Assessing the Assessment
of ENG 1900/1920 Instruction:
How Useful is the "One-Minute Paper"?

Submitted May 24, 2017

A Report by the Pius/Medical Center Libraries Assessment Committee:

Patricia Gregory (chair), *Assistant Dean for Library Assessment, Pius Library*
Ronald Crown, *Research and Instruction Librarian, Pius Library*
Lee Cummings, *Research and Instruction Librarian, Pius Library*
Judy Geczi, *Research and Instruction Librarian, Pius Library*
Jonathan Harms, *Library Associate, Research & Instructional Services, Pius Library*
Erica Lauriello, *Library Associate, Sr., Special Collections, Pius Library*
Donghua Tao, *Medical Reference Librarian, Medical Center Library*

Introduction and Overview

In July, 2016, the Pius/Medical Center Libraries Assessment Committee invited Assistant Provost Steve Sanchez and Assessment Coordinator Kathleen Thatcher to talk about undergraduate student learning outcomes. This meeting inspired the committee to consider how the libraries could contribute to overall University assessment efforts. The decision was made to embark on a pilot assessment project with English 1900/1920 classes to see how effective their two library instruction sessions are for helping students with their current assignments and for their long-term learning. The main audiences for this assessment are the English 1900/1920 instructors and the librarians who teach information literacy sessions to those classes. Chris Grabau, Instructional Designer from the Reinert Center for Transformative Teaching and Learning, also met twice with the committee to discuss information literacy assessment. Chris emphasized that the department's learning outcomes should align with the assessment tool used to measure services.

Each semester, students in English 1900 and 1920 watch two video tutorials (*Start Your Research with SLUth Search Plus* and *Find Books on a Topic with the SLU Libraries Catalog*) and complete a quantitative Qualtrics assessment of student learning associated with the tutorials. Research & Instruction (RIS) librarians at Pius Library review the results of this assessment prior to classroom instruction. Pius RIS librarians then meet twice with each English 1900 and 1920 class to teach information literacy skills. English 1900 is entitled "Advanced Strategies in Rhetoric and Research," and students at any level may enroll, although the majority are either first or second-semester first-year students. English 1920 is entitled "Advanced Writing for Professionals." The four learning outcomes for the library sessions state that the ENGL 1900 or ENGL 1920 student will

1. Describe the characteristics of different kinds of information sources used in the scholarly research process in order to use them effectively.
2. Utilize library catalogs and databases in order to find a variety of sources on their research topic.
3. Assess the credibility and relevance of information sources in order to select appropriate resources for their research project.
4. Identify the many ways to access research help via the SLU Libraries in order to meet their current and ongoing information needs.

The current assessment tool for the classroom portion of the English 1900/1920 instructional program is the "One-Minute Paper," in which each student responds to three open-ended questions at the end of the second library instruction session. Popularized by Angelo and Cross in their widely used teachers' handbook[1], this technique involves having students write brief responses to these two questions: "What is the most important thing you learned in class?" and "What is the muddiest point left unanswered?" Depending on the teacher's goals, this technique may be varied in terms of the questions asked, when it is implemented (end, middle, or beginning of class), and whether students respond individually or in groups. Because of its ease of use, flexibility, and sizeable benefits deriving from a minimal resource requirement, it has now "become rather ubiquitous in higher education"[2]

---

[1] (*Classroom Assessment Techniques: A Handbook for College Teachers*. Wiley, 1993)

[2] John F. Chizmar and Anthony L. Ostrosky, "The One-Minute Paper: Some Empirical Findings," *Journal of Economic Education* 29, no. 1 (Winter 1998): 3, https://www.jstor.org/stable/pdf/1182961.pdf.

Method

Participants

Pius Research and Instruction librarians meet twice with each ENGL 1900 and 1920 class and administer the One-Minute Paper after the second class.

Materials and Procedures

Although the usual One-Minute Paper asks two questions, the ENG 1900/1920 version asked three (below). In Fall 2016, Instructional Services librarian Amanda Albert suggested adding Question 2 in order to add substance to students' answers to Question 1.

> Q 1.   *Which concept presented did you find most useful? (Present only one).*
> Q 2.   *How will you apply this concept in your course?*
> Q 3.   *What information covered is still unclear to you?*

English subject librarian Jamie Emery created a Qualtrics form to collect the student responses so the Assessment Committee members could analyze this data. Student participants are anonymous.

Selected Findings

The committee initially hoped that analyzing the data from ENG 1900/1920 responses would enhance information literacy efforts and serve as a pilot project for future assessment of other classes taught by subject librarians in both Pius and Medical Center Libraries. However, as Chris Grabau noted, much of the data from ENG 1900/1920 classes represented mirror-level responses of the last thing students heard. For instance, the most useful concept was frequently "databases," which is a concrete example rather than a concept. Ultimately, the committee concluded that the data collected did not accurately assess the impact of instruction on understanding the library or its services or whether students believed that their work was improved by attending these two sessions.

One-Minute Paper Responses to Questions 1 and 2 in Relation to ENGL 1900/1920 Library Instruction Outcomes

> Q 1: Which concept presented did you find most useful?
> Q 2: How will you apply this concept in your course?

Correlating One-Minute Paper responses with ENGL 1900/1920 library instruction learning outcomes turned out to be problematic. The qualitative data collected by the survey was difficult to use because it was hard to measure learning in the responses. For some responses student learning was visible, but there was not enough evidence in their response to conclude that students gained knowledge or skills from the library instruction sessions. Did a general reference

to "databases" or the library web site or even a specific database (e.g. SLUth) indicate anything in relation to the learning outcomes? Some answers only correlated to part of a learning outcome (e.g., references to the library catalog, which correlates to the second objective above but not to the entirety of it as written).

But the major issue was that the responses simply did not provide enough information to know whether a desired outcome *was actually achieved*.

Perhaps this should not be surprising, because the questions on the One-Minute Paper did not focus on anything specifically mentioned in the stated learning outcomes. First, it became necessary to take into account the answers to both questions 1 and 2 on the One-Minute Paper in order to even begin consideration of the answers in relation to the learning outcomes. But even by doing this, in most cases, we were only able to make correlations between the *substance* of the objective and the content of the answer. We gained no information that would allow us to conclude that the student had achieved a desired outcome.

For example, one student responded to question #1 (most useful concept): "I thought that the introduction to the library's databases was most useful for me." That student's response to question #2 was, "I am going to use the databases to research and find information that I need for my class research project." This set of answers corresponds at least partially to the objective "Utilize library catalogs and databases . . . " but provides no evidence that the student was or will be successful in using databases, or that the student understands *how* to use databases effectively.

Another group of answers corresponds (roughly) to the learning outcome "Assess the credibility and relevance . . . " Sometimes the answers were so broad that they gave no useful information except that the answer *is related* to the learning outcome.

For example:

  – "Relevance" *(most useful concept)*
  – "It will help me figure out what sources to use" *(how will you apply?)*

Other answers provide no evidence other than the subjective attitude of the student that they are able to meaningfully assess credibility and relevance. For example, one student responded to question #2 with, "I will have credible, relevant, helpful sources when I write my advocacy paper," which indicates that the student is confident that they are able to do this. But the ambiguity of that student's answer to question #1 (most useful concept), "search engines in the SLU library database," suggests at most that the student is aware of the value of using databases provided by the library to increase the likely credibility/relevance of search results – but not necessarily that the student is able to conduct an independent assessment of particular sources as suggested by the stated learning outcome. Even when a student has been successful in achieving an outcome ("I was able to find relevant sources for my research paper" in response to question #2), the same student's answer to question #1 (the most useful concept learned was "SLU library search") does

not demonstrate that the student has any meaningful understanding of what goes into "assessing" relevance or credibility or that the student didn't simply identify relevant sources by accident.

In another case, a student's response to question #3 (what is still unclear?) contradicts a previous answer that seems to indicate at least a partial achievement of an objective. Consider this response to question 1:

  – One of the concepts presented during class today which I found useful was how to use trade articles and determine their credibility as well as their relevance to the topic at hand.

This answer seems to indicate that the student has (at least partially) accomplished the objective "Assess the credibility and relevance . . . " But then contrast the same student's response to question 3:

  – What I have found that remains unclear is how to determine a source's validity and to properly assess how relevant it is in relation to the topic which I am researching.

At best, this evidence is ambiguous; the student seems to have learned *something* in relation to the learning outcome, but what was learned apparently did not contribute to the student's confidence in being able to accomplish the learning outcome.

Insofar as it is even possible to (loosely) correlate answers with the learning outcomes, we observed that most of the correlations are with the second and third learning outcomes (as listed above) and comparatively few with the first and fourth. With the first learning outcome, some answers indicate an awareness of the *variety* of information sources available, but it is not at all clear that students have an ability to "describe the characteristics of" those sources. Indeed, the objective does not make clear exactly what the hoped-for goal is; what characteristics of information sources do we expect students to recognize? How would we know that a student can do this? Furthermore, many of the answers focused on a specific resource (SLUth, Opposing Viewpoints, GVRL, LibGuides, etc.) rather than on multiple/various information sources. Does this raise questions about the objective itself? Does a focus on particular resources in our instruction suggest that the objective should be revised to be more specific in this regard?

Another "most useful concept" mentioned a number of times concerned the distinction between scholarly, popular, and trade journals. This set of answers could be seen as corresponding to either (or both of) the first and the third learning outcomes. Some answers seem to demonstrate success in achieving one or both learning outcomes.

  – "[T]he difference between scholarly, popular, and trade journals" *(most useful concept)*
  – "[T]o determine which type of research is more applicable to what I am working on" *(how will you apply?)*

- "The presentation of scholarly, popular, and trade sources" *(most useful concept)*
- "By conducting research of all three various sources" *(how will you apply?)*

- "When to use different sources. (popular, trade, scholarly)" *(most useful concept)*
- "Being able to find sources to more easily portray my argument" *(how will you apply?)*

However, none of these answers actually demonstrate that the student has the ability to employ the distinction between types of journals in practice. They acknowledge that there are distinctions, but they do not necessarily demonstrate that the students are able to use them effectively in evaluating sources.

Another example illustrates a contradictory answer that casts doubt on the achievement of the learning outcome.

- "When to use different sources. (popular, trade, scholarly)" *(most useful concept)*
- "The difference of popular articles/journals" *(what is still unclear?)*

One-Minute Paper Responses to Question 3 in Relation to ENGL 1900/1920 Library Instruction Outcomes

Q 3: What information covered is still unclear to you?

Of the 646 respondents, the majority of answers (376, or about 58%) indicated that nothing was unclear (e.g., "None," "N/A," "I'm clear on all the topics covered").

With most students reporting this sense of mastery of the information covered, it is important to analyze what lingering questions remained. The six most prominent areas are summarized below, along with a sampling of representative responses.

- Physically locating books in the library
  - "I am still not entirely sure as to where I would go within the library to find a book if it is not a periodical"
  - "Finding sources at other SLU libraries and finding out how to get them"

- Choosing and using databases
  - "There are many other databases that were not touched on. Are they less reliable or less helpful?"
  - "I am not the best at doing research from databases, I just get confused on how to find what I am looking for"
  - "[A]ll the different clicking to get to so many different databases"

- Refining searches
  – "How to narrow my search with what I type into the keyword bar"
  – "Simplifying searches"
  – "[N]arrowing down your search on databases."

- Navigating the library website
  – "The whole general format of the website"
  – "Navigating everything on the library website"
  – "the structure of all the databases and layouts of the myriad websites"

- Finding peer-reviewed articles
  – "I am still unaware of how to look for credible sources that are not peer reviewed"
  – "How to know if it is a peer reviewed article or journal"
  – "The way to find if the article is peer-reviewed or not is still unclear to me"

- ILL/MOBIUS
  – "Not much. Some sources don't present their full text. Learning how to solve this problem would be great."
  – "[H]ow MOBIUS works"

The responses above clearly indicate that some students were still lacking understanding in certain areas of the research process. As opposed to questions 1 and 2, where the first and third learning outcomes were most relevant, for question 3 the areas of difficulty for students would primarily be addressed by the first two learning outcomes. For example, questions about finding peer-reviewed articles are related to the first outcome, "Describe the characteristics of different kinds of information sources used in the scholarly research process in order to use them effectively." Similarly, questions about finding books and choosing and using databases would all fall under the second outcome, "Utilize library catalogs and databases in order to find a variety of sources on their research topic." Additionally, responses related to using ILL or MOBIUS could also be related to the second outcome, as the "Find it @ SLU" button is often used as a link to the ILL web page.

Very few of the students' remaining questions were related to the third or fourth learning outcomes, which addressed source credibility and ways to get help from a librarian. This may indicate that these objectives were more easily achieved by the information literacy instruction. On the other hand, it could indicate that most students' attention was mainly on searching for resources rather than evaluating their credibility, or remembering where to find help from a librarian. A third possibility is that the questions on the One-Minute Paper simply do not (explicitly) speak to these outcomes.

Analyzing this information broadly, or at a section-by-section level, will aid RIS librarians in improving the design of course content and pedagogy for future instruction. Librarians could use results from the fall semester to adjust their teaching plans for the second semester. Librarians should also continue to use the information available to communicate with ENGL 1900/1920

instructors about any remaining areas of concern.

This information could be considered in reevaluating the course's learning outcomes, and perhaps improving them. Based on the results of the three questions in the One-Minute Paper, a future assessment tool may not need to directly assess the fourth learning outcome, "Identify the many ways to access research help via the SLU Libraries in order to meet their current and ongoing information needs."

Conclusions

Although students' One-Minute Paper responses have been valuable for individual librarians communicating with their individual English 1900/1920 instructors, the overall data gleaned from the One-Minute Papers are difficult to match up with the current RIS learning outcomes. In fact, the study revealed serious deficiencies in the use of the One-Minute Paper to assess success or lack of success in achieving ENGL 1900/1920 learning outcomes. During our discussions, it also became apparent that the learning outcomes themselves need to be stated in such a way as to lend themselves more readily to assessment. With this in mind, we believe that the data gathered in this study can be helpful in discussions of what we can reasonably expect to achieve in the ENGL 1900/1920 instructional program (and what we cannot). Considering the students' responses to the One-Minute Paper may suggest specific areas of accomplishment or even specific tasks where we want to focus our instruction and, correspondingly, our assessment.

Committee Recommendations

In order to enhance both the achievement of instructional learning outcomes and the assessment thereof, we recommend the following:

1. Learning outcomes should be updated and stated in a manner that can be more easily assessed. RIS discussion of outcomes should include means of assessment.

2. The assessment survey instrument should be redesigned to move beyond qualitative questions in order to keep up with library assessment best practices. For example, to facilitate quantitative analysis, use multiple choice and Likert scale questions instead of open-ended questions.

3. The RIS librarians should consult with the Assessment Committee to help create a new survey instrument to ensure that the data collected is meaningful in measuring how well students learn and retain content of ENGL 1900/1920 information literacy sessions.

4. Results from each semester should be used to improve instruction for succeeding semesters. Also, individual librarians should continue to analyze data from sections they teach and collaborate with English instructors on areas that need to be addressed.