Teaching and Learning

with Digital Primary Sources

Nine insights into awareness, literacy, and collaboration between librarians, faculty, and students
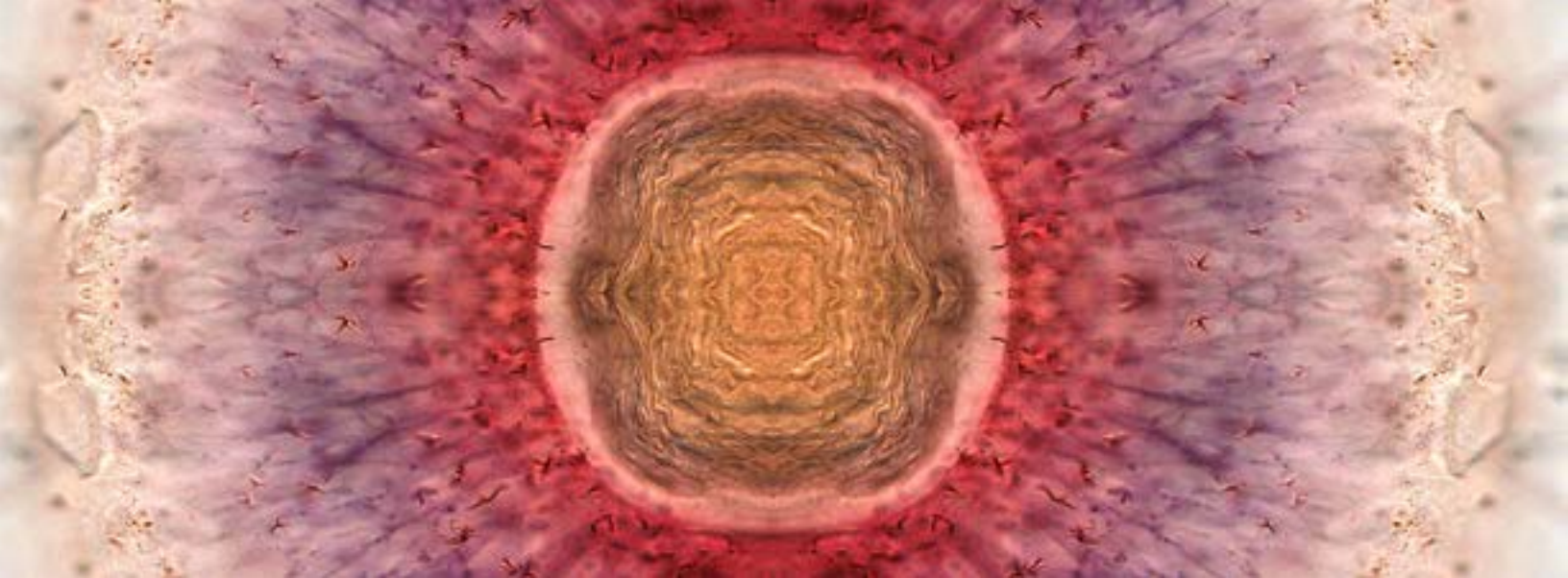
CHOICE · JSTOR

1: Margaret Calder Stewart. Smoking Cap. ca. 1885. Part of Open: Museum of New Zealand - Te Papa Tongarewa. 2: American. Star of Bethlehem Quilt. ca. 1845. Part of Open: The Metropolitan Museum of Art. 3: Edgar Degas. Bookshelves, Study for "Edmond Duranty". 1879. Part of Open: The Metropolitan Museum of Art. 4: India (Rajasthan, Bikaner). Three Polo Players. Early 17th century. Part of Open: The Metropolitan Museum of Art. 5: Bartolomeo Bimbi. Oranges, Limes, and Lemons. 1715. Part of Scala Archives.

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Dr. Steve Wilson. Sunrise in the eye: zebrafish retina. n.d. Part of Open: Wellcome Collection.

The situation

Introducing higher education students to primary sources and teaching them how to evaluate these materials has long been recognized by the education community as a valuable pedagogical tool for developing critical thinking and problem-solving skills. The digital revolution over the past three decades has expanded the accessibility and availability of resources housed in physical archives that were once restricted to the use of a select few scholars. This rapid transformation has been further accelerated by the Coronavirus (COVID) pandemic which forced academic institutions to pivot to remote learning. As online education evolves in the wake of the pandemic and digitized and born-digital primary source resources increase in number, there is a growing recognition of the need for innovative digital primary source instruction.

There is a substantial body of literature that supports teaching with physical primary sources, which is understandable, however there is a distinct fall-off in research that does the same for digital primary sources. Likewise, digital literacy has long been a key focus in academic libraries, but integrating digital primary resource use and instruction into a similar framework has seen far less support in the professional literature—a dynamic that has taken on greater urgency in this post-pandemic era where the benefits of remote access have become even more clear. This report steps into that gap to reveal the weak links in digital primary source literacy and instruction and provide actionable insights along with examples of front-line implementations to spotlight the unique factors in teaching with digital primary resources.

The insights

This report documents the current state of digital primary source instruction through a literature review, survey data analysis, and practitioner interviews. In partnership with JSTOR, a nonprofit service of ITHAKA, Choice, a publishing unit of the Association

of College and Research Libraries, examines the digital research challenges faced by librarians and faculty instructors. The study surfaced challenges of awareness and discoverability, students' lack of digital literacy, difficulties in platform navigation, and the gaps in perception and cooperation between librarians and teaching faculty.

To help address these challenges, the report provides nine key insights—numbered throughout and summarized below—that help guide librarians and faculty toward potential solutions. Further, we conducted five interviews to highlight best practices at institutions that are already putting some of these insights into action.

1. Collaborate to boost discoverability and learning: Librarians and teaching faculty should collaborate closely and communicate clearly with one another to drive successful primary and secondary source instruction.

2. Build instructional scaffolding: Supplement one-shot primary and secondary source instruction sessions with scaffolded approaches to course design for more effective teaching and learning outcomes.

3. Integrate primary and secondary sources: Use an integrated approach to help students learn to both synthesize and distinguish between primary sources and secondary sources.

4. Continue investing in digital source instruction: The COVID era ushered in a digital-first learning environment that leveled the playing field for remote instruction and the use of digital resources. Accordingly, librarians and faculty now must devote the same care and instruction to these resources as they did with physical resources and in-person instruction.

5. Boost primary source literacy: As the survey in this report revealed, significant percentages of librarians and faculty ranked student literacy of digitized primary sources as extremely challenged. With the rise of digital primary sources, literacy instruction is a critical component for success.

6. Create new paths to discoverability and digital literacy: The growing abundance of digital resources makes awareness and discoverability a challenge not only for students but for faculty and librarians as well. Building search and discovery skills that can be used across platforms can help mitigate this issue.

7. Improve platform navigation: Unfriendly user interfaces on digital primary and secondary source platforms hinder navigation and fruitful research.

8. Address the issue of missing context: Lack of context is a hurdle for undergraduate researchers, with students often not fully understanding what they are looking for or why.

9. Prioritize promotional efforts: Overcome the gap between what the librarians know is in the collection versus what faculty think is in the collection by enhancing marketing and promotion.

While it's unlikely that any library has the time or resources to implement all of these tactics at once, librarians and faculty might prioritize adopting one or more to address specific opportunities at their institution.

The literature

As broadly defined by the Society of American Archivists (SAA)-Association of College & Research Libraries (ACRL)/Rare Books & Manuscripts Section (RBMS) *Guidelines for Primary Source Literacy*, primary sources "are materials in a variety of formats that serve as original evidence documenting a time period, an event, a work, people, or idea" (*Guidelines*, 2018, 1). Students of these materials gain a unique perspective on their subject as well as develop other important information literacy and critical thinking skills. Primary source literacy is described as "the combination of knowledge, skills, and abilities necessary to effectively find, interpret, evaluate, and ethically use primary sources within specific disciplinary contexts, in order to create new knowledge or to revise existing understandings" (*Guidelines*, 2018, 1-2).

Teaching with primary sources at the undergraduate level may be a "hot" topic now, but the educational literature reveals that interest in the subject and recognition of its value as a pedagogical tool date as far back as the late 19th and early 20th centuries. The "pioneering efforts of Mary D. Sheldon at Wellesley College in 1877-78" were credited for the critical use of primary sources as basic reading in the early college years (Keohane,1950, 215). Fred M. Fling, who initiated a source-based teaching style known as the "Nebraska Method," valued the use of primary sources for "inspiration, information, and criticism" (Fling, 1914, as cited in Keohane,1950, 213), "It is especially interesting to note that the realisation of the problem-solving nature of primary resource research and its departure from rote-learning was understood this long ago" (Eamon, 2006. 300).

As primary source instruction developed over the years, the New History movement of the 1960s and 1970s not only revitalized history pedagogy but also laid the groundwork for archivists and special collections librarians "to come to the fore as promoters and teachers of primary sources" (Osborne, 1986, as cited in Eamon, 2006, and Hoyer, 2022).

Librarianship's focus on teaching with primary sources

Teaching primary sources across primary, secondary, and postsecondary settings has become a central focus in librarianship and archival pedagogy, aligning "with broader changes in the American educational landscape" that emphasize collaborative and experiential, inquiry-based learning (Garcia et al., 2019, 94). Archivist Doris J. Malkmus's survey of faculty instructional practices found that "primary sources are used almost universally in undergraduate education to improve class discussion, engage student participation, promote historical empathy, help develop critical thinking skills, and demonstrate how historians create narratives from disparate documents" (Malkmus, 2007, 39). She also found that the traditional lecture/textbook teaching style is giving way to active-learning modalities that incorporate these sources.

The 2018 adoption of the *Guidelines for Primary Source Literacy* also reflected "the influence of information literacy and the need for greater contextualization of collections" (Meiman and Kellams, 2018).

Recognizing the need for university archivists and special collections librarians to support the requirements of teaching with primary sources has led organizations like the SAA and the ARCL to create guidelines, discussion groups, listservs, and "unconferences" (Garcia et al., 2019, 94). The latest iteration of professional educational support can be found with the Teaching with Primary Sources (TPS) Collective.[1] Launched in 2019, this online resource-sharing community of librarians, archivists, educators, and museum professionals maintains a chronological, user-generated bibliography of current teaching with primary sources literature.[2]

The digital-physical primary source divide

Professional and scholarly writings about teaching with primary sources are extensive and robust, the result of decades of efforts to increase the accessibility and reach of primary sources (Garcia et al., 2019, 100), but much of the literature, divided by K-12 and higher education audiences with little crossover (Hoyer, 2022), consists of "case studies that describe student engagement approaches within institution-specific contexts" (Garcia et al., 2019, 96). In spite of the increasing prominence of digital materials in research, the bulk of these studies focus on the encounter with the physical archive and the incorporation of non-digital primary sources into the course instruction. Institutions hold rich and unique collections that are critical to research, teaching, and learning, yet these resources can be difficult for scholars to discover and use, and time consuming and expensive to support. In response, partners like ITHAKA offer infrastructure services to help institutions preserve, manage, and share their special collections alongside relevant secondary content. Through its nonprofit service JSTOR, ITHAKA shares this content openly to the global community of faculty, students, and researchers who need it.

An extensive scan and review of the professional literature from 2016 to 2018 by the Teaching with Digital Primary Sources Subgroup of the Digital Library Federation's (DLF) Digital Library Pedagogy Group concluded that a body of work about digital primary research instruction did not yet exist. Although a number of resources surveyed touched on digital (digitized or born-digital) sources, they did not discuss these materials in depth (Dickson et al., 2018).

A new iteration of the subgroup followed up with a white paper that explored the benefits and challenges of teaching with digital primary sources, including relevant literacies and issues in finding, evaluating, and citing sources, emphasizing ethical use, and concluding with existing teaching models (Gormly et al., 2019). Among its other findings, there is growing agreement that digital sources are distinct from analog versions of primary sources and that very little has been written about teaching with born-digital resources.

Challenges of teaching with digital primary sources

Because many students' first encounters with primary source material are digital, the need for digital primary source literacy instruction is pressing (Gillis, 2022). Likewise, faculty are expressing interest in more focused and explicit pedagogical guidance on how to teach with the ever-growing amount of digital primary sources, such as digitized original artworks, photographs, manuscripts, and letters made available through the proliferation of platforms, databases, and other tools. Ithaka S&R, a peer service of nonprofit ITHAKA that provides research and strategic guidance to help the academic and cultural communities navigate economic, demographic, and technological change, shared a research report on teaching with primary sources that quotes one instructor: "I'm still learning how to approach [teaching with primary sources], because different sources, I think, require different approaches. It requires a different approach to a digital primary source than a written one. Something in translation, I feel like you have to sort of deal with in a different way than something that's in the original language" (Tanaka et al., 2021, 25).

There is a small but growing corpus of online teaching resources to help faculty instructors incorporate both physical and digital primary sources into their courses. The TPS Collective runs an open-ended series of case studies designed to illustrate the application of the *Primary Source Guidelines*.[3] The DLF publishes #DLFTeach Toolkits, a series of openly available, peer-reviewed lesson plans and concrete instructional strategies related to digital literacy instruction.[4] TeachArchives.org features articles and exercises on how to teach effectively with primary sources.[5]

Still, the authors of the #DLF white paper found plenty of barriers to using digital primary sources in the classroom: "It can be difficult to locate relevant primary sources, there can be too many results to parse, sources are siloed, sometimes relevant primary sources are not digitized, subject access and metadata are frequently lacking, sources are not transcribed or translated, and students often lack the context to interpret the source or even to develop keywords for searching" (Gormly et al., 2021, 11).

In particular, online search and discovery tools are rarely optimized to make it easy to find resources appropriate for classroom use (Tanaka et al, 2021, 3). Malkmus believes the poor navigation design of many platforms is a major challenge for archivists, librarians, faculty and students in using primary sources. "While libraries provide on-line catalogs as the central gateway for library holdings and search engines serve as all-purpose gateways to Internet sources, no one efficient access point for locating digital sources has emerged" (Malkmus, 2017, 32).

Insight #1: Collaborate to boost discoverability and learning

A key issue in primary source pedagogy is facilitating better discovery, for both faculty and students, and requires close collaboration between instructors, librarians, archivists, and vendors (Tanaka et al, 2021, 17). Because of challenges like this, the importance of the librarian-faculty partnership is a continuing theme in professional literature. Cultivating close relationships as a best practice can pay dividends for both instructors and librarians/archivists (Tanaka et al., 2021, 3). And with interdisciplinary

initiatives on the rise at many colleges and universities, integrating information literacy is an area ripe for sustained collaboration (Murphy and Chacko, 2022, 73).

Much of the scholarship describes case studies involving librarian-faculty collaborations to incorporate physical and digital primary sources into the course framework and detail the lessons learned from "building new assignment models that teach meaningful research skills of students, highlight library collections and foster connections on campus and with the broader community" (Keegan and McElroy, 2016). As the studies reveal, the most successful relationships occur when there are shared goals (Keegan and McElroy, 2016). **Such fruitful collaborative instruction efforts have been shown to result in a more valuable learning experience for students** (Hicks and Howkins, 2015, as cited in Minter et al., 2022). But while most of these articles discuss implementing different types of programs for teaching effectively with primary sources, no one model exists for developing curriculum or evaluation tools (Garcia et al., 2019, 100).

Tip: Collaboration is key

In developing a rewarding relationship with instructional librarians, Stephanie Kaplan, a professor of art history at the Savannah College of Art and Design (SCAD), stresses the importance of having a conversation about course assignments and the research skills to be taught: "The most successful we've been is when we make time to meet, and I have learned to trust the librarians." The professor believes what makes the partnership with the SCAD librarians so successful is that "they are subject experts in finding information and I am a subject expert in whatever the content is, and combined we can focus holistically on these skills." Explore more of Kaplan's actionable insights in [Best practice #2, Use secondary sources to help with primary sources](#).

Insight #2: Build instructional scaffolding

The professional literature also discloses how carefully nurtured faculty-librarian relationships often lead to another best practice—a scaffolded approach to primary source instruction—that results in better student outcomes (Tanaka et al., 2021, 3). Instructional scaffolding is described as a technique in which faculty provide learning support for segments of a project that students normally might not be able to accomplish by themselves. One case study (Keegan and McElroy, 2015) found that in designing an assignment requiring students to engage with primary source materials, the authors uncovered necessary scaffolding that was otherwise left out. In other words, build in instructional supports that help students understand how to engage with primary sources and why they're doing so. The experience got students to better understand research as an ongoing endeavor and gave the librarian more confidence to set limitations on instructors expecting a one-shot session to solve their students' research difficulties. **Integrating primary sources into instruction using a scaffolded approach offers students the chance to practice research skills that increase in complexity and difficulty through a lesson or series of lessons** (Garcia et al., 2019, 99).
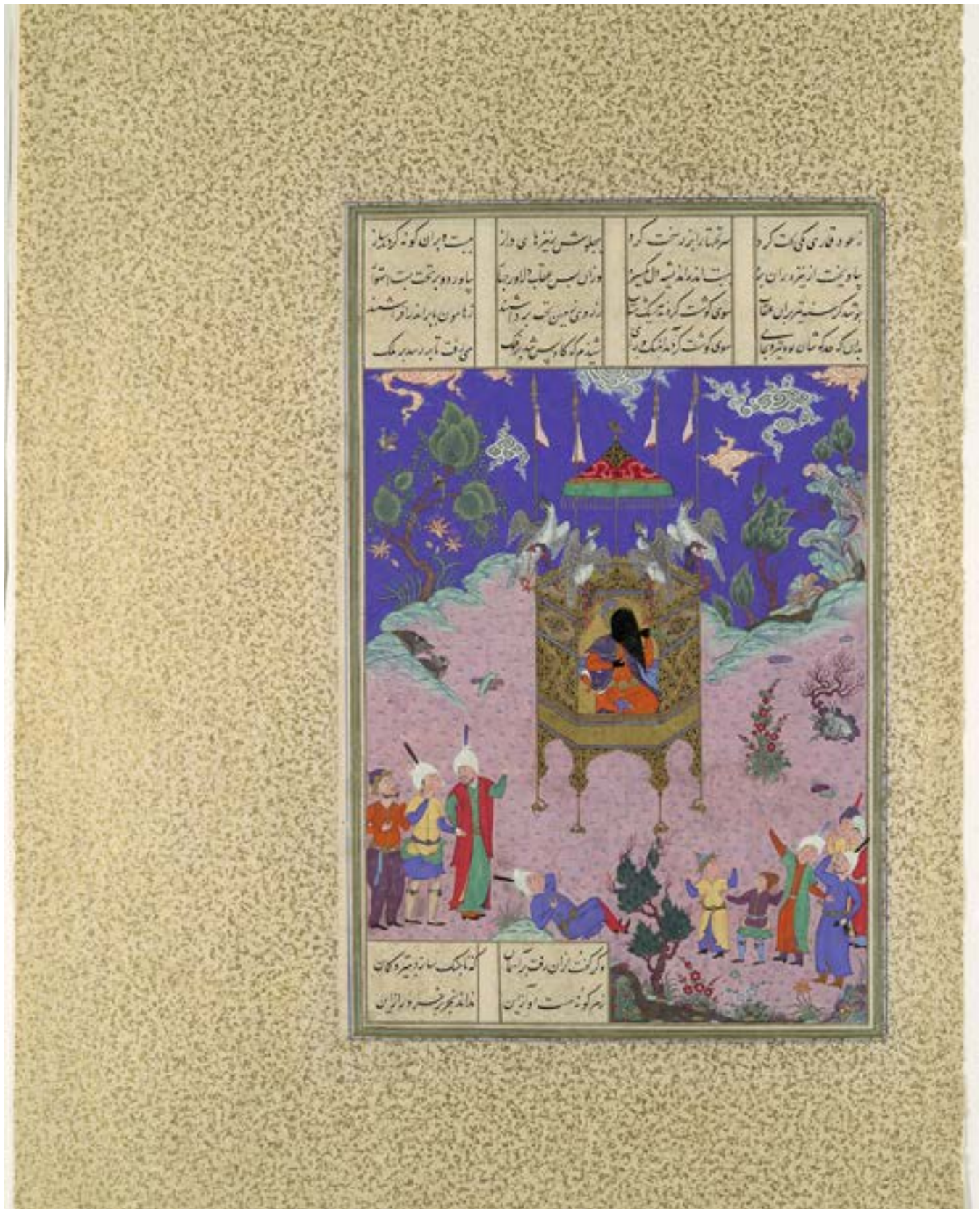
Abu'l Qasim Firdausi (author) and Qadimi (painter). "Kai Kavus Ascends to the Sky", Folio 134r from the Shahnama (Book of Kings) of Shah Tahmasp. ca. 1525–30. Part of Open: The Metropolitan Museum of Art.

Tip: Assign database activities and meet for instructional sessions

Over the years, Lindsay O'Neill, an associate professor of history at the University of Southern California (USC) has learned to first consult the librarians who can guide her to primary materials in special collections, as well as databases, books, and other resources. "In many ways, database activities are like a deconstructed paper that models how to approach a primary source and the kinds of questions to ask," she explains. "It's a lot of questions about where this source is coming from. Who wrote it? Is there bias in this source? What can you read between the lines?" What O'Neill appreciates about library instructional sessions and assigning database activities is that these scaffolding actions guide students through the step-by-step process of research. Explore more of O'Neill's actionable insights in Best practice #1: Determine sources based on class level.

Insight #3: Integrate primary and secondary sources

The SAA-ACRL/RBMS *Guidelines* define secondary sources as "a work synthesizing and/or commenting on primary and/or other secondary sources" (*Guidelines*, 2018, 13). A key learning objective is the expectation that a student knowledgeable in the use of primary sources will be able to distinguish between primary and secondary sources and demonstrate an understanding of the interrelatedness of the two source types for research (*Guidelines*, 2018, 4).

However, with primary sources placed in the foreground of much of the current professional literature, few articles are devoted specifically to teaching students to understand the connection between secondary and primary sources and how to synthesize them. One professor's experiment to have his students cite their colleagues' primary source research essays as secondary sources didn't quite turn them into deep readers of secondary literature. A majority continued to pluck isolated excerpts, but in the best of the essays, he noted that the writers "apprehended both the information and the point of view in their peers' essays and—as good researchers do—applied that information in other contexts" (Hager, 2015, 118).

Tip: Use secondary materials to find primary sources

Stephanie Kaplan, a professor of art history at the Savannah College of Art and Design (SCAD), has found teaching her students how to use secondary materials to find primary sources and vice versa to be very effective. She explains, "One of the things I have worked with students on is when a secondary source cites a primary source, go back to that primary source. Now you don't even have to find it, someone's given it to you." Explore more of Kaplan's actionable insights in Best practice #2: Join forces with instructional librarians.

Other articles in the literature call for better integration of primary and secondary sources into general library instruction beyond special collections, and not just limit such sessions to upper-level students who have assignments in the archives: "**We believe an integrated approach using archival materials in an instruction setting that emphasizes secondary source retrieval offers an opportunity to strengthen information literacy**" (Sutton and Knight, 2006, 321).

And while the pioneering digitization efforts of partners like JSTOR have expanded the accessibility and discoverability of secondary sources, instructors struggle to find the appropriate balance between primary and secondary sources when designing their courses (Tanaka et al., 2021, 33). Vendors and publishers also need to explore the synergies between primary and secondary materials and examine how the use of secondary literature as a major primary source discovery mechanism could be made more effective [Tanaka et al., 2021, 49].

In an effort to help educators, researchers, and students bridge the gap, JSTOR displays related primary and secondary sources alongside its presentations of images and text materials, making it possible to easily discover relevant primary sources by way of secondary sources and vice versa. As illustrated by the figure, this allows a user exploring a primary source—in the example, a photograph by Gordon Parks from "Introduction to Photography Collections at Cornell,"[6]—an open collection on JSTOR to expand their research across different types of materials from within their workflow.

Gordon Parks. Emerging man, Harlem, New York. 1952. Part of Introduction to Photography Collections at Cornell.

Insight #4: Continue investing in digital primary source instruction

As colleges and universities pivoted to remote learning in early 2020, the pandemic shutdown "demolished the myth that archival work must happen in person" (Craig and O'Sullivan, 2022, 106). For example, in March 2020, working in collaboration with JSTOR's publishing partners, ITHAKA announced a set of expanded access offerings to support libraries, faculty, and students making the emergency shift to remote instruction and research. This included providing JSTOR-participating academic institutions with free access to all journals and primary sources they did not already license. In addition, scholarly communities rapidly created and shared online teaching resources, assignments, and lesson plans like the TPS Collective's "TPS Community Crowdsource for Moving Archival and Special Collections Instruction Online".[7] Case studies on how to teach primary sources remotely[8] or how to design text message-based instruction for primary source literacy[9] were quickly published.

But what does this "watershed moment in which digital resources were developed and relied upon in an unprecedented fashion" mean for digital primary source instruction in the post-COVID era [Craig and O'Sullivan, 2022, 107]? Will the attention given to digital sources and engagements and the lessons learned continue as in-person instruction and research resumes?

Some post-pandemic articles expect that instructors will continue to make increased use of digitized primary sources and assign more digital scholarship projects than they did before the pandemic (Kiser, et al., 500).

"I don't think we're going back from that," said Michael Vath, product director for ITHAKA's JSTOR platform in a Zoom interview on April 23, 2023. "What is clear to me is that everything that faculty instructors and students will encounter from now on will be digital and online first."

And that means special collections and instructional librarians "should invest the same time, care, and energy into fostering research skills for digital primary sources as they do for physical materials. **Reconciling the two approaches is not only pedagogically effective but also more inclusive, more realistic, and more supple, as it allows for a wider range of engagements if one approach becomes less viable**" (Craig and O'Sullivan, 2022, 96).

In support, the education and/or editorial teams of content providers often produce curricular content designed to build digital primary source skills. They do this by combining pedagogical expertise with a deep knowledge of available primary source materials. As one example, JSTOR and Reveal Digital have collaborated with collection curators and curriculum experts to publish instructional guides, facilitating interdisciplinary engagement with digitized, open access primary source collections from underrepresented 20th-century voices.
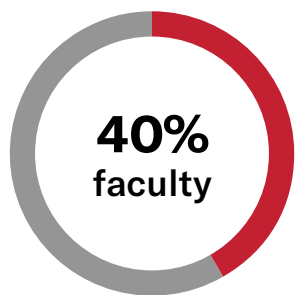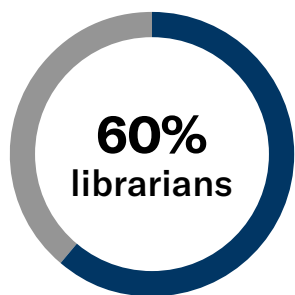
Unknown. Dr. Rivers Frederick Perfoming Surgery at Flint-Goodridge Hospital. n.d. Part of Archives Photographs Collection.

60% librarians

40% faculty

said lack of context hinders students' workflow when using digital primary sources

The surveys

Methodology

The Choice/JSTOR *Teaching and Learning with Primary Digital Resources* surveys deployed at the end of May 2023 and included two audience segments: Academic librarians (16,500 recipients) and teaching faculty (3,026 recipients). Questions focused on the challenges and benefits of teaching and learning with digital primary and secondary sources in an undergraduate environment. The survey closed at the end of June with usable responses from 248 librarians (1.5%) and 43 faculty (1.4%).

Demographics

As the data below indicate, librarian and faculty respondents represent a mix of job titles and functions.

- Almost 62% of the 248 librarian survey participants identified themselves as information literacy librarians (20.56%), reference librarians (20.97%), or subject specialists (20.16%).

- In response to Question 6 ("What is your level of involvement in the collection of your library's digitized primary sources?"), 42.32% answered that they are more or very involved while 26.21% are moderately involved and 31.45% have little or no involvement.

On the faculty side, **56%** are professors (including assistant and associate professors) while **37%** of the respondents marked the lecturer/adjunct/postdoc/graduate student category. History (**21%**), the humanities (**28%**), and social sciences (**28%**) are their primary areas of teaching.

Insight #5: Boost primary source literacy

The 2018 SAA-ACRL/RBMS *Guidelines for Primary Source Literacy* define primary source literacy as "the combination of knowledge, skills, and abilities necessary to effectively find, interpret, evaluate, and ethically use primary sources within specific disciplinary contexts, in order to create new knowledge or to revise existing understandings." While digitized primary sources aren't explicitly defined, the *Guidelines* note that "a surrogate is often a digital version of a physical source that is housed in a specific collection or repository."

"One of the fundamentals we've found at JSTOR, and ITHAKA more broadly, is the increased prevalence and importance of helping students develop primary source literacy," said Vath. As the Choice/JSTOR survey revealed, librarians and teaching faculty are well aware of the difficulties college students face when it comes to finding, evaluating, and using digital primary sources.

In response to Questions 15 and 26 ("How would you rate digitized primary source literacy at the undergraduate level?"), both librarians (61.29%) and faculty instructors (41.86%) ranked student literacy as challenged or extremely challenged. Regarding undergraduate digital research skills (Questions 7 and 8), just 12.91% of responding librarians believed students understood how to use a database, and only 23.79% felt students comprehended how to use digital content to meet their research needs.

Insight #6: Create new paths for discoverability and digital literacy

When asked to rate factors that could "hinder a student's research workflow when using digitized primary sources" [Questions 9 and 27], a lack of awareness of resources (87.1% for librarians; 52.38% for faculty) and difficulties in discoverability (72.27% for librarians; 44.19% for faculty) were rated as the highest challenges.

13%
librarians
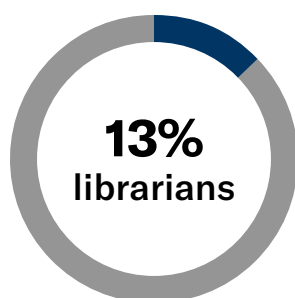
believed undergraduate students understood how to use a database
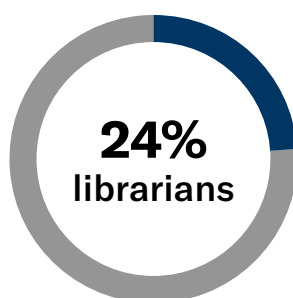
24%
librarians

felt students comprehended how to use digital content to meet their research needs

87%
librarians
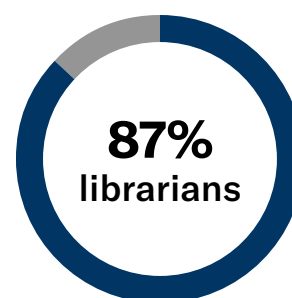
rated student's lack of resource awareness of digitized primary resources as a primary challenge

"I find student awareness both of the resources themselves and how beneficial they can be for their studies is lacking," responded one surveyed librarian. Another ranked the lack of awareness factor as a 10: "Students are rarely, if ever, prepared to recognize what a primary source is (and isn't) as well as difficulties in recognizing the contexts in which that primary source sits." Other librarians also noted that undergraduates have difficulty distinguishing between primary and secondary sources. Commented a surveyee, "They often struggle to think about the different areas to consider for primary sources and they often don't know what terms to use in their search to find primary sources."

For other librarian respondents, "discoverability is a huge issue, as is knowing where to find primary sources, specifically." **The abundance of different platforms and places to look—subscription collections, institutional repositories, subject repositories, collections on the open web, museum collections—can overwhelm researchers**. "Students (and in many cases, librarians and faculty) have NO IDEA which places to search might actually have materials that address the subjects that they need," said a librarian surveyee. "Discoverability is always an important barrier, and therefore is always an important space for us to find ways to innovate on behalf of students and faculty and give them better pathways to content that's going to be relevant," remarked JSTOR's Vath. "When we're talking with librarians or faculty, we will hear the acknowledgement, 'Yeah, my students just go to Google.' We think about the role we can play with the search and browse experiences that we develop on the platform, and with millions of users searching on JSTOR each year, we're in a position to really help them find relevant primary source materials alongside our journals and books."

Tip: Teach transferable research skills

Teaching students digital research skills that translate across different database platforms and search engines is essential to a successful primary source instruction program. That is why Virginia Seymour, Head Librarian of Research and Instruction at the Savannah College of Art and Design (SCAD) teaches with JSTOR, particularly because on the platform it's easier for the students to visualize what they're doing and do things in steps: start with a basic search and then refine their search with filters. "I teach [how to search] on JSTOR because that's a skill they can take to other databases, and they can take it out into Google and say, 'Okay, I know those kinds of terms I need to be searching for now. They worked in JSTOR. I know they're going to work in Google.'" Explore more of Seymour's actionable insights in Best practice #3: Build trust with faculty.

China, Qing dynasty. Club-shaped Vase. 1662-1722. Part of Open: The Cleveland Museum of Art.

63%
librarians
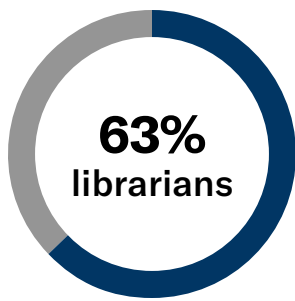
rated lack of digital literacy as a high factor in student research challenges

Discoverability issues also connect to the lack of digital literacy, which 62.91% of the librarian respondents rated as a high factor in student research challenges. "Gen Z undergraduates, who are used to materials being served to them spontaneously via an algorithm, are not generally adept at formulating searches or navigating websites and databases that require them to initiate and iterate search processes themselves. This is problematic for the discovery of all materials, but especially for born-digital or digitized primary sources not available via one of the large databases students are already aware of," explains a surveyee.

Recent advances in generative artificial intelligence (AI) offer both opportunities and risks in this area. **While this technology enables researchers to search powerfully with little training, the ability of AI-powered tools to reinforce misinformation and bias means researchers need further skills and training to use them responsibly.** In an effort to navigate this complex new terrain, organizations like ITHAKA are partnering with colleges and universities to assess technologies and develop adequate guidance, while at the same time working to develop AI-powered tools on JSTOR that mitigate the risks and deliver genuine value to the researcher.

When offered the chance to provide an open-ended response to the "current state of digitized primary and secondary source availability and discovery" (Questions 16 and 29), both librarians and faculty instructors are appreciative of their increasing accessibility despite the issues. "We just have to continue to make them user-friendlier," said one teacher. However another faculty member bemoaned the lack of a centralized searching mechanism, "I understand how each database has to own/profit from different sets of things, but it's a real burden to students used to the one-stop-shop of Google to have to go to different sources."

Insight #7: Improve platform navigation

Difficulties in platform navigation, which 64.12% of surveyed librarians rated as an impediment to undergraduate researchers, also present obstacles to finding online resources. Participants agreed that wide differences in platform design across digitized primary sources can be very confusing for students. "Students are overwhelmed by the number of interfaces, all dissimilar," remarked one librarian. Added another participant, "I believe that if you need training to use a collection, then it has not been designed correctly."

Another respondent complained about digitized primary sources not being discoverable in website discovery layers, "Adding them to the general discovery layer would be helpful," the respondent said.

Poor library website design also came in for criticism. "Personally, the 'breadcrumb trail' necessary to get to these resources on our libraries' website is too complicated. People are not prepared to persevere to get to things we offer, even the faculty," commented a survey participant.

64%
librarians

33%
faculty
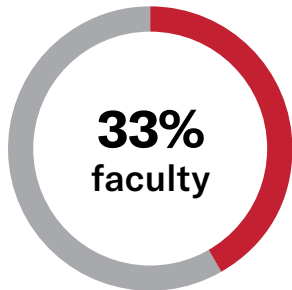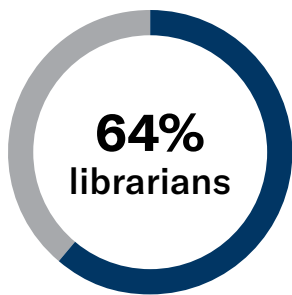
rated difficulties in platform navigation as an impediment to undergraduate researchers

However, one library platform did come in for praise. "I really like the model of the Digital Public Library of America (DPLA), especially for students who have little to no primary source knowledge," a librarian commented. "Our subscription collections are very siloed, which makes them excellent for someone who knows something about their topic and primary sources. But in terms of wide discoverability for US collections, DPLA has done a great job of creating a fairly seamless interface between the numerous platforms at institutions across the country, the citation feature is pretty easy to find, and the discoverability of collections is pretty high."

Interestingly, the faculty instructors surveyed are either more ambivalent—or more divided—than their librarian colleagues about platform navigation with only 32.56% rating it as a high or very high research factor.

Another 34.98% rated platform navigation as moderately low or very low, while 32.56% rated it as neither low nor high. Perhaps, as one surveyed librarian observed, it's because they often assume that undergraduates as digital natives already know how to use these kinds of resources effectively.

From Vath's perspective, however, there are mechanical challenges in terms of teaching with digital materials in the classroom: "Before the pandemic, which accelerated a lot of online teaching, a nontrivial amount of our users and faculty using Artstor would talk about the challenges of not always being able to teach directly from the online platform to the classroom. But some faculty don't necessarily have reliable internet access that they could count on in the lecture hall. And so they would resort to creating PowerPoint slides instead. And so we say, how can we facilitate that? If we can assume now that more teaching is happening from an internet-connected computer, how can we help our faculty teach from a workspace in our platform more efficiently instead of exporting it to a pdf or PowerPoint?"

Tip: Integrate databases into primary source teaching

Michaela Ullmann, Head of Instruction and Assessment for the University of Southern California (USC) Libraries, took the shutdown as an opportunity to more thoroughly integrate databases into primary source teaching: "That was good because we had to relearn how to navigate some of these primary source databases." She incorporated her teaching modules and had colleagues contribute chapters ("Electronically Available Primary Sources")[11] into an online toolkit (Primary Source Literacy at USC Libraries and Beyond)[12], that she designed to be sustainable and remain relevant after the pandemic ended. For more of Ullmann's insights, see Best practice #4: Encourage active learning— and teaching.
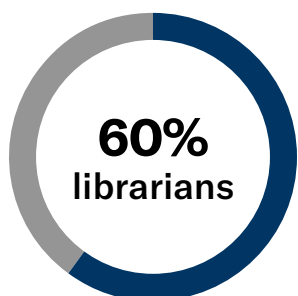
Insight #8: Address the issue of missing context

Lack of context as a stumbling block for undergraduate researchers also rated high with librarians (60.06%). Faculty respondents were split among:

- very low/moderately low (30.23%)

- neither low nor high (30.23%)

- moderately high/very high (39.54%)

"Students often just don't know what they are looking for, and when they find something they don't know what they are looking at," said one librarian.

Another respondent concurred, "**Students may grasp that they are lacking context, but because they do not know what they are looking at in terms of genre, they don't even know where to begin to build context**." A librarian, who over a 20+-year career had watched the growth of digitized primary resources, observed that content aggregators still had a long way to go with contextualizing the digital collections available and relevant to college students.

For JSTOR, bringing primary and secondary sources into the same experience—while highlighting connections between relevant sources and offering tools for organizing and sharing sets of materials—provides an opportunity for students to build that context on their own more easily, as well as for librarians and instructors to deliver it to their students.

Other factors that could impede a student's research progress—lack of secondary sources related to primary sources, lack of serendipity in the research process, and incomplete collections—were not rated as highly by librarians and faculty respondents.

60%
librarians

cited lack of context as a stumbling block for undergraduate researchers

Tip: Explore citations

Virginia Spivey, director of AP Art History and Comparative Government and Politics at The College Board, likes to have her students look at citations and recognize how important footnotes are. "I was a big fan of online, collaborative annotations so that they would learn to ask questions about what they were reading and bring alternative viewings," she remarks. "And I felt they could do that so much better when they were doing it together." Read more of Spivey's insights in Best practice #4: Encourage active learning—and teaching.

51%
librarians
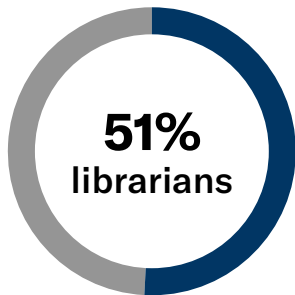
did not have dedicated marketing and promotion initiatives

Insight #9: Prioritize promotional efforts

Survey results revealed gaps in perception and cooperation between librarians and faculty. When asked (in Question 11) how they rated the frequency with which teaching faculty request in-person or online instruction from the library related to helping students find and use primary sources for research, only 20.16% of the surveyed librarians rated it as frequent or extremely frequent. Says one librarian, "The profs, themselves, are not very aware of what we have or how to use these resources and so may not be able to be very helpful."

A small minority of librarians, just 15.33%, rated as high or extremely high the collaboration between teaching faculty and the library with the selection/assigning of digitized primary resources at their institution. "**I just think there is a huge gap between faculty and on-campus libraries currently**," noted a participant.

This gulf may be partially due to a lack of library outreach and marketing. While 48.79% of librarians responded that their libraries had formal outreach procedures established with teaching faculty to coordinate the promotion, support, and use of digital primary source collections [Question 12], 51.21% said no or were unsure. More than half of the participants (51.61%) also answered that their libraries did not have dedicated marketing and promotion initiatives for their digital primary source collections [Question 13]. One respondent commented, "More formal outreach and promotion procedures need to be in place or made consistent but that will only work if we have more staff—our staff is so small we are burned out and overworked so other things become more of a priority."

On the faculty side, the perspective was more positive, with 46.51% rating the faculty-library collaboration as high or extremely high (Question 25). For Question 22, "How would you rate the level of assistance your library provides with its primary source digital collections...?"), 65.12% found their library to be helpful or extremely helpful. [Given the small response pool, this result might be skewed in favor of instructors experienced at partnering with librarians as opposed to incoming faculty members unfamiliar with their library's literacy instructional programs.]

As for referring students to the library for services and instruction when assigning primary sources to a research project (Question 23), 67.44% of the faculty respondents indicated that they would for every applicable assignment, although one participant noted, "I would if our librarians were more engaged on this issue." A majority (69.77%) would also provide basic primary source literacy skills to their students for every applicable assignment (Question 24).

"At an administrative level, the faculty and the library need to work more in collaboration and with specific goals," commented one librarian. "That requires additional qualified staff but mostly better communication in order to have adequate resources and in order to use better those available resources." But survey participants also noted that shortage of time and staff can be barriers to more impactful collaboration. "Both librarians and faculty have heavy loads (often doing the work of two full-time positions) and so [they] lack time and sometimes energy needed to select and promote the right sources for classes," replied a librarian surveyee.

On their end, content providers can serve as partners to overworked and under-resourced librarians and faculty by providing free, timely training materials that are promoted directly to both audiences. For example, JSTOR provides an annual series of "orientation" webinars, which cover core functionality as well as new features and collections, and are marketed to both faculty and librarians. These trainings ensure basic awareness of the discovery tools and digital content available from a given vendor, and lessen the need for library outreach at the institution level.

Etruscan. Gold and glass necklace. Early 5th century BCE. Part of Open: The Metropolitan Museum of Art.

Tip: Teach the teacher

Michaela Ullmann, Head, Instruction and Assessment, for the USC Libraries, has learned that literacy instruction starts with teaching instructors because they tend to be less familiar with how to access or navigate the materials. She often starts by inviting the faculty to tour Special Collections, showing them what the librarians do so they feel more comfortable communicating that to their students. Other forms of outreach and marketing include social media promotions of digital and physical collections and an annual Research Award given to graduate and undergraduate students. Launched a decade ago, the award initially was a "way to persuade the faculty instructors to create assignments that focus on primary resources." For more of Ullmann's recommendations, see Best practice #4: Encourage active learning—and teaching.
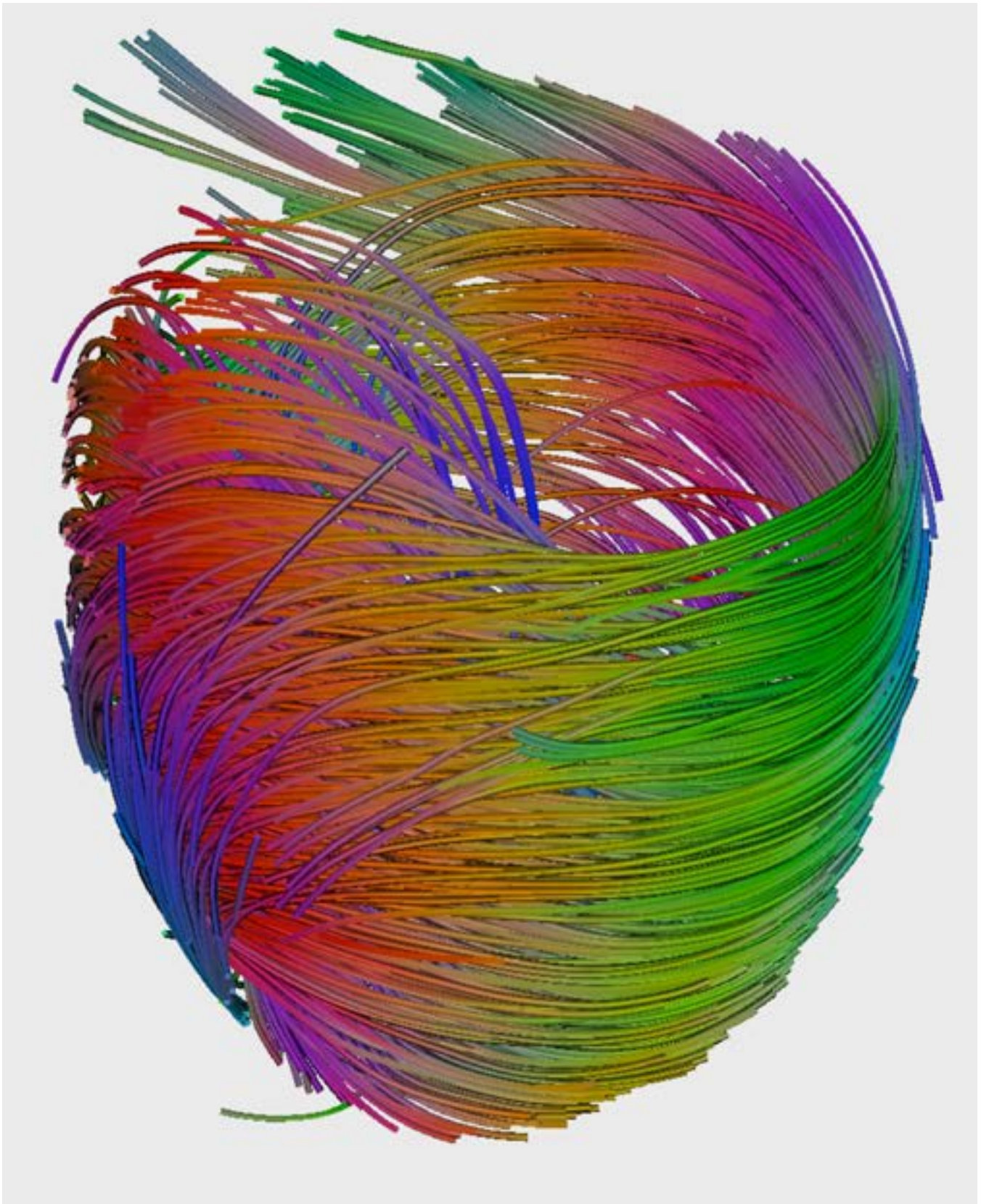
University of Oxford, Dr P. Hales/BBSRC. Heartstrings. n.d. Part of Open: Wellcome Collection.

The interviews

The following five best-practice interviews feature academic librarians and teaching faculty who are executing on specific initiatives that directly address the insights highlighted in this report. Collectively, they focus on primary source literacy, proactive partnerships between faculty and librarians, contextual solutions, and promotional tactics, among others

Best practice #1: Determine sources based on class level

An associate professor of history at the University of Southern California (USC) since 2014, Lindsay O'Neill teaches various courses ranging from big lecture classes of 100 students on early modern Europe, to smaller seminars capped at 15 registrants on the history of drink, and mid- to upper-level British history classes capped at 19. She also teaches a course on historical methodology.

Identify class level

"The way I use primary sources depends on the level of the class," says O'Neill, who eschews textbooks for lectures. "I see myself as a textbook, so usually my lectures are providing a lot of background information." For her large introductory classes, O'Neill starts with a secondary text, usually a microhistory that will engage her students. "And then we work our way into some primary sources." She usually uses the Bedford Series in History and Culture, which are little collections of primary sources tied to a theme. She will then have those classes engage in primary source database activities, such as searching for runaway slave advertisements.

Students in O'Neill's upper-level courses are reading primary sources, such as the novels she assigns in her Victorians and Twentieth Century Britain classes. The professor will layer those readings with different database activities, such as searching online newspaper archives to examine how journalists reported on Hitler before World War II, or how people reacted to the Sex Pistols in the 1970s.

"**In many ways, database activities are like a deconstructed paper that models how to approach a primary source and the kinds of questions to ask**," she explains. "It's a lot of questions about where this source is coming from. Who wrote it? Is there bias in this source? What can you read between the lines?"

Consult the librarians

Over the years, O'Neill has learned not to just throw her students into primary source research without first consulting the USC librarians who can guide her to materials in special collections, as well as databases, books, and other resources. Given the wealth of diverse resources at the school, she stresses the importance of the faculty getting to know their librarians. "I don't know if incoming faculty are always aware that these kinds of conversations can lead to getting new resources they might need for a class," she comments.

"In many ways, database activities are like a deconstructed paper that models how to approach a primary source and the kinds of questions to ask. It's a lot of questions about where this source is coming from. Who wrote it? Is there bias in this source? What can you read between the lines?" Lindsay O'Neill, Associate Professor of History, University of Southern California

O'Neill will usually have instructional librarians come into her classes to introduce the resources so that the students know what sources are available and whom to contact for assistance. "It lets them know that the library's there." She also uses the subject research guides[13] created by the instructional librarians to help students find primary, secondary, and reference sources.

Build the scaffolding

What O'Neill appreciates about library instructional sessions and assigning database activities is that these scaffolding actions guide students through the step-by-step process of research.

"Because not only do incoming faculty not know what the resources are but their students don't as well. So, learning to scaffold assignments is a way that helps them realize what's available and how to use it."

At some point, O'Neill also brings students to physical special collections. The final project for her spring 2023 Sex and the City: Constructing Gender in London, 1700-1900 course, in which students traveled to London for a week and visited various special collections, was to organize an on-campus and online exhibit[14] using images of objects they saw from the visited collections. "I wanted my students to work with not just the digitized primary sources, but the material ones," she explains.

On a basic level, what O'Neill wants her students to take with them is knowing the difference between a primary and a secondary source. "It's like a life skill," she notes. "I want them to question the information they receive and be able to critically engage with that information, both from the past and the present."

Best practice #2: Join forces with instructional librarians

Founded in 1978, the Savannah College of Art and Design (SCAD) is a private, nonprofit accredited university, offering more than 100 graduate and undergraduate degree programs on campuses in Savannah and Atlanta, Georgia, in Lacoste, France, and online via SCADnow. For the academic year 2021-22 15,636 students were enrolled, including 12,772 undergraduate and 2,864 graduate students.

Stephanie Kaplan has been a professor of art history at SCAD Savannah, Georgia, and Hong Kong since 2018. Winner of two teaching awards from Washington University, she is also highly rated by her students for emphasizing the big picture over rote memorization. Although her specialty is the Italian Renaissance, she teaches mostly survey courses that are global in scope.

Because many of her students haven't taken art history before, Kaplan's teaching style is a bit performative. She explains, "I always think it's important to bring in stories and narratives and to get them interested in the content. And once I get them hooked, then we can work on the skill-building. But I have to get them in the first week."

A large palace garden, possibly Versailles, the foreground peopled by figures wearing nineteenth century costumes. Gouache painting by a Chinese artist, ca. 1850. Part of Open: Wellcome Collection.

As a researcher working with archival documents, Kaplan defines primary sources as what was written at a particular period. She also thinks of the art objects she discusses in her classes as primary documents that have to be interpreted and given context. By week two, she's having her students work on description and close-in reading: "I have them bring up images and look closely and work on their description, but I also like them to do case studies where they learn to put an object in context. And so they are searching widely using a variety of databases."

Involve the library

Before she gives any primary source-focused assignments, the professor will bring in the instructional librarians. Timing varies by class level. For introductory classes where the focus is more on defining style or analysis, it will be close to midterms. For an upper-level 16th-century Italian art course, she'll bring the librarians into the class by the third week. "I can give students the search terms," says Kaplan, "but it's the librarians who are so good at turning that research into a process that the students can apply."

For the introductory classes, the library instruction is very much a one-shot session dealing with one or two skills. But Kaplan admits that those classes are more focused on secondary sources as the students are not always ready. "We're working on defining primary sources and how you use them, but it's sort of that building skill." For upper-level courses, she'll bring in the librarians three to four times a term to work on scaffolding skills as the students research their big-term projects.

In developing a rewarding relationship with instructional librarians, Kaplan stresses the importance of having a conversation about course assignments and the research skills to be taught: "The most successful we've been is when we make time to meet, and I have learned to trust the librarians." The professor believes what makes the partnership with the SCAD librarians so successful is that "**they are subject experts in finding information and I am a subject expert in whatever the content is, and combined we can focus holistically on these skills**."

Use secondary sources

A challenge for Kaplan as a teacher is that many students have been trained to believe that primary documents are the ideal sources, but they don't know how to interpret, contextualize, and apply these resources to their arguments. "They'll sort of slap the sentence on a page as if it has now done all the work," she notes. This is where secondary sources come into play. Kaplan models that interpretation and contextualization by showing her students examples in scholarship. "But it also takes practice and getting feedback on it."

Using secondary sources is especially interesting when Kaplan's students are researching contemporary artists. If her students are studying a current filmmaker, they are not going to find peer-reviewed scholarship, "the sort of secondary sources that we often privilege," on that artist's newest work. She will suggest instead they look at peer-reviewed sources about that filmmaker's earlier films to see how they are being interpreted.

She also teaches her students how to use secondary materials to find primary sources. "**One of the things I have worked with students on is when a secondary source cites a primary source, go back to that primary source. Now you don't even have to find it, someone's given it to you**." Kaplan has found that using primary sources to find secondary sources and vice versa has been very effective with her students.

Database training

In one of her classes, Kaplan schedules a digital resource presentation in which students are assigned digital resources, whether open access or through library subscriptions, and they are expected to become content experts and teach their colleagues how to use these resources. Despite the challenges of not always user-friendly database platform design, Kaplan strongly believes in the importance of learning to use these online resources and not just relying on Google to find accurate information. "In some ways, the rise of artificial intelligence makes it more important that we're using our peer-reviewed resources and these databases. Even if it's like I have gathered my basic information and now I need to check it, I need to find some way to confirm [my findings]."

Best practice #3: Build trust with faculty

The SCAD libraries in the Savannah and Atlanta locations operate as a single unit, serving both constituencies as well as virtual students in the SCADnow program. "Our students are art and design students in forward design fields like immersive reality animation, motion media as well as some more traditional fields like painting and sculpture, fashion, fibers, and photography," explains Virginia Seymour, Head Librarian of Research and Instruction. **Although the libraries serve both undergraduates and graduates in equal amounts, Seymour notes that a higher percentage of undergraduate students come into their classrooms, do consultations with librarians, and use their resources**.

In terms of classroom instructional interactions, Seymour estimates that across both locations the libraries have between 500 and 600 visits [annually]. "And that's in both traditional information literacy and visual literacy classroom engagements, as well as special collections. So that's primary source literacy and general show-and-tell with special collections material." Because of this heavy volume (including repeat visitors), the SCAD libraries don't do a lot of in-depth outreach except to new faculty as well as reminders to existing faculty.

Speak the same language

In designing successful literacy instructional sessions, Seymour reminds her team first to gauge what understanding and familiarity the faculty member has. "Often we are speaking a different language," she says. One thing Seymour sees often is that a library staffer will have a conversation with the instructor about primary sources and finding such sources online in the library databases and suddenly realize, after looking at the syllabus and assignment, that the professor is actually conducting primary research with students expected to do interviews and surveys. "That language is interchangeable to the professor, but in our context means something very different."

As a best practice, Seymour recommends instructional librarians assess the literacy foundation that their faculty members have to ensure they are sharing the same vocabulary and understanding. It's a particular issue at SCAD where not all of the instructors come from academia and many work in a variety of art and design fields.

Beyond her own campus, Seymour contributes to building a foundation for understanding essential skills for visual literacy—which, per SSA-ACRL guidelines, intersects with and is a component part of primary source literacy[15]—in her JSTOR Daily column, Learning to Look.[16] By exploring and defining terms from "medium" to "metadata" and beyond, Seymour establishes a vocabulary for visual literacy which can then be utilized in course design, as "each article is also intended to be a resource for educators interested in bringing visual literacy and JSTOR into their own classrooms, from grade school to grad school."

Create trust

Building trust with the faculty is another key element. "We're really lucky here that our faculty really trust us and that they are actively involved in their instruction sessions," says Seymour, who notes that faculty members treat the SCAD librarians as subject matter experts, especially in areas like primary source literacy, where they don't have that background. "So we have a lot of room to really instruct students [in primary source literacy] and to take the time to understand their assignments and to understand what the building blocks to them should be."

Drawing on a syllabus database system that is clear and transparent is another excellent practice. If Seymour and her colleagues are doing any outreach, they will look at the course list for the quarter and identify any that might need additional support, and then look at the syllabi. When faculty specifically request a session, they fill out a form on the library's request platform and upload their assignments and syllabi that the librarians see immediately. "We largely build sessions around the course goals and the specific projects of the courses," comments Seymour. "There are some courses that have specifically asked to engage with archival materials and others that want to engage with digital images, so we work around those needs and focus our classes that way."

Members of the congregation of the First Baptist Church, Perth Amboy. Quilt, Star of Bethlehem. ca. 1845–48. Part of Open: The Metropolitan Museum of Art.

Teach research skills that translate

Teaching students digital research skills that translate across different database platforms and search engines is essential to a successful primary source instruction program. "When I first started teaching," explains Seymour, "I was very anti-Google. I'd teach students how to use a database, but they wouldn't understand why you use it, or why it's different from Google. When it comes to finding primary sources, that [misunderstanding] becomes important because we subscribe to dozens of databases, but there are so many other open resources through Google." Seymour argues that if students aren't understanding how to find materials in ways that are smart, they lose access to those things that might be on the open web because they don't know how to search effectively.

Translating those research skills is difficult for students because they learn a "single platform kind of small vision." That is why Seymour teaches with JSTOR, particularly because on the platform it's easier for the students to visualize what they're doing and do things in steps: start with a basic search and then refine their search with filters. "I teach [how to search] on JSTOR because that's a skill they can take to other databases, and they can take it out into Google and say, 'Okay, I know those kinds of terms I need to be searching for now. They worked in JSTOR. I know they're going to work in Google.'"

Be consistent

For Seymour, the key to any good instruction program, be it primary sources or not, is giving students a robust basis of information-seeking, discovery, and ideation of their own. And that requires continuity. "Most libraries have to start over and over because a new person comes in and there's no foundation," she says. An essential practice is maintaining rigorous program documentation and support for staff.

Best practice #4: Encourage active learning— and teaching

Virginia Spivey is an art historian and educator with more than 20 years of experience, including supervising museum-based K-12 and public programs, directing the Art History Program at the University of North Carolina at Asheville, and co-editing the peer-reviewed open source e-journal *Art History Pedagogy & Practice*. Since 2019 she has been director of AP Art History and Comparative Government and Politics at The College Board.

The last significant revision of the curriculum for Advanced Placement (AP) Art History went into effect in the 2015-2016 academic year. "The revision did emphasize using more primary sources," explains Spivey, who wrote about the changes with Dana Howard, Artstor's Senior K-12 Relationship Manager, in a two-part series for the online platform *Art History Teaching Resources* (AHTR) [17]. The revamping aimed to be more global in scope and to clarify the curriculum framework. "When the art history curriculum was redesigned, there was a desire to move past rote memorization to encourage teachers to delve into the content," says Spivey.

> "I teach [how to search] on JSTOR because that's a skill they can take to other databases, and they can take it out into Google and say, 'Okay, I know those kinds of terms I need to be searching for now. They worked in JSTOR. I know they're going to work in Google.'"
> Virginia Seymour, Head Librarian of Research and Instruction, SCAD

"And interestingly they provided this collection of 250 core [art]works, which serve as the only required primary sources. In talking with people involved in the redesign, it was very intentional that they did not choose works found in every single survey textbook." The designers wanted teachers to model doing research with their students and discover more information about art that was less known, but Spivey points out that in terms of practical applications, teachers, given the realities of high school classrooms, just didn't have the time. Spivey expects some revision to the AP History curriculum in the next few years. "I think it needs to be chunked into more bite-sized ways to integrate [primary sources] into the [curriculum]."

Invite questions

In teaching her students how to find and use primary sources, Spivey's biggest challenge was helping them hone their research questions to be manageable so they could focus on a particular topic without being overwhelmed. "Then there was the issue of what is a good source." she adds. "Is this a reliable, authoritative source you should be using?"

She also had to make sure her students understood why they would search different indices for different reasons, as well as comprehend when Google and Wikipedia are useful for research, and when they are not. Another best practice Spivey emphasized often, especially with scholarly, secondary sources, was having her students look at citations and recognize how important footnotes are. "I was a big fan of online, collaborative annotations so that they would learn to ask questions about what they were reading and bring alternative viewings," she remarks. "And I felt they could do that so much better when they were doing it together."

Spivey also enthusiastically promoted other online collaborations among her students. "This is why digital is so wonderful because everyone has their laptop. They can go into whatever resource you want them to delve into, and then they can work together in a Google document or some other shared collaborative workspace."

Appreciate differences

Spivey also believes that learning from other teaching colleagues is essential. "I think that the best practices are to recognize that everyone has experiences that are different from yours," she comments. "And to be willing to consider how that can challenge or supplement your own practices. To me, it's all about the talk."

As an example, she refers to an exam development committee she oversees at The College Board. Its members include both higher education content experts and high school teachers. "The dialogue I see there is so productive," says Spivey. "K-12 teachers have a lot more educational background in pedagogy, and college professors don't."

Make it interactive

Spivey's own classroom practice had evolved over the years but remained rooted in her museum education background with its emphasis on active learning. Throughout her academic career, she worked closely with librarians in building her courses. At Georgetown University, Spivey became very involved with an art librarian named Anna Simons. "She was the first person doing libguides there and really developing [them] for specific courses," says Spivey.

Partnering with her and with Georgetown's teaching center, Spivey would explore different ways of redesigning a course to be more interactive. For her Georgetown students accustomed to the lecture-based format, she had them develop a syllabus, and different students would be responsible for coming up with lesson plans for certain days. At the Maryland Institute College of Art, she would do shared collaborative training with the librarians in meaty three-hour classes. "I feel strongly that any library tutorial needs to be active because just watching the PowerPoint is not going to get them there," stresses Spivey.

Harold Edgerton. Doctor Bird Jamaica. n.d. Part of Center for Creative Photography.

Odra Noel. Networking energies. n.d. Part of Open: Wellcome Collection.

Best practice #5: Longer-term literacy instruction and syllabus integration are key

Promoted in February 2023 to Head, Instruction and Assessment, for the USC Libraries, Michaela Ullmann has overseen primary source instruction as Instruction Coordinator for Special Collections for the past seven years. She started in Special Collections as the Exiles Studies Librarian, but over the years began to recognize the need for instruction. "When I got there, we did a little bit of show and tell, but there wasn't a lot of teaching going on," explains Ullmann.

Integrating active learning principles and working with the Reference and Instruction Librarian, Ullmann built the program from the ground up to the point that she and her colleague were teaching between 100 and 150 sessions annually. She instructed mostly students from the Humanities and worked heavily with artifacts and physical objects until the COVID pandemic's arrival in 2020 forced her to pivot to remote instruction.

The shutdown gave Ullmann the opportunity and time to more thoroughly integrate databases into primary source teaching: "That was good because we had to relearn how to navigate some of these primary source databases." She incorporated her teaching modules and had colleagues contribute chapters ("Electronically Available Primary Sources")[18] into an online toolkit (Primary Source Literacy at USC Libraries and Beyond)[19], that she designed to be sustainable and remain relevant after the pandemic ended.

Once Special Collections reopened, faculty requests for in-person visits and physical materials resumed. "They want that touchy-feely experience," Ullman adds. But she feels that working with physical primary sources is a good segue to digital resources. "I think once students have had time to critically interact and critically reflect upon the physical, then they may be more educated to deal with the digital because they would have a better understanding of what the item would look like for real. So I think physical and digital go hand in hand."

Teach the teacher

Ullman has learned that literacy instruction starts with teaching instructors because they tend to be less familiar with how to access or navigate the materials. She often starts by inviting the faculty to tour Special Collections, showing them what the librarians do so they feel more comfortable communicating that to their students. "That has drastically changed the way we do things, and we get more buy-ins from the faculty."

Other forms of outreach and marketing include social media promotions of digital and physical collections and an annual Research Award given to graduate and undergraduate students. Launched a decade ago, the award initially was a "way to persuade the faculty instructors to create assignments that focus on primary resources."

Scaffolding and partnering

Ullmann believes in a more programmatic, scaffolded instructional approach with higher learning outcomes that make the students educated researchers. "I learned from my early-on assessments that one-offs can get a lot of engagement, curiosity, and excitement, but they don't really teach you how to navigate the types of materials and primary sources, how to reflect upon them critically, and how to assess them." Special Collections instruction, she notes, now occurs either as semester-long classes or as classes scheduled three or four times during the semester.

Ullmann also stresses the importance of syllabus integration.

"Primary source literacy is part of the syllabus, not just an afterthought," she says. And that connects with a close librarian-faculty partnership. "It's a collaboration," says Ullmann, "where we bring expertise, but the instructor does, too."

Collaborating early in the process is vital. Things often go wrong, she remarks, when teaching faculty to create lesson plans involving primary sources without consulting with a librarian.

In Ullman's new position, which includes responsibility for primary source instruction, she envisions taking primary source literacy out of the special collections silo and promoting it throughout USC's library system. That is particularly useful when it comes to digital special collections since they are more easily accessible to researchers outside of Special Collections.

Conclusion and next steps

Despite the growing abundance of digital primary and secondary sources, their increasingly vital role in undergraduate education is still hampered by a number of factors. In the absence of specialized instruction, undergraduates can be overwhelmed by large-scale digitized collections. And they are further challenged by the difficulties in ease of access (too many sources behind paywalls, clunky interfaces) and discoverability that many online platforms present.

Although faculty instructors also need more pedagogical guidance in learning how to teach with new digital resources, librarians find their outreach efforts limited by lack of staff and time. However, the lessons learned from the pandemic offer librarians, faculty instructors, and content providers fresh and exciting opportunities to partner more closely to develop innovative digital primary and secondary source instructional styles to overcome student difficulties. Among those opportunities are more intentional collaborative efforts between librarians and faculty to incorporate primary source literacy instruction, awareness, and the role secondary sources can play in providing more context to a student's project. These opportunities are effectively detailed in the nine insights and the five best practices described here. The tactical approaches are not dissimilar to those that librarians and faculty are already pursuing in other areas (e.g., information literacy writ large, and promotional and instructional efforts that support other major areas of a library's collection) and significant progress can be achieved by folding in any one of the recommendations highlighted in this report.

Nevertheless, with more access comes more understanding—eventually. One librarian survey respondent was more optimistic: "Overall, while challenges still exist, the current state of digitized primary and secondary source availability and discovery is promising. The digitization efforts and advancements in online platforms have greatly expanded access to these valuable resources, empowering researchers and students to explore a wide range of materials conveniently from anywhere in the world."

Michael Vath of JSTOR concurred, "What I would highlight is that the use of primary source materials, especially those of visual or multimedia formats, gives faculty and librarians an opportunity to deliver more engaging learning experiences to students who are increasingly visual and increasingly multimedia-oriented."

JSTOR is addressing such opportunities with the introduction of audio and video. They are also using the insights to enhance product development and training resources. How might you use the recommendations provided throughout this report? Consider integrating one tip and making it your own. You can also learn how JSTOR can help at about.jstor.org/teach.

Alan Bennett. Klein bottle. 1995–1996. Part of Open: Science Museum Group.

About Choice

Choice is a publishing unit of the Association of College and Research Libraries, a division of the American Library Association.

Choice supports the work and professional development of academic librarians by providing tools and services that help them become more effective advocates for their patrons. Through its over fifty-year history, it has established itself as an authoritative source for the evaluation of scholarly resources and as the publisher of trusted research in areas of interest to a changing academic library community.

Today, Choice works to bring librarians, scholars, publishers, and the reading public together, facilitating a shared concern for the discovery, management, and preservation of scholarly information.

About JSTOR

JSTOR is part of ITHAKA, a nonprofit organization with a mission to improve access to knowledge and education for people around the world. As a nonprofit that believes in the power of knowledge to change the world for the better, JSTOR partners with libraries, museums, and publishers to reduce costs, extend access, and preserve scholarship for the future as affordably and sustainably as possible. At JSTOR, we strengthen the depth and quality of research by bringing together journals, books, images, and primary sources on a platform with unique tools for teaching and exploration. We do this because we believe in the power of knowledge to change the world for the better.

ITHAKA helps institutions and individuals accelerate the impact of research and learning through its diverse services including Artstor, where you can search over 270 collections from the world's museums, archives, libraries, artists, and scholars all in one place; Constellate, aITHAKA's digital humanities platform for teaching and learning text analysis; Ithaka S+R, whose strategic advice and support services help institutions improve their performance and further their missions; Portico, a community-supported preservation archive that safeguards access to e-journals, ebooks, and digital collections; and Reveal Digital, which uses a library crowdfunding model to digitize and publish develops open access primary source collections from underrepresented 20th-century voices of dissent, crowdfunded by libraries.

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