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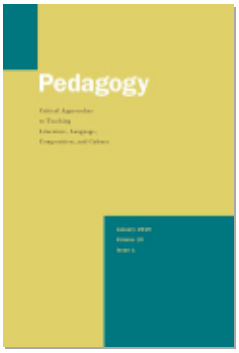

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Digital Curation

Pedagogy in the Archives

Jolie A. Sheffer and Stefanie Dennis Hunker

Over the last several decades, the digital humanities (DH) has become an increasingly important and high-profile part of university life. DH has been a particularly powerful force for interdisciplinary scholarship, bringing together literary scholars, historians, cultural geographers, computer scientists, statisticians, social scientists, and others to solve problems using newly available tools and methods. Yet all too often, when advocates talk about DH, they emphasize huge interdisciplinary projects that bring powerful quantitative analysis to humanistic study, enabling what Franco Moretti (2013) calls "distant reading" as a corrective and supplement to the traditional practice of close reading. DH projects such as those out of Harvard's Metalab, Stanford's Humanities Center, MIT's Hyperstudio, and Northeastern University's NULab are high-profile efforts, involving dozens of researchers and staff, massive institutional investment, and huge external grants. Such cost- and labor-intensive programs are exciting research endeavors, but they have prohibitive barriers to entry for individual faculty members or, indeed, for the vast majority of cash-strapped college and university campuses to begin to experiment with DH tools. Moreover, their learning curve is too steep to be useful in most college classrooms.

However, there are a variety of accessible options for engaging students in DH projects. A rich history of text encoding initiatives and digi-

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tal scholarly editions originate primarily in English departments, including multiple-institution projects like the Walt Whitman Archive, as well as smaller-scale efforts like the BeardStair Project, which began as a volunteer effort by four students under the guidance of Katherine D. Harris at San Jose State University to digitize three rare modernist illustrated books; or Amy E. Earhart's project on Alex Haley's notes for his biography of Malcolm X at Texas A&M University. As Earhart explains, by "embedding the project within a literature classroom, students learned to transcribe, markup, digitize, and annotate literary materials. This model of partnership allows students to understand the ways in which canons are constructed and to obtain hands on experience with digital humanities" (2014). Such text-focused DH projects continue and extend the curricular goals of traditional English classrooms.

Another student-friendly approach to DH is digital curation, which has become an increasingly popular and useful form of DH scholarship that is well suited to a wide variety of disciplines. The term *digital curation* includes "a wide range of practices of organizing and re-presenting the cultural record of humankind in order to create value, impact, and quality" (Burdick et al. 2012: 34). Put another way, curation is the process by which a series of images or texts is presented to audiences to tell a particular narrative, whether that narrative is one of fine art, temporal development, literary genealogy, popular culture ephemera, or documentary evidence. Open-source tools like Omeka, Scalar, Drupal, WordPress, and Viewshare allow individual faculty members to experiment with new visualization and digital curation methods (Zhang et al. 2015: 366). For example, Earhart (2010) used Omeka for a digital curation project on the Millican, Texas, race riot of 1868, in which undergraduate students digitized and provided metadata tagging and geolocation information for maps and historical newspaper articles. Earhart's project taught students the foundational practices of archival research and digital curation. In Ed Gallagher and Meg Norcia's early American literature project, students transcribed eighteenth-century letters from Lehigh University's special collections, and then provided analysis, context, and suggestions for future research.[1] Athena Castro-Lewandowski (2013) used Pinterest as a digital curation tool in a freshman composition course in order to encourage critical thinking, storytelling, and student collaboration. In addition, digital curation tools are being used to create robust online repositories; for example, Gayle Morris Sweetland's Digital Rhetoric Collaborative shares teaching resources, blog posts, a wiki, and much more.[2]

Digital curation projects are especially adaptable to English class-

rooms, which often tend toward interdisciplinary approaches that touch on literature, rhetoric, linguistics, and/or cultural history. English departments are already sites for pointed conversations about considering audience, modes of formal analysis, and historical context. However, digital curation tools offer new opportunities to critically engage students in public scholarship by asking them to synthesize existing scholarly research, make new arguments, and situate their work in relationship to current debates—all for a general audience. Whether incorporated into undergraduate or graduate classrooms, digital curation projects provide a relatively easy way to introduce students to new tools and audiences for humanistic skills. And we believe that is good for all involved.

With the wide availability of digital curation tools and digital environments, we all now have the opportunity to think about a new era in the study of popular texts. We are in a digital world, where visual images circulate across the globe in an instant. These images require explanation, historicization, analysis, and interpretation. We read images differently depending on how they are framed and in what context. Accordingly, we are engaged in the process of curation whenever we use digital tools such as Facebook, Pinterest, Flickr, and Tumblr. And with this new era in the circulation of popular media, we have new responsibilities to train our students to critically engage with their meanings.

The role of the visual is at the heart of this moment, with new possibilities for creating, altering, sharing, and interpreting images. Accordingly, digital curation has profound implications for pedagogical practice, as well as for processes of critical reading, thinking, and writing and for the audience(s) for our scholarship. Incorporating digital curation projects into the English classroom brings into sharp relief the particular skills necessary to humanistic inquiry while also making visible the often-unspoken values and methods that underpin such work. For example, students must carefully consider what context is necessary to explain the significance of a given archival text and its relationship to their overarching narrative. And they must be able to articulate their priorities and processes, such as in the opening curatorial statements of a digital exhibit. In devoting course time to engage deeply with questions about the processes of meaning making, we believe we better equip our students to do what English majors do best: close read cultural texts, find patterns, and make convincing arguments. Moreover, the use of digital tools and digital environments can profoundly enhance how we study literature and culture and communicate our findings with others. This kind of intellectual labor underscores and amplifies the skills we expect of our students but

with heightened applicability and immediacy. It is precisely in its differences from traditional academic assignments that it offers some important insights into ways we might revise our existing curricula to be more relevant and self-reflexive (Marsh 2013).

Despite the obvious relevance of digital curation projects and the wide availability of open-access tools, there remains a huge learning curve for non-DH teaching faculty to incorporate digital curation assignments in their classrooms. The barrier to entry often feels quite high, especially in the course of our ordinary working lives, in which faculty, especially those not at flagship public institutions or elite private schools, are increasingly burdened with heavier course loads, larger class sizes, recruitment and retention pressures, and expectations to contribute to raising the university's public profile. How does a single faculty member do all this, particularly without extensive prior DH experience? The answer, we propose, is astonishingly simple: by collaborating with one of the most valuable but underutilized and underappreciated resources for faculty interested in innovative teaching—the university library. We wish to highlight the opportunities for collaboration between teaching faculty and library staff to enable humanistic projects that have greater depth and breadth, as well as a wider audience and a longer shelf life, than typical class assignments.[3] In line with the arguments of Paul Fyfe (2011), we see this approach as providing the best of two worlds: teaching traditional, "analog" research skills while maximizing current technology to place that knowledge in new contexts and to reach ever-wider audiences.

Margaret Konkol's (2015) distinction between *digital humanities* and *digital pedagogy* is relevant here. As she discusses, all too often people believe that these terms are different, even incommensurate, assuming that the output of DH is knowledge (original research) and the output of digital pedagogy is student learning. To the contrary, students in a course with DH projects can, and regularly do, produce new knowledge. As we discuss shortly, and as some of the projects mentioned above illustrate, when students engage in digital curation they actively contribute to the scholarly community. Indeed, Konkol has found that "students advance more quickly through theoretical and practical problems when they can work collaboratively on a specific project with a real audience." We should all be more aware of DH tools that are freely available, and we should seriously consider how DH projects might be relevant to a variety of course types and topics. Moreover, as Adeline Koh explains, "you and your students are all already digital humanists, because you all use technology in your daily lives. . . . Without knowing it, you're probably already using many of the techniques of digital humanists in your

life and in your classroom" (2014). Certainly, to actually incorporate DH assignments into a classroom requires thoughtful preparation, but the tools are easier to learn and adopt than most faculty realize. This article attempts to help demystify the process by reviewing existing scholarship, sharing examples of classroom digital projects, and offering our own case study for digital curation collaboration. We hope this example provides a model for digital curation that is easy to adapt and to scale up or scale down.

Digital Curation for the Win

Just as university teaching conditions have changed over the past two decades, university libraries have undergone a tremendous shift. Gone are collections for just about every subject and periodicals for every department. Instead, lean staffs struggle to "do more with less," which usually means culling main stacks collections and print periodical holdings in exchange for spending millions of dollars on electronic resources. In this challenging environment, libraries have reinvented themselves. Despite the hoary stereotype of the librarian as a shy wallflower hiding in the basement stacks, today's librarians are at the cutting edge of technology, leading efforts in digitization, preservation, metadata tagging, and data curation. Through their work, university libraries are physical centers of modern research methods and the preservation of material culture. For these reasons, humanities teaching faculty have a tremendous amount to learn from our counterparts in the library. In turn, the librarians have the opportunity to reach larger audiences through partnerships with teaching faculty and their students.

For their part, librarians are eager to have students and faculty make use of their collections—to study, contextualize, write about, and publicize their holdings. Librarians are experts at archiving material so that the data is preserved for future generations, and the evolution of technology provides new opportunities for partnerships between these two disciplines (Vandegrift and Varner 2013: 69). Humanist scholar-teachers are experts at interpreting texts and material culture, making meaning from the documents of the past and present (Brewer and Fritzer 2011: 43). As such, we have the makings of a truly symbiotic relationship, with librarians and faculty drawing on each other's strengths, creating a continual feedback loop of collaboration, learning, and knowledge sharing. Such projects embody the digital curation lifecycle model described by the Digital Curation Centre at the University of Edinburgh (Digital Curation Centre, n.d.). Fortunately, collaboration among librarians and teaching faculty or other campus units is becoming more common. Chris Alen Sula (2013) writes about various studies analyzing DH work

on campuses, which collectively illustrate the diverse nature of DH work in academia. Libraries are involved in most of it, it seems, but to varying degrees.

When you add students into this mix, we believe you get a win-win-win situation, with students providing additional labor for faculty research and utilizing library resources while gaining invaluable expertise in interpretation, visualization, and communication, as well as learning to use various digital tools to enable distribution to a wider audience. One promising example of the kind of symbiotic collaboration we advocate is Lauren Klein's Science Fiction Fanzine Archive,[4] which fuses pedagogical and research interests to digitize and contextualize science fiction fanzines; the project was the product of two separate classes at two different institutions (Georgia Institute of Technology and University of Victoria) and involved special collections at Georgia Tech's university libraries, utilizing the Omeka platform. Another example is Konkol's class at the New College of Florida, which produced a public database in WordPress for the dissemination and contextualization of items from John Ringling's personal library and select rare books from the Ringling library.[5] At Bowling Green State University (our institution), Sue Carter Wood's graduate rhetoric and writing students created "Literacy Artifacts: Preserving Tools, Methods, and Teachers' Technologies of the Long Nineteenth Century," a digital exhibit on the history of writing instruction and teacher training at the campus.[6] These projects, like those we mentioned earlier, suggest some of the myriad possibilities for collaboration between teaching faculty and university libraries, which not only enhance student learning but also bring new knowledge to the public. For all of these reasons, we see such collaborations as mutually beneficial for all participants: students, teaching faculty, library staff, and the wider public.

The pedagogical value of these projects to students is worth emphasizing. In digital curation projects, students are confronted with choices about information architecture that are usually invisible to them. They must actively consider what kinds of metadata and exhibit architecture will be most helpful to their readers/viewers. Plus, they must consciously craft their work into a compelling and accessible narrative, a lesson that is too often forgotten when the assignment is to make a scholarly argument. (We discuss these issues in greater detail shortly.) As an additional benefit, this kind of collaboration can elevate the university's public profile and provide students with intellectually rigorous skills that are also directly relevant to the job market—and not just the academic job market.

The challenges of the academic job market are no minor consideration. In the 2016 Mellon Foundation study "Reforming Doctoral Education,

1990 to 2015" Robert Weisbuch and Leonard Cassuto identified "professional identity and public engagement" as one of the most significant challenges to—and urgent requirements for—revising graduate education to better meet the needs of students and the labor market. In their words, "The doctoral degree remains hermetic and programs often fail to train students to address wider audiences or to apply their learning to social challenges" (iv). For years now, universities and nonprofit organizations across the United States have been working on modeling new kinds of graduate programming.[7] The most promising approaches to this problem all focus on public scholarship initiatives, of which digital curation projects are one example. As Miriam Bartha and Bruce Burgett explain, public scholarship programs can help "address the three-way mismatch between the aspirations of graduate students, graduate curricula grounded in a disciplinary or guild apprenticeship model, and available job opportunities and career pathways" (2014: 33). But even without overhauling graduate education, there are immediate ways to revise undergraduate and graduate curriculum to prepare students to connect their academic skills to a wide variety of settings, including meaningful employment both inside and outside the academy.

The benefits of these applied projects are profound and multiple. When done thoughtfully, the use of digital curation tools and online environments can make vividly real for students the ways that knowledge of a subject is shaped by particular contexts and framing. By studying primary texts as evidence and considering how to place them in a new context, students become more aware of the ways that the media both reflect and shape the public's attitudes on various issues. Indeed, engaging in digital curation can help students recognize the very processes by which we ascribe cultural meaning (Marsh 2013: 279). We offer our own example as one way that special collections materials and digital curation tools can be included into English department curricula (and across the humanities more broadly) through close collaboration with teaching faculty (Hubbard and Lotts 2013: 28).

How We Did It

Beginning in Fall 2013, Jolie, a faculty member in English and American culture studies at Bowling Green State University, began working with Stefanie in the University Libraries on a collaboration in which graduate classes in English and American studies would curate online exhibits using digitized primary source materials from our special collections. We have since partnered on a total of three courses and provided the basis for many other faculty members to develop their own digital curation assignments. The particular

case study for this article comes from the Spring 2014 graduate course The 1960s in Contemporary American Culture, in which students learned not only about the 1960s but also about how scholars, artists, and curators create master narratives about the era. The project capitalized on the skills of each constituent group: librarians brought their expertise in the particular collections, as well as their knowledge of proper archival standards, digitization, cataloging, metadata tagging practices, and copyright law and fair use.[8] Jolie brought disciplinary expertise and established the curatorial framework for the digital exhibit, providing guidance for the students' primary and secondary research and helping them identify patterns across their individual research interests and findings. The students, in turn, brought their unique insights, personal passions, and varied disciplinary training to bear on the artifacts they curated and the exhibit texts they wrote. The lessons here can easily be adapted for undergraduate students. And while we advocate combining archival work with digital curation tools, these processes certainly can be separated.

Bowling Green State University holds world-renowned collections of Civil War materials, local history, music, and popular culture. The Music Library and Bill Schurk Sound Archives houses the largest academic collection of popular sound recordings in the United States. It also supports the College of Musical Arts and counts among its holdings a large collection of popular sheet music from the late nineteenth century to the present. The Browne Popular Culture Library (BPCL) is the largest and most comprehensive collection of American popular culture materials in the United States. Beginning with material from the 1870s, the BPCL has research-level collections of contemporary popular fiction, popular entertainment, and graphic arts materials, among other resources. In addition, a wealth of local history is housed in the Center for Archival Collections, which also holds university archives, regional historical collections, rare books, and other special collections. Finally, as a Federal Depository Library, Bowling Green houses a government documents collection that is rich in online and print documents, both contemporary and historical, state and federal.

Extensive and diverse collections such as these made selecting materials for the digital exhibit a challenging process, simply because there was so much from which to choose. Even with a historical focus limited to materials from the 1960s and early 1970s, there was far more material than could be curated within a single class in one semester. If the students in the course were going to be curating a digital exhibit, how would they even begin to know what resources were available, much less what to do with them? The

answer to these questions lies in the structure of the digital project itself, which was designed to introduce students to the process of getting lost in an archive and then collectively plotting a path out. We return to this issue in more detail shortly.

In terms of the division of labor, Jolie developed the course syllabus and assignments. She has a background in twentieth-century American literature and cultural studies, with particular focus on race and ethnicity, gender, and sexuality in popular literary and visual texts of the long twentieth century. Her intellectual interests shaped the preliminary list of relevant archival materials (see appendix A). As general liaison and project manager, Jolie coordinated with library staff on their contributions, developed a workflow document (appendix B), and ensured that problems would be satisfactorily addressed by the appropriate constituent(s). Whenever questions or problems arose, she was responsible for clarifying responsibilities and finding solutions.

Meanwhile, Stefanie served as leader on the library side. Librarians from BPCL, Center for Archival Collections, government documents, and the Music Library provided their expertise in their respective collections, as well as knowledge of proper archival standards. In addition, the university libraries have a dedicated technology unit with a project manager, a server administrator, and a web developer, all of whom contributed to this project. The web developer modified the open-source Omeka code to allow for the use of additional plug-ins, such as a slideshow and timeline. In addition, an undergraduate graphic design intern worked with the class to develop a customized logo and color story for the digital exhibit. While these supplemental resources added to the aesthetics and technological capabilities of the project, the essence of the digital curation project did not require them. Faculty at institutions without such resources can absolutely do this work with existing (and free) out-of-the-box tools.

The students who contributed to the digital exhibit were MA and PhD students from a variety of departments and programs, including American studies, art, English, history, and popular culture. As students enrolled in graduate programs, they possessed fairly well-developed understandings of academic research expectations and good writing skills. A few of them had advanced computer skills, such as in HTML or digital imaging programs (e.g., Adobe Illustrator and Photoshop). However, even though they had a variety of different disciplinary training, none of them had any prior experience using archival materials, nor had they engaged in critical curation before. In addition, all were new to Omeka, an open-source web-publishing

platform that is widely used to create scholarly exhibits and digitized collections. This meant that there would be a steep learning curve for the students. Nevertheless, all were excited, if also apprehensive, to engage in this new form of scholarship.

Learning through Doing

The course was designed to have students study representations of the 1960s in popular texts from the 1990s to the present, in order to better understand the various social movements of the 1960s, but also to ask what these contemporary texts are doing *with* the 1960s. The class was tasked with considering what version(s) of the civil rights, Black Power, and women's movements, antiwar protests, and counterculture get the most attention today. What do contemporary texts reveal about political attitudes and social activism in the last twenty-five years? This course, with students from various disciplines who nevertheless shared common skills in close reading texts for ideological as well as aesthetic meaning, was a terrific fit for the digital curation project. Moreover, the small class size (fifteen students maximum) made it easier for Jolie to supervise both their use of technology and their research/analysis for this new project. However, what we did was certainly replicable in an undergraduate course with many more students. Some of our colleagues have since developed similar projects in larger introductory courses, with exhibits divided into small groups on topics (and using texts) preselected by the instructor.

During the semester, the students read and watched a variety of texts about the 1960s that were produced within the last twenty years or so—films like Robert Zemeckis's *Forrest Gump* and Ang Lee's *Taking Woodstock*; Matthew Weiner's television show *Mad Men*; novels such as Kathryn Stockett's *The Help*, Charles Johnson's *Dreamer*, Karen Tei Yamashita's *I Hotel*, and Philip Roth's *American Pastoral*—alongside primary texts from the era, historical context essays, and secondary articles. The intention was to get a sense for the 1960s but also to recognize the retrospective gaze that shapes contemporary texts about a prior era. The course was designed to investigate how we tend to read the past through the lens of the present, seeking proof that history was inevitable, that events were destined to turn out the way they did.

In keeping with the focus both on the past and on the present's treatment of that history, the course had two distinct final projects. First, students wrote a conference-paper-length essay on a topic of their choice; they could

either do a historical recovery project using archival materials or a textual analysis of a contemporary text about the 1960s. Regardless of the topic, they were expected to make an original argument that was participating in an existing critical conversation—a pretty standard academic assignment. The second final project was less familiar: a digital exhibit, which all of the students worked together to create using Omeka (see appendix B). The students were responsible for selecting materials from the archives for digitization, choosing page layouts and exhibit architecture, and writing all explanatory text (from the opening curatorial statement to short essays on subtopics linking the various primary texts).

Anecdotally, it makes sense that knowledge of another culture or time period can be strengthened and broadened by the introduction of primary sources into an assignment. Research has backed up this claim (Carini 2009; Krause 2010; Bailar 2011; Brewer and Fritzer 2011; Mazella and Grob 2011; Bahde 2013). The incorporation of a fully digital component was designed to extend this "feeling" for history to a broader audience and to make explicit the ways that narratives of the past are constructed and disseminated, while also adhering to rigorous standards for archivization and research.

Accordingly, the digital exhibit had five interwoven intellectual goals:

1. Understanding history and culture through archival materials
2. Collaborating to create an exhibit greater than the sum of its parts
3. Practicing interpretation
4. Thinking critically about data and information architecture
5. Telling a compelling story and communicating it effectively to a wide audience

The first goal was achieved through course readings, as well as through learning to work with archival materials as primary texts. We spent an entire class meeting (three hours) as a group in the library, devoted to introducing the students to archival research, with plans for them to repeatedly return individually or in smaller teams for further research and for us to continually address these issues in class throughout the semester. In that introductory session, we discussed the need to approach archival materials with a spirit of exploration, telling students that they should be alert to surprising things, to items that confounded or provoked them. Given their lack of experience doing archival research, Jolie encouraged them to be open-minded, to see what they find, to let their research interests develop out of the archive, rather than coming in with a narrowly defined topic. Our focus for the project on using

the library's special collections meant that students had to work with whatever materials we happened to have; every archive is idiosyncratic. Rather than chafe against that, we wanted them to see it as a provocation to find relationships among items, make unexpected connections, and experience open-ended intellectual exploration. Indeed, one of the greatest pleasures—and challenges—of scholarship is discovery.

On the archives day, the students were divided into small groups and rotated through representative materials in each special collection by the appropriate librarian (see appendix C). By the end of the day, they had to request at least one item to be digitized, which they would use in their Omeka training two weeks later. However, another key goal of this small group arrangement in the archives was to get them talking with one another from their first tentative exploration, to share their findings and identify connections with one another and with materials across collections. They were thus instructed, from the beginning, to think of one another as coauthors, as well as to consider the library faculty and staff as equal partners with valuable expertise on which they should draw. As a group, they possessed far more knowledge and expertise than they would have individually; the exhibit would reflect their collective knowledge.

Just as the students learned to collaborate with one another, the course itself required intense cooperation between the faculty member and the library staff. Jolie began working with the librarians several months before the semester began. During multiple planning meetings and many e-mail exchanges, she provided parameters and prompts to help the librarians identify relevant materials within the archives, including paying special attention to items relating to civil rights and the Black Power movement, social protest and student movements, the Vietnam War, feminism, counterculture, and popular culture.

The librarians then developed a document outlining some of the most promising materials from across the collections. This document became part of an online "LibGuide" for students to familiarize themselves with some of the available materials. LibGuides is a content management platform that uses a system of content boxes to build pages within a guide, enabling librarians to more efficiently provide information to users. Content boxes can be shared among users within an institution. Thus, LibGuides easily allows libraries to publish web pages on particular subjects or formats or for particular courses (e.g., academic writing) and as a means to share tutorials and how-to guides. For our course, the LibGuide identified archival materi-

als from major national counterculture centers like Berkeley, as well as local resources, such as a former university president's letters to and from students and parents in response to the Kent State shootings of May 1970. As previously discussed, the array of topics and materials left room for students to begin the process by pursuing their own interests, to get lost in the archive, and then eventually to make connections with other students' materials to form their exhibit.

Accordingly, after their initial introduction to the archive, students made appointments with the collections' respective librarians, singly and in small teams, to study in greater depth and breadth particular items, collections, or topics of interest. The library staff brought their knowledge of their archives' resources to bear on the project, working with students to identify additional materials relevant to the emerging themes of the exhibit. Two weeks later, the students had another full class period devoted to issues around digital curation, including copyright and fair use; basic Omeka training, including establishing common standards for all metadata and inputting metadata for one digitized artifact per student; and an exhibit design theme consultation with an undergraduate graphic design intern (see appendix D). At the conclusion of this training session, Jolie led the class through an initial brainstorming session to identify major patterns in their archival materials, to articulate thematic subsections of the exhibit, and to develop smaller working groups to collaborate on researching and writing exhibit text. Throughout the semester, Jolie regularly checked in on their progress and helped them see connections among their interests and archival materials.

Another learning goal for the course was to curate historical materials thoughtfully to provide a sense of context and meaning. In selecting particular texts for inclusion and in deciding how to place them in relationship to other historical artifacts, the students made subtext into text. Humanities and arts courses already teach interpretation effectively, but while faculty expect students to think deeply, to make claims about the meaning(s) of texts, we do not always "go meta" with these processes. And here, too, we think digital curation is useful: it calls attention to the processes of making history and culture. In other words, students learn how narratives about history get made. This notion of doing history (or textual analysis) rather than merely studying history (or texts) is well expressed by T. Mills Kelly in his book *Teaching History in the Digital Age* (2013). Kelly advocates taking "a more forward approach to teaching students about the past and at least mak[ing] an attempt to meet them where they live. . . . We need to give them room to

create, even as we teach them to think like historians" in disciplinary ways (106–7). Digital curation projects teach students to think in disciplinary ways while simultaneously asking them to do disciplinary work.

Our digital exhibit thus required students to historicize archival materials, synthesize information efficiently, and explain what they saw in those historical documents that might not have been understood the same way in the past (or in existing scholarship). In other words, the digital exhibit project demanded more than merely proving students had done their homework. They actually gained expertise in their subject for the digital exhibit. And they got excited to read more, to make sure they felt they really understood the texts and the era they were discussing.

This leads us to the issue of audience. When we ask students to write traditional research papers, the audience is clear—and quite narrow. But their work can have a longer life cycle than the semester and a much wider audience. Indeed, this is where the DH has a lot to say to those of us teaching traditional humanities courses. There is an audience for clear, well-written, accessible research. As John Unsworth has written, the general public is the crucial audience for both digital and conventional humanities work (qtd. in Poole 2013). Accordingly, we asked the students to write the exhibit text in clear, accessible language—for their parents, neighbors, future employers, and random strangers with an interest in history and popular culture. This kind of writing still requires extensive research and expertise but discourages leaning on academic jargon. It also frees students to express their passion for and curiosity about the subject. Part of what DH has brought to the fore is the potential for academics to be public intellectuals. This sort of project is a useful step in developing students' sense of themselves as having skills that are applicable to a wide variety of situations and content areas.

Intellectual Growing Pains

The digital curation assignment was designed to give students the opportunity to make their own discoveries, and it achieved that end. As one student, Nichole Rued, explained,

> My favorite part of the projects, and I think the most valuable, was the research part. . . . Working with artifacts in the library archives, holding them, close reading them, and making them accessible to others through digitization, were instrumental in helping my understanding of the time periods, and in particular the racial issues of the time periods, during my graduate career. It is one thing to read about the time periods, texts from them, or texts about them, but looking through other pieces from

those time periods (music, album covers, posters, pictures, letters) allowed me to "read" in a new way and to see a part of American history I wouldn't otherwise see (or think to look for as a literature student).[9]

The use of archival materials provided students a much richer sense of the 1960s and early 1970s. The students pored over magazines, paying equal attention to advertisements and feature articles. They listened to albums and read liner notes to understand the global circulation of musical influences. They studied sci-fi book cover illustrations and film cinematography to get a sense for the era's fascination with and aestheticization of technological progress. They read mimeographed counterculture 'zines alongside glossy national magazines to trace the spread of the counterculture into the mainstream media. They perused political cartoons and letters to the editor to understand the debates raging at the local and national levels. The more objects they studied, the more nuanced their findings became. Indeed, they were surprised and excited to realize that the version of the 1960s they knew from contemporary popular culture was utterly inadequate, if not downright wrong. For example, one student was shocked to learn that the Black Panthers were early, powerful advocates for free breakfast for schoolchildren. While such information is available in scholarly books, discovering it through reading the Black Panthers' own publications was truly mind expanding. The process of working intimately with archival documents made that history come alive in new ways. (Indeed, two students from the course went on to continue to work with materials from the digital exhibit. One published a peer-reviewed journal article on his discovery and now attends a history PhD program with a strong digital media focus, while another made archival research initiated for the exhibit the focus of her doctoral dissertation.)

Such archival discoveries led to fruitful collaborations among the students. The final exhibit featured short essays about "The War at Home and Abroad," which discussed newspaper coverage of protests against the Vietnam War alongside Black Power publications critical of police brutality; "Exploration and Expansion," which linked drug use as a tool for mind-altering experience with the technological progress of the space race; and "From Margins to Mainstream," which demonstrated how popular music and advertising co-opted counterculture symbols and themes.

Clearly, meaningful collaboration was fundamental to this project, which asked students to take an interdisciplinary, wide-angle view on their subject. Designed to help them learn about the "real" 1960s through original documentary evidence, the digital exhibit asked them to present that material

cohesively. In contrast with a typical research paper, in which each student takes an atomized approach to the course topic, the digital exhibit required a bigger canvas. Just as the course readings moved from the individual text (e.g., *Forrest Gump*) to the larger patterns (e.g., 1990s anxieties about affirmative action, neoliberal trends toward privatization of social issues into individual struggles), the digital exhibit required them to toggle between exploring the meaning of individual historical documents and the larger themes they saw emerging in the period. Thus, the digital exhibit required them to *do* interpretation using archival materials; they had to articulate what they saw as the cultural work these various items did in (and for) their original context(s).

Moreover, the entire process was designed to get students to work collaboratively to develop a more comprehensive picture of the era. Each student might begin with a narrow topic of interest, but that would have to be put in conversation with the other students' materials; they would have to collectively identify larger patterns. To facilitate this, students used Google Docs and our university's course management software to share their findings, such as individual items they wanted digitized for the exhibit, items they thought others might find useful, and possible collaborations among students with overlapping or adjacent interests. They also met frequently in person to work through their differences. Eric Browning, another student in the course, noted that "it was really exciting to engage on a scholarly level with a larger group to create an exhibition. With everyone having their own roles to fill, we were each given the chance to showcase our own particular interests, but then shape them, as a group, into one project." Indeed, the collaborative nature of these projects resulted in final products far more comprehensive and nuanced than any student might have developed solo. As Nichole describes, "The collaborative efforts toward organizing content helped me identify commonalities across artifacts of all kinds and piece together alternative histories. It contributed to a broader, intersectional understanding of the time periods, movements, and groups we studied."[10]

However, this kind of collaboration did not come easily, as heretofore the students had been trained to work individually. Typical of many of her classmates, Nichole wrote that "I generally embrace solitude, and I'm really meticulous about writing, so it was difficult to relinquish control, as it was for the rest of the grad students who were similarly neurotic; we all cared deeply about the project. . . . I definitely think I am better able to work in groups after both of these projects, and I've learned to value the input of others and their talents much more than I did previously." To encourage this collabora-

tive environment, we devoted partial class time on multiple occasions to help the student contributors think through exhibit organization and suggest connections among their research. To this end, Jolie also met with each student individually to track their progress, offer secondary source suggestions, and connect them with other students working on related topics.

While collaboration is an utterly essential skill in the private sector—hence all those team-building exercises beloved by management consultants and open-office arrangements at tech companies—it is not something that humanities disciplines typically train their students to do. Given parents' and students' anxieties about employment opportunities for English majors (not to mention the truly dismal job market for PhDs), we feel we have a responsibility to ensure that students at all levels can envision meaningful careers outside of the academy and that they can communicate clearly and effectively the relevance of their intellectual work to potential employers. An uncritical reliance on the research paper maintains the illusion that all work is done in isolation, without regular feedback from others, and without self-conscious consideration of audience. The reality is quite different: most work is highly collaborative, with small or large teams working on complex problems together, maximizing each member's particular skills and knowledge. We need to reflect that reality in our curriculum, to encourage students to see collaboration itself as a valuable, transferable skill. This is not a dumbing down of research; rather, it is a more relevant explanation of the benefit of humanistic inquiry and a more accurate reflection of contemporary skilled labor.

Another ongoing topic of conversation was the shift in audience. By reimagining their readers as real people out in the world (their family members, neighbors, or nonacademic friends) rather than a private audience of one (the instructor), students were forced to think critically about every aspect of the exhibit, including their language (avoid jargon), metadata tagging (ensure viewers could follow the trail back to the original publication and/or archive), and exhibit architecture (tell a clear, compelling story). As Hannah Espinoza explains, "Because the program design [of Omeka] allowed for nearly endless information paths, we had to be careful to not overwhelm the audience." The question of audience, which college students encounter in freshman writing classes and then frequently forget, shaped nearly every decision the students made. The digital exhibit project made a previously academic issue vividly real and urgent.

Once completed, the lessons gained in the process of creating the exhibit have the capacity to stick with students much longer than a sixteen-

week semester. Hannah, now a PhD student in rhetoric, explained, "These conversations about audience are also ones I [now] have with my writing classes, particularly in regards to multimodal projects. . . . I do find myself talking to students in terms of 'curating' their work, which I probably would not have done before the digital exhibits." For all of these reasons, we are convinced the digital curation assignment is stimulating and valuable to the students in ways that conventional coursework is not.

Another key priority was to get students to think critically about aspects of the research process that are often hidden from view, such as information structures like metadata. We asked them to consider how other scholars might use their exhibit and to ensure their work would be legible to future researchers. In the language of library science, we asked the students to think critically about archival arrangement, which refers to groupings within a set of materials in one of three ways: (a) logical groups within the set as established by the creator, (b) new groupings when original ones were lost, or (c) establishing new order where one never existed (Society of American Archivists 2004: xiii). It is in terms of this last category that the students working on these exhibits learned to think like information professionals. They took a disparate set of materials and made new logical groupings within the set.

While we introduced students to the concept of metadata, one semester was certainly not adequate to train them to think like experienced library professionals. Thus, while the students described these materials in terms similar to what librarians might use, the descriptions also reflect the scholars they are in the process of becoming. We taught them about basic Dublin Core metadata elements, a set of fifteen basic properties (such as title, date, creator, etc.) for use in describing a wide range of resources, and stressed that their terminology and descriptions needed to be as consistent as possible. We did not, however, require them to have librarian-like metadata. For example, we did not require them to use Library of Congress subject headings. Instead, we focused on ensuring that metadata were robust enough to enable user discovery, but we emphasized discoverability for their imagined audience.

Ying-bei (Wang) Eldridge, a student in the course, explained the value of thinking about audience and information architecture:

> Knowing that what we did was going to be viewed by the public and even used by librarians and other scholars, we were more careful and spent a lot time and effort creating the metadata as well as checking the validity and preciseness of information we input. There was a shared impulse to make sure every description we provided was right or at least made sense. This made the digital assignment different, and

to some degree more difficult, than traditional final papers, where some parts of writing might be rushed through. We also paid attention to tailoring original ideas, thus procuring more insight into the primary materials. This made the assignment a challenging and valuable learning experience.

Another student further described the value of this part of the process when she explained that

entering metadata pushed me to objectively approach the primary research because I had to articulate objective facts about the artifacts for a larger audience before interpreting that content. . . . For instance, it pushed me to pay closer attention to specific dates for publications (newspapers, music, book covers) rather than seeing an artifact as part of a more general time period. It reinforced the importance of considering very specific and individual contexts that were part of a larger context/time period.

We are not necessarily suggesting that all courses should swap the research paper for the digital exhibit. Certainly there are trade-offs in focusing on archival research and new technology tools. Students in the class did not read as many contemporary texts about the 1960s, or as much secondary scholarship, as they would have in a traditional reading-intensive version of the course. The students did not spend as much time on individualized academic research. They did not write article-length essays. But they did develop other skills, including actively thinking through processes of interpretation (what is significant about these particular images/texts?), prioritization of texts and ideas (what is the story we want to tell?), organization of information (how do we guide our readers through the exhibit?), and modes of communication (how can we make our ideas easily understandable and accessible?). We required our students consciously to make choices about what belonged in the exhibit, the connections they wanted to make among various artifacts, and how to incorporate each contributors' expertise into the exhibit in a coherent and unified way. The project thus required them to be able to articulate their priorities, arguments, and audiences in ways that often go unsaid for conventional writing assignments. This, too, was deeply challenging intellectual labor. For all of these reasons, we believe that digital curation assignments should be a meaningful component of a robust humanities curriculum. We believe that students ought to graduate with research skills *and* the ability to apply those skills in a variety of settings or formats. We ought to strive to have our students be able to demonstrate their mastery

of transferable skills—and, equally important, to be able to talk about the utility of their training (Bonds 2014: 148).

Once completed, the exhibit was made publicly available from the library website's home page, and students could show off their handiwork to family, friends, and prospective employers by sharing the URL. This was no small benefit to the students, who were justifiably proud of their work and also grateful to have a means of explaining their research and analytical skills in an accessible way. We also encouraged the students to include the exhibit on their résumés or CVs, to illustrate their technology skills as well as their research and writing skills. Most did so, and we think the very act of discussing the assignment as evidence of their expertise is valuable, giving them a language to talk about what they know and what they know how to do. One of the challenges we humanists now face is that we have to get better at explaining why what we do matters. We think digital curation helps us to articulate those arguments.

Concluding Thoughts

We want to stress that doing a digital curation project within the course was not a supplement to the course or simply a variation on the typical research paper. It required rethinking and reframing the entire course material, the sequence of readings and classes, and the structure of assignments. For example, three full class periods were devoted exclusively to digital exhibit work, including an archives day, a digital curation day (including the introduction to Omeka), and a workshop day for collaborating on the final exhibit's architecture and explanatory text. There were also many class periods in which we devoted anywhere from fifteen to forty-five minutes to working on the exhibit. Doing this kind of project thus requires a reorientation of time and focus. While this took time away from discussing a greater number of texts on and about the period, we believe the trade-off was worth it. The students spent a great deal of time outside of class working with the archival materials, giving them a richer sense of the era and its complexities than they could have gotten from traditional reading and in-class discussion. Moreover, by requiring them to collaborate with one another to create a single exhibit with several subsections, they learned about each other's research findings, which then forced them to reevaluate their own assumptions and conclusions. The resulting digital exhibit truly is greater than the sum of its parts, providing each student with greater breadth and depth of knowledge than would otherwise have been possible.

Faculty from other institutions, or those working in other disciplines or historical periods, could easily adapt this assignment for their course goals and local resources. While our students curated only materials from our own library archives, in keeping with the historical focus of the course, the assignment would work well with other kinds of documents, such as new photographs or videos created by students, or historical or cultural materials found on the Web. The point is to make use of whatever materials are available to you. Because the primary output of a digital exhibit is original interpretation and context, the only limitations to the kinds of texts you work with are those you set. Digital curation offers an endlessly adaptable approach to humanistic inquiry.

Just as with traditional curation, such as in museums, digital curation provides a disciplinary frame and an interpretative point of view for items on display. In the context of the humanities classroom, digital curation can provide historical context, juxtapose different media or representations, and articulate the cultural work of material and popular texts. There are infinite curatorial possibilities; it is the process of curation, and not just the curatorial stance, that makes this kind of work valuable and instructive. In this golden age of digital curation, the role of visuals is especially important to understand. And humanities scholars have invaluable expertise in the form and function of visuals in contemporary culture.

APPENDIX A: PRELIMINARY MATERIALS LIST FOR LIBGUIDE

Government documents

- Commission on Civil Rights
- Congressional hearings (Black Panthers)
- Presidential documents (campus unrest, riots)
- Integration of gov't programs (African Americans in the military)

Music Library and Bill Schurk Sound Archive

- 1960s music
- Sheet music cover art
- Smithsonian folkways collection

Center for Archival Collections

- Local/campus materials
- Photographs
- Manuscripts
- Campus yearbook (on microfilm)
- Campus newspaper (on microfilm)

Popular Culture Library

- William F. Ringle Collection on 1960s counterculture
  - Drug history
  - Underground music
- Alternative and Underground presses and papers (independent voices)
- Press kits
- Magazines
  - *Women's Day*
  - *Life*
  - *Jet*
  - *Ebony*
  - *Rolling Stone*
  - 'Zines
  - *Toledo Bronze Raven* newspaper (microfilm)
  - *Toledo Blade* (Google news archive)
- Vintage paperback covers
- Psychedelic posters
- Scripts
  - Soap operas
  - TV dramas

APPENDIX B: DIGITAL EXHIBIT ASSIGNMENT AND TIMELINE

Digital Exhibit

Students will work together as a class to create a digital exhibition based on visual, textual, and musical artifacts from the University Library's special collections, with explanatory text and curatorial essays. Once completed, this exhibit will be published on the library's Student Digital Gallery web page, available for all to see and use. Students will decide who is responsible for what: project management, drafting the introductory curatorial statement on the exhibit, providing infographics (such as a timeline), crafting a bibliography page, writing a page with contributor information, and editing/ proofreading (and checking all links).

Part of the project will also require students to work in small teams to create subsections of the exhibit. Your job will be to curate original materials from the library's archives, as well as write explanatory essays for your pages using course readings and additional research. On the last day of class, students will present on their sections of the exhibit.

This project will require individual research, analysis, and writing, as well as excellent coordination and cooperation with others in order to create a cohesive, comprehensive digital exhibition that illustrates both course content and library resources.

The Digital Exhibit will be graded by the quality of the completed work, as well as by a short executive summary and analysis report. By the scheduled date, each student will submit an executive summary that includes:

- **An outline** of the particular tasks and responsibilities he/she has contributed to the Digital Exhibit, including the items he/she was responsible for curating (1–2 pages)
- **A personal reflection** in which you discuss how the entire project has shaped your understanding of American culture during this historical period (another 3–5 pages). For this portion, go "meta" by offering personal reflections on the process and insights you gained from your work with **archival materials** and your **collaboration on the Digital Exhibit**.

Every student must meet with me before April 4th to discuss your contributions to the Digital Exhibit.

Key tasks and deadlines

	Who	Does What	Deadline
1.	Students	Select initial **1–2 artifacts** to be digitized	February 10
2.	Students	Schedule **appointments** with head librarian(s) of relevant collection(s) for further research	February 14
3.	Students	Complete **archival research** with librarian assistance.	February 21
	-	Submit **digitization requests** for all artifacts via e-mail to relevant librarian(s). See LibGuide for contact information.	
	-	Select 10 PAGES per person; a document with multiple pages is not a single item.	
	-	If working with an artifact with one prominent image and subsequent text pages, request digitization ONLY for main image. You should make an appointment to take notes on or transcribe the =additional pages. The librarians are not a copy =service.	

4.	Library staff	Digitize initial items	February 21
5.	Students	Begin **researching** topic for annotated bibliography, essay abstract, and final essay.	February 24
6.	Students	Learn to use **Omeka** at Digital Exhibit Training Day.	February 24
7.	Students	Craft **curatorial statement** for exhibit about fair use and transformation, and how others can use it.	March 3
8.	Library staff	Complete digitization of all artifacts.	March 7
9.	Students	**Input metadata** for all artifacts in Omeka.	March 21
10.	Students	**Meet with collaborators** to plan contributions to Exhibit. Create Google Doc(s) to facilitate use communication and collaboration about exhibit text.	March 21
11.	Students	Submit **annotated bibliography** and **essay abstract**.	March 28
12.	Students	Meet with Instructor for individual or small group conferences.	April 4
13.	Students	**Final Essay** due.	April 18
14.	Students	**Complete all editing of Digital Exhibit in Omeka** and submit **Executive Summary and report**.	May 4

APPENDIX C: ARCHIVES DAY

1. Introduction
    a. Go over LibGuide
    b. Split class into small groups
    c. Groups rotate into each archive
    d. Debrief students and help them brainstorm preliminary unifying themes/topics
    e. Each student selects 1–2 objects for digitization
    f. Faculty member emails librarians the students' requests
2. Library staff digitize those objects (within 2 weeks)
3. Follow-up instructions: Students make appointments with head librarians for further research
    a. Students identify the rest of the materials they want digitized for the Omeka exhibit
    b. Each student selects a maximum of 10 PAGES (only scan main IMAGE per document; students should take careful notes on additional pages they want to discuss)
    c. Students must make appointments for research consultations (10 minutes with each librarian; no walk-ins)
    d. Students contact head librarian for each collection (see LibGuide for contact information) to request their artifacts for digitization

APPENDIX D: INTRODUCTION TO DIGITAL CURATION

1. Copyright and Fair Use
2. Omeka Demonstration and Workshop
    - Explain "collection" view in Omeka
    - Discuss Dublin Core standards for metadata (on LibGuide)
    - Explain Metadata (focus on objective description to allow other researchers to find it again)
    - Add metadata for each digitized item
    - Have class work together to make fields consistent across ALL digitized items
    - Explain "exhibit" view in Omeka
        - Slug should be short URL (lowercase, no spaces)
        - Options to change structure (hierarchy of pages)
3. Exhibit Design Session
4. Draft Curation and Fair Use statement for exhibit
    - Students craft statement for exhibit about fair use and transformation, how others can use it
    - Issues to discuss:
        - Obscenity/nudity
        - Use of outside materials (include/link to in the exhibit?)
        - Access (campus or open-access?)
        - Privacy (remove names/details from some letters?)
        - Link to items in other databases?
        - Embargo some items (due to restrictions from source)?

Notes

1. Their project, titled *"I remain," A Digital Archive of Letters, Manuscripts, and Ephemera*, is available at http://digital.lib.lehigh.edu/remain/index.html.
2. Sweetland's Digital Rhetoric Collaborative is available at www.digitalrhetoriccollaborative.org/.
3. Amy Earhart (2010: 32–33) offers an important caution that it remains challenging in institutional environments for collaboration to count toward tenure and promotion. As Earhart notes, "Digital projects remain rare, often the product of tenacious participants rather than a supportive academic environment." Such infrastructure issues are real concerns, though they are beyond the scope of this article.
4. The Science Fiction Fanzine Archive can be accessed at https://dhlab.lmc.gatech.edu/fanzines/.
5. The database, titled Networks of the Archive: The John Ringling Rare Book Collection, is available at readingwiththeringlings.wordpress.com/.
6. Wood developed her course based in part on the case study we are presenting here.

The "Literacy Artifacts" digital exhibit is available at digitalgallery.bgsu.edu/student/exhibits/show/literacy.

7. For an example of such modeling, see the Praxis Network, available at praxis-network.org/.
8. The final DH project from the course, titled "1960s and Youth Culture," can be viewed online at digitalgallery.bgsu.edu/student/exhibits/show/1960s.
9. The student responses quoted in this article were solicited via e-mail by Jolie in January 2016 from former students in the class still enrolled at Bowling Green State University or who had remained in contact with Jolie since graduating, with an open-ended prompt asking them to reflect on "what you found valuable/challenging/useful about these courses/assignments, as compared with those with traditional research papers as final assignments." Names are included with their permission.
10. Jolie followed up with two of the students in March 2016 to ask additional questions about selecting exhibit architecture and inputting metadata: "Did doing those things make you think differently about the information in the exhibit, choices for organization, etc.? Did you and your classmates ever discuss these issues? Did it in any way affect your teaching and learning?" Nichole's answer quoted here, and Hannah Espinoza's comments quoted later, were in response to that e-mail prompt.

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