Participant Learning in an Archival Education and Outreach Program: An Implementation of Evidence Based Librarianship and Information Science

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Abstract
What can researchers do when they want to transform a traditional lecture into a collaborative, hands-on learning experience? How can participants learn and become empowered to construct and maintain historical records that reflect their experiences? An archivist can lecture students about basic archival practices and the students can learn a few skills, but hands-on activities for record creation and maintenance that facilitate participants’ learning will create collaborators with basic, but important, archival skills.

Disciplines
Archival Science | Library and Information Science

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Participant Learning in an Archival Education and Outreach Program: An Implementation of Evidence Based Librarianship and Information Science

by Sarah Passonneau and Michele Christian

What can researchers do when they want to transform a traditional lecture into a collaborative, hands-on learning experience? How can participants learn and become empowered to construct and maintain historical records that reflect their experiences? An archivist can lecture students about basic archival practices and the students can learn a few skills, but hands-on activities for record creation and maintenance that facilitate participants’ learning will create collaborators with basic, but important, archival skills.

At Iowa State University, the University Archivist and the Assessment Librarian partnered to create an educational outreach program with Greek (fraternity and sorority) students and alumni. By following the Evidence Based Librarianship and Information Practice (EBLIP) process, the traditional lecture program was transformed into an authentic hands-on learning experience. Students learned how to evaluate their organization’s materials and to create long-lasting records through hands-on activities.

This research project spanned two years and culminated in a qualitative study that measured the learning of students and alumni who created a university community archive focused on fraternity and sorority life. A community archive is an archive in which members are owners who create and input materials and in which a member’s current activities have a place in the historic record.¹ ² This model fits the needs of this research project in a hybrid form, in which the archivist played a pivotal role in reviewing and checking metadata to facilitate discoverability while the records were still in custody.
of the community. The term “community archives” will be used to refer to this hybrid model.

**BACKGROUND**

After years of "sage on the stage" lectures to fraternity and sorority groups, the University Archivist felt stymied. Her goal had always been to create a partnership with Greek students, but connections did not endure. Students seemed courteous during lectures but they never came back for more when the opportunities presented themselves. Occasionally, a Greek chapter would have the Special Collections Department house their records, one goal of the lecture, but many chapters did not want to turn over their materials—even if the records would be under better care. Additionally, there was no record of learning outcomes or of students' changing needs. To review this program, the Assessment Librarian chose the EBLIP model because it parses action research into manageable, systematic steps. The results from this research show that EBLIP facilitates discovery and systematic implementation of transformative and manageable solutions.

This qualitative research of 34 students and alumni measures hands-on learning experiences using multi-pronged assessments. Small sample sizes like this are not unusual for qualitative studies. EBLIP is a good framework to use for qualitative studies because it can address the “why” of many library research questions. This project fits under the EBLIP education domain, but rather than teaching information literacy skills, it reviewed the teaching of basic archival practices. The use of the mnemonic SPICE (Setting, Perspective, Intervention, Comparison, Evaluation) in formulating the questions is a particular focus of this project because EBLIP literature emphasizes that a well-formulated research question is the key to success.
LITERATURE REVIEW

In 1997, Jon Eldredge introduced the EBLIP model in his article “Evidence Based Librarianship: A Commentary for Hypothesis.” He proposed that the processes in evidence-based medicine (EBM) and evidence-based health care (EBHC) parallel and could enrich the skills of health sciences librarians. Andrew Booth described the processes for using the best available evidence in conjunction with user needs and preferences. EBLIP does not support one method over another but instead, EBLIP can rigorously shape qualitative educational studies.

The book *Evidence-Based Practice for Information Professionals: A Handbook* provides a historically contextual overview of EBLIP, as well as detailing the stages of the EBLIP process. A chapter devoted to question formulation defined the SPICE mnemonic as Setting, Perspective, Intervention, Comparison and Evaluation. As EBLIP matured, the “concept of what constitutes evidence” grew to include practitioner-observed, research-derived and user-reported data. The focus on the pragmatic and systematic could support the formulation of answerable questions.

The SPICE model helps define a research question. Librarians can use SPICE within the EBLIP model to develop focused, answerable research questions, which can help facilitate decision-making based on the outcomes of the research. Booth later focused specifically on the importance of formulating the question you want answered or addressed.
METHODOLOGY

QUESTION: Define the Problem

Booth clarified the reiterative nature of EBLIP in a recent work where he articulated the inherent complexity and collaborative nature of EBLIP. The importance of question formation is central to EBLIP. Crafting a well-formulated question for this educational and outreach program involved cycling through the evidence several times and discovering through the evidence the need for collaboration and hands-on learning of the project. Using SPICE helped delineate each aspect of the research project. The list below shows how SPICE focused the question on the specific details of this research project.

S Setting: University Library and Greek Chapters.

P Perspective: Greek students and alumni interest in learning.

I Intervention: Create a new program that improves creation and care and collaborative opportunities.

C Comparison: Old outreach program with new hands-on learning program.

E Evaluation: Formative and summative assessment as a determiner of effectiveness.

The final research question became:

Do fraternity and sorority students and alumni want to collaborate with the University Archives to learn best practices for creating and storing historical documents using a community archive?

EVIDENCE: Gathering a variety of evidence - professional experience, vetted research, and white papers and reports.

Holistically reviewing evidence or data from multiple sources assists in making more informed decisions, and generates a more systematic, nuanced approach to
reviewing systematic and qualitative reports. The researchers used several types of evidence in this project.

**Professional Experience**

For more than a decade the University Archivist conducted regular 45-minute seminars to the Greek community. At the seminars, participants listened to a presentation about the best practices for creating and maintaining scrapbooks and other records. Students and alumni stated they enjoyed the experience, yet few of the fraternity and sorority members that attended the seminars donated non-sensitive chapter records to the archives. Almost all the records ingested by the archives were poorly created and poorly stored from the perspective of long-term preservation. The seminars seemed to have little impact on how records were created or maintained. The archivist was discouraged and felt that a sustainable relationship with the chapters was not possible.

To address this problem, the Archivist and Assessment Librarian reviewed the seminar’s content and pedagogy. The previous seminars to the Greek community, while filled with interesting content, did not appear relevant to the participants, nor did the seminars actively engage them. At this point, the researchers reviewed the literature.

**Vetted Research**

To gather evidence, the researchers focused on education and outreach, two of the six library research domains identified in EBLIP. The Assessment Librarian conducted a thorough search of literature using several databases and searching journals. The databases included ERIC, PsycINFO, Library Literature OCLC and the library’s search tool with mixed results. OCLC and ERIC provided the most valid literature regarding
EBLIP. The journals, chosen because of their impact on the profession, included *Archival Science*, *The American Archivist* and *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage*. The search also included the journal, *Evidence Based Librarianship and Information Practice* because it provided peer-reviewed research in the area of EBLIP. While some articles appeared in all the search tools, the amount of overlap was smaller than expected.

Because EBLIP literature that looks at educational practice often focuses on the theory and practice of active-learning, the literature uses a variety of terms, including variations on active-learning, hands-on learning, authentic assessment, outcome-based learning, problem-based learning, and rubrics. Similarly, rich environments for active-learning and authentic assessment research areas overlap with constructivist theory. Therefore, the terms used during the search process included these words.

The archival literature did include articles related to student learning and assessment. Top leaders in archival instruction promote hands-on learning with students interacting with primary resources. Rubrics for archival education improved authentic assessment. One constructionist research study showed improved learning outcomes when students worked in archives with external partners.

In regards to active learning, content relevance for the learner facilitates reflection and incorporation of ideas. Active learning and technology can focus instruction on student choice that increases the power and the relevance of the learning. Archives can provide historical materials that students see and discuss, allowing them to create their own knowledge by working on problem-based questions. Students participate more
with primary sources when given hands-on activities. User-centered “learning by doing,” enriches student experiences when creating digital libraries for clients.

Active learning requires hands-on problem-solving. One article looked at 18 years of research on science instruction and found that students' conceptual understanding increased when taught with an inquiry-based model. Different research showed that students who scored low on a pre-test performed better on a post-test when participating in an inquiry-based educational model. Iowa State University’s Greek community archival educational outreach program measures confidence, motivation, and skills using authentic performance-based assessments coupled with both pre-and post-tests.

Using a variety of assessment points triangulates the data in a manner that adds rigor and validity to the results. Matthews and Bowles-Terry focused on implementing a variety of assessments, including a pre- and post-test, essay questions, and instant feedback. Using technology increased the learning scores of students while building relationships with the librarian. Assessment that evaluates the cognitive behavioral and affective changes in learning provides a big picture understanding of learning and instructional outcomes.

Professional Reports and Existing Professional Data

“Reinventing Undergraduate Education: A Blueprint for America’s Research Universities,” often referred to in the literature, called for research-based learning starting with an inquiry-based freshman year, and the strategic use of technology. Several other professional learning groups mentioned the importance of the annual Horizon Report, which describes the impact and quality of learning analytics. A report from Abilene
Christian University provided practical evidence that strategically used technology during the implementation of learning and assessing added to students’ experience through improved communication with teachers, increased control over of the learning environment and improved collaboration.41

APPRAISAL/DECISION

After reviewing the evidence, the researchers knew they needed to forgo the lecture format and create a dynamic learning experience, and decided to conduct a needs assessment with students.

Needs Assessment

The Assessment Librarian contacted the University Office of Greek Affairs. The two departments met and appointments made for interviews with students and alumni. Through the interviews, the researchers hoped to identify the participants’ specific needs. Five participants were interviewed using open-ended questions. Four Greek students were interviewed, along with one other student interested in properly creating personal records. The results are listed below.

- Students wanted a workshop with a mix of discussion and hands-on activities.
- They wanted to learn how to create “good” records as long as it wasn’t “too much to do.”
- The students asked that their work be made accessible 24/7 and part of the library’s collections.
- They wanted to have access to expert advice 24/7.
- They wanted to learn about digital recordkeeping as well as print.
- They wanted a “fun” workshop.

One result surprised the researchers:

- All of the students who were interviewed separately said they wanted a recruitment tool for getting new members.
These criteria shaped the goals, learning outcomes, and activities in the workshop. Originally, the researchers were planning to focus on print records, but after conducting the needs assessment, incorporated digital records as well. The researchers realized an important, if not obvious, outcome. These days, most records, whether they are pictures, flyers or house documents, are now born digital.

APPLICATION/INTERVENTION

The researchers created hands-on learning activities that included both digital and print elements. The activities incorporated technology as much as possible, especially when creating assessments. The learning outcomes would be:

- To learn basic skills in records creation and management.
- To learn about collaborative opportunities with the Special Collections Department and the importance of student records through actively engaging with the community archive.
- To understand the importance of including correct metadata when adding images to a digital community archive.

Hands-on learning

The participants stated they wanted to be active, to enjoy the experience and to create long-term records. The researchers held three workshops comprising two modules, each lasting two hours. The first workshop covered the maintenance and storage of print records. Basic archival supplies were provided for the students to help them take care of photographs, scrapbooks, and paper documents. The second workshop centered on digital records and storage. Participants were asked to bring their own materials for both the print and digital workshops.
For the first workshop module, the librarians created hands-on educational segments based upon the needs assessment. In one module, participants described their materials. In the other module, participants used the techniques they had learned to properly preserve their materials.

The second workshop module focused on the creation, description and preservation of digital images and documents. This workshop also introduced the idea of the hybrid model of a community archive, where the chapters are encouraged to regularly and actively upload images and other items to a share site on Shutterfly™. Due to the unlimited amount of the space, and the usability of the interface the Archivist selected this cloud photo storage vendor. The Shutterfly™ share site is monitored by the Archivist, who routinely harvests new images and adds them to the university archives for permanent storage. With additional workshops and increased publicity, the Greek Community Archives has the potential to create an easily sustainable collaboration between the archives and the chapters, in addition to meeting the fraternities’ and sororities’ needs to recruit new members and preserve their legacies.

For each module, the Archivist provided a ten minute overview of fundamental concepts and issues related to the creation and preservation of records. She also walked the participants through basic procedures for proper storage of print and digital materials.

The Archivist sent each participant an e-mail with specific information regarding the workshops, including what items they should bring to each workshop, how to open a Shutterfly™ account, and links to the online surveys. The students and alumni were invited to attend the workshops and to RSVP through e-mail. Funds from a related
research grant made it possible to purchase gift cards as incentives to participants who submitted their names.

Assessments

Four different assessments were used to measure participant learning and engagement. Goggle forms were used for pre-and post-testing (after beta-testing by students). Final pre-tests and post-tests included questions about the creations and management of print and digital records. Additionally, questions also addressed the relevance of the workshops.  

As participants completed the post-test at the end of the workshop, they were asked to write a short response about one thing they learned and one question they still had. Students and alumni were asked to also comment on the best way to keep the collaboration going between the archives and the chapters.

The second assessment piece, photographic assessment, consisted of images of participants’ hands-on learning during the workshop. Photo documents of an activity can complement other results and demonstrate processes. In this case, the Assessment Librarian asked the participants to explain what they were doing. This was written in a data log book and paired with the photo for later viewing. The researchers reviewed the photos to examine the participants’ process.

Finally, because the workshops centered on hands-on learning and the researchers had permanent access to the digital photos through the community archives, a rubric was used to evaluate the labeling of materials uploaded by participants. The rubric was based on the Born-Digital Archiving Rubric by Emily Doyle, which came from Megan
Oakleaf’s RAILS site. The use of the rubric would provide the researchers an opportunity to evaluate the quality of the work produced by participants. If there was a pattern in which important elements to recording or maintaining records were missed by participants, the researchers could reevaluate and redesign the content of their workshops to more effectively focus on key learning outcomes.

Developing inter-rater reliability (consistency in the evaluation of the same phenomenon by two or more different raters) is important when implementing a rubric. Consensus estimates, consistency estimates, and measurement estimates are the three types of statistical inter-rater reliability models. Consensus estimates work when the assumption raters can agree on how to score participants’ products. For this research, it was important that the raters agreed on how to score the products; therefore the consensus estimate was used.

Using these four different types of measures (pre-test and post-test; short comments; photo artifacts and a rubric) provided different data points to assessment the learning of participants. Triangulating the data with multiple assessments added rigor and validity in the final analysis of results.

The needs assessment, the workshop redesign and the multi-pronged assessments addressed participants’ needs and learning. Two important and seemingly unlike needs were being met.

First: Greek participants had a 24/7 access to a digital community archive that included the participating chapters.

Second: Special Collections now had a portal to curate a new collection of Greek student digital records.
RESULTS/ PERFORMANCE EVALUATION

The 34 participants included seven alumni and 27 students. The alumni group had four women and three men. The student participants included 16 females and 11 males. Four of the student participants had no house. Two students were African-American, one was Latina-American and the remaining 24 were European-American.

1. Pre-test and Post-Test Results

[Insert table one]

Tables 1-4 display the results related to Learning basic skills in records creation and management.

[Insert table two]

The post-test results show a great increase in self-reported skill and knowledge levels related to creating and managing records. Table three has a greater total number of in the post-test than in the pre-test.

[Insert table three]

Clearly, participants marked more boxes in the post-test than the pre-test. It is unclear why this is the case. Of special note are the skills participants learned regarding use and importance of archival-like materials in the care and longevity of print materials.

[Insert table four]

An important aspect of maintaining digital records is keeping at least two copies.
During the workshop, the Archivist showed an example of digital rot for an image that was only five-years-old. The results from table 4 show an increase in the number of participants who will keep their digital records in more than one place.

A second set of questions measures the motivation and relevance of the workshops.

Tables 5 through 8 illustrate how attitudes either did or did not change related to the purpose and relevance of the workshops; how participants rated the importance of collaborations; and why people attended the workshops.

[Insert table five]

Table five and six had only 33 responses in the post-test compared to 34 for the other post-test questions. It is probable that a participant accidentally skipped these two questions or did not want to answer the questions. There were positive results in every category except for relevance (the results of which are in table 5).

[Insert table five]

One less person in the post-test said that the workshop was very relevant compared with the pre-test responses.

[Insert table six]

Some time was spent explaining the role Special Collections could play in keeping chapter records. All but three students felt this was a positive thing.

[Insert table seven]

Of the four Greek alumni, all but one felt that keeping records at Special Collections was a positive thing, but felt that doing so might go against the National Office’s rules. One
participant voiced this problem in additional comments by stating, “Have to wait and see. With floods it would be nice but I’ll have to contact our national office.”

[Insert table eight]

The results of the pre-test and post-test were promising, but it is widely understood that self-reporting can lead to bias because respondents want to respond in ways that make them look better or in ways they feel the researchers want to them to respond. Implementing several tools measuring the learning experience that occurred during workshop balanced the self-reporting of the pre- and post-tests and ensured that the feedback from the tests could be evaluated by comparing test comments to other assessment artifacts.

[Insert table nine]

2. Short Comments

There were 28 comments from the post-test, falling into three categories related to things participants learned and three areas for things they still had a question about. “Things Learned” included Digital Records with 13 comments. This category included seven comments related to digital records, three comments related to digital rot and four comments related to keeping two copies. The second category was Materials/Records with six comments. Four alumni and two students had comments in this grouping, which included working with the correct material with three comments, metadata with two comments and storage with one comment. Collaboration was the main category for “Things Learned.” This included both working with the archives/special collections, with three comments, and working with the archives/special collections and Greek
Student Affairs center. Two students with no house made comments in this area. One student Greek leader made a comment and an alumnus made another comment.

The question “One Question You Still Have” generated only 12 comments, almost half from alumni. They uniformly had questions/concerns regarding how to manage large projects. In follow-up conversations, this group had concerns regarding the preservation/organization of old print records and the best method to proceed. Four comments from students asked or addressed the best ways to develop digital archives with pointed statements to “spend less time on print.” The other group of questions related to keeping chapter materials at Special Collections Department/Ownership.55

3. Photo Record

The photos showed all students and alumni engaged and involved with the process. Pictures were printed and/or displayed on the computer. Participants were asked to describe what they saw in the picture. The researchers recorded the comments on a data logbook. The comments were one data point that confirmed participants correctly understood the processes.56

4. Rubric

The researchers reviewed the print and digital images produced by the participants. The print images were reviewed for three factors:

1. Recording tool: Did the participant use soft lead pencils or a different writing tool?
2. Information: Did the participant include Who, What, Where, and When (WWWW) in recording the descriptive information?
3. Care: Did the participant put the print material in a photo archival cover?
For the digital products put in the digital archive, there were also three areas evaluated:

1. Recording area: Did the participant record the information in the right location under properties?
2. Information: Did the participant include Who, What, Where, and When (WWWW) in recording the descriptive information?
3. Place: Did the participant put the image in the right file in the digital archive?

For assessing activities for print and digital products, the rubric included a review of “information” - did the participant include WWWW in the recording of information? Out of 60 print products, 22 did not include part of each WWWW. All participants used the correct type of pencil both for the work they did in the workshop and the materials they recorded between the first workshop and second. Only 38.24 percent (13) of the photos worked on between workshops had sleeves when the participants returned for the second session. The main reason for this was, as one participant stated, “I ran out of sleeves.” When reminded that participants could get the correct sleeve at the local craft store, participants noted “they forgot.” This implies that participants learned important skills but would follow the path of least resistance when maintaining materials.

Of 102 digital products, information was always recorded in the correct place. At the same time, not all images (only 41%) had complete information for WWWW field. The number one reason, participants explained, was that they did not have the information nor did they know where to get the information. Other participants stated they included all the information they had. Reviewing digital images after the workshop, the Archivist and Assessment Librarian noted that none of the images they spot-checked
had the WWWW in the correct properties field before the hands-on learning activity showed participants where and how to include the information. While the results in this area are not overwhelmingly positive, it is important to note the large gain in knowledge and skills in this area. Using the rubric’s scale (*beginning, developing* or *exemplary*) showed that the participants as a whole were in the developing range in terms of their skills.57

All the participants said they learned more about the partnerships between the Special Collections/Archives department. Six months after the first workshop series, the archivist noted four additional Greek chapter donations, compared to only one donation in the six months prior to the first workshop series.

**DISCUSSION - Evaluate Performance**

In EBLIP it is important to evaluate the process and compare past activities with the current activities. This section of the paper will analyze and compare the outcomes of the hands-on learning workshops to the former lecture format.

*Learning*

There were several long-term changes between the “sage on the stage” format and the hands-on learning workshops. One of the biggest changes was the ability to review student learning and skills through the products they produced. A significant minority of images had all the correct metadata. Most often, the metadata missing from images included exact dates or all the names of people in an image.

From the old lecture format, the assessment results showed there was a twenty-six percent increase in participants willing to think about putting their materials in the Special Collections Department. There were 26 participants in the old lecture format; 34
participants took part in the new hands-on learning workshops. For the hands-on learning group, there was 29.41 percent increase in participants willing to think about permanently placing their chapter’s collections in Special Collections Department.

The photos taken during the workshop are an essential data point for the historic record and for showing partners and supervisors. The impact these photos had on the validity of the results of this research are an important complementary data point. Due to the fact that participants were learning many new skills, a researcher took the pictures so as not to interrupt their workflow. Indeed, it is worth noting that most uses of photography in research expect the participants themselves to take the photos.58

The results of the rubric show gains in participants’ skills. In the former lecture format, participants did not work with their own materials. Therefore, no comparison can be made between products produced at the different programs. At the same time, the researchers now have a method of reevaluating participants’ skills over time.

Partnerships

Ongoing Greek donations to Special Collections/Archives and contributions to the community digital archive indicate both an interest in working with the department and enthusiasm for the digital community archive. The library, the Greek Affairs Office and Greek leadership are discussing how to make this a sustainable, enriching program for all stakeholders.

Collections

The archives now have a growing relationship with current Greek students and alumni. The goal is to assign one student who works in the Greek Affairs office to work with the archives to monitor the ingest of the photos by participants in the community
archives to ensure the metadata is correct. Additionally, discussion of policies related to appropriate images and safeguarding chapters’ initiation rites and other “secret” rites are an important part of the community archives’ success. The current success of this community archive collection is measured by gradual, but continued growth.

LIMITATIONS

This research included the results of only three workshops with two sessions each that only included participants from the Greek community. Additionally, this involves only one institution, well known for its high number of Greek students active in all areas of college life.

Involving different student groups would be an important future direction for this project. Can these results be replicated with different student groups on this campus, and at other universities, colleges (including community colleges), and other institutions of higher education? It would be important to work with other archives in order to replicate and/or validate the results from this research.

CONCLUSION

The EBLIP model is recursive and the researchers continue to refine this project. After three sessions in which many participants wrote comments stating they wanted more time to work with digital images instead of print records, the workshops are now focusing on the digital community archive. Separate workshops and one-on-one consultations have been developed to address the long-term “preservation” projects that Greek alumni said are of great concern to them. Additionally, the researchers are
expanding their efforts to other student groups, including the governing student bodies and other long established groups.

Academic librarians must think outside the box in order to stay relevant and exciting to community members. This research shows that a thoughtfully implemented EBLIP led to the creation of new partnerships, a new collection, and invigorating conversations with Greek students, the Greek Affairs Center, faculty and researchers on the campus. This can only point to the value and unique role the library can play in nurturing an essential, unique university collection that showcases an important campus group – Greek students. The implementation of EBLIP with a focus on developing a relevant, impactful research question changed the way the Archives works with and continues to partner with Greek students and other relevant stakeholders.
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http://lib.dr.iastate.edu/refist_pubs/40/.


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Table 1: A comparison of Pre-test and Post-test results - How skilled are you in creating chapter records that will last for 30 years or more?

<table>
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<tr>
<th></th>
<th>Pre-test Number</th>
<th>Pre-test Percentages (from total)</th>
<th>Post-test Number</th>
<th>Post-test Percentages (from total)</th>
<th>Percentage Difference between Pre- and Post-tests</th>
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<tr>
<td>Very Skilled</td>
<td>9</td>
<td>23.53%</td>
<td>13</td>
<td>38.24%</td>
<td>15%</td>
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<tr>
<td>Skilled</td>
<td>14</td>
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<td>Slightly Skilled</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don't Know</td>
<td>5</td>
<td>8.82%</td>
<td>0</td>
<td>0.00%</td>
<td>-9%</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>20.59%</td>
<td>2</td>
<td>5.88%</td>
<td>-15%</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>100.00%</td>
<td>34</td>
<td>100.00%</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Pre-test Number</td>
<td>Pre-test Percentages (from total)</td>
<td>Post-test Number</td>
<td>Post-test Percentages (from total)</td>
<td>Percentage Difference between Pre- and Post-tests</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------</td>
<td>-----------------------------------</td>
<td>------------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Elmer's or other commercial glue</td>
<td>10</td>
<td>10.10%</td>
<td>0</td>
<td>0.00%</td>
<td>-10%</td>
</tr>
<tr>
<td>Water-soluble glue</td>
<td>4</td>
<td>4.04%</td>
<td>20</td>
<td>15.63%</td>
<td>12%</td>
</tr>
<tr>
<td>PVC photo covers</td>
<td>6</td>
<td>6.06%</td>
<td>11</td>
<td>8.59%</td>
<td>3%</td>
</tr>
<tr>
<td>PVC photo Corners</td>
<td>7</td>
<td>7.07%</td>
<td>30</td>
<td>23.44%</td>
<td>16%</td>
</tr>
<tr>
<td>Construction paper</td>
<td>20</td>
<td>20.20%</td>
<td>6</td>
<td>4.69%</td>
<td>-16%</td>
</tr>
<tr>
<td>Lignin-free/Acid-free paper</td>
<td>5</td>
<td>5.05%</td>
<td>20</td>
<td>15.63%</td>
<td>11%</td>
</tr>
<tr>
<td>Ballpoint pen to record information</td>
<td>4</td>
<td>4.04%</td>
<td>1</td>
<td>0.78%</td>
<td>-3%</td>
</tr>
<tr>
<td>Soft lead pencils to record information</td>
<td>28</td>
<td>28.28%</td>
<td>30</td>
<td>23.44%</td>
<td>-5%</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>15.15%</td>
<td>10</td>
<td>7.81%</td>
<td>-7%</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>100.00%</td>
<td>128</td>
<td>100.00%</td>
<td>NA</td>
</tr>
</tbody>
</table>
Table 4: A comparison of Pre-test and Post-test results - You do/will keep your digital records in more than place?:

<table>
<thead>
<tr>
<th></th>
<th>Pre-test Number</th>
<th>Pre-test Percentages (from total)</th>
<th>Post-test Number</th>
<th>Post-test Percentages (from total)</th>
<th>Percentage Difference between Pre- and Post-tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>41%</td>
<td>26</td>
<td>76%</td>
<td>35%</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>21%</td>
<td>0</td>
<td>0%</td>
<td>-21%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>13</td>
<td>38%</td>
<td>8</td>
<td>24%</td>
<td>-15%</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>100%</td>
<td>34</td>
<td>100%</td>
<td>NA</td>
</tr>
</tbody>
</table>

Table 5: A comparison of Pre-test and Post-test results - For your needs, this workshop is: Please check answer that is appropriate.

<table>
<thead>
<tr>
<th></th>
<th>Pre-test Number</th>
<th>Pre-test Percentages (from total)</th>
<th>Post-test Number</th>
<th>Post-test Percentages (from total)</th>
<th>Percentage Difference between Pre- and Post-tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Relevant</td>
<td>16</td>
<td>47.06%</td>
<td>15</td>
<td>45.45%</td>
<td>-2%</td>
</tr>
<tr>
<td>Relevant</td>
<td>11</td>
<td>32.35%</td>
<td>13</td>
<td>39.39%</td>
<td>7%</td>
</tr>
<tr>
<td>Slightly Relevant</td>
<td>4</td>
<td>11.76%</td>
<td>3</td>
<td>9.09%</td>
<td>-3%</td>
</tr>
<tr>
<td>Inrelevant</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
<td>0%</td>
</tr>
<tr>
<td>Very Inrelevant</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>8.82%</td>
<td>2</td>
<td>6.06%</td>
<td>-3%</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>100%</td>
<td>33</td>
<td>100%</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Pre-test Number</td>
<td>Pre-test Percentages (from total)</td>
<td>Post-test Number</td>
<td>Post-test Percentages (from total)</td>
<td>Percentage Difference between Pre- and Post-tests</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------</td>
<td>-----------------------------------</td>
<td>------------------</td>
<td>------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Very Confident</td>
<td>8</td>
<td>24%</td>
<td>14</td>
<td>42%</td>
<td>19%</td>
</tr>
<tr>
<td>Confident</td>
<td>12</td>
<td>35%</td>
<td>15</td>
<td>43%</td>
<td>10%</td>
</tr>
<tr>
<td>Unconfident</td>
<td>12</td>
<td>35%</td>
<td>0</td>
<td>0%</td>
<td>.35%</td>
</tr>
<tr>
<td>Very Unconfident</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>6%</td>
<td>4</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>100%</td>
<td>33</td>
<td>100%</td>
<td>NA</td>
</tr>
</tbody>
</table>
### Table 7: A comparison of Pre-test and Post-test results - Would you keep your chapter's records at Special Collections?

<table>
<thead>
<tr>
<th></th>
<th>Pre-test Number</th>
<th>Pre-test Percentages (from total)</th>
<th>Post-test Number</th>
<th>Post-test Percentages (from total)</th>
<th>Percentage Difference between Pre- and Post-tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12</td>
<td>35.29%</td>
<td>22</td>
<td>64.71%</td>
<td>29.41%</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>38.24%</td>
<td>7</td>
<td>20.59%</td>
<td>-17.65%</td>
</tr>
<tr>
<td>Already do</td>
<td>0</td>
<td>0.00%</td>
<td>0</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>9</td>
<td>26.47%</td>
<td>5</td>
<td>14.71%</td>
<td>-11.76%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>34</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>NA</strong></td>
</tr>
</tbody>
</table>

### Table 9: A comparison of Pre-test and Post-test results – Are you interested in developing the digital community archive for the Greek community?

<table>
<thead>
<tr>
<th></th>
<th>Pre-test Number</th>
<th>Pre-test Percentages (from total)</th>
<th>Post-test Number</th>
<th>Post-test Percentages (from total)</th>
<th>Percentage Difference between Pre- and Post-tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Interested</td>
<td>12</td>
<td>35.29%</td>
<td>20</td>
<td>58.82%</td>
<td>23.53%</td>
</tr>
<tr>
<td>Interested</td>
<td>12</td>
<td>35.29%</td>
<td>10</td>
<td>29.41%</td>
<td>-5.88%</td>
</tr>
<tr>
<td>Uninterested</td>
<td>3</td>
<td>8.82%</td>
<td>4</td>
<td>11.76%</td>
<td>2.94%</td>
</tr>
<tr>
<td>Very Uninterested</td>
<td>7</td>
<td>20.59%</td>
<td>0</td>
<td>0.00%</td>
<td>-20.59%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>34</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>NA</strong></td>
</tr>
</tbody>
</table>