# Undergraduates in the Archives: Using an Assessment Rubric to Measure Learning

Magia G. Krause

#### Abstract

This study introduces the use of a rubric to assess student learning from archival instruction. The researcher undertook a field study to examine what students in an undergraduate history course at a large state university learn from archival instruction. The study also builds upon previous work in the archival literature to introduce a reliable measure of archival literacy skills. The results of this study demonstrate that archival instruction can have a positive impact on student learning.

rchives professionals expend a great deal of effort instructing their users about their collections, finding aids, and other resources. They provide one-on-one guidance at the reference desk, teach workshops for faculty and administrators, and participate in classroom instruction at all levels of education. Yet the feedback they collect about these efforts is haphazard and informal. Repeated visits and use of the archives are oft-cited measures of satisfaction, as are informal discussions with instructors and students. These anecdotal impressions provide neither an accurate nor a concrete justification for the many hours of instruction archivists provide since such effort's impact on students' education is unclear. Impressions also do not satisfy the need for repositories to be accountable to their administration for the services they provide to users.

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<sup>&</sup>lt;sup>1</sup> Magia G. Krause, "Learning in the Archives: A Report on Instructional Practices," *Journal of Archival Organization* 6, no. 4 (2008): 233–68.

Professional guidelines prepared by the Society of American Archivists (SAA) encourage college and university archives to "serve as an educational laboratory where students may learn about: a particular subject, the different types of available resources, the proper procedures and techniques for using primary archival resources in their research projects."<sup>2</sup> Concurrently, archivists and special collections librarians hope that their instructional efforts enhance students' learning experiences.<sup>3</sup> The resources academic archives hold reflect their institutions' administrative and cultural histories, missions and, in some cases, faculty research interests. Academic archives and special collections can and do complement the information literacy efforts of academic libraries, extending them to include a definition of primary sources, an overview of finding aids, and the basics of documentary analysis. In the most recent College and University Archives Reader, Elizabeth Yakel calls archival researcher education "an opportunity" for archivists. <sup>4</sup> Academic archivists can use it to build a stake in the educational mandate of their institutions by helping students learn how to search for, locate, and analyze primary sources for class assignments and beyond.<sup>5</sup> However, without the aid of concrete assessment tools that provide feedback to archivists about their efforts, archivists can find it challenging to measure their impact on users.

This study introduces the use of a rubric and offers a model for assessing student learning from archival instruction. Through a field study, I examined what students in an undergraduate history course (U.S. history 1865–present) at a large state university learn from archival instruction. The study built upon previous work in the archival literature to explore the components of archival literacy and how they can be measured.<sup>6</sup> The research questions guiding this study are the following:

<sup>&</sup>lt;sup>2</sup> The Society of American Archivists, *Draft Revised Guidelines for College and University Archives*, available at http://www.archivists.org/saagroups/cnu/index.asp, accessed 3 December 2008.

<sup>&</sup>lt;sup>3</sup> M. G. Krause, "Undergraduate Research and Academic Archives: Instruction, Learning and Assessment," PhD diss. (University of Michigan, 2010), 93–94.

<sup>&</sup>lt;sup>4</sup> Elizabeth Yakel, "Managing Expectations, Expertise, and Effort While Extending Services to Researchers in Academic Archives," in *College and University Archives: Readings in Theory and Practice*, ed. Christopher J. Prom and Ellen D. Swain (Chicago: Society of American Archivists, 2008), 268.

<sup>&</sup>lt;sup>5</sup> Ken Osborne, "Archives in the Classroom," *Archivaria* 23 (1986): 16–40; Sharon A. Cook, "Connecting Archives and the Classroom," *Archivaria* 44 (1997): 102–17; Anne J. Gilliland-Swetland, "An Exploration of K–12 User Needs for Digital Primary Sources Material," *American Archivist* 61 (1998): 137–57; Marcus Robyns, "The Archivist as Educator: Integrating Critical Thinking Skills into Historical Research Methods Instruction," *American Archivist* 64, no. 2 (2001): 363–84; Julie Hendry, "Primary Sources in K–12 Education: Opportunities for Archives," *American Archivist* 70, no. 1 (2007): 114–29; Elizabeth Yakel, "Information Literacy for Primary Sources: Creating a New Paradigm for Archival Researcher Education," *OCLC Systems and Services* 20, no. 2 (2004): 61–64.

<sup>&</sup>lt;sup>6</sup> Anne J. Gilliland-Swetland, Yasmin B. Kafai, William E. Landis, "Integrating Primary Sources into the Elementary School Classroom: A Case Study of Teachers' Perspectives," *Archivaria* 48 (Fall 1999): 89–116; Elizabeth Yakel and Deborah A. Torres, "AI: Archival Intelligence and User Expertise," *American Archivist* 66, no. 1 (2003): 51–78.

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- 1. What can undergraduate students learn from archival instruction?
- 2. Can undergraduate-student learning about archives be measured through the use of a rubric?

# Assessing Learning in Archives: A Literature Review

Recently, attention has focused on assessing archival services and their impact on users. Evaluation of archival services, including instruction sessions, can offer useful feedback to archivists about how their efforts impact visitors and researchers. In practice, however, few repositories have any kind of formal evaluation for their instruction efforts. In 2008, the Archival Metrics project published a suite of standardized questionnaires to help college and university archives evaluate their services, website, online finding aids, and orientation sessions, but these measures are not yet widely adapted. A 2008 survey of archival instructional practices found that over one-third (38.7%) of the respondents *never* assess an instruction session. A 2008 content analysis of online tutorials about primary sources revealed that not one contained an evaluation component about the tutorial itself.

Two recent studies examine archival instructional services from the perspective of students. Xiaomu Zhou's article, "Student Archival Research Activity: An Exploratory Study," describes a small case study of instruction at the Bentley Historical Library at the University of Michigan. Zhou conducted observations of an undergraduate history class both at the archives and in the classroom and interviewed 4 students, the professor, and the reference archivist on several occasions. She relied on both Yakel and Torres's model of archival intelligence and Carol Kuhlthau's information-seeking model to create a new model specific to the archival environment. Zhou's Student Archival Research Activity (SARA) model captures the stages students encounter in their research, knowledge and skills they develop in the process, and the role of both the instructor and the archivist. Zhou offers a detailed description of the tailored orientation the reference archivist provided, which consisted of an introduction to and history of the institution, its holdings, the concept of provenance, a discussion of the

<sup>&</sup>lt;sup>7</sup> Xiaomu Zhou, "Student Archival Research Activity: An Exploratory Study," *American Archivist* 71, no. 2 (2008): 476–98; Wendy Duff and Joan Cherry, "Archival Orientation for Undergraduate Students: An Exploratory Study of Impact," *American Archivist* 71, no. 2 (2008): 499–529.

<sup>&</sup>lt;sup>8</sup> See http://archivalmetrics.org, accessed 24 June 2010.

<sup>&</sup>lt;sup>9</sup> Krause, "Learning in the Archives."

<sup>&</sup>lt;sup>10</sup> Elizabeth Yakel, Magia G. Krause, and April C. McKay, "Technology to Support Learning in Archives: A Content Analysis of Online Tutorials" (under review).

<sup>11</sup> Zhou, "Student Archival Research Activity."

<sup>&</sup>lt;sup>12</sup> Yakel and Torres, "AI: Archival Intelligence"; Carol Kuhlthau, "Developing a Model of the Library Search Process: Cognitive and Affective Aspects," Reference Quarterly 28, no. 2 (1988): 232–42.

differences between primary and secondary sources, and searching strategies. The students then engaged in exercises in which they passed around "copies of a handwritten letter selected by the reference archivist and instructor, reading it and trying to recognize words and interpret their meaning." In evaluating the orientation, students wanted more information about how to use archival resources, such as online finding aids; how the arrangement of materials affects their accessibility; and the basic steps involved in using the archives.

Zhou notes that the design of the orientation is crucial because this activity helps students begin thinking critically about how to interpret archival materials and use them in their own work. She calls for more interaction between instructors and archivists in shaping the content of the orientation and posits that archivists need to view themselves as "real instructors" and "take the responsibility of not only transferring basic archival searching skills but also encouraging students to gain critical and contextual thinking." <sup>14</sup> Zhou's study is a valuable first step in analyzing students' research behavior in the archives, but it is based on a very small sample of subjects and her model has not been tested in any other study. Furthermore, Zhou's study does not objectively demonstrate student learning because it is based on students' reports of their archival experience.

Another study relying on students' perceptions assesses the impact of 4 archival orientation sessions at the Yale University Library Manuscripts and Archives conducted by Wendy Duff and Joan Cherry as part of the Archival Metrics project. <sup>15</sup> Duff and Cherry surveyed students before they attended a brief orientation and at the end of the term to find out whether the students' self-reported confidence in finding primary sources and their use of these sources was higher then. The researchers found a small increase in the level of self-reported confidence in finding archival materials and an increase in the use of personal papers, correspondence, and photographs. Most interesting are the students' suggestions for improving the orientation. Of the 46 completed surveys, 16 expressed a need to learn how to search more effectively and 11 wanted to learn more about how to actually use the archives. <sup>16</sup> Seven students and 2 of the 4 professors also surveyed in this study expressed an interest in a hands-on approach as part of the orientation. <sup>17</sup>

These studies reflect the opinions of students about archival orientations, and, in all of them, students generally expressed satisfaction with the instruction. Their suggestions for improvement are instructive. Students felt they needed more instruction in the basic steps involved in using an archives, ranging from

<sup>13</sup> Zhou, "Student Archival Research Activity," 9.

<sup>&</sup>lt;sup>14</sup> Zhou, "Student Archival Research Activity," 11.

<sup>&</sup>lt;sup>15</sup> Duff and Cherry, "Archival Orientation for Undergraduate Students."

 $<sup>^{16}</sup>$  Duff and Cherry, "Archival Orientation for Undergraduate Students," 521.

<sup>&</sup>lt;sup>17</sup> Duff and Cherry, "Archival Orientation for Undergraduate Students," 521.

filling out a call slip to using finding aids. The students also wanted a more active experience in which they could engage not only with the documents themselves, but also with the process of doing research in the archives. These studies suggest that students want the process modeled so that they can build a conceptual model of how to accomplish archival research.<sup>18</sup>

While these studies offer important first steps in assessing the impact of archival instruction on undergraduate students because they assess students' feedback about the process, what they reveal about learning is limited. Both studies rely on self-reported measures—either in interview form (Zhou) or questionnaire (Duff and Cherry). Self-reported measures can be subject to bias stemming from such elements as the way the question is worded or the available response categories. These measures can also be related to social-desirability bias, or "the tendency to offer responses that are felt to be more acceptable than others." While the studies point to the archival orientation as a critical instructional experience, they do not address whether or not the students are learning.

Learning can be challenging to measure because it is a subtle process that cannot be observed directly. For this reason, the outcomes of learning are usually assessed through observation, written or oral responses, and self-reports. <sup>20</sup> Written and oral responses are the most common measure of learning in schools. Teachers evaluate students' written work in the form of quizzes, tests, essays, and term papers to determine if learning has occurred. They often employ a rubric to assess students' performance on one of these types of exercises. Linda Suskie and Trudy W. Banta define *rubric* as "a scoring guide: a list or chart that describes the criteria that you and perhaps your colleagues will use to evaluate or grade completed student assignments." Two types of rubrics exist: holistic and analytic. Holistic rubrics "score the overall process or product as a whole, without judging the separate parts," while analytic rubrics, like the one used in this study, score individual parts of a product or performance. <sup>22</sup>

<sup>18 &</sup>quot;Modeling involves an expert performing a task so that the students can observe and build a conceptual model of the processes that are required to accomplish it." Allan Collins, "Cognitive Apprenticeship," in *The Cambridge Handbook of the Learning Sciences*, ed. Keith R. Sawyer (New York: Cambridge University Press. 2002), 50.

<sup>&</sup>lt;sup>19</sup> Michael S. Lewis-Beck, Alan Bryman, and Tim F. Liao, *The Sage Encyclopedia of Social Science Research Methods* (Thousand Oaks, Calif.: SAGE Publications, 2004), 1014.

<sup>&</sup>lt;sup>20</sup> Dale H. Schunk, *Learning Theories: An Educational Perspective*, 4th ed. (Upper Saddle River, N.J.: Pearson, Merrill, Prentice Hall, 2004).

<sup>&</sup>lt;sup>21</sup> Linda Suskie and Trudy W. Banta, *Assessing Student Learning: A Commonsense Guide* (San Francisco: John Wiley and Sons, 2009), 137.

<sup>&</sup>lt;sup>22</sup> Bonnie Gratch-Lindauer, "Selecting and Developing Assessment Tools," in Assessing Student Learning Outcomes for Information Literacy Instruction in Academic Institutions, ed. Elizabeth F. Avery (Chicago: Association of College and Research Libraries, 2003), 31.

Megan Oakleaf discusses some of the benefits of rubric assessment. If rubrics are transparent, they can help students understand instructors' expectations and provide direct feedback about their performance. <sup>23</sup> Oakleaf argues that the very process of creating a rubric is useful for university librarians and faculty to clearly define learning objectives and outcomes. Rubrics also provide assessment data about students' learning that can help improve instruction. For archivists, rubrics can be useful to identify and articulate the goals of archival instruction. Rubrics can also aid collaboration with teaching faculty and librarians because they serve as tools for communicating the objectives of archival orientations and demonstrate whether or not students are acquiring specific knowledge and skills.

Although librarians increasingly use rubrics to assess information literacy instruction, archivists have not yet adopted these assessment tools.<sup>24</sup> In this study, I developed a rubric for assessing undergraduate students' performance on a document analysis exercise. I hypothesized that undergraduate students receiving archival instruction would perform better on a document analysis exercise than students not receiving this instruction. Furthermore, I examined what the students learned and how those skills might contribute to an understanding of archival literacy.

#### Methodology

# Study Participants

The subjects in this research study were 93 undergraduate students taking a large history survey class during the winter of 2009 at a large state university. The students in 4 discussion sections were divided into a control and a treatment group. The study did not determine the number of students in each discussion group, which was a factor of the enrollment process at the beginning of the term. Some data were removed from the final dataset because 10 students were not present for the post-test and 1 student was a second-year graduate student. Thus, the final dataset consisted of 37 students in the control group and 45 in the treatment group, for a total of 82 students.

The majority of the students in the treatment group were 20 years old and in their sophomore year of college. The control group differed slightly in that the subjects tended to be younger first-year undergraduates. In addition, the majority of students in the control group were majoring in education or history,

<sup>&</sup>lt;sup>23</sup> Megan Oakleaf, "Using Rubrics to Assess Information Literacy: An Examination of Methodology and Interrater Reliability," *Journal of the American Society for Information Science and Technology* 60, no. 5 (2009): 969–83.

<sup>&</sup>lt;sup>24</sup> Lorrie A. Knight, "Using Rubrics to Assess Information Literacy," Reference Services Review 34, no. 1 (2006): 43–55.

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with 7 undecided. In the treatment group, many more students majored in history (19 compared to 7 in the control group), and none were undecided.

Despite these differences between the groups, the students' archival experience as measured by responses to the question, "How much experience do you have with conducting archival research?," were strikingly similar. Surprisingly, fewer than 10% of the students in both groups reported having no archival experience. The majority of students in both groups reported having minimal archival experience. A third of the students had conducted archival research using digital primary sources, while a quarter reported on-site archival experience. Only 4 individuals in each group claimed to have substantial experience conducting archival research.<sup>25</sup>

In addition, the course instructor and 2 graduate student instructors assisted in facilitating the teaching experiment described in this study.<sup>26</sup> The archivist provided the instruction, and 2 professional archivists assisted me in grading the students' document analysis exercises to increase the reliability of the results. The archivists each had more than 5 years of experience teaching and working with undergraduates.

#### Materials

To measure learning directly through the use of a rubric, I compared 2 similar groups of students: 1) a treatment group that was given an archival orientation, and 2) a control group that did not receive any archival orientation. I asked both groups to complete a document analysis exercise before the archival instruction and afterward. This pretest-post-test comparison is a classic experimental design that can assess a pedagogical intervention (i.e., archival instruction) by comparing the results of 2 groups over a period of time. I selected this method because it is often used in educational research to measure the effects of instruction. <sup>27</sup> This comparison would suggest whether or not the treatment group learned from the archival instruction.

<sup>&</sup>lt;sup>25</sup> Other studies indicate that undergraduates may misinterpret their use of archives. Kathleen Fear's master's thesis, "User Understanding of Metadata in Digital Image Collections" (University of Michigan, 2009) found that in a group of 78 undergraduate subjects, about half claimed they had archival experience. Subjects had the opportunity to ask for clarification when completing the questionnaire, as in, "Would I know if I have used archives before," leading Fear to expect much lower levels of archival experience than reported (p. 16). Similarly, in this study I expected the majority of the students to report having no previous archival experience. Until we have a better measure of archival experience, results such as this need to be interpreted with caution.

<sup>&</sup>lt;sup>26</sup> I had a difficult time finding a professor willing to participate in this study. The professor in this study was open-minded and proactive about incorporating archival instruction in her curriculum. Her decision to utilize the university archives in a large survey class was ambitious, and it was the first time she had attempted to do so.

<sup>&</sup>lt;sup>27</sup> Louis Cohen, Lawrence Manion, and Keith Morrison, *Research Methods in Education* (London: Routledge, 2007), 275.

# Document analysis exercises

To increase the validity of my experiment, I relied heavily on materials developed by educators at the National Archives and Records Administration (NARA) in designing the document analysis exercises. In my previous research, I learned that archivists frequently use these materials to teach both high school and college students. Since these worksheets are already commonly used in practice, I made slight modifications and tested them with a pilot group to develop the exercises used in this study.

The document analysis exercise pretest (see Appendix 1) consisted of 3 sections representing analysis of 3 types of documents: a textual document, a photograph, and a finding aid. The first 2 sections of the exercise for the textual document and the photograph were adapted from the NARA materials. Questions required students to identify the type of document and information about its source, its audience, its physical qualities, and its content. Open-ended questions encouraged students to consider why the document was written, place it in a historical context, and engage with its author by posing an unanswered question.

To measure students' knowledge about searching for and locating primary sources, I added a question asking students where they would go to find documents similar to the one they analyzed. I also added a third section asking students to interpret and navigate through a finding aid to identify important information on a topic. In the pretest, I also included 4 demographic questions about the students' age, year in school, field of study, and experience conducting archival research to gain a better understanding of the students' background. The post-test (see Appendix 2) was a slight modification of the pretest in that the questions remained the same, but the students used different primary sources and a different finding aid to complete the exercise.

The questions in both the pre- and post-tests were designed to capture the students' ability to identify the basic characteristics of a primary document and demonstrate an awareness of its source. I relied on insights from the research on historical inquiry in evaluating and developing the document analysis exercises. For example, the concepts of *sourcing* and *contextualization* are important heuristics historians use to verify, evaluate, and place documents in a broader context.<sup>30</sup> The pre- and post-test questions aimed to encourage students to reflect on the meanings, purposes, and historical significance of the documents

<sup>&</sup>lt;sup>28</sup> The National Archives and Records Administration offers many lesson plans and analysis worksheets that conform to the National History Standards and National Standards for Civics and Government, available at http://www.archives.gov/education/lessons/, accessed 10 June 2009.

<sup>&</sup>lt;sup>29</sup> Krause, "Undergraduate Research and Academic Archives."

<sup>&</sup>lt;sup>30</sup> Samuel Wineburg, "Historical Problem Solving: A Study of the Cognitive Processes Used in the Evaluation of Documentary Pictorial Evidence," *Journal of Educational Psychology* 83 (1991): 73–87.

they encountered. The questions also measured students' ability to read a basic archival finding aid, a necessary skill for identifying and locating primary sources.

#### Assessment rubric

In developing the pre- and post-tests, I listed several learning objectives that would be useful in assessing students' performance. I used these objectives to develop the assessment rubric for the tests. Creating a rubric can be time consuming. It requires explicit and detailed language about the learning objectives associated with a lesson or exercise. Bonnie Gratch-Lindauer explains that designing a rubric typically requires a number of decisions about the lesson content, levels of performance, and quality of work.<sup>31</sup> She recommends following these steps: 1) describe the learning outcomes of the instruction; 2) identify specific attributes that students should be able to demonstrate as a result of the instruction; 3) brainstorm characteristics of each attribute; and 4) write narrative descriptions of the levels of performance for each attribute.<sup>32</sup>

The learning objectives I developed reflect previous research on the skills necessary to conduct archival research. Yakel introduced the term *information literacy for primary sources* and proposed several dimensions of this concept.<sup>33</sup> For Yakel, information literacy for primary sources includes domain or subject knowledge, artifactual knowledge, and archival intelligence. Archival intelligence refers to a user's understanding of archival policies, arrangement, and systems.<sup>34</sup> Based on the learning objectives and the dimensions of the archival intelligence model, I identified 4 general categories of analysis or archival literacy skills:

- 1. *Observation:* Were students able to describe the elements of a document, photograph, and finding aid?
- 2. *Interpretation/Historical Context:* Were students able to find meaning in the sources and place them in a broader historical context?
- 3. *Evaluation/Critical Thinking*: Were students able to ask questions of the sources regarding their validity, limitations, and strengths?
- 4. *Research Skills:* Did students have a meaningful awareness of archives, where to locate primary sources, and how to read a basic finding aid?

I considered the skills and knowledge students should be able to demonstrate in the various categories and wrote narrative descriptions for each level of

<sup>31</sup> Gratch-Lindauer, "Selecting and Developing Assessment Tools."

<sup>32</sup> Gratch-Lindauer, "Selecting and Developing Assessment Tools," 32.

<sup>33</sup> Yakel, "Information Literacy for Primary Sources."

<sup>34</sup> Yakel and Torres, "AI: Archival Intelligence."

performance, from minimal to exemplary. I applied these categories to the document analysis exercises by creating sample responses for each level of performance.

After completing the rubric (see Appendix 3), I shared it with 2 professional archivists I had recruited to grade the pre- and post-tests. They reviewed the test materials and the rubric thoroughly before the experiment commenced.

#### Procedure

Students in both the control and treatment groups were given the pretest in their discussion sections during the second week of the semester. After the pretest, the students in the treatment group received a total of 2 hours of archival instruction during 2 separate sessions.<sup>35</sup> The first session occurred during the third week of the term. The archivist visited the class during a biweekly lecture and gave a PowerPoint presentation covering basic information about the repository and highlighting a few of its pertinent collections. Students in the control group were told to miss class that day and did not receive the archival instruction until later in the semester after they took the post-test.

The second instructional session took place in a meeting room in the archives. Students signed up to visit the archives for a 1-hour, hands-on instructional session. During the session, students participated in a station-based exercise that incorporated both elements of active and cooperative learning. Active learning and cooperative learning are pedagogical strategies often incorporated into constructivist classrooms. Constructivism is a learning philosophy that "argues that humans generate knowledge and meaning from their experiences." Constructivism is often associated with instruction that promotes active learning. Research suggests that active learning strategies, such as peer teaching, group work, debates, and hands-on exercises, help students acquire higher-level skills, such as analysis, critical thinking, and evaluation, and support the use of these pedagogical strategies in promoting student engagement and participation in the classroom.<sup>37</sup>

<sup>35</sup> Although I developed the rubric and the document analysis exercise, the actual instruction was the domain of the participating archivist. The archivist designed the instruction in collaboration with the faculty member and me, based on years of experience conducting orientations.

<sup>&</sup>lt;sup>36</sup> "Constructivism (learning theory)," Wikipedia: The Free Encyclopedia, available at http://en.wikipedia.org/wiki/Constructivism\_%28learning\_theory%29, accessed 9 April 2010.

<sup>&</sup>lt;sup>37</sup> Michael Prince, "Does Active Learning Work? A Review of the Research," Journal of Engineering Education 93, no. 3 (2004): 223–31; John D. Bransford, Ann L. Brown, and Rodney R. Cocking, eds. How People Learn: Brain, Mind, Experience, and School (Washington, D.C.: National Academies Press, 2000); Arthur Chickering and Zelda Gamson, Applying the Seven Principles for Good Practice in Undergraduate Education (San Francisco: Jossey-Bass, Inc., 1991).

During the exercise, the students were divided into groups of 4 to 6 and rotated around the room, spending 10 to 12 minutes each at 4 different stations. The stations consisted of 1) bibliographic instruction (i.e., using local catalogs to search for primary sources), 2) critical thinking, 3) photograph analysis, and 4) citation/footnote analysis. An archives staff member guided each of the first 3 stations, and a graduate student instructor for the class conducted the citation/footnote analysis station. I observed the students working in these stations and recorded my impressions of the instruction and student participation.

The archivist led the bibliographic instruction station. She began by asking the students about their majors to make her discussion more relevant to their needs. She walked them through the archives' website, pointing out features of the online finding aid system. She also highlighted the different types of searches supported by the university library's main online catalog. Finally, she created a scenario in which she had to write a 2-page paper on a given subject and walked the students through the process of searching for relevant materials specific to that scenario.

Another archives staff member led the photograph analysis station. She focused the session on a photograph taken near campus in the late nineteenth century. She compared the physical photograph to a digitized surrogate and demonstrated how to identify various aspects of the image. She also described several authoritative sources the students could use in verifying the photograph.

Another staff member led the critical thinking station, where students were invited to sit around a table and read an article about a temperance resolution adopted in Michigan in 1881. Both photocopies and originals of the document were available to the students. After reading the document, the students were encouraged to work through a copy of NARA's written document analysis worksheet.<sup>38</sup> Students were walked through the questions and identified the type of document, its audience, and passages in the document illustrating its intent. The students read the document and individually answered the questions aloud.

Another graduate student led the citation/footnote station. The graduate student had a copy of Thomas Sugrue's book *Origins of Urban Crisis* and a box of sources cited in the book.<sup>39</sup> He began by giving the students a brief overview of Sugrue's book, reading a passage about employment discrimination in Detroit's brewing industry. He pointed out a footnote for that passage and showed the students how to track down the sources in the Detroit Urban League Collection. The graduate student also made the paper-based finding aid for the collection

 $<sup>^{38}</sup>$  This exercise should have been familiar to the students because the first 6 questions on the document analysis exercises in this study are identical to the NARA worksheet.

<sup>&</sup>lt;sup>39</sup> Thomas J. Sugrue, Origins of Urban Crisis: Race and Inequality in Postwar Detroit (Princeton, N.J.: Princeton University Press, 1996).

available and walked through it with the students, describing it as providing basic information about a collection. He encouraged the students to locate a particular folder and to find specific materials that Sugrue used in his argument. The students in this group actively handled archival materials and were encouraged to make a connection between a finding aid, a box of archival materials, and a historical footnote.

Students in both the control and treatment groups were given the post-test in their discussion sections before the middle of the term, approximately 4 weeks after the pretest. Once the post-tests were collected, the archivist provided the same instruction and activities to the students in the control group to ensure that they were able to complete the assignments and exams for the course.

# Assessing student learning with a rubric

Instructors who use rubrics attest to their strengths in making grading easier and more consistent because rubrics explicitly spell out the expectations of student work and, in the case of multiple graders, provide guidance for grading consistently. To grade the students' exercises objectively using the assessment rubric, I sought the help of 2 professional archivists who had considerable experience working with undergraduates and who each had at least 5 years of archival experience. We sought consistent, reliable results in grading the tests. Reliability in educational research is an important measure of consistency. <sup>40</sup> I decided to use 3 raters to grade the exercises to increase the reliability of the assessment scores.

In classroom and rubric-based assessment, reliability can refer both to the consistency of scores assigned by 1 rater over time (intrarater reliability) as well as the consistency of scores assigned by more than 1 rater (interrater reliability).<sup>41</sup> In this research study, using multiple raters makes the latter more relevant. For example, 1 rater may evaluate some of the students' research skills more highly than another and give them a higher score, which can be partially mitigated, as Moskal and Leydens attest, by a well-designed rubric.<sup>42</sup> Inconsistencies in scores can also be addressed by making adjustments to the rubric and calibrating the

<sup>&</sup>lt;sup>40</sup> Oakleaf, "Using Rubrics to Assess Information Literacy."

<sup>&</sup>lt;sup>41</sup> Barbara M. Moskal and John A. Leydens, "Scoring Rubric Development: Validity and Reliability," *Practical Assessment Research and Evaluation* 7, no. 10 (2000), available at http://pareonline.net/getvn.asp?v=7&n=10, accessed 15 July 2009.

<sup>42</sup> Moskal and Leydens, "Scoring Rubric Development."

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grading process through initial training, ongoing discussion, and reconciling inconsistent responses.  $^{43}$ 

We used the control group's pretest scores to test the reliability of our scoring consistency. After each of us graded the control group's pretest exercises, I used a statistical measure known as Fleiss Kappa to calculate our interrater reliability on the scores. A Fleiss Kappa is intended for multiple raters, and, thus, it was more appropriate than the well-known Cohen's Kappa for 2 raters.<sup>44</sup> Our initial interrater reliability test of the strength of our agreement was poor. The Fleiss Kappa was 38.3%, an unacceptable level of agreement since we were aiming for over 75% or excellent agreement. This result led to many email discussions, the creation of a wiki to share our scores and comments, and many hours of regrading and justifying our scores. We also decided to develop a key collaboratively for the post-test document analysis exercise to aid in grading. Our calibration process ultimately led to an excellent level of agreement for both the pre- and post-tests. Our Fleiss Kappa for the pretest was 80% and 78% for the post-test, both of which are considered excellent strengths of agreement. Once we achieved these results, we combined our scores so that the students had 1 score for each pretest and post-test category of the rubric.

## Reliability

The 4 criteria or categories of analysis in the rubric (observation, interpretation/historical context, evaluation/critical thinking, research skills) encompass a set of skills associated with primary source or archival literacy. These skills include the ability to identify important elements of primary sources and to place them in a historical context. They also include an ability to make inferences about primary sources, validate them, and identify how to search for and retrieve related sources. In theory and in practice, these skills are related. I performed a test of statistical reliability to examine the underlying structure among these 4 skills.

A concept such as archival literacy skills is complicated to measure because it includes a multitude of factors. However, theoretically, these factors should be related and encompass a holistic set of skills that help users understand how to use archives. I hypothesized that the 4 categories of the rubric would be highly correlated. In other words, students receiving 1 score (i.e., good) on 1 category of the rubric would be more likely to receive the same score on another category. I performed a Cronbach's alpha test to measure how reliably the 4 categories of the rubric were correlated. In this case, *reliability* refers to a measure of

<sup>&</sup>lt;sup>43</sup> Peggy L. Maki, Assessing for Learning: Building a Sustainable Commitment across the Institution (Sterling, Va.: Stylus, 2004).

<sup>&</sup>lt;sup>44</sup> Joseph L. Fleiss, Statistical Methods for Rates and Proportions (Hoboken, N.J.: Wiley-Interscience, 1981).

the internal consistency among the categories.<sup>45</sup> The Cronbach's alpha ranges between 0 and 1, and the higher the alpha, the more highly correlated the categories. In practice, an alpha of at least 0.7 is accepted as reliable.<sup>46</sup>

# Hypothesis testing

The dependent variable used to measure learning was the averaged score on each criterion of the rubric (i.e., observation, interpretation/historical context, evaluation/critical thinking, and research skills) on a 1 to 4 scale. In determining appropriate statistical tests, I considered the fact that the data in my study were ordinal. An ordinal scale assumes an implicit order to the data where, in this case, a 2 meant fair and a 4 meant exemplary. Given the nature of the data and the relatively small sample, I decided to use a nonparametric statistical test, which is useful in practice to assess ordinal and nominal data. <sup>47</sup> Nonparametric data are characterized as generally not having a normal distribution because assumptions cannot be made about the population being measured. Although nonparametric tests are not as powerful as parametric tests (i.e., t-test, z-test), they are useful with small sample sizes. <sup>48</sup>

A nonparametric test equivalent to the t-test is the Mann-Whitney U test for 2 independent samples. This test is based on ranks so that it does not assume the space between the values is the same, making it ideal for ordinal rather than interval data. After some initial exploration of the data, using the statistical software package SPSS, I conducted a Mann-Whitney U test for both the pretest and post-test scores of the 2 groups by rubric category.

# Results

# Comparison of Pretest Scores

The results of the pretest revealed that the students in both the control and treatment groups were statistically equivalent. I analyzed demographic data from the pretest using independent sample t-tests, and they revealed no statistically significant difference in the students' ages, years of study, or archival experience. I analyzed the results of the pretest document analysis exercise by rubric category and compared them. The mean scores of both the control and treatment groups on the pretest were not statistically significant for any of the rubric

 $<sup>^{45}</sup>$  David De Vaus, Surveys in Social Research,  $5^{\rm th}$  ed. (London: Routledge, 2002).

<sup>&</sup>lt;sup>46</sup> De Vaus, Surveys in Social Research, 184.

<sup>&</sup>lt;sup>47</sup> Cohen, Research Methods in Education.

<sup>&</sup>lt;sup>48</sup> Neil A. Weiss, *Introductory Statistics*, 7th ed. (Boston: Addison-Wesley, 2005).

U N D E R G R A D U A T E S I N T H E A R C H I V E S : U S I N G A N
A S S E S S M E N T R U B R I C T O M E A S U R E L E A R N I N G

Table 1. Comparison of Pre- and Post-test Scores

Category	Score	Pre	etest	Post	Þ			
		Control (n = 37)	Treatment (n = 45)	Control (n = 37)	Treatment (n = 45)			
Observation	I Minimal	0	ı	0	0	.008*		
	2 Fair	14	24	13	4			
	3 Good	22	18	23	40			
	4 Exemplary	ı	2	I	I			
		M=2.65 SD= .538	M=2.47 SD= .625	M=2.68 SD= .530	M=2.93 SD= .330			
Interpretation/	I Minimal	0	I	0	0	.008*		
Historical Content	2 Fair	14	24	13	4			
	3 Good	22	18	23	40			
	4 Exemplary	I	2	I	I			
		M=2.19 SD= .397	M=2.20 SD= .694	M=2.43 SD= .689	M=2.73 SD= .447			
Evaluation/	I Minimal	2	2	0	0	.021*		
Critical Thinking	2 Fair	29	29	25	18			
	3 Good	6	10	11	27			
	4 Exemplary	0	0	I	0			
		M=2.11 SD= .458	M=2.09 SD= .596	M=2.35 SD= .538	M=2.60 SD= .495			
Research Skills	I Minimal	14	13	7	2	.040*		
	2 Fair	20	22	28	38			
	3 Good	3	9	2	5			
	4 Exemplary	0	ı	0	0			
		M=1.70 SD= .618	M=1.96 SD= .767	M=1.86 SD= .481	M=2.07 SD= .393			

<sup>\*</sup> p < .05

Note. This table includes p values from the Mann-Whitney U tests comparing the control and treatment groups' scores on the post-test. The pretest p values are not included because none of them were significant.

categories (see Table 1). In other words, students performed about the same on the document analysis exercise before receiving any archival instruction.

# Comparison of Post-test Scores

However, in comparing the pretest and post-test data, I found a statistically significant difference in students' scores at the level of every rubric category. Students in the treatment group had statistically higher scores on the post-test

after participating in archival instruction. While the means of all the scores improved for both groups in all categories, the magnitude of the increase in the post-test scores was much greater for the treatment group than for the control group. Table 1 provides the results of the Mann-Whitney U tests used to compare the students' pre- and post-test scores on the document analysis exercises. The table also includes the overall means and standard deviations for each of the rubric categories.

Figure 1 provides a visual comparison of the students' scores on both the pre- and post-tests. While the pretest scores are comparable, the post-test scores of the treatment group show a gain where the majority of the scores were good (3) instead of fair (2). As the figure illustrates, the slope of the line representing the treatment group's scores on the post-test shows a sharper incline for the observation, interpretation/historical context, and valuation/critical thinking categories. The only exception is in the research skills category, where the treatment group slope is about the same as that of the control group. Although the treatment group showed a slight, statistically significant improvement in its research skills, the students' scores remained low. Similarly, while the scores in the treatment group generally improved from fair to good, very few students received exemplary scores.

Overall, the results of the statistical tests suggest that although both groups demonstrated comparable knowledge of archives and primary sources on the pretest, the students in the treatment group learned more about analyzing sources from the archival instruction they received. Furthermore, they gained skills in identifying, describing, and evaluating primary sources from receiving instruction in the archives.

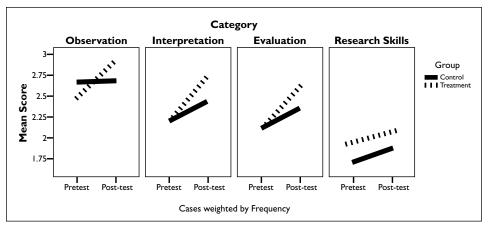


FIGURE 1. Comparison of mean scores on pre- and post-tests.

# UNDERGRADUATES IN THE ARCHIVES: USING AN ASSESSMENT RUBRIC TO MEASURE LEARNING

# Archival Literacy

Students' scores in both the control and treatment groups did highly correlate among all 4 categories of the rubric on the pretest. The overall Cronbach's alpha was .792 for all the categories, which is highly reliable (see Table 2). This high alpha score indicates that the 4 categories are interrelated and can extend our knowledge of the components of archival literacy.

Table 2. Correlation of Rubric Categories

	Pretest	Post-test
Overall	.792	.574
Treatment	.847	.293
Control	.663	.605

I performed the same statistical reliability test on the post-test scores but was disappointed to find that the skills were less correlated, particularly for the treatment group. I concluded that the improvement in the treatment group's post-test scores was unbalanced. In other words, the students improved some skills but not others. A closer examination of the post-test scores indicated that for the treatment group, the research skills category did not correlate to the other three skills measured by the rubric. Thus, while students in the treatment group improved their observation, interpretation/historical context, and evaluation/critical thinking skills after they received archival instruction, they did not improve their research skills. This finding suggests that the archival instruction the students received effectively taught them how to utilize the sources meaningfully. However, research skills are complex to measure because they comprise a variety of different skills that are generally acquired over time, not from a single, 10-minute instructional session. The low research skills scores could also be a factor of the decision to correlate the rubric to the document analysis exercises instead of to the instruction. Finally, the low scores suggest that improving students' research skills is a long-term outcome of the combined efforts of teaching faculty, librarians, and archivists that can be difficult to measure with a single intervention.

# A Closer Look at Student Responses

Since many of the responses to the document analysis exercises were open ended, it is useful to examine some of the students' qualitative perspectives. I limit these observations to the post-test responses because the responses between

the 2 groups of students are more distinct. As a rater participating in this study, I was impressed overall with the students' ability (in both groups) to identify the basic elements of primary sources. To demonstrate the archival literacy skill I refer to as "observation," students needed to identify characteristics of the primary sources, including date, title, quotations from the written document, objects in the photograph, and the size of an archival collection in the finding aid portion. Still, a cross-tabulation of the post-test data revealed substantive differences between the groups. For example, on the post-test, almost 90% of the treatment group obtained a good score on their ability to identify and describe elements of the sources, but only 62% of the control group did so. No students received a minimal score (1) because everyone was able to identify at least some characteristic of all the sources.

The interpretation/historical context skill was a little more difficult for most of the students. This skill required students to place the primary sources in a broader historical context to explain and understand them. Although the focus of the history class was post-1865 U.S. history and the content of the document analysis exercise was approved by the instructor, no direct link existed between the exercise in this study and a particular unit in the class. The majority of the treatment group (74%) obtained a good score on their ability to explain the sources and place them in an appropriate historical context. In contrast, 60% of the control group only obtained a fair score in this category. The written document used in the post-test consisted of a letter from U.S. Secretary of War Henry Stimson to the president dated 24 April 1945. Students were asked to extrapolate basic historical facts from the details and content of the letter. However, the majority of the students in both groups merely rewrote excerpts from the letter instead of placing the letter in the broader historical context of World War II. For the photograph question, students were asked to infer 3 things about the image of a child selling newspapers in 1910. Those students who listed historically appropriate observations were given a higher score in this category. Here is one exemplary answer to this question: "The young boy is an immigrant working; rich people are ignoring the boy; rich town b/c of car in background at 1910" (EGA6).49

Critical thinking has been identified as an important skill students can learn from archival instruction.<sup>50</sup> In this study, evaluation and critical thinking involved the ability to ask questions about the sources regarding their validity, limitations, and strengths. Students in the treatment group also showed an improvement in their critical thinking skills. Over half (60%) obtained a good score in this category, while only 30% of the control group did. To verify the letter to the president from Henry Stimson, a student suggested "view[ing]

<sup>&</sup>lt;sup>49</sup> Subject identifier.

<sup>&</sup>lt;sup>50</sup> Robyns, "The Archivist as Educator."

other documents from following days. Presidential documents from this time have been released and are a matter of public record" (EGA4). Another exemplary response was to verify the signature of the sender and "check Washington source" (EGA9). Responses that received a fair or minimal score included "by showing and reading the document" (CGA2) and "go directly to author" (CGB1).

The treatment group's research skills improved only slightly. The majority of the students in both the control (76%) and treatment (84%) groups received a fair score on this portion of the post-test. No one received an exemplary score. The treatment group's responses on the post-test did not seem to reflect the instruction received. In fact, the group's responses were very similar to the control group's answers. According to the rubric, students need to demonstrate the ability to ask research questions of the primary sources, identify places to look for additional sources, and mention archives in a meaningful way. For example, students were asked where they would go to find more information about the Stimson letter and how they would locate additional materials about the civil rights movement in Detroit. Many good responses built on the information they received during the archival instruction. For example, 2 good responses included: "Contact the Urban League itself or perhaps use a Library of Congress subject head for more relevant info" (EGA9) and "Return to search results list + type in civil rights movements in Detroit" (EGB11). Students who received minimal scores gave very general responses such as "the library," "the internet," "archives."

## Discussion

In this study, I introduced an assessment tool, in the form of a rubric, to evaluate archival instruction for undergraduate students. To test the efficacy of this rubric, I conducted a field experiment comparing 2 groups of students in a large history survey class where 1 group received 2 hours of archival instruction and the other group did not. I utilized the rubric to measure what students in the treatment group learned from the archival instruction they received. I found that the students who received archival instruction improved their scores on a document analysis exercise, demonstrating increased knowledge of the basic characteristics of primary sources and how to interpret and analyze them. These results suggest that a rubric can be a useful assessment tool to help archivists evaluate their instructional services and can contribute to their understanding of what students learn from them.

In the rubric, I identified 4 categories of archival literacy skills and demonstrated that 3 are statistically correlated: 1) observation, 2) interpretation/historical context, and 3) evaluation/critical thinking. A statistical test of reliability

confirmed that these categories were highly interrelated based on the students' scores. In other words, students receiving a certain score in a single category are more likely to receive that same score in other categories. These results lead to a better understanding of the components of archival literacy, but they do not comprise all of the skills necessary to conduct archival research effectively. The findings suggest that the research skills category did not correlate to the other categories of the rubric because students in the treatment group did not dramatically improve their scores in this area. This finding can be the result of several factors, including the limitations of the archival instruction, the study design, and the notion that archivists can have an impact on students' research skills without collaborating with teaching faculty and librarians.

That the students in the treatment group did not possess more sophisticated research skills after this limited archival instruction is not entirely surprising given what is already known about undergraduate information-seeking skills. Many researchers point out that students exhibit elementary searching and organizational skills. A study of the "Google Generation" commissioned by the British Library and the Joint Information Systems Committee (JISC) synthesized decades of literature about young people's information-seeking behavior and concludes that today's undergraduates are not as "Web-literate" as conventional wisdom assumes. Their unquestioning dependence on the accuracy of search engines such as Google and Yahoo is consistent with research on how students judge the credibility of online resources. Thus, teaching students effective research skills is an ongoing challenge for educators, librarians, and archivists.

The design of this study is limited in that it does not account for a more holistic view of the research skills students learn as undergraduates. Instead, it is meant to isolate the impact of a single instance of archival instruction given the reality that most students are exposed to archives in brief orientations, if at all, during their college years. A longitudinal study that follows a group of

<sup>&</sup>lt;sup>51</sup> Gloria J. Leckie, "Desperately Seeking Citations: Uncovering Faculty Assumptions about the Undergraduate Research Process," *The Journal of Academic Librarianship* 22, no. 3 (1996): 201–208; Patricia D. Maughan, "Assessing Information Literacy Among Undergraduates: A Discussion of the Literature and the University of California-Berkeley Assessment Experience," *College and Research Libraries* 62, no. 1 (2001): 71–85; Barbara Quarton, "Research Skills and the New Undergraduate," *Journal of Instructional Psychology* 30, no. 2 (2003): 120–24.

<sup>&</sup>lt;sup>52</sup> Ian Rowlands, "Information Behavior of the Researcher of the Future," Joint Information Systems Committee (JISC) and The British Library, 11 January 2008, available at http://www.bl.uk/news/pdf/googlegen.pdf, accessed 7 December 2008.

<sup>&</sup>lt;sup>53</sup> Tsai-Youn Hung, "Undergraduate Students' Evaluation Criteria When Using Web Resources for Class Papers," Journal of Educational Media and Library Sciences 42, no. 1 (2004): 1–12; Soo Y. Rieh and Brian Hilligoss, "College Students' Credibility Judgments in the Information Seeking Process," in Digital Media, Youth, and Credibility, ed. Miriam J. Metzger and Andrew Flanagin (Cambridge, Mass.: The MIT Press, 2007); Brian Hilligoss and Soo Y. Rieh, "Developing a Unifying Framework of Credibility Assessment: Concept, Heuristics, and Interaction in Context," Information Processing and Management 44, no. 4 (2008): 1467–84.

students from their first year to graduation and beyond could potentially shed light on the role archivists play in providing students guidance and instruction in developing their research skills.

Archival literacy aligns with the 21st Century Skills movement, which focuses on teaching analytical skills to help students succeed in a global, competitive environment. Fet teaching these skills requires collaboration. This gives archivists an opportunity to engage with librarians and educators to assert their instructional role in helping students build skills that will serve them in their education and future careers. As colleges and universities increasingly develop curricula that encourage undergraduate research opportunities, students in the humanities and social sciences, in particular, will need to strengthen their analytical and research skills. Archivists can play an important role in helping students acquire these skills by forming strategic collaborations with teaching faculty and librarians to provide effective instruction and an environment for students to engage in hands-on, authentic research projects.

# Limitations of the Study

Although I took steps to minimize possible threats to the validity of these results, both the design and outcomes of this study have limitations. My decision to examine only a single instance of archival instruction makes it difficult to draw general conclusions from the results. However, I chose this particular archival instruction because I judged it to represent a good approach based on my research. In addition, both the archivist and faculty member were willing to accommodate the requirements of the study. Further, the design of the study limits my ability to assess the effectiveness of the archival instruction because it features only one approach to teaching students about primary sources. Another possible experimental design would compare 2 or more different instructional approaches to test which method is most effective instead of excluding 1 group from the intervention.

As a researcher observing the instruction, I had little influence over the design and content of the archival instruction or of the undergraduate history course. However, this allowed me to be more objective in my analysis of the data. In practice, archivists should work closely with teaching faculty to customize the instruction they provide to students. They should also modify the rubric to support their own learning objectives and instructional sessions.

Most of the threats to the experimental design relate to the fact that the control and treatment groups were potentially nonequivalent, which is

<sup>&</sup>lt;sup>54</sup> 21st Century Skills, Education and Competitiveness (Tucson, Ariz.: Partnership for 21st Century Skills, 2008).

unavoidable in quasi-experiments.<sup>55</sup> For example, that the 2 groups had different graduate student instructors threatened the internal validity of the experiment because this difference could explain some of the differences in the results. Unfortunately, this logistical issue was unavoidable because of section scheduling. That all of the students had the same professor, attended the same biweekly lectures, and completed the same assignments mitigated this difference. The professor developed the curriculum for the course and advised the graduate student instructors about leading student discussions. Thus, there is little reason to believe that the findings in this study are primarily the result of the different graduate student instructors.

It is also possible that the pretest and the orientation session sensitized the students to the measurement instrument. In any pre- and post-test design, this possibility always exists, thus affecting answers on the post-test. I reduced this possibility by changing the primary sources and the finding aids the students analyzed. Although the questions were the same, the students had to apply them to sources they had not previously encountered.

#### Conclusion

Archivists hope their instructional efforts make a difference in students' learning experiences and overall education. This study provides empirical evidence—based on student performance rather than perception—that archival instruction can help students learn to use primary sources meaningfully. The results suggest that students learn from archival instruction, and, as a result, archivists can contribute to the educational missions of their institutions. The results of this study demonstrate that archivists can be proactive in assessing the impact of their instructional efforts on students. An assessment rubric has the potential to increase collaboration among archivists in sharing instructional materials. It can also give archivists a reliable tool with which to collaborate with faculty and demonstrate their instructional goals to educators and librarians. A rubric can be tailored to reflect general orientation learning objectives or explicit course-specific goals. It can also serve as a tool to inform administrators about the role of archives and special collections in enhancing undergraduate research.<sup>56</sup>

<sup>&</sup>lt;sup>55</sup> The term *nonequivalent* refers to the fact that the subjects were not randomly assigned to the control and treatment groups. The groups were selected after the students had already registered for the course and the discussion sessions.

<sup>&</sup>lt;sup>56</sup> The Boyer Commission on Educating Undergraduates in the Research University, Reinventing Undergraduate Education: A Blueprint for America's Research Universities (Stony Brook, N.Y., 1998) and Reinventing Undergraduate Education: Three Years after the Boyer Report (Stony Brook, N.Y., 2001).

U N D E R G R A D U A T E S I N T H E A R C H I V E S: U S I N G A N
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The rubric in this study can serve as a template for archivists to use with their own learning objectives and exercises. It can assist archivists to reflect upon the effectiveness of their teaching and encourage them to be more explicit about specific learning outcomes, skills, and how students will demonstrate what they are learning. This rubric can be improved by addressing even more explicitly how students will demonstrate the skills they have learned from instruction. It can also be expanded to incorporate additional skills or to use with different types of exercises. As it stands, it is intended to be a foundational and customizable assessment tool. As archivists share instructional curricula and materials with one another, other standardized assessment tools will emerge and improve their efforts to introduce students to primary sources and help them acquire competitive, lifelong learning skills that will serve them in their educational and career goals.

Student	nan	ne:	Date:
Instructi	ions	• •	
Your pace photogra through	cket aph a c	contains copies of two prim . In your packet there is also	ary sources: a written document and a a finding aid (a tool to help navigates). Carefully examine each item and
Written 1	Doc	ument Questions (Adapted fr	rom NARA's Teaching with Documents):
1.	Ty	pe of Document (Check one	e):
		_Newspaper	Telegram
		_Letter	Advertisement
		_Patent	Census report
		_Memorandum _Map	Other (please describe)
2.	Uı	nique Physical Qualities of th	ne Document (Check one or more):
		_Distinctive letterhead	Seals
		_Handwritten	Notations
		_Typed	Other (please describe)
3.	Da	ate(s) of Document:	
4.	Αυ	thor (or Creator) of Docum	ent:
5.	Ti	tle of Document:	
6.	Fo	or What Audience Was the Do	ocument Written?
7.	Do	ocument Information (There	are many possible ways to answer A–E.)
	A.	List three things the author	said that you think are important:
	В.	Why do you think this docu	ument was written?
	C.	What evidence in the documenten? (Quote from the documenter)	ment helps you know why it was writent.)
	D.	List two things the docume States at the time it was write	nt tells you about life in the United tten:
	E.	Write a question to the authument:	nor that is left unanswered by the doc-
	F.	How would you verify what	is written in this document?

U	N	I	)	E	R	G	R	Α	D	U	Α	T	E	S	I	N	I	T	Η	E	A	1	R	$\mathbf{C}$	Η	I	$\mathbf{V}$	E	S	:	U	S	I	N	G		Α	N
	Α	١ ,	5 5	S	E.	s s	5 1	ví	E.	N	Т	]	R	U I	3 F	: 1	C		Т	О	1	M	E	Α	S	U	R	Е		L	E. /	A :	R	N	1 1	N	G	

	G. Where would you go to find more information about the topic of the document?												
Photogr	aph Questions (A	Adapted from NARA's Teac	ching with Documents):										
Step 1: 0	Observation												
A.	Study the photo the photograph	a and then examine indidrants and study each se	orm an overall impression of ividual items. Next, divide the ection to see what new details										
В.	Use the chart b photograph.	elow to list people, obje	cts, and activities in the										
	People	Objects	Activities										
	1												
Step 2: I	nference												
A.	Based on what infer from this		e, list three things you might										
Step 3: 0	Questions												
-	What questions does this photograph raise in your mind?												
В.	Where could yo	ou find answers to them:											
Finding	Aid Questions (F	retest): <sup>57</sup>											
1.	Who was Leon	DeMeunier and where a	are his papers?										
2.	What types of d	ocuments does the Leo	n DeMeunier collection										
3.	What is the size	of the Leon DeMeunie	r collection?										
4.	You are writing	a research paper about	the civil rights movement in										

Detroit. You are particularly interested in the work of the Detroit Congress of Racial Equality (CORE). Where in the DeMeunier collection would you find the organization's founding documents?

<sup>&</sup>lt;sup>57</sup> The only difference between the pretest and the post-test is in the finding aid section. I merged both tests and distinguished between the different versions of the finding aid sections for publication here. Blank space for student answers has also been reduced for publication.

- 5. You are looking at a letter from Mr. Monroe Curry to the Detroit Branch of the NAACP dated June 18, 1961. How would you go about citing this letter?
- 6. Where would you go for additional materials about the civil rights movement in Detroit?

# **Demographic Questions:**

- 1. What is your field of study?
- 2. What is your year of study?
- 3. What is your age?
- 4. How much experience do you have with conducting archival research? (Please select all that apply.)
  - None—(this is my first time using digital or physical primary sources)
  - Minimal—(I have encountered primary sources in class, but have not searched for materials or visited archives)
  - Some digital—(I have searched for and used digitized primary sources for a project)
  - Some onsite—(I have visited archives and/or special collections to use primary sources)
  - Substantial—(I have conducted more than one archival research project)
  - Other (please describe)

# Finding Aid Questions (Post-test):

- 1. What is the Detroit Urban League and where can you find this collection?
- 2. What types of documents does the Detroit Urban League collection contain?
- 3. What is the size of the Detroit Urban League collection? \_\_\_\_\_
- 4. You are writing a research paper about the civil rights movement in Detroit. You would like to know more about the conditions experienced by African-American youth in the 1950s and 1960s. Where in the Detroit Urban League collection might you find something useful?
- 5. The following is a footnote from an article written by Thomas Sugrue about racial inequality [Sugrue, Thomas J., "Crabgrass-roots Politics: Race, Rights, and the Reaction against Liberalism in the

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Urban North, 1940–1964." *Journal of American History* 82, no. 2 (September 1, 1995): 551.]

# Footnote:

<sup>17</sup> Mel Ravitz, "Preparing Neighborhoods for Change," July 13, 1956, folder A8-1, box 44, Detroit Urban League Papers (Michigan Historical Collections, Bentley Library, University of Michigan, Ann Arbor).

What steps would you take to find this document?

6. Where would you go for additional materials about the civil rights movement in Detroit?\_\_\_\_\_

# Appendix II: Supporting Documents for Pre- and Post-tests

# Pretest:58

- Written Document Analysis: http://www.archives.gov/education/lessons/wilder/#documents
- 2. Photograph Analysis: http://www.archives.gov/exhibits/picturing\_the\_century/postwar/postwar\_img81.html
- 3. Finding Aid: http://quod.lib.umich.edu/cgi/f/findaid/findaididx?c=bhlead&idno= umich-bhl-851131

#### **Post-test:**

- 1. Written Document Analysis: http://www.archives.gov/education/exhibit/stimson.html
- 2. Photograph Analysis: http://www.archives.gov/global-pages/larger-image.html?i=/press/ press-kits/way-we-worked/images/small-newsie-l.jpg&c=/press/ press-kits/way-we-worked/images/small-newsie.caption.html
- 3. Finding Aid:<sup>59</sup> http://quod.lib.umich.edu/cgi/f/findaid/findaid-idx?c=bhlead&idno=umich-bhl-851100

<sup>&</sup>lt;sup>58</sup> Websites are current as of 6 November 2009.

<sup>&</sup>lt;sup>59</sup> Students were provided with a 2–3 page excerpt from the finding aid.

# Appendix III: Analytic Rubric for Document Analysis Exercise

Criteria	Minimal	Fair	Good	Exemplary					
	<b> </b> *	2	3	4					
Observation	Makes a very brief or erroneous attempt at identify- ing the basic char- acteristics of the sources.**	Offers only a basic description of the sources and may include errors.	Describes most of the elements of the sources cor- rectly.	Thoroughly and accurately describes elements of document, photograph, and finding aid.					
Interpretation/ Historical Context	Is not able to place any of the sources in a broader his- torical context.	Offers I example in which a source is placed in a broader historical context.	Explains and gives examples of the meaning and usefulness of more than I but not all of the sources, placing them in a broader historical context.	Explains and gives examples of the meaning and usefulness of all of the sources and places them within a broad historical context.					
Evaluation/ Critical Thinking	Does not offer any additional information about the source besides what is already provided.	Asks questions about I source regarding its valid- ity, limitations, and strengths	Able to ask questions about more than I but not all of the sources regarding their validity, limitations, and strengths.	Able to ask questions about all of the sources regarding their validity, limitations, and strengths.					
Research Skills	Shows no awareness of how to find additional resources. Does not mention archives at all and is unable to come up with new research questions based on the sources.	Demonstrates limited knowledge of where to go for additional resources. Does not mention archives in a meaningful way. Shows limited ability to ask new research questions based on the sources.	Shows some awareness of additional sources, both primary and secondary. Mentions archives in a meaningful way. Demonstrates some ability to ask new research questions based on the sources.	Exhibits ability to ask new research questions based on the sources and to recognize the existence of additional resources, both primary and secondary. Exhibits a meaningful awareness of archives and how to read a finding aid.					

<sup>\*</sup>All answers received at least I point even if they were blank or erroneous.

<sup>\*\*</sup>In this rubric "sources" refers to the document, photograph, and finding aid in the document analysis exercise.