Jefferson College Library Assessment Summary
Library Use Instruction Fall 2015 – Spring 2016
Jennifer Gibson
Part-time Reference Librarian

Background

The Jefferson College Library plays an essential role in Jefferson College’s mission to provide superior teaching in a supportive learning environment that will prepare Jefferson College students for success as they further their education. The Library has provided research (bibliographic) instruction in the Introduction to College sections since they began in fall of 2007. Those sessions were so well-received that they became mandatory for all Introduction to College sections. We also offer bibliographic instruction to various classes in other academic departments such as English Composition I and II, General Psychology, and General Sociology. Full-time librarians also teach a semester long Introduction to College section focused exclusively on library and research skills. These sessions are designed to provide students with the skills to perform college-level research and to make the best possible use of the various information resources accessible through the Library.

The Library began a multi-section assessment plan of all bibliographic instruction in fall of 2011. This formative assessment allows the Library to gather data to inform the continual improvement of instruction to achieve stronger learning outcomes as well as how to improve our assessment process. Instead of relying solely on anecdotal student comments regarding bibliographic instruction, we designed a standardized questionnaire in order to systematically collect student data and assess the effect of our instructional efforts.

Method

The majority of the library’s bibliographic instruction occurs in one-shot sessions in which a librarian meets with a class—English Composition I, for example—on one occasion for about one hour. The exception is the Introduction to College course taught by two of our full-time faculty librarians. The one-shot course is easy for librarians to organize and minimizes the amount of time that faculty must sacrifice for library instruction. However, one-shots are challenging from an assessment perspective because they preclude the possibility of assessing long-term changes in the students’ skills.

We devised a classroom assessment tool that combines multiple assessment techniques: the pre- and post-test, the one-minute paper, and muddiest point. Our assessment tool is a half-sheet of paper with 3-4 questions on the front and 2 questions on the back. This simple questionnaire is quick and easy for students to fill out during a one-hour class and provides useful information to the library. The first side of the sheet is the “pre-test” and asks students whether they have had previous bibliographic instruction at Jefferson College, the number of research assignments they have completed at Jefferson College, and the types of resources they used. The back of the questionnaire is the “post-test” and asks students, after
the session is completed, to list two things they have learned (the one-minute paper) and one thing that is still confusing (the muddiest point). The same questionnaire is used for every one-shot instruction session, thus standardizing the method of assessment for each session taught by the Library. This standardization allows the Library to draw comparisons between classes (Introduction to College vs. General Psychology), for example, and also between students based on the number of prior bibliographic instruction sessions they have attended. Librarians tally the student answers to these questionnaires into a spreadsheet that automatically organizes the responses. The resulting data illuminate several important outcomes of our instruction as well as opportunities for improvement.

Data

Fall 2015.

In the fall semester of 2015, the Library taught 1801 students in 86 sessions of bibliographic instruction. About two-thirds of those sessions took place at the Hillsboro campus while the remaining were located at Arnold. The classes that received library instruction included: Introduction to College 100, 101, and 136; English Composition I and English Composition II; Oral Communications; General Psychology; and General Sociology.
The key findings from the fall assessment are as follows:

- The emphasis on the CAPOW method of evaluating websites for research purposes in the Introduction to College class leads to an increase in website usage after students’ first LUI, and emphasis in later LUIs on databases and books accounts for a decrease in the use of websites and increase in the use of books after students’ second LUI. This indicates that topics covered in LUI sessions have a direct impact on student research behavior and that the resources used correlate to the emphasized tools in bibliographic instruction.

- The use of websites for college research remains relatively steady at 22% before any bibliographic instruction, 24% after one LUI, and 21% after the second LUI. The data show that the reliance of students on websites is not likely to fade and that the library must make special effort to ensure that students have the skills to evaluate website quality.

**Spring 2016.**

In the spring semester of 2016, the Library taught 718 students in 41 sessions of bibliographic instruction. The classes that received library instruction included: Introduction to College 100, 101, and 136; English Composition I and English Composition II; Fundamentals of Communication; General Biology; United States History I; General Psychology; and General Sociology. The charts below summarize the data collected:
The key findings from the spring assessment are as follows:

- The maximum impact on student research behavior occurs after 2 library use instruction sessions. The data show an increase of 5% in the use of scholarly articles, 3% in the use of books; and 4% in “advanced skills” which we define as using both scholarly articles and books while performing academic research.

- The dominant skill that students report learning after an LUI is how to use the library databases and how to narrow down their search results (which we term “college level research” in our data analysis). After their first LUI, 41% of students report learning how to use databases and 12% report learning how to narrow down their search results. After their second LUI, 40% of students report learning about databases while 18%...
report learning how to narrow their research. The 6% change in learning how to narrow search results provides more evidence to support the conclusion that students are better researchers after two bibliographic instruction sessions.

- The use of websites in research remains almost unchanged regardless of the number of LUI sessions a student has attended. Before any instruction, students report using websites for 21% of their research; after one session they report 23%, and after two sessions they are back down to 23%.
- Open-ended comments from students regarding what still confuses them (the “muddiest point” assessment technique) most commonly indicate a lingering confusion about using databases—such how to choose the right one, how to limit the number of results, and how to find the most relevant articles—as well as confusion about when and how to use and create citations.

Recommendations and Challenges

In light of these findings, the Library recommends include requiring an LUI session for every section of English Composition I, thus ensuring that most Jefferson College students will encounter library instruction a minimum of two times—once in their Introduction to College class and again in their English Composition I class. Giving the greatest number of students the opportunity to receive library instruction at least twice will directly support the College’s mission of preparing students for their future education, as research skills are one of the most transferable skills no matter the discipline or institution.

Student-reported learning outcomes of our LUI sessions indicate that we are on track in our emphasis on evaluating websites using CAPOW in the Introduction to College sections and on using databases in our later LUI classes. They also indicate that our in-class database exercises help students learn how to search databases and limit their results. As we review outlines we can look for opportunities to focus even more on databases as well as providing additional opportunities to practice using them. At the same time, the open-ended comments from students indicate that databases are the largest source of lingering confusion after these LUI sessions.

A solution that would address both of these findings would be to offer a monthly and completely voluntary workshop in the library where students can drop-in during a specified hour to receive more personalized, less structured help in using databases. This workshop would also be an opportunity for students to clarify when and how to use citations in their research, a topic not currently covered in our bibliographic instruction but strongly present in the students’ open-ended comments. It would also be another assessment opportunity for the library and could provide special insight into the research behaviors of students who voluntarily seek research help at the library. The library could also provide links to citation “games” and exercises online in their LibGuides and direct students needing citation help to those online tools.

One major challenge is how to assess the quality of the use of websites in research. The reported percentages are quite high—21% to 23%—and unlike books and scholarly journals
which we can generally assume are of high research quality, we cannot verify the quality of the websites being used for research. Without being able to see the reference lists and works cited pages that students submit with their assignments, the Library has limited means to perform a quality-check on a significant area of student research. One possible method of assessing the quality of website research would be to design an in-class website exercise where students are given a topic and a selection of websites on that topic and then choose which website is the best to use for academic research. That would give librarians some idea of the skill level of students when using websites for research assignments.

**Conclusion**

The Library’s multi-section formative assessment has shown over the 2015-2016 academic year that our bibliographic instruction has a distinct and measurable impact on students’ learning and research behavior. Our data show the maximum improvement in research quality after two library use instruction sessions, manifested as increases in the use of books, scholarly journals, and advanced skills (the use of both books and scholarly journals for research). Thus, we recommend that library use instruction be mandatory in English Composition I sections as well as Introduction to College sections. We also learned that while our emphasis on databases in these classes is on-point, we can still improve by offering more practice exercises and possibly creating additional opportunities for bibliographic instruction that are voluntary and less formal. The challenge remains in how to assess the quality of ever-present website research. We will fine-tune our assessment tool and continue to find ways to streamline the collection, entry, and analysis of assessment data.