IN 2014 AT ROLLINS COLLEGE, a liberal arts college in central Florida, the history department completely revised its curriculum. Like their peers across the history discipline, Rollins history faculty saw a disconnect between its traditional curriculum—with a stress on lecture and memorization—and the actual process of doing history. Students focused on large periods of time at the 100 levels in survey courses, and then gradually narrowed their historical focus as they moved through the intermediate courses to the more advanced ones. Colleges developed this curricular structure when knowledge memorization was a vital historical skill. Thus, students first acquired a historical overview before immersing themselves in the details of specific historical times. Today, the proliferation of online information repositories that are immediately accessible has vastly reduced the importance of memorization as part of the historian’s toolkit. Instead, other skills have become more important, including critical thinking, researching—both online and offline—and effective written and oral communication. Undoubtedly, during their journey
through the traditional curriculum, students learned a wide array of these transferable skills, but the structure of the major did not make this expanded skill set explicit for them or for prospective history majors. Consequently, the focus of the Rollins history curriculum revision in 2014 was to highlight and emphasize skill acquisition—often through iterative pedagogy—rather than just chronological or geographical knowledge acquisition.

After the Rollins history faculty successfully remapped the major, the new 100-level courses (Investigating History) focused either on a ten-year period or on the history of a specific city. By reducing the amount of history content that students learned at this early level in the major, more time could be devoted to developing fundamental skills. Specifically, the 100-level courses were designed to teach students close reading skills, which, in disciplinary terms, the department interpreted as primary source literacy. Primary source documents are regularly discussed in class, and the main writing assignments for the 100-level classes are all short primary source document analyses. These ask the students to discuss the basic parameters of a document: author, date, audience, medium, and other information gathered, along with less tangible information, such as bias and rhetoric.

The revised 200-level courses (Historical Methodology) became research methods classes. Students are now required to take two of these classes representing two geographical areas, as historical research is often significantly different depending on time and place. All 200-level courses are intended to have the same structure. Focusing on a manageable topic—U.S. women in the nineteenth century, African American education from 1865 to 1965, Renaissance Europe, China from the Opium War to present—the students write three five-page papers during the semester. Both the history research and history writing processes are thoroughly dissected at this level. Students conduct research in class, with the faculty member guiding them through search engines and online archives. The source requirements—both in terms of primary and secondary sources—increase with each paper. So, while the first paper might require eight sources with two primary, the third paper will need twenty sources with ten primary. Similarly, in terms of writing, both faculty and students review outlines, thesis statements, topic sentences, and draft papers. While the 200-level courses teach research and writing, they also start to develop students’ abilities to create an argument
and synthesize materials. Most importantly, for this study, these courses ask the students to use primary and secondary sources in conversation with each other to create a final, polished narrative.

The department’s revision resulted in the development of two types of 300-level courses (Interpreting History and Applying History). Interpreting History, the first set, focuses on topical areas of interest or specialty to the faculty. In this setting, students do extensive reading and write a complex fifteen-page research paper on a topic of their choice, related to the course subject matter. These courses build on the skills students have gained in the 100 and 200 levels as they refine their research and synthetic skills and develop their ability to create an extended and supported argument, while also engaging with relevant historiography. Applying History, the other set of 300-level courses, requires students to put their historical knowledge to work in a non-classroom setting such as through field studies and internships.

The aim of this case study is to evaluate whether the new curriculum developed by Rollins history faculty effectively helps students learn specific and important history skills. In particular, the department’s American historian, Claire Strom, investigates if the iterative pedagogy of the 200-level classes facilitates students’ acquisition of primary source literacy skills over the course of a single semester.

**Primary Source Literacy and Archives Pedagogy**

Historians use primary sources and teach their students how to find and analyze them. However, the concept of primary source literacy—and how to define and measure it—has largely been developed by archivists. In 2003, Elizabeth Yakel and Deborah Torres outlined three broad areas of expertise that were necessary for working with primary source documents: domain knowledge (the ability to situate findings within a broader body of knowledge); artifactual literacy (the ability to interpret the primary documents or artifacts); and archival intelligence (the ability to understand how an archive works in order to locate the documents/artifacts that are relevant). Six years later, Peter Carini offered a list of fifteen concepts as a starting point for understanding—and assessing—primary source literacy. This list focused largely on what Yakel and Torres defined as “artifactual literacy,” with some attention to “archival intelligence,” but little attention to “domain knowledge.”
In 2011, Terry Cook returned to the idea of “archival intelligence,” discussing the archives as “active sites of agency and power,” where archivists help to “construct...social memory.” Cook argued that full primary source literacy necessitates an understanding that archivists create history by being the “principal actor in defining, choosing, and constructing the archive that remains.” Others place stress on the importance of being able to find primary sources, such as a clear understanding of the nature of primary sources, how to develop search terms, and how to use finding aids. In 2016, Carini posited a more mature and nuanced assessment of primary source literacy, encompassing five broad outcomes: 1) know, 2) interpret, 3) evaluate, 4) use, and 5) follow ethical principles. Finally, working from this wealth of literature, the Society of American Archivists (SAA) published their Guidelines for Primary Source Literacy. This comprehensive document summarizes all previous work, dividing primary source literacy into five categories: 1) Conceptualize; 2) Find and Access; 3) Read, Understand, and Summarize; 4) Interpret, Analyze, and Evaluate; and 5) Use and Incorporate.

Defining primary source literacy does not make it easier to teach. In fact, historians and archivists must adapt their teaching to three recent and substantial changes in primary source research if they are to be effective. First, more primary sources are available online that are easy to access. Access does not, however, equal literacy. The proliferation of digital collections makes it hard for researchers to know where to start, resulting in an overuse of search engines like Google, which are ill-suited to the task, and to sites like the Library of Congress, which constrain research to national governmental parameters. This change requires historians (and librarians) to become well-versed in virtual holdings, and digital archivists to think about how to educate a global audience about their collections. A second development is that the increased availability of primary sources has “facilitated a greater interest in the use of these resources at all levels of education.” Indeed, the role of an archivist has shifted from piloting individual researchers to specific resources, to educating large groups about archival materials and how to use them. The third change stems from the first two. With archives and archival users evolving and expanding, educators need to develop new methods of instruction. Generally, archivists have embraced the shift from passive to active learning, developing classroom activities
and online guides to teach primary source literacy. One of the key challenges is that it is difficult to teach primary source literacy in a rigorous fashion without domain knowledge, which necessitates collaboration with subject experts like teaching faculty.

Sometimes, the faculty/archive connection results from institutional initiatives. For example, at the University of Minnesota, a campus-wide emphasis on information literacy between 2005 and 2008 led to increased collaboration between faculty and the school’s librarians and archives. At other times, the connection is harder to make. At Yale University, the archivists scanned the course catalog annually and then reached out to faculty members teaching related courses to invite course consultation and partnership. Occasionally, as in this case study, the faculty/archives connection is more serendipitous, occurring through sheer happenstance.

Many of these collaborations decide to view the archival collection broadly—not necessarily for its specific content, but for its versatility in teaching primary source usage. So, for example, at Dickinson College in North Carolina, all history majors are required to take a methodology course, which includes two hands-on sessions wherein students wrestle with the problems posed by primary sources when trying to interpret a document, identify an artifact, and determine possible avenues of research for writing a biography about a Dickinson College notable. Similarly, the library at the University of Minnesota developed a three-module sequence for the history department’s methods course, integrating hands-on archival research at several stages. And, at DePaul University, historian Warren Schultz embedded the archives experience into a historical methods class, in which students select a letter from the China Missions collection, transcribe and annotate it, and finally write a paper putting “the letter in both its local and broad contexts.”

Other collaborations focus on collections that have special pertinence for class topics, molding lengthy assignments or even a whole course around engagement with relevant artifacts. The model used at Yale of examining the catalog resulted in several course-specific assignments, such as political science students curating mini-exhibits focused on the relationship between politics and academia or U.S. history students examining changing social and religious attitudes in the 1960s using the College chaplain’s papers. An archivist/historian team at The University of North Carolina at
Chapel Hill designed a first-year course that focused almost entirely on archival research, where students researched and wrote essays on southern history topics, utilizing twentieth-century manuscript collections in the archives’ holdings. All of these collaborations focus on either a single assignment or a set of scaffolded assignments or activities. However, the literature on best pedagogical practices is clear that skills-based learning needs to include practice. As James Lang stated: “Whatever cognitive skills you are seeking to instill in your students, and that you will be assessing for a grade, the students should have time to practice in class.” But practice alone is not sufficient. Complex skills, such as writing a paper using primary sources, involve many component skills, and instructors must be able to unpack these separate parts for the students clearly and confidently. While seemingly easy, identifying an “expert blind spot” can be challenging for instructors for whom the practice is second nature and the process seems a cohesive whole. Finally, timely and effective feedback is crucial to student learning, especially when part of an iterative pedagogy where the feedback can be applied to an immediately subsequent exercise.

Recursive Pedagogy

Recursive pedagogy is not new in teaching history. Indeed, in 2006, Lendol Calder wrote about a class he had developed that focused on teaching students how to think like a historian. This “signature pedagogy” uses the repeated examination of primary sources, short written papers, and in-class discussions to teach students “the personality of a disciplinary field [history]—its values, knowledge, and manner of thinking.” Iterative learning has also been used effectively in the archives. A collaboration between English professor David Mazella and special collections archivist Julie Grob at the University of Houston focused on literature published in four Anglophone cities in 1771. For each city, the course followed a “repeated sequence of brief required readings, reading questions, student presentations, special collections visits, and research-based writing assignments.” Similarly, at Oregon State University, Anne Bahde, a special collections librarian, taught six hands-on scaffolded class sessions focused on the primary source literacy skills required of students in executing the final paper.
At Rollins College, the multi-year collaboration between digital archivist Rachel Walton and history professor Claire Strom started accidentally. In 2018, Walton was involved in a multi-college grant from the Associate Colleges of the South (ACS) entitled “Pathway to Diversity: Uncovering our Collections,” focusing on the integration of African Americans at the participating schools with required a classroom component. The summer before the grant started, the professor who had agreed to participate left the College, and Strom, who was returning from sabbatical, stepped into the project last-minute. With her courses already set and enrollment complete, Strom had little flexibility. She determined the best option was to refocus her historical methodology class from the topic of Victorian women to African American education from the Civil War to the Civil Rights Movement so that integration could remain at the heart of the grant project. Two years later in Fall 2020, after successful collaboration, Walton and Strom reprised the same course as part of another multi-college ACS grant entitled “Before #MeToo: How Women Historically Navigated Higher Education at the ACS Schools.” This offering of the course focused on the experiences of women at college during the nineteenth and twentieth centuries, but the approach to the course remained the same.

Rollins history faculty’s design of the 200-level methods course utilizes recursive pedagogy. By having students revisit the same assignment three times during the course of the semester, in conjunction with peer and instructor feedback, the faculty hope the students will make significant strides in general skill acquisition, such as written communication and critical thinking, alongside more discipline specific skills, such as historical research, history methodology, and primary source literacy. Strom designed the course so that the first unit delivered the majority of the historical content during the writing of the initial paper, the second unit of the class involved readings and discussions about how to use a wide variety of primary sources from a collection of essays, and the last third of the class was spent in the archives and focused completely on archival research. For each of the three papers, Strom and Walton provided a long list of potential topics for the students to choose from (see Appendix for the 2018 and 2020 topic lists). These topics gave students a starting point for their research from which they were meant to develop a narrower focus for an evidence-based, five-page paper. The first paper had to focus on earlier aspects of the history being...
studied, the second on later aspects, and the third on topics relevant to the local archival collections. For this third topic, Walton selected themes that were well-supported by the existing archival collections.

During the semester, the students spent much of their class time working on their own research. They conducted online research for sources. They reverse outlined articles and book chapters, they assessed each other’s outlines, theses, and paragraphs, and they dissected primary sources. During the first third of the course, Strom built on the work of the prerequisite 100-level classes, regularly introducing documents or groups of documents and asking the students to analyze them for content, inference, and bias. During the second third of the class, Strom encouraged the students to take lessons from their readings on primary resources and also think of other sources they could search for—artifacts, photographs, buildings, monuments, and more—with consideration of various sources’ strengths and limitations. After this substantial training in primary source literacy, the last third of the class was spent nearly full-time in the archives.

For the first iteration of the course in 2018, with the archives open, the class physically moved into the archives reading room for the last section of the term. The Archives team pulled boxes and folders from the archival stacks related to each student’s chosen topic in an effort to start them on their research journey. During each class period, Strom, Walton, and others from the Archives aided students with analyzing documents, honing research questions, and exploring other potential archival sources like photographs, yearbooks, and the school newspapers. The same conceptual format was followed in 2020. However, due to the pandemic restrictions, the course was fully online. Fortunately, the Archives and Special Collections already had a significant amount of material digitized from their holdings. Walton arranged to have the relevant material for each research question scanned (if not already digitized) prior to the first archives meeting for the class, so each student could have a digital folder of primary sources to start off with as a kind of surrogate to the physical materials they would typically interact with in the traditional reading room setting. Then, Walton and Strom spent each class period (and substantial out-of-class time) meeting one-on-one with students to discuss their projects and help them brainstorm and move forward in their research process. And the archives team was able to digitize more material for each student as needed for the remainder of the semester.
Methodology

The instructors’ aim for the 200-level classes was to teach a broad array of historical research and writing skills, and this project in particular focused on students’ improvement in primary source literacy abilities over the course of a semester. Walton and Strom aimed to evaluate success in this area through a quantitative analysis of student work. For the quantitative component, a team of two expert assessors—Strom and Hannah Ewing, a history department faculty member who was not involved in the courses and therefore served as an outside reader—individually assessed each of the three papers written by the students in the 2018 and 2020 iterations of the course. Using 5-point scales (see Figure 1 for rubric), they evaluated each paper on the basis of three learning outcomes:

1. Ability to integrate primary sources with other sources (broadly ties into the concepts of “Domain Knowledge” and “Conceptualize” from the SAA and Yakel and Torres).

2. Ability to understand how the nature of specific primary sources or their absence affects the narrative (roughly corresponds to “Artifactual Literacy” and “Interpret, Analyze, and Evaluate”).

3. Ability to discover and use a variety of types of primary sources (aligns with “Archival Intelligence” and “Find and Access”).

A total of thirteen students took the 200-level methodology class in 2018, and eight were able to supply all three of their papers for assessment. Eleven students enrolled in the course in 2020, and all their papers were assessed. In total, Ewing and Strom both separately assessed 57 papers, resulting in a total sample of 114 discrete ratings across 19 students for each learning outcome. Since individual students likely entered the classroom with different levels of pre-existing capabilities and the focus of this case study is their learning growth over time, the authors used a linear mixed model approach to address non-independence in the data (i.e., individual students may be more skilled than others and thus have higher ratings across all three assignments).

The authors constructed three models, one for each learning outcome. All models allowed individual students to vary in their overall ability (random intercepts) and included fixed effects controlling for the potential impacts of rater (Strom or Ewing) as well as class (2020
<table>
<thead>
<tr>
<th>1. Ability to integrate primary sources with other sources.</th>
<th>2. Ability to understand how the nature of specific primary sources or their absence affects the narrative.</th>
<th>3. Ability to discover and use a variety of types of primary sources.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not relate primary sources to other sources used. Evidence: No primary sources.</td>
<td>Provides no identification of primary sources. Evidence: No citations.</td>
<td>Doesn’t use a primary source.</td>
</tr>
<tr>
<td>Uses primary sources to illustrate information gained from secondary sources. Evidence: Primary sources present, but only to illustrate ideas gained from secondary.</td>
<td>Provides some basic identification of primary sources—author, type—but no analysis. Evidence: Citations.</td>
<td>Uses one type of primary source, e.g., newspapers.</td>
</tr>
<tr>
<td>Uses primary sources to acquire information not present in other sources. Primary sources not integrated smoothly with secondary sources. Evidence: Primary sources present, but often distinct from secondary.</td>
<td>Provides full identification of primary sources and some analysis. Evidence: Source name in text.</td>
<td>Uses two types of primary sources, e.g., newspapers and yearbooks.</td>
</tr>
<tr>
<td>Recognizes relationships between sources and integrates primary sources with secondary sources. Evidence: Primary and secondary sources used in same sentence or idea.</td>
<td>Provides full identification of primary sources and good analysis of their biases. Evidence: Source name and other information in text.</td>
<td>Uses three types of primary sources, e.g., newspapers, yearbooks, and letters.</td>
</tr>
<tr>
<td>Uses primary sources in a full dialog with other sources to create an original argument or interpretation. Evidence: Primary sources contribute something additional to argument.</td>
<td>Provides full identification of primary sources and recognition of their biases. Offers understanding of how the argument is shaped by the absence of certain sources. Evidence: Source name, other information, and possible bias in text.</td>
<td>Uses four or more types of primary sources or all available types of primary sources.</td>
</tr>
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**Figure 1:** Learning Outcomes/Rubric for Assessment of Student Papers

or 2018). If the recursive pedagogy approach worked as expected, the models should show that the assignments had a significant effect on each learning outcome and that this effect was cumulative, such that each assignment demonstrated a significant improvement from the one that preceded it. “Assignment” was therefore treated as a fixed effect and analyzed using a set of two planned repeated contrasts comparing Paper 1 to Paper 2 and Paper 2 to Paper 3.
Results

Results for each of the three learning outcomes demonstrate a substantial amount of variance at the student level (17% for integration of primary sources with other sources; 18% for understanding how primary sources affect the narrative; and 20% for discovering and using a wide variety of primary sources). In other words, roughly a fifth of the variation in ratings of primary source literacy is attributable to individual differences between students, as opposed to the effects of classroom interventions. Critically, the mixed model approach taken in the paper accounts for these differences between students.

1. Ability to Integrate Primary Sources with Other Sources

For the first learning outcome—the ability to integrate primary sources with other sources—there was a highly statistically significant effect of assignment \( (F(2, 92) = 24.95, p < .001) \), with individuals improving an average of .61 points from Paper 1 to Paper 2 \( (M = 2.52 \text{ to } M = 3.12, p = .002) \) and an average of .74 points from Paper 2 to Paper 3 \( (M = 3.12 \text{ to } M = 3.86, p < .001) \). This growth (depicted in Figure 2) fully supports the role of iterative pedagogy in building students’ ability to integrate primary sources with other materials. The authors found no significant effects for rater or class.

Qualitative observations support these statistical findings, affirming that students built primary source literacy through repeated engagement with the same paper requirements. For example, in 2018, Toby used his first paper to look at the education offered to freedpeople in the South. He constructed his well-structured and well-written paper largely from secondary sources, using only two quotations: one from Abraham Lincoln’s 1863 Proclamation of Amnesty and Reconstruction to illustrate a point made by Eric Foner, and one from Samuel Chapman Armstrong, the founder of the Hampton Institute, to demonstrate information found in James Anderson’s book on Black education. By his second paper, Toby was doing better. Once again, his paper on the civil rights lawyer Charles Hamilton Houston, who helped lay the groundwork for Brown v. Board of Education, was largely grounded in secondary material, but Toby crafted an image of Houston as a “social engineer”
based solely on primary sources written by Thurgood Marshall and Houston himself. Toby’s final paper was a more sophisticated piece. He integrated a large number of both primary and secondary sources to explore Rollins College’s response to the gentrification of a local African American neighborhood, Hannibal Square, arguing that the College implicitly encouraged the process both economically and structurally, while simultaneously fighting it through the visible promotion and support of cultural heritage institutions and community centers. Many of his secondary sources for this paper were local, such as newspaper articles published in *The Orlando Sentinel*.

Similarly, Dillon’s first paper discussed the relative freedom that college gave women to explore same-sex relationships. While she did an excellent job of finding diverse primary sources—from photographs to poems—she only used these to support information found in a number of secondary texts. By her second paper, however, Dillon was more sophisticated in her integration of primary and secondary sources. Writing about sexism within Students for a Democratic Society, she was able to formulate her own ideas based on wide reading. For example, one topic sentence—“By the 1969
National convention Female students began to see their experiences not as a personal problem but rather as a social problem that necessitated political solutions but still had not reached a consensus on how to achieve those solutions as a group”—referenced a scholarly article, an online encyclopedia, and an interview with an SDS member. Dillon’s third paper investigated the origins of the Women’s Studies program at Rollins College. This piece of original research was driven by her work in the college archives looking at the school newspaper and college catalogs over a twenty-year span. She also did original oral interviews with faculty members and used secondary sources to provide national context. Overall, it seems conclusive that these history students gained greater confidence in using primary sources between Paper 1 and Paper 2. This confidence proved invaluable when the classes shifted into the archives setting, allowing students to comfortably use unique primary sources in the shaping of original arguments.

2. Ability to Understand the Nature (or Absence) of Primary Sources

The second learning outcome looked at the students’ ability to understand the nature of primary sources, considering their relative strengths and weaknesses, and how that affects their historical argument. It also, at its most advanced level, expected students to think about the potential impact of the absence of certain sources. For this outcome, it was once again determined that there was a significant effect of assignment (F(2, 92) = 3.60, p = .031). However, repeated contrasts did not demonstrate significant growth from Paper 1 to Paper 2, or from Paper 2 to Paper 3. The authors used an additional test to compare Paper 1 with Paper 3 and showed that individuals improved an average of .53 points between the first and last papers.34 This supports the idea that a recursive pedagogical approach is associated with improvements in primary source literacy but indicates that—contrary to our hypothesis—gains for this particular learning outcome may not build upon each other from paper to paper. Figure 3 depicts the average student improvement from paper to paper. Worth noting is that although there was no significant effect of class (2020 versus 2018) in this model, there was a significant difference between the two raters (B = -.46, SE = .16, p = .007), implying that possible lack of clarity in the outcome itself could be impeding the assessment
of student growth in this setting with consistency and certainty. The evaluation criteria for this outcome looks for identification of sources, recognition of bias, and an understanding of what sources are lacking. Having all three of these aspects of the criteria influence the raters’ score makes it difficult to assess students’ work easily and consistently, as each assessor must juggle the different requirements.

Again, qualitative observations aligned with the data from statistical analyses, demonstrating some gains in this learning outcome, but also implying that these gains may not be incremental in nature (e.g., not building from assignment to assignment, but improving overall from the beginning to the end of the course). Javier’s first paper looked at the integration of women at the University of Minnesota. One of the primary sources he used was a bulletin issued by the university in 1913 called “Vocations Open to College Women.” Javier identified this bulletin in his essay, but did not interrogate it for potential bias or consider other sources that might have offered him a different perspective. Both reviewers rated this paper relatively low in terms of understanding how the nature of

![Figure 3: Average Student Improvement on Learning Outcome 2: Ability to Understand How the Nature of Specific Primary Sources or their Absence Affects the Narrative](image)
sources affects the narrative. The ratings on Javier’s second paper, however, were more divergent. Javier looked at the sexism prevalent in the Students for a Democratic Society. He used a wide range of primary sources, most of which he identified in the essay. One rater considered the essay to offer a reasonably good assessment of bias, while the other did not. Javier’s final paper, which both reviewers rated highly, examined the work of Muriel Fox, co-founder of the National Organization of Women, who attended Rollins between 1946 and 1948. Javier used interviews with Fox and with Betty Friedan to make a large part of his argument. In each case, while not fully interrogating the primary sources, he provided significant in-text information about the sources and their potential biases. For example, in discussing the Fox interview, Javier pointed out that students conducted the 2010 interview and that “Fox spoke nothing but good things about her time at Rollins.” Javier’s advancement is most noticeable comparing the first paper with the third paper, particularly since the raters diverged on assessing the second.

The raters also differed considerably in assessing John’s papers. His first paper looked at the influence of Samuel Chapman Armstrong on the thinking of Booker T. Washington. While he used primary sources, including writings of both men, he did not discuss them in the text. Both raters assigned this paper a 2 for the second learning outcome. John’s second paper looked at the desegregation case of Murray v. Pearson. John identified the court case as a primary source in the text and described it, but did not discuss its potential bias as a primary source. Both raters again ranked this a 2. The third paper saw further divergence of rating, however, with one rater seeing no improvement and assigning a 2, while the other rater thought that John’s abilities had reached a 4. In this paper, John discussed the cancellation of a football game in 1947 between Rollins College and Ohio Wesleyan when the visitors announced they were bringing a Black player. John did substantial primary research for this paper, and the second rater thought that his identification of the nature of each primary source—newspaper article, letter, speech—and his discussion of the bias of the sources was adequate, assigning a 4. The other rater differed, reflecting the problem of determining exactly what constitutes a “good” analysis of bias, and once again assigned a 2. This murkiness probably reflects an inherent weakness in this particular learning outcome.35
3. Ability to Discover and Use a Variety of Types of Primary Sources

Finally, for the last learning outcome of interest—the ability to discover and use a variety of types of primary sources—the proposed pedagogical model was statistically upheld. Results show a highly statistically significant main effect of assignment ($F(2, 92) = 27.49, p < .001$), with significant ($p < .001$) average improvement between Paper 1 ($M = 3.24$) and Paper 2 ($M = 3.92$) as well as between Paper 2 ($M = 3.92$) and Paper 3 ($M = 4.64$). Figure 4 graphically demonstrates this improvement. As with the first learning outcome, the authors found no significant effects for class or rater.

As one might expect from the strength of the above statistical findings, some of the most striking qualitative observations focused on how students’ knowledge of how to find diverse primary sources improved over the course of the three papers. In her first paper in fall 2020, Gloria wrote about how women in the nineteenth century “were able to improve themselves both in status and in personal freedom through education.” Although Gloria found twice the number of sources required, she only used one type of primary source—federal
reports. This limited her essay to a bird’s-eye view of the situation, one focused exclusively on statistics and lacking any qualitative details. Similarly, in her second paper looking at flappers in college, Gloria had many primary sources, but they were all from *The New York Times*, thus circumscribing her analysis. By the time Gloria explored the archives in her third paper, her understanding of primary source research seemed to have expanded. For this final assignment, she chose to research the 1970s controversy surrounding Rollins College’s dormitory policies for women. Gloria explored this debate from all sides, reading handbooks, regulations, meeting minutes, questionnaires (and their results) sent to parents and students, presidential addresses, and many issues of the student newspaper. Showing a similar growth trajectory, another student, Amy, was so initially uncertain about the nature of primary sources that she failed to find any for her first paper in 2020. By her second paper, which looked at anti-Black and anti-Semitic forces in higher education in the early twentieth century, she still seemed shaky on the concept of primary sources. She found several reports that offered contemporary information, but used them for historical context instead, still showing a misstep in her approach to source material. However, she did incorporate two very different primary source news sources into her second paper—one from *The New York Times* and the other from the *JTA Daily News Bulletin*—pointing to slight improvement. Amy’s third paper focused on three of Rollins’ founding female faculty members in the 1890s. Her final essay utilized letters, newspaper stories, a biography, and alumni reminiscences from the College Archives. Perhaps, most significant, Amy ventured beyond the archives to online U.S. census records to find information she was lacking locally, and, for the first time, she listed her primary and secondary sources separately in her bibliography, indicating a degree of improved understanding and greater confidence with source materials than her previous two attempts.

*Additional Implications and Questions*

This class level data is enlightening; it shows how recursive pedagogy and archival experiences can positively affect student learning in a single semester experience. However, a question remains about what other variables affect individual students’ pre-existing capabilities and their uptake of primary source literacy throughout
a semester, despite demonstrated variability at the individual level. Although the authors were able to effectively model individual growth because the study design involved repeated evaluations of student work (resulting in a total sample of 114), the small number of students (only nineteen) involved in the study does not allow the authors to draw strong conclusions about differences between them. There are, however, two possible effects of interest. First, although the semester of the class (2020 versus 2018) is not significantly related to improvement for any of the learning outcomes, it is positively associated with baseline scores for the first learning outcome; in other words, students in the 2020 course were better able to integrate primary sources with other sources than their peers in 2018 from the start of the course. It is unclear why this is so, but perhaps it reflects improvements in the methods Strom employed to teach source integration early on during the second iteration of the course. Second, and more importantly, the number of previous history classes taken is positively and significantly related to students’ baseline primary source literacy: the more history classes that students took before the 200-level course, the more likely they were to have higher initial scores. Nonetheless, there was no significant impact of this variable on student learning growth for any of the three primary source literacy outcomes analyzed here. This suggests that skill-building may be happening iteratively across courses as well as within them, with repetitive exposure to historical analysis increasing students’ overall level of primary source literacy across the board. Importantly, this effect appears to exist independently of greater academic experience, as no significant effects were found for class rank.

Conclusion

In conclusion, the strategy of using recursive pedagogy in 200-level history methodology courses with a hands-on archives integration proved effective in developing students’ primary source literacy skills over the course of a semester. Moreover, in two of the metrics assessed, the importance of repetition was clear, with statistically significant improvement between the first and the second papers, and then between the second and the third papers. The second metric showed improvement between the first and the last papers, but it did not appear to advance incrementally. On reflection, this metric was
a less defined than the others, requiring both source analysis and an understanding of how source absences can affect historical narratives. Perhaps focusing on one aspect of this learning objective or the other would have resulted in more straightforward assessment criteria (since raters seem to score this component less consistently than the other rubric values) and potentially a clearer progression of improvement in primary source literacy incrementally with each essay.

Although a substantial amount of variation in ratings of primary source literacy is attributable to differences between students, the authors were unable to detect any significant student-level predictors of individual improvement in these learning competencies. They found two significant predictors of students’ baseline ability with primary sources upon entering the course (baseline is represented in the scores for Paper 1). First, previous exposure to historical analysis was associated with higher primary source literacy abilities at the baseline level on all three metrics. Second, a difference also existed between the two iterations of the course in terms of baseline scores, which was perhaps due to pedagogical improvements early in the semester. However, neither of these variables show significant effects on the improvement of any of the three primary literacy metrics identified in this case study. This implies that despite students in 2018 using the archives in person and those in 2020 experiencing the course completely virtually during the pandemic setting, they achieved similar gains in primary source literacy across their respective semesters.

While this study demonstrates that the history department’s approach to teaching primary source literacy seems to work well pedagogically, a few caveats are in order. As Doris Malkmus observed in 2010, one size does not fit all. The Rollins College history department’s methodology classes are small and labor-intensive. The recursive use of interactive learning, production, and feedback requires significant time on the part of the faculty member. Additionally, the Digital Archivist and the other members of the Archives team invested substantial amounts of time throughout the semester working individually with students, as well as scanning material for them during the pandemic. Thus, this model would not be well-suited for a large class or, perhaps, even for a large university environment where faculty’s time, effort, and emphasis may be more focused on graduate education. Similarly, the physical space in a given archive could be a barrier to successful undergraduate class
research, although the COVID-19 pandemic restrictions forced Strom and Walton to find ways around in-person work in the archives in the case of 2020.\textsuperscript{42} And, finally, the structure of the Rollins curriculum places maximum importance on applicable skill acquisition rather than encyclopedic knowledge. While it is possible for this kind of in-depth, recursive primary source pedagogy to be executed in a traditional survey course, the challenge to cover hundreds of years of content can require such substantial amounts of class time that the learning focus may be diverted away from hands-on classroom activities like the one described in this case study, and for very good reason—the course material itself is simply too overwhelming.

To move away from the numbers, we reflect on Hugh Taylor’s 1972 article advocating for “letting students loose in archives,” in which he talked about “exposing them to all kinds of dangerous enchantment and unorthodox reactions.”\textsuperscript{43} Such an experience, he argued, will teach the students “the intense pleasure which can be experienced when handling manuscript and record groups, pleasure which has something to do with personal discovery.”\textsuperscript{44} Today, the academy talks less and less about the pleasure of learning and more and more about metrics and assessment, which in many ways is a shame. But Taylor is right. Giving students the tools they need to explore the archival record and equipping them with primary source materials from the past creates a certain magic.\textsuperscript{45} They find stories no one has told. They make connections no one has seen. And sometimes the magic is important—not just to the learning enterprise, but also in the academic career and personal development of the student. For example, one student in the 2018 class carried on researching the topic from her HIS 200 five-page paper and now has an article on the same subject accepted by a peer-reviewed publication. She has discovered a love for demographic research and is in the process of applying to graduate schools for next fall.\textsuperscript{46} Two other students, who researched various aspects of the effect of the second wave of feminism on the Rollins College community in their Fall 2020 archives project, continued their individual research into Spring 2021 and planned to collaborate on a larger article for journal submission in the near future. Thus, the recursive, archives-driven pedagogy of this revised methodology course at Rollins was not just effective in teaching primary source literacy to undergraduates, it also exposed these students to the pure joys and successes possible in rigorous historical research.
Notes


5. Yakel and Torres, “AI: Archival Intelligence and User Expertise,” 51-78.


16. Yakel and Torres, “AI: Archival Intelligence and User Expertise.”


22. Rockenbach, “Archives, Undergraduates, and Inquiry-Based Learning.”


30. Readings used about the nature of primary sources mainly came from Claire Strom and Annabel Tudor, eds., *Using Diverse Primary Resources to Research US History: Essays from the Agricultural History Society* (Mississippi State, MS:Agricultural History Society, 2018).


33. All students referenced in the paper have been given pseudonyms.

34. The authors used an additional post-hoc test (using a Bonferroni correction, which makes it more difficult to reach statistical significance, thereby limiting the false positive risk when conducting exploratory analyses) to
compare Paper 1 with Paper 3 and showed that there was statistically significant improvement between the two (M = .53, p = .031).

35. Javier’s student paper, “Muriel Fox’s Experience at Rollins and How they Influenced her Role within the Feminist Movement,” Rollins College, Fall 2020.


37. This was determined after conducting several supplementary linear regression analyses of the baseline scores (assessments of Paper 1), as well as supplementary mixed models with additional predictors.

38. B = .96, SE = .31, p = .004.

39. There were significant relationships between previous history courses and the three baseline outcomes as follows: for integration of primary sources with other sources, B = .23, SE = .08, p = .005; for understanding how primary sources affect the narrative, B = .25, SE = .09, p = .007; for discovering and using a wide variety of primary sources, B = .20, SE = .09, p = .03.


Appendix

**Topic Lists for the Historical Methodology Courses (2018)**

**Topic 1: Educating Blacks after the Civil War to 1900**
- What were the achievements of the Freedmen’s Bureau in creating schools for African Americans?
- What challenges did the Freedmen’s Bureau face in creating schools for African Americans?
- What were the achievements of the Freedmen’s Bureau in creating colleges for African Americans?
- What challenges did the Freedmen’s Bureau face in creating colleges for African Americans?
- What was the role of Northern philanthropy in creating colleges for African Americans?
- What was Booker T. Washington’s educational philosophy?
- What role did W. E. B. Du Bois see for education?
- What were George Washington Carver’s main educational achievements?
- How was George Washington Carver’s education extraordinary for African Americans?
- What was the role of churches in the push for African American education after the Civil War?
- Discuss the achievements of and challenges faced by Fanny Jackson Coppin.
- What precedents were set by the case *Roberts v. City of Boston*?

**Topic 2: Educating Blacks after *Plessy v. Ferguson*, 1900 to 1960**
- How did the NAACP fight for educational equality in the early 20th century?
- What role did Charles Hamilton Houston play in the fight for educational equality in the early 20th century?
- What role did Thurgood Marshall play in the fight for educational equality in the early 20th century?
- What was the NAACP’s policy of establishing legal precedents to further African American education?
- What were the arguments and results in the case *Briggs v. Elliott*?
- Discuss the experiments of Kenneth Clark and Mamie Clark on Black school children and the resulting effects on opinions regarding segregation.
• What were the arguments and results in the case *Brown et al. v. Board of Education of Topeka, Kansas*?
• What were the arguments and results in the case *Davis v. School Board of Prince Edward County*?
• What were the arguments and results in the cases *Bulah v. Gebhart* and *Belton v. Gebhart*?
• What were the arguments and results in the case *Bolling v. Sharpe*?
• Discuss the Supreme Court’s discussion and ruling on school segregation.
• What were the roles and successes of Black fraternities and sororities?

**Topic 3: Bringing it Home—African American Education at Rollins College**

• What was the experience (profession, education, living situation, community life) of African Americans in the early days of Winter Park when Rollins was founded?
• What role did Rollins play in the doctrine of “separate but equal” as it was enacted and experienced in the Winter Park community in the years before integration?
• What was famous African American author and anthropologist Zora Neale Hurston’s connection/relationship to Rollins?
• What was Rollins’ relationship with nearby institutions of higher education for African Americans, like the Hungerford School and Bethune-Cookman?
• What was the experience of African American staff at Rollins in the first half of the 20th century?
• What was the conflict with the 1947 Rollins vs. Ohio Wesleyan football game about, and how was it resolved?
• What was the work and charge of the Rollins Interracial Committee (later renamed the Race Relations Committee)?
• What were the perspectives of Rollins administrators on race and education during the years before integration on campus?
• What were the perspectives of Rollins faculty on race and education during the years before integration on campus?
• What were the experiences of Rollins’ first African American faculty?
• What were the experiences of Rollins’ first African American students?
• What was the perspective and goal of Rollins’ Black Student Union?
• What was “Africana Fest” and why was it created at Rollins in the early 1990s?
• What role did Rollins have in the process of gentrification experienced over the last three decades by the historically Black community of West Winter Park?
**Topic Lists for the Historical Methodology Courses (2020)**

**Topic 1: Women’s Education in the 19th Century**

- Discuss the motivations for and/or means of founding of Troy Seminary.
- Discuss the motivations for and/or means of founding of Hartford Seminary.
- Discuss the motivations for and/or means of founding of Oberlin.
- Discuss the motivations for and/or means of founding of Mount Holyoke.
- Investigate the educational background of Elizabeth Cady Stanton and how it contributed to her work.
- Investigate the educational background of Jane Addams and how it contributed to her work.
- Investigate the educational background of Florence Kelley and how it contributed to her work.
- Investigate the educational background of Mary Church Terrell and how it contributed to her work.
- Investigate the educational background of Harriet Beecher Stowe and how it contributed to her work.
- Look at the incorporation of women into the University of Minnesota.
- Look at the incorporation of women into Kansas State.
- Look at the incorporation of women into Cornell.
- Look at the incorporation of women at the University of Wisconsin.
- Look at the incorporation of women at the University of Washington.
- Investigate the theory of limited energy as a problem for educating women.
- Investigate colleges’ concerns that women were outstripping men at college and what they did about it.
- Look at the first Black college women. Where did they go? Who were they?
- Investigate the development of home economics as a facet of the curriculum.
- Discuss how college education influenced the close relationships between women that developed in the 19th century.
- How did higher education in the 19th century for women provide a space for lesbians to exist semi-publicly?
- How did early sororities fit into the broader themes of women’s education in the late 19th century?
- Discuss the relationship of women attending college to the fears of race suicide in the late 19th century.
Topic 2: Women’s Education in the 20th Century

• Investigate how colleges in the early 20th century limited the enrollment of Jewish or Black students.
• How did Mary McLeod Bethune’s background set her up for her career?
• Discuss the motivations for and/or means of founding of Spelman.
• Discuss the motivations for and/or means of founding of Bennett.
• Discuss the motivations for and/or means of founding of St. Catherine’s.
• Discuss the motivations for and/or means of founding of Trinity in Washington, D.C.
• What was the American Student Union? How was it founded? What were its aims?
• How did the image of the flapper shape the college woman of the 1920s?
• What was college life like for women in the 1920s?
• How did the depression affect women’s lives at college?
• What was Title IX and how did it affect women’s lives on college campuses?
• How were women involved in civil rights movements on college campuses?
• Discuss the second wave of feminism on college campuses.
• How and where did women’s studies originate as a discipline?
• What women went to college under the GI Bill after WWII? What were their experiences?
• How did the AIDS epidemic affect women’s life on campuses?
• How did female students engage politically in the 1960s and 1970s?
• How did Betty Friedan’s college background set her up for her career?

Topic 3: Bringing it Home—Women’s Education at Rollins College

• Discuss Lucy Cross and her role in the founding of Rollins.
• Who were the first graduates of Rollins and how did their Rollins education prepare them for their life endeavors?
• Look at the work of some of the early female professors at Rollins (Louise Abbott, Alice Guild, Eva Root, etc.) and discuss their educational background.
• Who was Lucy Blackman and what was her impact at Rollins? What was her larger role in the environmental conservation movement?
• What was Mary McLeod Bethune’s connection with Rollins and in what ways did she impact higher education for women in Florida?
• Who was Prestonia Martin? What was her connection to Rollins? And what were her thoughts on feminism?

• How did the prominent College donor, Hattie M. Strong (a.k.a. Mother Strong) become connected with Rollins? How did her life experience and views on “womanhood” impact Rollins’ female students? Were they typical of the era?

• How and when was Home Economics taught at Rollins? Who taught it and what did the curriculum consist of? Did this curriculum evolve over time? How?

• How and when did Rollins begin to offer Women & Gender Studies courses? Who taught them and what did that curriculum consist of? How did it evolve over the years?

• How did Rollins’ dormitory rules and regulations (curfew, visitation hours, etc.) differ for female students in the 1960s? How did those change in the 1970s and why?

• What was the significance of pageant culture at Rollins for women? When was it dominant on campus and why?

• What was sorority life like for Rollins women in the 1960s and how did NCM challenge traditional sorority culture in the 1970s?

• In what ways did the Women’s Liberation Movement impact Rollins students? What controversies did it spark on campus and who was involved in those conversations?

• Who was Muriel Fox? What was her connection to Rollins? And what was her role in the National Organization for Women?

• How did Title IX affect women and women’s sports at Rollins? Why was this a significant moment in College history?

• When and why did sexual assault become a campus-wide concern? What kind of solutions were discussed and implemented, and by whom?

• Discuss the work and influence of a trailblazing female leader at Rollins (Annie Russell, Constance Ortmayer, Susan Gladwin, Susan Dyer, Geneva Drinkwater, Rita Bornstein, etc.). What kind of supports did she benefit from, and what supports were missing that she might have needed?
In 1940, the Teachers’ History Club at the University of Notre Dame created the “Quarterly Bulletin of the Teachers’ History Club” to improve the learning experience in the history classroom.

By 1967, the expanding collaboration of educators reorganized as the History Teachers’ Association and decided to transform the bulletin into an academic journal—The History Teacher.

In 1972, the association transferred guardianship of The History Teacher to coordinating faculty members at the Department of History at California State University, Long Beach. In the interest of independence and self-determination, the associated teachers incorporated as a non-profit organization.

The Society for History Education, Inc. (SHE) was recognized by the State of California in 1972.

In 2012, the Society began offering full-text, open access to recent archives of The History Teacher at its website, thehistoryteacher.org.

In 2014, The History Teacher launched its full-color covers feature, showcasing historical documents on both front and back covers, specifically designed to spark classroom discussion.

In 2021, The History Teacher entered its 55th Volume, and we ask you to join us in celebrating history teachers throughout the world and throughout time.