The digitization of archival materials and placing them online for use in the K-12 classroom is a practice that was popularized by the Library of Congress American Memory Project, and has since been embraced by many in the archival community. This paper reports on a study that investigated the practices and attitudes of North Carolina K-12 public school teachers and the factors that they considered when deciding whether or not to use the sources in their classrooms. Participants were asked questions as to whether or not, why or why not, and how they used the sources in their instruction. Overall, respondents reported a high rate of use of digitized sources, thus this high rate may be over-stated.

Headings:

Digitized Primary Sources

Access to Archives—K-12

Use Studies—Archives

Digitization
USING DIGITIZED PRIMARY SOURCES IN THE NORTH CAROLINA K-12 CLASSROOM

by
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A Master’s paper submitted to the faculty of the School of Information and Library Science of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Science in Library Science.

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Approved by

Christopher Lee
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Introduction

The digitization of primary source materials can help repositories to accomplish at least two goals. First, digitization provides an electronic surrogate of the unique and fragile original, which contributes to the original document’s preservation by subjecting it to less handling over time. The creation of the digital surrogates also aids institutions in providing access to primary materials, as the creation of a digital surrogate allows for the object to be accessed by a larger number of people via the Internet. Because of the increase in accessibility of primary and archival documents by the average person, a natural extension of the digitization process is the incorporation of digitized documents in the K-12 classroom.

Many archival repositories place digitized primary resources on the Internet specifically for use in the classroom. The size of the online collections range from only a few images, to websites such as the Library of Congress American Memory Project (www.memory.loc.gov) which provide users access to over one hundred distinct collections. Many of the collections held by United States national and state repositories also provide educators with lesson plans and ideas for integrating the new material into the classroom.

Noticeably absent from the existing literature are explanations as to how teachers use these sources in their classrooms. Up to this point, professional library literature about educators has focused on how educators can take available sources
and use them in the classroom, but the literature has failed to look at how, or even if, educators actually use the sources. Also missing are the factors teachers take into consideration when deciding whether or not to incorporate digitized primary sources in their instruction.

To the best of my knowledge, the Library of Congress conducted the only other study of this nature for the American Memory Project from 1991-1993. My study differs significantly from the American Memory Project user study in two ways. First, the American Memory user study solicited responses from users in multiple forums, including primary and secondary schools, universities, public libraries, and special libraries across the nation whereas this study focuses on primary and secondary schools in North Carolina. The previous American Memory user study also focused exclusively on American Memory material, which at the time was only accessible through CD-ROM, whereas this study focuses on all digitized primary source materials available online.

This study explores three main questions: Do teachers in the North Carolina K-12 environment use digitized primary sources in their classroom instruction? How do teachers use the sources? What is the teachers’ reasoning for either incorporating or not incorporating digitized primary sources as a part of their classroom instruction? This paper aims to answer these questions as well as provide insight to librarians and archivists as to the desires and needs of the K-12 teacher in order to foster a more collaborative relationship between the groups.
Literature Review

Three institutions have made available noteworthy case studies that delineate their methodology for the inclusion of individual primary sources in the digital collections, as well as any supplementary materials: the Library of Congress National Digital Library and American Memory Project, Louisiana State University (LSU) Special Collections Louisiana Purchase Project, and the University of California at Los Angeles (UCLA) Digital Portfolio Archives Project.

During the planning stages of the American Memory Project, the Library of Congress conducted surveys about educators using digitized resources. The Library conducted two surveys, the first in 1992-1993 and another in 1995, of library workers, educators and other targeted users. Significant findings from these early surveys include an almost universal desire on the part of the educator for the inclusion of contextual information alongside the primary sources, which led to the launch of the American Memory Project’s gateway, “The Learning Page” in 1998.

Shortly after the establishment of the American Memory Project, researchers at UCLA established an experimental digital library in order to more closely study the issues associated with digitization of documents, including the needs of the user, in this case the K-12 student and teacher, particularly in the fields of the natural and health sciences. A direct product of the overarching study at UCLA is the two case
studies written by Anne Gilliland-Swetland that stem from the project. The first article to be published conveyed the results of two surveys regarding digitization efforts at individual repositories in California. Based upon the results of these surveys, repositories are provided with selection criteria for digitization, the items are encoded with Encoded Archival Description (EAD) and placed on the Internet for educational purposes¹.

The second case study examined the methods used by archivists and teachers to bring primary sources into the classroom, and the attitudes teachers held about integrating primary sources into their lessons². The study found that the teachers who participated in the case study often had wildly varying views on topics ranging from what exactly constitutes a primary source and to how to situate the source in the lesson. The study also found the sources were more effective in engaging students if they were offered in a variety of formats, such as Internet web pages, hand outs, and film clips.

More recently, Laver conducted a study of the usability of the Louisiana Purchase Project that is hosted by the Louisiana State University Special Collections. The survey, which was targeted at a panel of Louisiana public preK-12 teachers, addressed technical and usability issues associated with digital learning websites.

¹ Gilliland-Swetland, A. An exploration of K-12 user needs for digital primary source materials. The American Archivist v. 61 no. 1 (Spring 1998) p. 136-57

² Gilliland-Swetland, A., et. al., Integrating primary sources into the elementary school classroom: a case study of teachers' perspectives [using resources from the history of medicine collection at UCLA]. Archivaria no. 48 (Fall 1999) p. 89-111
Areas of concern for educators fall in four general categories: content, problems encountered and anticipated when using the items, quality and quantity of the content, and concerns about students’ ability to interact with the items\(^3\).

The remaining literature addresses issues that educators must address when, and if, they choose to use primary source materials. The set of issues that presents itself to an individual educator and school setting is unique to a given situation, but a few key issues present themselves in nearly every scenario. The issues that present themselves to educators when attempting to decide whether or not to incorporate primary sources run the gamut from the technical issues associated with incorporating technology in the classroom to how to best communicate their needs to archival professionals.

The first step for archival professionals when attempting to identify and address the needs of K-12 educators is to find the potential users. Outreach programs in archival repositories and special collections have traditionally centered on how to draw teachers and classes into the repositories albeit with mixed results. These mixed results can partially be attributed to the outreach programs themselves. In a survey of participating Association of Research Libraries (ARL), 10% of the 70 responding libraries who reported that they had hosted K-12 visits within the past year reported

\(^3\) Laver, T. Z. Off the Shelf and Into the Classroom: Working with K-12 Teachers to Integrate Digitized Collections into Classroom Instruction. The Southeastern Librarian v. 50 no. 4 (Winter 2003) p. 32-7
that their institution prohibited visits from certain grade levels, with 1 institution prohibiting visits from classes as high as 10th grade.

Outreach with digital objects has emerged as an extension of existing repository outreach programs. An example of such a scenario can be found at Southwest Missouri State University (SMSU) where the federal depository librarians initially began a workshop on using federal depository libraries and supplementary material available on the Internet as a cost-saving solution for teachers wishing to use primary sources. In subsequent years, with the proliferation of digital objects and projects such as the American Memory Project, the focus of the workshop has shifted away from the paper-based documents and placed more emphasis on digital documents. The creators point to the many benefits of the program for the workshop’s success: the fact that the documents are within the public domain and free, and that material can be found on nearly any subject.

An integral component to a successful K-12 outreach program is continued collaboration among archival professionals and educators to address the issues of bringing primary sources to the K-12 audience. A collaborative relationship between archival professionals and educators is key to the success of both outreach and digital learning initiatives as each group brings to the table a unique set of issues and

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5 Stewart, T. Get 'em while they're young: outreach ideas for K-12 [government documents projects for children at Southwest Missouri State University]. DttP v. 30 no. 1 (Spring 2002) p. 19, 22
perspectives. Collaboration among groups of educators and archival professionals also allows for a sharing of information and technique among institutions.

The information shared between archival professionals and educators in the course of collaboration can make future projects stronger by providing to the group key insights about the policies and procedures governing their professions and institutions. Educators can share the political climate of their school, and possible roadblocks to implementing a primary sources lesson plan, including resistance from administration, time and perceived curriculum restraints, and the predominating teaching culture of the school\(^6\). Archival professionals assist teachers in overcoming these obstacles by helping educators draw realistic expectations for such programs, particularly in the beginning when educators are becoming acquainted with the materials, as “another layer of complexity means that it will take time to absorb new techniques”\(^7\)

A key component to implementing a program for students to view documents online is ensuring that the proper technology is in place, and that the educators understand how to teach their students how to use the technology. Problems related to technology arose during the conceptualizing stages of projects such as the American Memory Project, which occurred during the mid and late 1990’s. Among the issues raised were that schools lacked adequate computer facilities and technology to

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\(^6\) Buzzeo, T. Collaborating to Meet Standards: Teacher/Librarian Partnerships K-12. Knowledge Quest v. 32 no. 1 (September/October 2003) p. 29-30

\(^7\) Veccia, S. H. Information powered by primary sources [American Memory Fellows Program at LC teaches educators to teach using online primary sources]. Knowledge Quest v. 29 no. 1 (September/October 2000) p. 12-15
efficiently provide students access to the primary documents, because of faulty Internet connections or lacking computer technology, or simply because the educators did not know how to use the computers themselves. Though educators have a variety of reasons for introducing their students to primary sources, one of the reasons may very well be to satisfy a state or national curriculum standard. For an educator, finding an online exhibit or project with supplementary materials is often not difficult. However, finding materials that meet with a specific set of curriculum standards, whether the standards are local, state or national, may be more difficult. The standards a particular repository abides by may be based in what the repository views as their primary user base. For example, the National Archives Digital Classroom lesson plans meet national curriculum standards while the LSU Special Collections lesson plans that correspond to the exhibit on the Louisiana Purchase meet Louisiana state standards. Those involved with the construction of the Louisiana Purchase project acknowledged that “matching curriculum standards with digital content is critical to the success of any project that hopes to be useful in K-12 instruction.”

In addition to meeting curriculum standards, a motivation for educators to introduce their students to online documents is to increase the information literacy of the students. A commonly used definition of information literacy is “the ability to

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9 Laver, 33.
locate, access, evaluate, and use information”¹⁰. Boff and Bushong delineate what they believe to be five essential information skills for any high school student considering college, including the ability to: discern credible resources from the plethora of information available on the Internet, develop basic search strategies, critically evaluate information, cite sources, and know when to ask for help¹¹. However, for students to be able to learn these skills, it is necessary that the educators are fluent in these skills, and able to use the sources themselves.

In the process of implementing a digital primary resource program in the classroom, a further step for educators is to figure out exactly how to incorporate the materials into the existing curriculum. This step in itself is multifaceted and carries with it many considerations. The issues include determining and choosing appropriate topics for the particular class and designing lesson plans to complement the materials.

For educators, choosing the right materials is much more than simply finding materials on a topic, but also taking into consideration the dynamics of the class, school and community. Every document prepared by a human being carries bias, and thus has the ability to be inflammatory. However, it can be argued that certain documents are more inflammatory than others, depending upon the topic and audience.

The appropriateness of the materials selected is also an issue for educators in that the information contained within primary documents must often be framed and

¹⁰ Boff, C., et. al., Information literacy K-12 and beyond: working toward a seamless plan. Ohio Media Spectrum v. 54 no. 1 (Winter 2002) p. 5-9

¹¹ Ibid, 6-8
contextualized for younger audiences. The framing and contextualization can range from simple acts, such as providing transcripts of handwritten documents, to the more complex and time consuming. For a younger class, or for a particularly sticky subject, such as race relations in Reconstruction Era United States, an educator may need to provide his or her students with several background lessons in the cultural climate and social norms of the day. Factoring in the planning and execution of contextualizing primary documents is an essential step for educators, as not all repositories provide background information for all, if any, of their digitized primary sources. As Frances Jacobson points out about the American Memory Projects “Learn More About It Page”, it provides contextual information for the individual collection, “But there are no explanatory or contextual materials for individual items in the collections and the user is left to interpret as he or she will. Is it fair to make these collections, in all their rawness, available to school-age audiences?”

Another important consideration for educators is whether to use the lesson plans provided by the repository, if there are any, or to make up their own lesson plans. The primary advantage to using a set of documents with a lesson plan that has already been constructed is that the educator does not have to spend time constructing the lesson. With a lesson plan that has been pre-constructed for an educator, particularly if the lesson has been constructed with particular curricular standards in mind, it is much easier for an educator to either prune or augment a given lesson to fit

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12 Jacobson, F. F. The dark side of primary sources [children may encounter potentially offensive materials when using primary sources]. Knowledge Quest v. 29 no. 1 (September/October 2000) p. 35-7
the class’s needs. Lincoln advises educators to ask themselves if the lesson plans meet certain criteria such as how the unit is designed, and what students would be likely to gain from a particular lesson plan before choosing to implement a provided lesson plan over their own.

The other option for educators is to draw up their own lesson plans based upon their knowledge of their students, and their goals for the lesson. The drawback to this approach is that few educators have the time to draw up lessons equivalent to those provided by repositories, and educators may lack a basic background in primary or historical documents, an influence that plays significantly into many prepared lesson plans. However, by drawing up lesson plans for their own classes, educators are able to tailor the lessons to their classroom and students, and there are a significant number of resources available that provide advice on how to construct lessons centered around primary documents. These documents include questions to ask about the document, the creator, the historical context in which it was created, and subtly tackle issues of information literacy.

The past 15 years have signaled the beginning of the use of digitized primary sources in the K-12 classroom. Early user studies and case studies conducted by the Library of Congress, Louisiana State University and researchers at UCLA provide

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13 Westfall, A., et. al., Amplifying literature with primary sources [using sources from LC’s American Memory Web site to support curriculum activities at St. Peter's School in Washington, D.C.] Knowledge Quest v. 29 no. 1 (September/October 2000) p. 30-1


many insights as to the elements teachers wish to see incorporated in learning websites. The remaining literature addresses teacher’s awareness of primary sources, and the factors they take into consideration when deciding whether or not to incorporate primary sources into their curriculum. This includes issues related to technology, standards compliance, age-appropriateness of the materials, and the availability of supplementary materials.
Methodology

The primary purpose of this study was to ascertain how teachers in North Carolina use digitized primary sources in the classroom. A “teacher” was defined in this study as an educator in charge of a classroom or group of students, ranging from grades K-12. “Digitized” was defined as any item that has been converted or copied into a computer-readable format.

The population from which I sampled was current teachers in North Carolina public schools. The sample for this survey was defined by selecting a stratified sample of 10 counties as to be roughly representative of North Carolina as a whole, representing different geographic areas and population. Geographic area and population were chosen as the criteria for stratification as I wanted to be sure to reach out to individuals with widely varying experiences and in varying educational settings. In selecting the 10 counties, I first selected 10 counties from a North Carolina map based upon their location within the state, without knowing the names of the counties. These 10 counties were selected as to represent different regions, such as the coastal, Outer Banks and Mountain regions, with each county representing a different region. I then looked up the names of the counties and the population of the county according to the 2000 census\(^{16}\). As I had

\(^{16}\) http://www.npg.org/states/nc.htm
five population types that I wished to target\textsuperscript{17}, it was necessary that only two counties match each population type.

Upon selecting the 10 counties, I visited the websites of all of the schools in the given counties as they are listed in the North Carolina Department of Public Instruction’s publication \textit{Education Directory: Public Schools of North Carolina 2007-2008}. This publication is published annually, is available to the public and lists contact information, including websites for all public schools in North Carolina. Once at the websites, I harvested all teacher e-mail addresses that were available. Recruitment e-mails were then sent to all of the harvested e-mail addresses.

\textbf{Survey Questions}

The survey was administered through the online survey tool, SurveyMonkey. Before participants could begin the survey, they were required to read an information sheet and provide their consent, which was indicated by clicking the button that began the survey. Upon agreeing to the information sheet, and beginning the survey, the participants were then provided with a brief definition and examples of both “primary source” and “digitized primary source”, as their understanding of these terms was integral to the successful completion of the survey. In order to prevent individuals from filling out multiple surveys, I configured SurveyMonkey to prevent users from the same Internet Provider (IP) address from filling out the survey more than once. While SurveyMonkey automatically retains IP addresses, this information was neither retained as part of the study nor associated with any answers.

\textsuperscript{17} See Appendix D
Survey questions were divided into two categories: qualitative and quantitative. The quantitative questions focused primarily on demographic data, and whether or not they incorporated digitized primary source materials in their classrooms. The qualitative questions focused on their reasoning. Two of the quantitative questions allowed respondents to choose more than one answer: respondents asked to choose all areas applicable for the grade levels and the subject areas in which they taught. The survey consisted of 15 questions, 8 of which were quantitative and 7 of which were qualitative.

**Figure 1. Survey Questions**

1) How many years have you been working as an educator? ______
2) What grade levels do you teach? (choose all that apply)
   a. K-2
   b. 3-5
   c. 6-8
   d. 9-12
3) In which subject area(s) do you teach classes? (choose all that apply)
   a. Art, including performing arts and music
   b. Computers and Technology
   c. Foreign Language
   d. History
   e. Language Arts, including English and writing
   f. Math
   g. Physical Education
   h. Physical and Biological Sciences
   i. Social Sciences
   j. Other (Please specify): __________
4) How many minutes are there in a regular class period? ______
5) Which of the following best described the community in which your school is located?
   a. Rural
   b. Small town (under 20,000)
   c. Small city (under 200,000) that is NOT a suburb
   d. Suburb of a city
   e. City larger than 200,000
6) Do you use digitized primary source materials in your curriculum?
   a. Yes
   b. No
7) If you DO NOT use digitized primary source materials, why not? __________
8) If you DO use digitized primary source materials in your classes, what are your main reasons for doing so? __________
9) How many times in the past six months have you used digitized primary sources in
your classroom?
   a. 0
   b. 1-2
   c. 3-4
   d. 5-6
   e. more than 6
10) How do you use the primary sources in your curriculum? _______
11) How do you find primary sources for classroom use? ______
12) What problems have you encountered when using digitized primary sources in your classroom? ______
13) When using the sources that also make available supplementary materials such as lesson plans and worksheets, do you use the supplementary material?
   a. Always
   b. Sometimes
   c. Never
   d. I have encountered supplementary materials in my use of primary source materials
   e. I do not use primary source materials in my classes
14) Why do you, or why do you not use the additional resources provided with the primary sources? ______
15) Please share any additional comments or observations. ______

Survey Dissemination and Analysis

On February 11, 2008 the recruitment e-mail was sent to the identified potential participants, for a total of 5500 recipients. A follow-up e-mail was sent exactly two weeks later on February 25. The follow-up e-mail was sent to all potential participants except for 168 e-mail addresses that were returned as invalid during the initial mailing. The survey was closed to responses at 8am on March 10th.

Survey responses were recorded using SurveyMonkey, which also provided the data analysis for the quantitative data. Data analysis for the qualitative responses was conducted by performing content analysis on the answers provided by the respondents,
dividing the answers into categories, and coding the answers accordingly. The coded responses were then inserted into SPSS for statistical analysis.
Findings

Of the 5500 initial recruitment e-mails that were sent out, 5332 were delivered successfully. 168 e-mails were automatically returned, thus those individuals were unable to participate in the survey. Eight individuals also contacted me directly to decline to participate in the survey, and 4 contacted requested that they be removed from the e-mail list. As these 12 individuals still received the initial solicitation e-mail, and actively chose not to participate, they were not subtracted from the number of successfully delivered solicitation e-mails.

772 of the 5332 potential participants contacted responded to the survey, yielding an overall response rate of 14.47%. A low response rate for the survey was anticipated. As the survey was targeted towards teachers of all subjects and age ranges, it was anticipated that some individuals would feel that their unfamiliarity with the materials disqualified them from participating in the survey. Some teachers also expressed concerns about the validity of the study as it was not backed by a North Carolina teacher’s or education association. One teacher expressed this concern in an e-mail addressed directly to me, while the remaining 6 teachers expressed similar concerns through their survey responses.

Of the 772 surveys begun, SurveyMonkey recorded 584 as being completed, which accounts for 75.6% of the surveys begun, or 10.95% of the total population. The existence of the remaining surveys can be explained by the simple fact that in
SurveyMonkey, once the user clicks the “Begin Survey” button, all of the fields, and any answers the respondent enters, are logged. If a user quits the survey, intentionally or unintentionally, before clicking on the “Submit” button, their answers are still recorded, with any unanswered questions logged as “No Response”. When presented to the researcher, individual responses are not distinguished as being either complete or incomplete. Because a respondent’s intentions, their reasons for not submitting the survey, and exactly which surveys are incomplete cannot be determined, all of the surveys that were begun are included in my analysis.

The diverse nature of the demographic data gathered through the respondents is representative of the targeted recipients. Respondents’ years of experience in the classroom ranged from one to more than forty. The average number of years a respondent had spent as an educator was 13.28 years, with a standard deviation of 9.77 years. Respondents were also asked to describe the community their school serves as being rural, in a small town, in a small city, a suburb or urban. The responses to this question were fairly evenly distributed, with only the “Small City” category receiving more than 25% of the total responses. The responses also reflected the sample stratification, as all population types were represented.
Table 1. Survey Respondents by Location

<table>
<thead>
<tr>
<th>Community Type</th>
<th>% of Respondents</th>
<th>Number of Respondents (n=766)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small City</td>
<td>26.8%</td>
<td>205</td>
</tr>
<tr>
<td>Rural</td>
<td>22.6%</td>
<td>173</td>
</tr>
<tr>
<td>Suburb</td>
<td>19.6%</td>
<td>150</td>
</tr>
<tr>
<td>Small Town</td>
<td>18.7%</td>
<td>143</td>
</tr>
<tr>
<td>City</td>
<td>12.4%</td>
<td>95</td>
</tr>
</tbody>
</table>

Respondents were asked to indicate the grade levels and subjects that they taught, in order to gain a better understanding of how student age and the subject being taught influence a teacher’s decision to use digitized primary source materials. For both questions, individuals were allowed to pick multiple answers as North Carolina primary and secondary school teachers are not limited to teaching only one grade level or subject area. Thus, though 769 respondents answered question 2, and 742 respondents answered question 3, 871 responses were recorded for question 2 and 1,904 responses were recorded for question 3.

The respondents of the survey represented a wide variety of subject areas, with 41.8% of respondents, or 323 individuals, reported that they taught classes in at least two distinctly different subject areas. A group of 24 respondents report that they not only teach multiple subjects, but also teach children in multiple age groups.
Table 2. Survey Respondents by Subject Area

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>% of Respondents</th>
<th>Number of Total Respondents (n=742)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Arts</td>
<td>47.8%</td>
<td>355</td>
</tr>
<tr>
<td>Math</td>
<td>42.5%</td>
<td>315</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>31.8%</td>
<td>236</td>
</tr>
<tr>
<td>Physical and Biological Sciences</td>
<td>28.8%</td>
<td>214</td>
</tr>
<tr>
<td>History</td>
<td>24.9%</td>
<td>185</td>
</tr>
<tr>
<td>Computers and Technology</td>
<td>15.5%</td>
<td>115</td>
</tr>
<tr>
<td>Art</td>
<td>11.6%</td>
<td>86</td>
</tr>
<tr>
<td>Physical Education</td>
<td>7.3%</td>
<td>54</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>5.4</td>
<td>40</td>
</tr>
<tr>
<td>Other: Special Education</td>
<td>4.0%</td>
<td>30</td>
</tr>
<tr>
<td>Other: Not Specified</td>
<td>2.6%</td>
<td>19</td>
</tr>
<tr>
<td>Other: Vocational</td>
<td>2.3%</td>
<td>17</td>
</tr>
<tr>
<td>Other: Life Skills</td>
<td>1.9%</td>
<td>14</td>
</tr>
<tr>
<td>Other: English as a Second Language</td>
<td>1.5%</td>
<td>11</td>
</tr>
<tr>
<td>Other: Business</td>
<td>0.9%</td>
<td>7</td>
</tr>
<tr>
<td>Other: ROTC/NJRTOC</td>
<td>0.8%</td>
<td>6</td>
</tr>
<tr>
<td>Other: Family and Consumer Science</td>
<td>0.8%</td>
<td>6</td>
</tr>
<tr>
<td>Other: Health and Medical Science</td>
<td>0.7%</td>
<td>5</td>
</tr>
</tbody>
</table>
Participants were also asked how many minutes comprised a regular class period. The average class period lasted 84.9 minutes, with a standard deviation of 73.9 minutes. However, both numbers were skewed due to a large incongruence in the manner in which respondents responded the question. A selection of 27 respondents answered the question in terms of hours rather than minutes and these answers inflated the final total. For example, in answering how many minutes were in a normal class period, one respondent stated “6 HOURS not minutes”\textsuperscript{18} and another provided the length of the school day, “8:20 am-2:50pm”\textsuperscript{19}. Thirty respondents provided answers that were non-numerical, and were thus considered non-responsive.

**Are digitized primary sources used in the K-12 classroom?**

More than half of the respondents, 440 (58.7\%) reported that they used digitized primary sources in their classroom instruction. While this may lead some to believe that the use of digitized primary source materials is a pervasive practice in North Carolina schools, the answers and clarification provided by the subsequent questions suggest that the use of digitized sources may not be as prolific as the question indicates.

Respondents may have over-reported their use of digitized primary sources in their classroom, due to their unfamiliarity with digitized primary sources, or even primary sources in general. This unfamiliarity manifested itself in two ways: directly and indirectly. Fourteen respondents directly stated that they were unfamiliar with the concept of digitized primary sources, yet responded that they used them in their classroom instruction. When asked to provide his or her primary reason for incorporating digitized

\textsuperscript{18} R. 179  
\textsuperscript{19} R 531
primary sources into instruction, one respondent stated, “Honestly, not familiar with this and I have not been introduced to this”.  

Ten respondents stated that the definitions of “primary source” and “digitized” at the beginning of the survey were confusing, and thus were not helpful to them in determining what a digitized primary source was. The frustration experienced by these respondents was best expressed by the respondent who stated, “I am not sure what Digitized Materials are---a better explanation of what this is at the beginning of the questionnaire would have been helpful!” Approximately 30 individuals contacted me via e-mail and asked for either clarification or more examples of the defined terms. These individuals were sent an e-mail with the information they requested.

36 individuals, or 4.66% of the total respondents, indirectly indicated through their answers to at least one of the qualitative questions – “How do you use primary sources in your curriculum?” -- that they were unfamiliar with digitized primary sources or primary sources. The majority of this subset appears to have misinterpreted the definition of the word “digital” in this case, as they did not indicate anything about how they used technology to facilitate the use of primary sources, but rather how they use technology for other activities. For example, two responses were “All classwork delivered in the form of classroom web page.” and “PowerPoint to present notes”.

A smaller subset of respondents alluded to not knowing the difference between a primary and secondary source. These individuals indicated that they did use digitized

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20 R. 744
21 R. 365
22 See Appendix E.
23 R. 749
24 R. 414
primary sources in the classroom, but when asked why or how, their answers indicated that they relied heavily on secondary sources rather than primary sources. One respondent replied, “We read from the textbook. I use an overhead projector to show transparencies”\textsuperscript{25}. Another teacher replied that he or she had students use digitized primary sources by doing “On-line reading of articles”\textsuperscript{26}.

Why do teachers incorporate digitized primary sources into their classrooms?

One of the primary reasons for conducting this study was to gain insight into why teachers elected to use digitized primary sources in their instruction. To this end, respondents to the survey were asked to explain why they did or did not use digitized primary sources, by providing a free-text response. It was the intention of the researcher that respondents would only answer either question 7 or question 8 (and not both). However, the survey instrument did not prevent them from answering both questions, and 22 respondents did answer both.

The responses to this question were coded by first reading all of the responses to the question, taking note of key words and phrases that respondents used to express their ideas. Responses were then broken up into categories based upon these key elements, and individual responses were placed in the category that corresponded to the respondents’ use of the key elements. This method of coding allows for the individual applying the coding to interpret multiple answers from a single response. In this study, the derivation of multiple answers from a single response was allowed, provided that the respondent

\textsuperscript{25} R. 634
\textsuperscript{26} R. 275
clearly indicated a separation between concepts. This separation was indicated through punctuation or connective language. However, for both questions 7 and 8, though multiple answers were allowed, respondents did not indicate more than 1 answer.

Table 3 provides a breakdown of the most popular answers provided by the 309 teachers who provided reasons as to why they use digitized primary sources as part of their instruction. No single reason or grouping or reasons stood out as being wildly popular. There was a great variety of reasons that teachers choose to incorporate the materials into their lessons. Among other reasons, respondents replied that they incorporated the materials because the materials harnessed technology, they were easy to use, or because the use of the sources was mandated by their school or district.
Table 3. Reasons for Using Digitized Primary Sources

<table>
<thead>
<tr>
<th>Reason</th>
<th>% of Respondents</th>
<th>Number of Respondents (n= 309)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material provides variety</td>
<td>17.4%</td>
<td>54</td>
</tr>
<tr>
<td>They are easy to use</td>
<td>15.8%</td>
<td>49</td>
</tr>
<tr>
<td>Uses technology</td>
<td>12.9%</td>
<td>40</td>
</tr>
<tr>
<td>They make lessons more engaging</td>
<td>10.0%</td>
<td>31</td>
</tr>
<tr>
<td>To incorporate primary sources in lessons</td>
<td>8.0%</td>
<td>25</td>
</tr>
<tr>
<td>Provides access to materials that aren’t available elsewhere</td>
<td>6.1%</td>
<td>19</td>
</tr>
<tr>
<td>Allows for the use of most up-to-date information</td>
<td>5.5%</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
<td>5.1%</td>
<td>16</td>
</tr>
<tr>
<td>To enhance available materials</td>
<td>4.5%</td>
<td>14</td>
</tr>
<tr>
<td>Material provides a visual reference</td>
<td>4.2%</td>
<td>13</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>3.2%</td>
<td>10</td>
</tr>
<tr>
<td>Using primary sources is mandated</td>
<td>1.9%</td>
<td>6</td>
</tr>
<tr>
<td>To reach different types of learners</td>
<td>1.9%</td>
<td>6</td>
</tr>
<tr>
<td>It makes material “come alive” for students</td>
<td>1.9%</td>
<td>6</td>
</tr>
<tr>
<td>They save resources (paper, ink, etc)</td>
<td>1.0%</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 4 reflects the reasons participants provided for why they do not use digitized primary sources in their instruction. The responses for question 8 were coded in
the same manner as question 7. The responses were divided into categories based upon
the respondents’ use of key words and phrases. In theory, respondents were allowed to
provide more than one reason as to why they did not use primary sources, but in practice
no respondent provided more than one answer. The most notable finding about this
question is that respondents came up with far fewer reasons for not using digitized
primary sources in the classroom.

Overall, the most common reason that respondents provided for not using
digitized primary resources in the classroom is that the teachers were lacking some other
resources that would help them to use the primary resources, such as time or training, the
knowledge of what constitutes a primary source, or the proper technology necessary to
deliver the items to their students. One teacher expressed experiencing all three of these
constraints, “time constraints on EOC; availability; understanding of digitized primary
sources”27

Another reason that respondents gave for not using primary sources in their
instruction was that they did not believe that using primary sources was applicable to
either them or their students. This general attitude manifested itself in many ways, and
with many different voices. The largest portion of this group directly stated that they did
not believe that digitized primary sources were applicable to their area of teaching, most
often because of the subject area or grade level taught. Of the 41 respondents who
provided this reason for not using primary sources in their classroom, 23 of the
respondents teach high school, 12 teach middle school, and 6 teach elementary school.
The teachers teach in a variety of subject areas and include: 12 math instructors, PE

27 R. 142
teachers, 5 language arts teachers, 4 forge in language teachers, 3 computer, science and social science teachers, and 2 art and history teachers. The responses ‘hard to use in kindergarten’ and “In the Physical Education classes I teach, there is no need to use digitized primary sources” are two examples of answers that respondents provided that indicated that they did not use primary sources. Another set of 8 (2.8%) responses indicated that students do not possess the proper tools to understand the materials without extensive help or background instruction, “Primary sources are extremely difficult for kindergarteners to understand in isolation, so a lesson and additional resources to explain the primary source is necessary.”

28 R. 622
29 R. 620
30 R. 256
Table 4. Reasons for Not Using Digitized Primary Sources.

<table>
<thead>
<tr>
<th>Reason</th>
<th>% of Respondents</th>
<th>Number of Respondents (n=281)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don’t have other resources (money, training, etc)</td>
<td>29.1%</td>
<td>82</td>
</tr>
<tr>
<td>Don’t know what a primary source is</td>
<td>21.7%</td>
<td>61</td>
</tr>
<tr>
<td>Don’t have access to technology</td>
<td>14.9%</td>
<td>42</td>
</tr>
<tr>
<td>Not applicable to my area of teaching</td>
<td>14.6%</td>
<td>41</td>
</tr>
<tr>
<td>Requires too much planning</td>
<td>6.7%</td>
<td>19</td>
</tr>
<tr>
<td>Meet teaching objectives using other media</td>
<td>5.7%</td>
<td>16</td>
</tr>
<tr>
<td>Hadn’t thought of it before</td>
<td>3.5%</td>
<td>10</td>
</tr>
<tr>
<td>Not appropriate for my students</td>
<td>2.8%</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>0.7%</td>
<td>2</td>
</tr>
</tbody>
</table>

How do teachers incorporate digitized primary sources into their lessons?

The first questions participants were asked in regard to how they use digitized primary source materials was how frequently they had used digitized primary sources in their classroom in the past six months. Nearly two-thirds of the 490 respondents represented the extremes allowed by the question, with 156 respondents (31.8%) never using the sources, and 151 (30.8%) utilizing the sources more than six times in a six-month period. The remaining 179 respondents (36.5%) reported using digitized primary sources in their classroom between 1 and 5 times.
Respondents were asked a qualitative, open-ended question inquiring as to how they used primary sources in their curriculum. The question generated 375 responses. It was the intention of the researcher that respondents would provide teaching methods that the respondents used to convey the materials to students. However, seventy (18.6%) of the total responses contained answers relating to the technological means that teachers used to display or otherwise distribute the materials to their students, such as “Netscape”31, “computers”32, and “Laptops, Computer Lab time, Data Projector”33. A similar effect was seen with the 54 respondents (14.4%) who answered the question with the somewhat non-descriptive term “reinforce lesson objectives”34.

Two other categories of answers were potentially ambiguous, and rely primarily on the contextualization of each individuals’ response for clarification. The first response provided by 21 individuals (5.6%) is that the materials are used for lesson enhancement. Materials that are being used for lesson enhancement are materials that are being used “To enhance or elaborate upon what they are learning”35, in addition to the course materials, during class lectures. The second category included the comments made by 28 individuals (7.4%) who reported using digitized primary sources specifically for extension activities. In this instance, extension activities were regarded separately from lesson enhancement because the activities are an active form of learning.

Generally, respondents reported incorporating digitized primary sources into their instruction by bringing the sources to the students, rather than having the students seek

31 R. 329
32 R. 766
33 R. 82
34 R. 306
35 R. 65
out the sources. The most popular method, indicated by 60 respondents (16.0%), involved visually engaging the students in the materials by projecting images of the digitized materials for the entire class to view. Respondents also reported using digital materials in their class lectures, both as a means to enhance the lecture, and as a means to keep their students engaged. Along the same lines, 11 teachers (2.9%) reported using digitized materials to introduce new topics and concepts to their students, using the digitized materials as examples, “These are original works of art that I use to introduce a skill in art or to give an example for an art history lesson”36. Twelve teachers (3.2%) reported using primary sources as a method of connecting their students with the past, specifically by providing them with first-hand accounts of events or time periods. The concept of immersing their students in the experience of the primary source was taken a step further by 4 teachers (1.0%), who indicated that they print out the documents and construct displays around the documents or their historical context.

When teachers indicated that they charge their students with seeking out primary sources, it was almost exclusively to expose students to the research process. Eleven respondents (2.9%) reported that they require their students to use primary sources as a component of a research paper or project, with 3 of these respondents stating that they prefer their students to use digitized primary sources. Students were also challenged to work with the documents in small groups, as 10 teachers indicated that they assign work with primary documents to small groups of students.

Several other categories of response to question 10 are worth noting. Two respondents (0.5%) reported that they used digitized primary source documents in place

36 R. 152
of a textbook entirely, while 8 (2.1%) indicated that they used the documents as a supplement to the text. While only 3 respondents (0.8%) said that they used primary source documents as a discussion starter in their classes, 9 (2.4%) reported using the documents as writing prompts. The remaining 23 respondents (6.1%) either provided answers that were not responsive to the question or elected to answer the question, but responded with “Not Applicable”.

When asked how they find materials for use in the classroom, many respondents provided reference to multiple sources within a single answer. Therefore, although only 375 individuals responded to the question, 488 unique responses were recorded. The following percentages are calculated out of the 488 responses.

By and large, when searching for primary sources to use in the classroom, teachers relied heavily on the Internet. Of the 488 instances, 233 (47.7%) cited search engines as methods that teachers use for locating primary sources. In addition to using online search engines, 43 respondents (8.8%) named specific educational websites or online services specifically targeted toward educators where they found primary sources, such as the Library of Congress American Memory Project or UNC’s Documenting the American South, or the North Carolina Department of Instruction. Seventeen respondents (3.4%) also relied on proprietary databases, which they either accessed through their local library, university, or school subscription.

A great variety of offline sources were identified as sources consulted for finding primary sources, though these sources were used with far less frequency. A refreshing number, 31 individuals (6.3%) rely on their school or local librarians to assist them with finding sources, while 22 (4.5%) consult their school media specialist. Teachers also
relied on professional resources such as educator workshops or materials provided by textbook publishers. Educators also reported that word-of-mouth plays an important role in their search for primary resources, with 55 teachers (11.2%) indicating that they seek out primary documents after receiving a recommendation from a fellow educator.

In some classes, teachers taught about the primary source by making their own primary sources. This affects the use of the digitized primary object in that teachers are taking their own works, or the works of their students and digitizing them. One elementary school teacher reported that he/she places personal photographs on his or her website, and then incorporates them into class lessons by “pictures from field trips are used to write books about the experience, to enhance work assignments, to illustrate the focus of the lesson…” A relatively small number of survey respondents reflected this method of teaching about the primary source, and locating the primary source, with 11 (2.2%) individuals reporting that they digitize and incorporate their personal materials into their lessons, and 4 individuals indicating that they digitize materials brought in by their students.

Respondents were also asked to share any problems that they had encountered, or that had affected their use of digitized primary sources. A surprisingly high number of the individuals who answered the question, 195 (54.1%) of 360, expressed that they had experienced technical difficulties, either with the hosting websites, or the hardware at their school. As one respondent expressed, “Sometimes the links in webquests are not

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37 R. 250
38 According to the Webquest website, a webquest is, “an inquiry-oriented lesson format in which most or all the information that learners work with comes from the web.” (www.webquest.org).
available. On occassion my projector overheats and I lose my lesson”. 39 On the other end of the spectrum, 56 respondents (15.5%) reported experiencing no problems of any kind.

Other problems teachers reported when using, or attempting to use, digitized primary sources varied as much as the documents themselves. A concern expressed by 31 individuals (8.6%), including 26 elementary school teachers, was the lack of material aimed toward younger audiences, and the difficulty of the antiquated language for the younger reader. These teachers reported that, if they choose to use the primary sources at all, they ended up adapting the materials to make them useful to their students, which, in turn, was very time consuming “The major problem I have is finding age appropriate materials for students with little or no academic skills and adapting the materials I find for access by these students” 40.

Another concern expressed by a smaller set of 10 teachers (8.6%) is that students do not have the background knowledge necessary to understand the primary source document. As one teacher explains, “Students do not have the necessary background knowledge to fully understand the information they are reading in the document” 41. A final concern expressed by only 2 respondents is that locating documents was difficult and time consuming.

The final two questions on the survey dealt with the existence of supplementary materials alongside the digitized primary sources, and whether or not teachers used these sources as well. Respondents were first asked if they used the supplementary materials, such as lesson plans and worksheets that are available for use with the primary source.

39 R. 199
40 R. 240
41 R. 367
Thee-hundred eighteen (68.7%) of the 463 respondents who answered the question indicated that they sometimes use these sources. Two options drew a nearly equal number of responses. Forty-nine (10.6%) of respondents indicated that they always used the supplementary sources when they encountered them in conjunction with digitized primary sources, while 48 (10.4%) of respondents answered that they did not use primary sources in class. The next group of respondents, 29 individuals (6.3%), reported that in their use of primary source materials, they had not encountered an instance where a repository had provided supplementary materials. The least popular category, with 19 responses (4.1%), reflected individuals who had encountered supplementary materials and consciously chosen not to incorporate them into their lessons.

The main reason respondents provided for using the supplementary materials is that they do not have to “reinvent the wheel.” In the same vein, 4 respondents (1.3%) reported using the supplementary sources because the sources saved the teacher resources, whether it is time or printer paper. The materials also appealed to 6 (1.9%) teachers for their ability to present information that is not readily available through a strict reading or viewing of the primary source and, for 13 (4.2%) teachers it was their ability to make lessons more engaging for students.

A number of respondents expressed their answer to question 14 in terms of conditions. The respondents who expressed their answer in conditional terms also universally answered that they engage supplementary materials “sometimes”. Important factors that educators took into consideration when deciding whether or not to use the supplementary materials included the relevancy of the materials to the lesson objective,
the relevancy of the materials to the primary source, and the amount of time that the teacher has set aside for the lesson.

The primary reason that respondents cite for not using supplementary materials is that they prefer to create their own supplementary and evaluative materials. The 32 respondents (10.4%) who replied in this manner provided a number of explanations for why they chose to create their own materials as opposed to utilizing ready-made materials. In some instances, teachers simply preferred to make their own materials. In other instances, respondents were taking the ideas from ready-made materials and then adapting them to better fit with curriculum standards or to suit the needs of their students.

I take some of their ideas or questions, but usually the lesson plans would just take too much time. With U.S. History we cannot devote half a class period to analyzing the Alien and Sedition Acts. I'd love to be able to and go in-depth with the simulations/discussions/activities in those lesson plans, but there's no time.\textsuperscript{42}

An interesting finding is that some teachers specifically cite the supplementary materials’ failure to match state curriculum standards, while some teachers specifically cite the supplementary materials’ ability to match state curriculum standards. Both groups represent a small minority of the respondents to the question, with 7 (2.2%) of the total respondents replying that the materials do meet state standards, and 5 (1.6%) replying that they do not. How individuals answered this question is probably highly dependent on specifically which repositories and which supplementary materials they have viewed, and when they were created. While documents posted on the Doc South website, and other North Carolina repositories are drawn to meet the North Carolina Standard Course of

\textsuperscript{42} R. 334
Study, repositories in other states do not necessarily take into consideration the North Carolina curriculum standards when constructing their documents. Also, as curriculum standards are changed every year, it is possible that the individuals viewed outdated documents that did not meet the current standards, but did meet a past standard.

Table 5. Why/Why Don’t Use Supplementary Materials

<table>
<thead>
<tr>
<th>Response</th>
<th>% of Respondents</th>
<th>Number of Respondents (n=308)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maybe-If materials fit with lesson</td>
<td>21.1%</td>
<td>65</td>
</tr>
<tr>
<td>Maybe-If materials tie to sources</td>
<td>18.5%</td>
<td>57</td>
</tr>
<tr>
<td>Maybe-If I have time</td>
<td>10.7%</td>
<td>33</td>
</tr>
<tr>
<td>No-Create own course materials</td>
<td>10.4%</td>
<td>32</td>
</tr>
<tr>
<td>No-materials aren’t appropriate for my students</td>
<td>10.4%</td>
<td>32</td>
</tr>
<tr>
<td>Yes- Don’t have to “reinvent the wheel”</td>
<td>10.0%</td>
<td>31</td>
</tr>
<tr>
<td>Other (Not Applicable/Not Responsive)</td>
<td>4.5%</td>
<td>14</td>
</tr>
<tr>
<td>Yes- Makes lesson more appealing</td>
<td>4.2%</td>
<td>13</td>
</tr>
<tr>
<td>No-Don’t have resources</td>
<td>2.9%</td>
<td>9</td>
</tr>
<tr>
<td>Yes-Resources match state curriculum</td>
<td>2.2%</td>
<td>7</td>
</tr>
<tr>
<td>Yes- Materials offer extra information</td>
<td>1.9%</td>
<td>6</td>
</tr>
<tr>
<td>No-Don’t match state curriculum</td>
<td>1.6%</td>
<td>5</td>
</tr>
<tr>
<td>Yes- Saves teacher resources (time, energy)</td>
<td>1.3%</td>
<td>4</td>
</tr>
</tbody>
</table>

At the end of the survey, respondents were asked to share their comments or observations with the researcher. 100 individuals provided responses to this open-ended question. The comments assisted the researcher in two ways: providing insight into
alternate ways that the study could have been conducted, or providing further insight into the thought process of the teachers. Responses in the first category included encouragement to the researcher, “hope this helps!” and discouragement at the terminology used in the survey “I am not absolutely sure if i follow what digitized materials include”. Respondents also expressed a desire to learn more about digitized primary sources, and how to incorporate them into their classroom. Some responses that further expounded on earlier survey questions both questioned and exalted the place of digitized primary sources in the classroom and the outside world, while others attempted to explain an individual’s non-use of digital materials because of their teaching philosophy, lack of training, age, or other factors. For example:

Realizing I sound like a dinosaur at times, I nevertheless am most comfortable with a good story and a piece of chalk. The bells and whistles of the modern age are a nice-to-have, but will never replace teacher competency in their field and their ability to capture the imaginations of young people. Young teachers overly reliant on technology need to figure that out.

Limitations and Suggestions for further research

A primary goal for this study was to present the issues surrounding the use of digitized primary source documents in the North Carolina K-12 classroom as seen through the eyes of the teacher. Because of limitations in time and resources, only public school teachers were surveyed. Further research would need to include teachers from

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43 R. 64
44 R. 759
45 R. 439
different instructional settings, and possibly redefine “teacher” to include instructors at private and parochial schools, home schools, tutoring centers and other places where instruction occurs.

Soliciting survey responses proved to be somewhat problematic. Although the study was backed by the School of Information and Library Science (SILS), individual teachers expressed concerns about the legitimacy of the survey as it was not being sponsored by an education or teacher’s organization. Before the survey was executed, attempts were made to have the survey distributed through several North Carolina teacher association electronic mailing lists, but these attempts failed to come to fruition. A possible remedy to this situation would be to conduct further research in conjunction with the UNC School of Education.

The number of qualitative questions may have been a deterrent for some individuals filling out the survey. This can be seen by comparing the rate of response for the qualitative and multiple-choice questions to the response rate for the qualitative questions. The quantitative question on the survey with the lowest rate of response was question number 13 (about use of supplementary materials). This question yielded 463 responses, and 309 respondents elected not to answer the question, for a response rate of 59.97%. In contrast the qualitative questions with the highest rate of response were questions 10 and 11, which each produced 375 responses for a response rate of 48.57%.

Another limitation on my qualities findings is the reliance on a single set of coded data, and the findings derived from this data are based upon the decisions made by a single person. While the qualitative responses were coded carefully, only the primary
researcher coded them. Further research would need to incorporate inner-coder reliability, including multiple coders, in order to ensure the reliability of the qualitative questions.
Conclusion

The results of the study suggest that North Carolina teachers are accessing and using digitized primary sources in their classroom instruction, though the rate at which users are reporting their use may be over-stated.

The study has also provided useful commentary from teachers regarding their reasoning for incorporating digitized primary sources in the classroom, and where they find primary sources. The study reveals that respondents use the resources as extension activities, using the digitized materials as supplements to an existing lesson rather than a lesson unto itself. It is refreshing to learn that not all teachers rely on the Internet for their primary sources, but many still turn to their local or school librarian and media specialists. A few are even able to think outside the box, and turn their own primary source materials into digitized primary source materials.

The number of respondents that either misinterpreted or failed to understand the meaning of the core term in this study, “digitized primary source” despite the fact that both a definition for the term and examples of the term were provided at the beginning of the survey is concerning. This situation provides the staging for archivists to reach out the K-12 community in order to raise awareness about the opportunities presented by digitized primary sources. This situation opens the door for archivists to market to the K-12 community about the existence of the documents, how they benefit educator and children, how these sources differ from existing sources and how continued interaction between the archival and K-12 communities will benefit all involved.
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Appendix A
Recruitment E-mail

Dear Educator,

My name is Jennifer Merriman, and I am a masters student in library science at the University of North Carolina-Chapel Hill. I am writing to request that you participate in a brief survey for a research study that I am conducting. Completion should take about 10 minutes.

This survey is for a study of teachers’ use of digitized primary sources in the classroom. Your participation is valued because this study examines the factors educators consider before using digitized primary sources in their classroom instruction. The information collected from this study will help foster a collaborative relationship between librarians and teachers, whereby librarians are better able to suit the needs of educators. Your county and school district were randomly selected to be included in this study, and your e-mail address was obtained through your school’s website. Your participation in this survey is completely voluntary. A decision to not participate in this survey has absolutely no bearing on your employment. Your participation is completely anonymous, and the data will only be reported in the aggregate.

If you are willing to participate in this survey, or would like more information, please follow the link below. If you have a specific question, I can be reached by phone at (217) 473-4960 or by email at jmerrima@email.unc.edu. You may also contact my advisor, Cal Lee, at callee@email.unc.edu

https://www.surveymonkey.com/s.aspx?sm=8RELKpjSrTRP_2bUzY3_2fFe3Q_3d_3d

Thank you,

Jennifer Merriman
Appendix B
Follow-Up Recruitment E-mail

Dear Educator,

My name is Jennifer Merriman, and I am a masters student in library science at the University of North Carolina-Chapel Hill. I recently sent you an e-mail, asking you to participate in my research study. If you have already completed the survey, thank you very much and please ignore this reminder. If you have not completed it, I would greatly appreciate it if you would complete it now.

This study examines how teachers use digitized primary objects in their classroom instruction. If you are willing to participate in this survey, or would like more information, please follow the link below. Your county and school district were randomly selected to be included in this study, and your e-mail address was obtained through your school’s website. Your participation in this survey is completely voluntary. A decision to not participate in this survey has absolutely no bearing on your employment. Your participation is completely anonymous, and the data will only be reported in the aggregate.

If you have a specific question, I can be reached by phone at (217) 473-4960 or by email at jmerrima@email.unc.edu. You may also contact my advisor, Cal Lee, at callee@email.unc.edu

https://www.surveymonkey.com/s.aspx?sm=8RELKpjSrTRP_2bUzY3_2fFe3Q_3d_3d

Thank you,

Jennifer Merriman
Appendix C
Fact Sheet

You are being asked to participate in a survey about the use of digitized primary sources in the classroom. You are being asked to participate in this survey because you are currently a K-12 teacher in a North Carolina school.

I would like you to read each question and answer it honestly and to the best of your ability. This survey should only require about 10 minutes of your time.

This study is being carried out with the support of the School of Information and Library Science (SILS) at University of North Carolina-Chapel Hill and has received approval by its Institutional Review Board. Your participation in this survey is completely voluntary, and no risks are anticipated to respondents. You may refuse to answer any item you choose to omit. You can choose to stop the survey at any time.

All information that you provide will be completely anonymous and confidential. No identifying information has been linked to this survey. Return of this survey will be taken indication of your consent to participate in this project.

If you have any questions regarding this research, I encourage you to contact me at either (217) 473-4960 or by email at jmerrima@email.unc.edu. You may also contact my advisor, Cal Lee, at calllee@email.unc.edu.

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Thank you in advance for your consideration of this project. I know that your time is valuable.

Jennifer Merriman
Appendix D

Survey

Some definitions and examples:

A primary source is: is a document, speech, or other sort of evidence written, created or otherwise produced during the time under study (University of Nevada). Examples include: journals, oral histories, photographs, letters, drawings and maps, and moving images.

An item that has been digitized: has been converted or copied into a computer-readable format. An item that has been digitized may have been scanned or been captured with a digital camera.

Some examples of digitized primary sources: Documents from the Louisiana Purchase, the Declaration of Independence, Civil War journals and WWII photographs.

1) How many years have you been working as an educator? ______

2) What grade levels do you teach? (choose all that apply)
   a. K-2
   b. 3-5
   c. 6-8
   d. 9-12

3) In which subject area(s) do you teach classes? (choose all that apply)
   a. Art, including performing arts and music
b. Computers and Technology

c. Foreign Language

d. History

e. Language Arts, including English and writing

f. Math

g. Physical Education

h. Physical and Biological Sciences

i. Social Sciences

j. Other (Please specify): __________

4) How many minutes are there in a regular class period? ________

5) Which of the following best described the community in which your school is located?
   a. Rural

   b. Small town (under 20,000)

   c. Small city (under 200,000) that is NOT a suburb

   d. Suburb of a city

   e. City larger than 200,000

6) Do you use digitized primary source materials in your curriculum?
   a. Yes

   b. No

7) If you DO NOT use digitized primary source materials, why not? ________
8) If you DO use digitized primary source materials in your classes, what are your main reasons for doing so? ______

9) How many times in the past six months have you used digitized primary sources in your classroom?
   a. 0
   b. 1-2
   c. 3-4
   d. 5-6
   e. more than 6

10) How do you use the primary sources in your curriculum? ______

11) How do you find primary sources for classroom use? ____

12) What problems have you encountered when using digitized primary sources in your classroom? ______

13) When using the sources that also make available supplementary materials such as lesson plans and worksheets, do you use the supplementary material?
   a. Always
   b. Sometimes
   c. Never
   d. I have encountered supplementary materials in my use of primary source materials
   e. I do not use primary source materials in my classes
14) Why do you, or why do you not use the additional resources provided with the primary sources? ______

15) Please share any additional comments or observations. ______

Thank you very much for completing this survey!
Appendix E

E-mail sent to respondents who requested further clarification about digitized primary sources

I'm sorry that I did not make that more clear with my examples at the beginning of the survey.

A primary source is any item that a person creates using only their personal knowledge, and not from places like books. Examples of primary sources are journals, letters, photographs, home movies, speeches and interviews.

A digitized primary source is taking a primary source that exists in a tangible physical format (e.g. a paper letter) and transforming it into an item that can be understood by a computer. This is usually done by scanning an item or taking a digital picture of it. So some examples of primary sources would be: family photographs or letters that you have scanned, historical documents that have been scanned, historic video clips that have been formatted for Internet viewing (such as a clip of JFK's assassination), or paper transcripts that have been scanned.

Books and encyclopedias, whether they are on paper or on CD-ROM, are called secondary sources. They are accounts that rely on primary sources for their facts, and are typically written by people who did not have first-hand knowledge of the event/thing being described.

I hope this clears up any confusion.