and reflections more than the final product" as well as "more immersive and engaged assignments and activities" to equip students with "critical thinking skillsets for engagement in digital environments" (para. 46). Giannetti (2017) considers the expanding pedagogical role of librarians in the digital humanities stating that "librarians are increasingly stepping into the role of teacher and pedagogical collaborator in smaller-scale but equally effective partnerships that introduce humanities thought and methods in the classroom" (p. 257).

Clement (2012) discusses how "project-based learning in digital humanities demonstrates that when students learn how to study digital media, they are learning to study knowledge production as it is represented in symbolic constructs that circulate within information systems that are themselves a form of knowledge production" (p. 366). Through experiential learning in the archives "undergraduates get to think about the cultural work done by and through digital media" while simultaneously "analyzing and critiquing knowledge production in the humanities" (Clement, 2012, p. 370).

Background

Located in northeast Pennsylvania, the University of Scranton has an enrollment of approximately 3,400 undergraduate students. Its core educational mission is to provide students with a transformational learning experience with an overall focus on undergraduate education. The University identifies critical analysis, technological competency, information literacy, and a special commitment to the pursuit of social justice among the institutional learning outcomes (ILOs) of its programs and general education curriculum.

To support these and other ILOs, the University of Scranton offers several opportunities for students to engage in high-impact practices (HIPs) at the course, program, and college levels. High-impact practices, introduced by George D. Kuh (2008), are a series of teaching and learning practices which, research suggests, increase student success and engagement, and foster transformational learning. HIPs include collaborative assignments and projects,

undergraduate research, diversity and global learning, service learning, internships, and capstone projects. Many HIPs incorporate collaborative and experiential elements to provide students direct experiences with an issue and ask them to "*apply* what they are learning in real-world settings and *reflect* in a classroom setting" (Kuh, 2008, p. 11, emphasis in original).

As a high-impact educational practice, undergraduate research engages students in critical thinking, encourages both independent and collaborative learning, and enhances transferable skills (Kuh, 2008; Ruelle, 2020). At the University, there is a growing need for digital humanities support and services on campus, partially due to the field's intersection with many high-impact practices. Humanities faculty have started to experiment with digital tools and methods in undergraduate instruction. Course assignments and projects have incorporated GIS mapping, text analysis, digital publications, and multimedia technologies. Though DH pedagogy continues to expand on campus, the University's Harry & Jeanette Weinberg Memorial Library does not currently have a DH lab or formalized services specific to the digital humanities.

However, the library in many ways represents a knowledge base on campus for the digital humanities with relation to information organization, project management, scholarly communication, copyright and intellectual property, and metadata standards. And the library's collections, services, and spaces enable digital humanities teaching and learning by creating digital collections of primary sources, providing access to technology, and preserving humanities scholarship. The library's 2020-2025 strategic plan objectives include exploring "new and sustainable ways to encourage and support teaching and learning in the digital humanities" and continuing "to develop ways to cooperate with the humanities to utilize primary sources and special collections for student research and scholarship" (Weinberg Memorial Library, 2020).

Depending on institutional size, resource allocation, and labor constraints, digital humanities services at small-to-mid-sized academic libraries must often leverage the expertise of multiple librarians and technical support staff. The case studies discussed below engaged faculty librarians and support staff who were enthusiastic about working with students on digital humanities projects. These commitments, however, required preliminary conversations with library administration about priorities and expectations. Digital humanities support often comes at the expense of other job responsibilities, or duties are unintentionally augmented, which can quickly lead to burnout (Posner, 2013). It is essential for libraries to consider "the set of institutional supports, incentives, and rewards that will allow DH to flourish in a sustained way" (Posner, 2013, p. 44).

The author is a digital services librarian with faculty status who manages the library's digital collections and related digital projects. The digital services librarian leads the development of policies and workflows for accessioning and preserving digitized and born-digital materials from the University of Scranton Archives & McHugh Family Special Collections. The author is regularly invited by disciplinary faculty to provide lectures on primary sources in digital collections, but information literacy instruction is not among their position's official duties. As mentioned, librarians at small institutions tend to wear many hats, and they can experience an expansion of their responsibilities based on the needs of their service communities and evolving professional interests. It is important to acknowledge that adding DH instruction to an already lengthy list of responsibilities is not feasible in all contexts. But this article hopes to contribute to a growing list of examples of how librarians who are not typically involved in instruction are leveraging their expertise as information professionals to support teaching and learning in the digital humanities. Specifically, the cases demonstrate a digital librarian's approach to DH pedagogy that focused on archival practice and experiential learning in the library.

Case Studies

The case studies present three digital humanities projects by undergraduate students that were facilitated by academic librarians. The pedagogical focus of the projects was critical engagement and hands-on experience with archival practices to encourage transformational learning in the digital humanities. The first case was a year-long honors project to create a physical and digital exhibit of medieval manuscript leaves. The second project was a capstone experience in the digital services department of the library that examined the relationship between archives and social justice. The final case study was a course project that researched the University of Scranton's Black history and curated a digital archive with resources from the University Archives.

Omeka

Each of the case studies used the web-publishing software Omeka. Omeka is a free, open-source platform for creating digital collections and media-rich online exhibits. It is managed by Digital Scholar and was originally developed by the Roy Rosenzweig Center for History and New Media at George Mason University (Omeka, 2022). Since its release in 2008, Omeka has become a leading open-source infrastructure for the digital humanities. It was selected for the case studies based on three primary considerations: (1) demonstrated success in undergraduate projects within LIS and humanities literature; (2) a global community of users with robust project documentation; and (3) appropriateness for the project types (i.e., online exhibit, digital publication, and digital archive). Because Omeka S allows multiple projects in a single installation, the projects share the same institutional domain name. Adopting the same platform for all three projects was also practical from a labor and training perspective. The training resources that were developed by the author, including instructional videos and an Omeka guide, were used and adapted for all three cases. By working within the same technological infrastructure, the author was able to devote more time to addressing epistemic and pedagogical questions and avoided getting bogged down in new technical issues for each project.

Honors Project - Online Exhibit of Medieval Manuscript Leaves

The first case study took place during the 2020-2021 academic year. An undergraduate student with a work-study position in the University Archives & McHugh Family Special Collections enrolled in the University's Honors Program. The program is designed to support freedom of inquiry and personal development in undergraduate education and is characterized by rigor, independent work, and intense engagement with faculty and other honors students. The program culminates in a year-long senior project defended before mentors and a faculty board at the end of the spring semester. Undergraduate research by honors students is preserved and made accessible in the library's digital collections.

The student was a history major with a minor in classical studies. They possessed a particular interest in medieval manuscripts and paleography. In the spring of 2020, the student and special collections librarian defined an exhibit of medieval manuscript leaves as the final honors project. The special collections librarian arranged for the student to curate the exhibit from an external collection of medieval leaves. Though self-described as apprehensive about working with technology, the student wanted to incorporate a digital humanities component to the project. The author and special collections librarian became joint faculty mentors on the project and guided the student through the development of the physical and digital exhibits. The private collector granted the library a perpetual, non-exclusive license to publish digitized versions of the medieval leaves publicly in an Omeka collection. The library provided the collector with the master preservation copies of the digitized leaves.

The details provided below focus on the pedagogical objectives and learning activities for the digital exhibit. The paleographic and material analysis of the medieval manuscript leaves was mentored by the special collections

librarian and is beyond the scope of this article on DH pedagogy. The final project can be viewed here: www.scranton.edu/digitalprojects/medieval-leaves.

Project meetings between the student and author took place twice a week in the summer of 2020, and weekly meetings between the student, special collections librarian, and author occurred during the 2020-2021 academic year. Meetings were used to reflect on assigned readings, discuss theoretical concepts, engage in technology training, and address technical questions, as well as touch base on the overall progress of the project.

The learning objectives for the digital exhibit were: (1) examine the relationship between material artifacts and their digital representations; (2) critically analyze descriptions of digital resources; (3) experiment with the organization of digital resources in an online environment; and (4) evaluate the value of digital publication for primary sources. To accomplish these learning objectives, active learning exercises focused on archives processes and practices including curation, digitization, metadata application, and organization. The student was trained on the software and tools used in the library's digital services department. Learning exercises included digitizing the manuscript leaves, processing the images, developing a metadata schema and controlled vocabulary, describing the digital surrogates, and organizing the items in Omeka. Assigned readings on archival and museum theory were discussed at project meetings where the student reflected on their work.

The learning activities enabled critical engagement with the types of archival work that take place behind online collections and digital exhibits of primary sources. Though the student was performing these activities as part of an educational project, they were partially conducted within the professional setting of the library and reflected daily operations in the special collections and digital services offices. In this way, the active learning assignments represented experiential learning in the library. Experiential and applied work-based learning expose students to a professional setting, project team meetings, and work-based skills and competencies which provide a proxy for a real-world work experience (Wagner & Strach, 2019).

While undergraduate research encourages students to acquire core research methods and skills, students also benefit from developing "their collaborative and interdisciplinary skills – skills that are increasingly required within and outside the academy" (Mahony & Pierazzo, 2012, p. 216). Bell (2015) agrees that "including undergraduates in DH provides them with applied or problem-based learning, and the project and the classroom community benefit from the real-world skills the students have acquired" (p. 107). The honors student completed traditional humanities assignments in primary source research and narrative development to complete their project, but the archival tasks complemented this work. And the student gained a broader understanding of how knowledge is constructed in a digital environment.

Capstone Experience - Archives and Social Justice

Capstone courses, experiences, and projects are recognized as high-impact educational practices that typically occur in the senior year of undergraduate education. Over intersession of the 2020-2021 academic year, a student from the University's Peace and Justice Studies concentration inquired about a capstone experience in the Weinberg Memorial Library's digital services department to be mentored by the author. The Peace and Justice Studies concentration is designed to bring "academic studies, including classes, community service and interdisciplinary research, into the process of building a more just and thus more peaceful society" (University of Scranton, 2022). The concentration takes a multidisciplinary approach to courses and requires an experiential learning component which is open-ended in format.

The student expressed interest in digital history and community archives, and they were considering a graduate career in library and information science. To fulfill the experiential learning requirement, the student and author collaboratively defined a capstone experience that would examine the relationship between archival practice and social justice. Readings from critical archives discourse explored collections from underrepresented communities

and the documentation of social justice movements. Reflections for reading assignments asked the student to consider how archives may contribute to or reflect race, gender, and class inequities as well as underrepresentation in historical collections.

During the spring 2021 semester, the capstone experience included active learning exercises in archival practice. The student participated in some of the everyday tasks of the digital services department to select, describe, organize, and publish materials in digital collections. These activities set a groundwork from which the student and author could discuss issues of critical librarianship from the literature. Bell & Kennan (2021) describe how critical librarianship intersects with the humanities and explain how it requires librarians to "consider the historical, cultural, social, economic, and political forces that affect information so to critique and disrupt these systems" (p. 159, citing Gregory & Higgins, 2013). The authors point out that this definition "acknowledges the systemic inequalities that library work exists in and recognises a need for active intervention, engaging with issues surrounding access, neutrality, and representation" (Bell & Kennan, 2021, p. 159).

The student then used digital humanities projects as objects of study to reflect on how library work contributes to humanities collections and, ultimately, the types of historical narratives that can be told. The final project culminated in a narrative digital publication that reviewed secondary digital humanities scholarship. The student selected three DH projects to critically analyze. The narrative of their Omeka site explored the connections between archival practice and the social justice histories of the projects. The projects selected were:

- *The Berkeley Revolution Digital Archive* (revolution.berkeley.edu): a collective project which emerged from an honors undergraduate seminar in American Studies at the University of California-Berkeley taught by Scott Saul in the spring of 2017. Students in the seminar conducted research in the archives to recover the stories missing from or hidden within standard accounts of Berkeley's history.

- *Baltimore's Civil Rights Heritage: Looking for Landmarks from the Movement* (baltimoreheritage.github.io/civil-rights-heritage): an ongoing project to research and document the historic context for the African American Civil Rights movement in Baltimore.

- *Freedom's Ring* (freedomsring.stanford.edu): a project of The Martin Luther King, Jr. Research and Education Institute at Stanford University in collaboration with Beacon Press's King Legacy Series. The project is an interactive multimedia presentation of Martin Luther King Jr.'s "I Have a Dream" speech, which incorporates the written and spoken word as well as excerpts from the civil rights movement's activists.

Following the capstone experience and graduation, the student was accepted into a year-long service-learning program, the Jesuit Volunteer Corps, in the Pacific Northwest. Because of the student's interest in archives and social justice, they were placed at an academic library in Alaska to help process a local history collection of Indigenous peoples.

Course Project - HIST 190 Digital History

The final case study incorporated the high-impact practices of undergraduate research and collaborative learning. Collaborative learning combines working together to solve problems with transforming individual understanding through the consideration of the insights of fellow students (Kuh, 2008).

In the summer of 2021, a faculty member in the history department approached the author about course-integrated digital humanities instruction for their fall 2021 course. HIST 190 *Digital History* offers undergraduate students an introduction to the discipline of history through an exploration of digital history's fundamental theories and methods. The faculty member and author discussed a course research project using the University Archives that would explore the University's Black history. The students were tasked with searching the archives for records relevant to their research questions, creating a digital archive in Omeka, and writing narratives to contextualize the primary

sources they found. The students were divided into groups focused on three topics: (1) student activism in response to the civil rights movement; (2) Black athletes; and (3) examples of racial inclusion and exclusion amid the onset of affirmative action. The final project (digitalprojects.scranton.edu/s/hist190) brought together primary research on the University's Black history conducted and curated by students.

The library played an important role in supporting the course throughout the semester. Through information literacy course integration and classroom instruction on research methods, three faculty librarians contributed meaningfully to the overall learning experience. The faculty-librarian partnerships originated from multiple conversations among the history faculty member and librarians during information literacy consultations, faculty learning communities, and joint committee work on campus. Library staff in the digital services and systems departments also provided invaluable assistance to build the digital archive and customize the Omeka site. As many academic librarians have observed, it is often through various connections and forms of outreach that librarians become involved with the digital humanities, particularly at smaller institutions without a dedicated DH librarian or lab. The course scaffolded instruction in research strategies, information literacy, and training with digital humanities tools and methods. This article presents details related to the author's embedded librarianship to support the students' completion of DH-focused exercises. It does not discuss details on the information literacy and research instruction which had different pedagogical goals and approaches and, therefore, are beyond the scope of this specific article.

The HIST 190 project presented an opportunity for the author, a digital librarian not in the research & instruction department of the library, to partner on course-integrated digital humanities instruction. The author made three presentations during the semester, met regularly with students from each group, and attended the final presentations to provide feedback. Inquiry-based assignments to build the digital archive focused on the following tasks: (1) discover primary sources in the archives; (2) develop metadata following a schema; (3) organize the sources within the site's narrative pages. The students also took advantage of digital tool integration to present their research findings. Their narratives included a digital map of civil rights events in Scranton, a timeline of the history of Black athletics on campus, and a data visualization with enrollment and demographic statistics.

In completing the course assignments, students considered archival issues including privacy, copyright, representation, and description. These are the same issues that librarians must critically confront when creating digital collections and conducting archival work. The students, faculty member, and digital services librarian addressed issues within the archives profession related to collection, selection, and description of primary sources. These discussions considered issues of archival silence and engaged students in critically thinking about why some records do not exist or were not kept. They considered how collection practices and archival descriptions can communicate, in some ways, the values and priorities of an institution. Confronting these issues with the students enabled a more critical understanding of how historical knowledge is constructed in print and digital collections. Through building their own digital archive, they strengthened their analytical and interpretive skills working with primary sources. They also gained experience making intellectual choices about the representation of sources before presenting their findings to a public audience. The inquiry-based learning activities attempted to reveal how contemporary research is mediated by digital collections.

The history faculty member was very pleased with the students' final project and, as a result, a similar pedagogical partnership with the author is underway for the fall 2022 course. The students will use the digital archive to further study the University's Black history with a focus on affirmative action. In addition to achieving a strategic objective to discover new and sustainable ways to support the digital humanities, the library's course support also meaningfully contributes to the strategic goal of pursuing "opportunities to highlight diverse perspectives and narratives in digital collections through collaboration with campus and community-based programs and projects" (Weinberg Memorial Library, 2020). The course project was also directly connected to the efforts of the University of Scranton's Council for Diversity & Inclusion. The Council has a Subcommittee on Institutional Black History of which

the author and history faculty member are both members. The subcommittee's work seeks to shift the Black experience from the margins to the center of analysis to challenge the predominant understanding of the campus's collective history as an opportunity for transformation (scranton.edu/rememberingblackness).

Analysis

The case studies represent an expansion, or perhaps re-envisioning, of the digital services librarian's role whereby a non-instruction librarian became actively involved in DH pedagogy to support transformational learning in undergraduate education. By taking a central role in DH instruction, the author was able to integrate the library's primary source collections into teaching and learning and encourage the use of digital archives as an experimental space for undergraduate research. The case studies also invited the author to envision digital humanities pedagogy as related to the archival work they already do in the library. Bell (2015) points out that "many institutions have had various levels of DH engagement without calling it that or without offering specifically marketed DH service and support" and suggests that one path to forming digital humanities partnerships is to "package and market existing services that are valuable to DH scholars" (p 107).

The case studies needed to be designed within tight timeframes during a period of relative disorder and uncertainty amid the pandemic. Therefore, assessment methods specific to these cases were not designed in advance. Project meetings with students, classroom notes, reflective assignments, course evaluations, and feedback during campus presentations all offered valuable insight to assess the projects. This information helps draw some preliminary conclusions that will inform future pedagogical activities in the digital humanities by the library. Some of the feedback from students related to technical hurdles and limitations of the platform's functionality. Students described challenges they encountered while working with Omeka, including issues with uploading images, arranging content blocks, formatting metadata, working with HTML, and customizing page layouts. Students also wanted to incorporate static, illustrative images within their narratives to supplement the archival items, which was a functional limitation of Omeka at the time. That content functionality was included as an enhancement in the most recent update for Omeka S.

A surprise for the author that has not gone unnoticed by other academic librarians (Christian-Lamb & Shrout, 2017; Clayton & Widener, 2017; Giannetti, 2017; Locke, 2017; Mahony & Pierazzo 2012) was students' apprehension about working with digital tools, as well as the overall lack of digital literacy for so-called "digital natives." Several students expressed a misconception that in order to work on a digital project they needed to be able to code. Basic procedures like file naming, working in different file formats, and editing spreadsheets required valuable time during training sessions that were originally planned for more advanced topics. Reed et al. (2012) discuss the challenges that librarians face when designing experiential learning activities including "combating the student experience of feeling underprepared or inadequate and identifying a healthy balance between guiding students and allowing them to lead" (p. 109).

The library literature reveals a growing deficiency in students' digital and information literacies. Clayton & Widener (2017) explain that while conducting training workshops "one of the biggest surprises was the students' lack of digital and information literacy skills" (p. 5). The authors needed to "move at a slower pace than we planned because we needed to explain basic concepts, including information bias, proper attribution, working with different file formats, and searching databases and the library catalog" (2017, p. 5). Locke (2017) considers some of the curricular problems from the rhetoric of undergraduates as "digital natives" and the misconception that "students are skilled in both the use and creation of digital content" (para. 4). The author points out that "though many in higher education generalize their undergraduate students as being well acquainted with technology and approach their studies through a digital lens, students often struggle when it comes to critical content creation and mediation" (Locke, 2017, para. 4).

Giannetti (2017) addresses this issue, stating that the "lack of prior critical engagement complicates the transition from a 'point-and-click' user to a researcher capable of critically evaluating the results of a digital process, let alone one capable of analyzing the theoretical, cultural, or ethical implications of that process" (p. 261). Christian-Lamb & Shrout (2017) explain that the "discrepancy between what instructors expect of these digitally 'native' generations, and what the students themselves know has been a challenge for digital humanities pedagogy in undergraduate contexts" (para. 6). Russell & Hensley (2017) argue for a "more information-literate approach to digital humanities instruction" to move towards critical engagement with humanities sources (p. 589).

Bell & Kennan (2021) describe the disconnect in role perceptions between librarians and disciplinary faculty in the digital humanities, pointing out that the library's role is often understood as a technical and support-focused one. The authors cite a 2015 survey sponsored by Gale Cengage and *American Libraries* that found that "80% of faculty considered the library's role to be 'providing general support'" for digital humanities projects, while "63% of librarians felt DH librarians should be a 'full-fledged project collaborator and participant'" (p. 163). But librarians who develop and maintain digital archives are well positioned to engage in digital humanities pedagogy. Brannock et al. (2018) state that "by conceptualizing the digital humanities in relationship to ongoing archival work at our university, we hoped to expand the umbrella of digital humanities to include, in addition to project development, the countless forms of pedagogical and bibliographic work that go into the curation and contextualization of archival materials for the broader public" (p. 164). The authors conceptualized the digital humanities as a set of archival practices to foreground "the increasingly collaborative and material practices of knowledge work in the 21st century" (2018, p. 164). Related to this, one of the goals of the case studies was for students to experience the digital humanities as a material and archival practice.

There was consensus among the students in these cases, expressed in their reflections and public presentations, that the archival activities to create digital projects were rewarding learning experiences. Recent research has explored the affective impact of inquiry-based and experiential learning in the archives, and these domains were considered by the author when designing their instructional approach. Carino (2018) writes that "transformational theory focuses on a student's disposition toward learning, emphasizing the affective domain (emotional growth or attitude)" (p. 486). Transformational theory considers "how teaching changes the attitudes, emotions, interests, motivation, self-efficacy, and values of the students involved (affective domain) and less on acquiring or retaining specific facts, concepts, and principles (cognitive domain)" (Carino, 2018, p. 486). Carino demonstrates how the development of affective dispositions aligns with research on inquiry-based learning in the archives. The students' self-reflections and conversations during project meetings suggested a shift in their attitudes and motivations towards their research topics beyond grasping the basic concepts and principles.

Students in every case study gave campus presentations to groups of faculty, staff, administrators, fellow students, and members of the board of trustees. The presentations were forums to celebrate the students' accomplishments and for them to share their enthusiasm for their research projects. After the presentations, faculty and academic administrators acknowledged the significance of the library's role and commented that the projects were likely not possible without the library's support. The case studies demonstrated for a campus audience the ways in which the library can support transformational learning in the digital humanities. Wertzberger & Miessler (2017) similarly describe how "using our historic collections as the foundation of a digital project strengthens existing connections between the library and the academic curriculum and provides additional exposure to the library's collections" (p. 84). The undergraduate research projects created a new learning experience for students and illustrated "how librarians and archivists can collaborate with faculty to integrate collections into curriculum" (Rockenbach, 2011, p. 297).

Looking forward, the library is developing a policy and process for requesting access to Omeka S and course-integrated DH support. Resources will also provide guidance on content, technical, and copyright considerations for

users of the platform. As these resources are being developed, Yale University Library's online exhibitions research guide was one of the valuable examples of how digital humanities support is defined and structured in another institutional context (guides.library.yale.edu/onlineexhibitions). As digital humanities expertise in the library expands with each successful collaboration, and as instructional exercises and materials are further refined, the hope is that less start-up time will be required for subsequent projects. Varner (2016) argues that "librarians can build on their role as instructors and reflect the emerging identity of the library as an active and productive space on campus and not only a warehouse of primary and secondary sources" (p. 220). The author asks librarians to consider how "connecting the library to digital humanities work will create new ways for users to work with library collections and give the library a low-stakes way to experiment with emerging tools" (2016, p. 220).

Conclusion

This article has attempted to demonstrate how academic librarians can find entry points into digital humanities pedagogy by conceptualizing the field as related to their professional work in archives and special collections. The cases studies considered the pedagogical possibilities of archives-focused assignments in digital humanities instruction. The digital humanities is an experimental field, with many practitioners being self-taught, so librarians in non-instructional areas should not be discouraged from participating in digital humanities curriculum and pedagogy. Active learning approaches and experiential learning in the archives can promote students' critical engagement with issues of archival selection and knowledge production in digital collections. In this way, students participate in the development of digital collections from which digital humanities scholarship is generated.

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