

Student Learning Outcome Information Literacy Instruction 2019-20

Parameters and Timeline

This study assessed the following Student Learning Outcome:

“Thesis (senior seminar) students, given instruction and an opportunity to practice citation tracking, will be able to articulate, as demonstrated by giving at least three reasons or methods, why and how they might use citation tracking to identify sources for their research.”

The library’s four-liaison librarian instruction team developed this outcome and assessment over the spring and summer of 2019. 44 subjects were assessed from 7 groups during the 2019 fall semester: Art History, Biology, Communications, Dance, Economics, GPS, History.

Survey Design and Methods

Our goal was to assess one aspect of seniors’ readiness for graduate school: knowledge and application of citation tracking. Our instruction team followed principles of backwards design (Wiggins & McTighe, 2005), working from the above outcome to determine the best model for assessment; we also applied Kirkpatrick’s model as adapted by Turnbow & Roth (2014) to consider at which level to assess student learning.

Information literacy instruction at Hollins is largely decentralized: beyond shared goals developed for FYS instruction, individual liaisons collaborate with faculty to develop sessions without a common curriculum. In order to ensure consistency our librarians developed a common framework for delivering instruction on citation searching. The framework included suggestions for constructivist learning activities such as having students choose from a bibliography and reflect on their choices.

The instrument consisted of two questions, asking students to describe their process and their reasons for information searching using citations. Student responses were captured using both a Qualtrics form and paper forms.

Scoring

Following the gathering of student responses, librarians met to review and score results. Lists of response options were developed during the scoring process, in order to allow discussion and categorization. As one of our librarians was unable to attend the scoring session, two student responses were left unscored until they could be consulted.

Results

Our learning outcome defined success as “at least three reasons or methods”: 84% of students met this criteria. Results are classified as follows:

Unsuccessful: 7 students (16%)

- Students providing less than three reasons or methods: 7.

Successful: 16 students (36%)

- Students providing either three reasons, or three methods: 1
- Students providing three reasons and methods, using both categories: 15

Excellent: 21 students (48%)

- Students providing more than three reasons or methods, using both categories: 21

Methods: Question 1

Briefly describe your process, when looking through a reference list or bibliography, for deciding which items are useful for your project.

As the first question on the survey (and the more straightforward: *how* elicits a more direct response than *why*) question 1 garnered the most responses:

- 4 methods: 2 students (5%)
- 3 methods: 12 students (27%)
- 2 methods: 22 students (50%)
- 1 method: 8 students (18%)

Librarians identified 13 separate response options for this question (see appendix I). The most frequent responses indicated students are largely using date, title, author and key words to find sources. Other methods included using features such as “Cited By” searching, looking for specific formats or university affiliations.

Reasons: Question 2

Why would you use citation tracking (i.e. doing research starting with citations) instead of or in addition to database searching?

Answers:

- 3 reasons: 2 students (5%)
- 2 reasons: 11 students (25%)
- 1 reason: 30 students (68%)
- 0 reasons: 1 student (2 %)

Librarians identified 12 separate response options for this question (see appendix I). Students most frequently indicated that citation searching exposes different sources than other types of searching; many also mentioned the value of citations to reflect the scholarly conversation on a topic.

Conclusions

Citation tracking is an essential tool for researchers. As information literacy teachers we treat citation tracking as a complex, higher-level skill; it is often identified by faculty as an important tool for students entering graduate school. Yet the underlying principle that one can search for useful information by following a trail of sources applies to almost all information formats, and benefits all life-long learners.

With 84% of seniors in our group appropriately articulating both methods and reasons for using citation searching, we are confident of their success. Nearly half of students assessed exceeded our criteria.

We are also pleased with the strength of response: 82% of students articulated more than one method for citation searching, while 30% of students were able to provide more than one reason for using this method. Use of information tracking as a tool relies on understanding reference lists as information systems; therefore it falls primarily under the information literacy framework of Searching as Strategic Exploration. Understanding the functions of citation also touches on other areas such as Scholarship as Conversation, and Authority is Constructed and Contextual (ACRL, 2016). For example: students responding to Question 2 with answers such as “faster searching,” or “to get more ideas” were demonstrating their strategic abilities; meanwhile, answers such as “reliable sources” or “they are most likely valid sources that are useable” points to factoring in authority and quality, and “finding other people who did work in the area of interest” indicates an understanding of the nature of scholarly conversation. Both the robust numbers and the variety in student responses are significant indicators of success.

Finally, we would like to note the teaching element embedded within the assessment: asking students to reflect on their learning is a well-known technique to aid them with information retention.

Note: excluded from this assessment were groups of seniors whose faculty did not choose to work with librarians in an instruction session in the fall; also excluded were those seniors whose thesis projects are of a creative (and therefore less scholarly research-based) nature. Still, we are pleased with the diversity and size of the groups we were able to assess. They represented 7 different majors from three of Hollins’ four academic divisions and we feel that our results are relatively representative of the range of students graduating from Hollins.

Recommendations

While this assessment does not suggest changes are needed, it may be seen as confirmation that attention to teaching citation tracking in the final year is helpful to students. In preparing for the assessment our instruction team designed a flexible method which has just proved its worth; this outline (along with its reflective component) may serve in future work with students working on thesis or capstone projects.

The diverse list of responses is also an excellent tool, providing additional suggestions for future teaching of citation. In teaching, one can get into the habit of repeating whatever works; our methods for teaching citation tracking are likely no exception. Furthermore, as liaisons to particular departments and disciplines, we naturally tend to focus on the methods favored by those we serve. This broad and varied overview can provide a jumping-off point for challenging ourselves to change up those routines: using methods suggested by those in other disciplines we can design new in-class exercises, resources etc., enhancing our instruction across the board.

Bibliography

Association of College and Research Libraries. (2015). *Framework for information literacy for higher education*. Retrieved from <http://www.ala.org/acrl/standards/ilframework>

Turnbow, D., & Roth, A. (2014, December 3). *Kirkpatrick Levels 3 & 4: They know it, but are they doing it?* Retrieved from <https://learningservicesucsd.wordpress.com/2014/12/03/kirkpatrick-levels-3-4-theyknow-it-but-are-they-doing-it/>

Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Appendix I: Response Options and Frequency

Question	Responses	Frequency
1. Briefly describe your process, when looking through a reference list or bibliography, for deciding which items are useful for your project.	Date Title Author Key words Specific type of source Reputability Quality (of original source) "Cited By" searching Scholarly Publisher University Affiliation Number of times cited Journal title Type of use	26 22 17 13 5 3 2 2 1 1 1 1 1
2. Why would you use citation tracking (i.e. doing research starting with citations) instead of or in addition to database searching?	Exposes different sources Scholarly conversation Cross-referencing Speed Scholarly publications Jumping-off point New Ideas Quality (of original source) Relevance "Cited By" searching Comprehension How sources are used	18 10 5 4 4 3 3 3 3 2 2 1