

Using Assessment to Enhance an Information Literacy Tutorial for a first-year student seminar course

University of Pittsburgh Library System

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Background

Each fall at the University of Pittsburgh, the University Library System hosts an in-person, 50-minute library orientation session with an information literacy component to a large cohort of first-year students. In recent years, an online tutorial was developed to introduce information literacy concepts in a flipped classroom environment.

In 2018, the online tutorial introduced students to searching the library catalog and identifying scholarly information. The classroom activity focus shifted on developing those skills in more depth, in particular looking at how the resources could be used for a research assignment.

In 2019, information literacy was exclusively introduced online based on instructor demand for more library orientation activities during the in-person session. The online tutorial was expanded to include information about how resources are used within the research process. To better assess skills acquisition within the online tutorial, a pre- and post- test were developed. In addition to the test, questions were asked during the tutorial to assess skills such as identifying book and journal article citation information and scholarly characteristics of an article.

The tutorial was created in LibWizard and delivered through a course specific LibGuide. Over 1,100 responses were received.

Methodology

Assessment of the 2019 online tutorial was completed using a two-step process:

A pre- and post- test to assess skills acquisition, providing real-time results to students was deployed. 935 responses were collected after instructor and repeat submissions were removed.

A rubric was used to evaluate 4 tutorial questions related to citation information and information evaluation. This rubric is mapped to knowledge practices within the Framework for Information Literacy in Higher Education. 11% of completed tutorials were assessed using this rubric. 102 submissions were part of this assessment.

Results

Pre and Post Test Results:

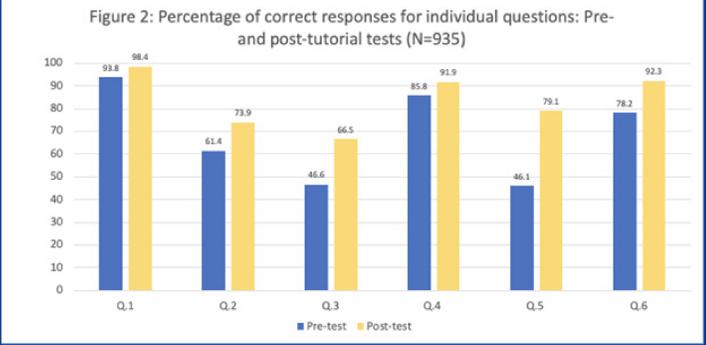
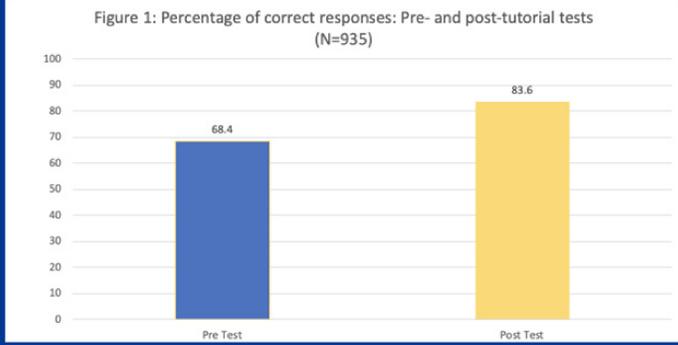
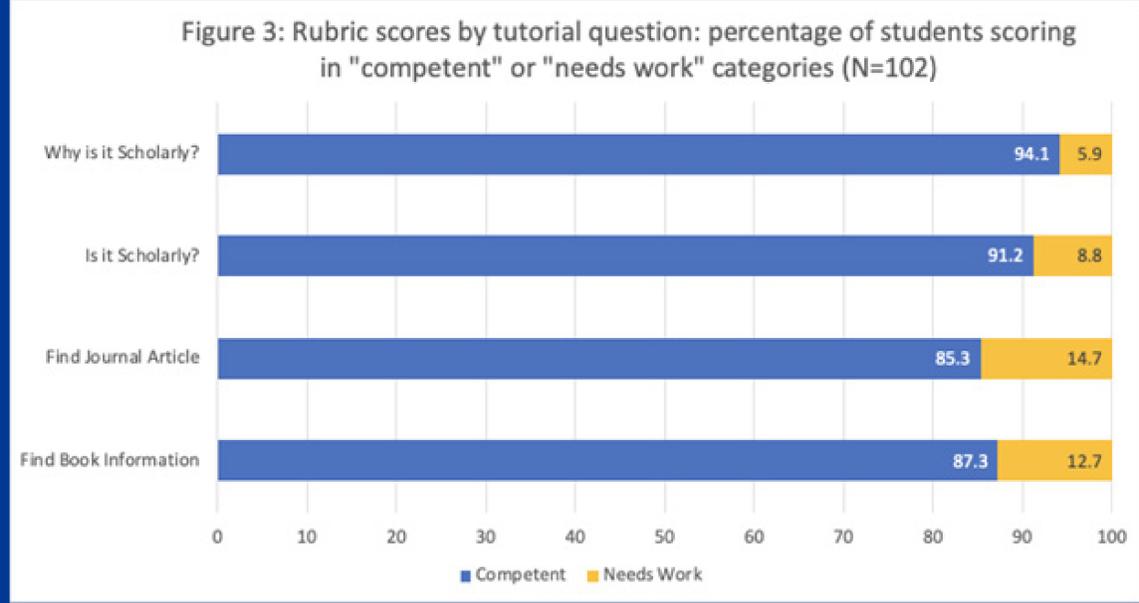


Table 1: Percentages of students responding correctly to questions: pre- and post-tutorial test and percentage improvement (N=935)

| Question | Difference |
|--|------------|
| 1: What can you find in the Catalog? | 4% |
| 2: What is a characteristics of scholarly information? | 13% |
| 3: Identify a book citation | 19% |
| 4: Identify a journal citation | 6% |
| 5: Identify background information use | 33% |
| 6: Identify in-depth information use | 14% |

Rubric Scoring Results:



Discussion

As part of the Pre- and Post-test questions, students were asked to identify what they could find in the library catalog, characteristics of a credible source, identify a resource type from a citation, and identify the use of information from a citation. Students were able to see correct answers in real time and the same questions were asked both in the pre and post test. 59% of students showed improvement from pre- to post- tutorial assessment and the overall average score increased by 15%. A large improvement in question 5 was shown, in which 33% more of students correctly identified the use of a newspaper article as background research than before completing the tutorial.

As part of the qualitative assessment, over 85% of all scored tutorial questions were identified as competent. Some areas of confusion were noted in identifying article citation information, especially in the descriptions of journal issue numbers. Additionally, some responses did not include citation information relevant to the tutorial research question or misidentified a resources type, such as an abstract instead of an article. When asked about characteristics of a credible source, commonly used words included cited, experts, tables, and data.

Practical Implications of Assessment Data

We have been collecting and using these dynamic data assignments for a few years. In 2019, for the first time, students received feedback in real time, in a low stakes environment. In the past, we collected an assignment in the classroom and graded them after the term ended. Students did not get feedback on performance.

Librarians use the data for an internal assessment feedback loop. Each year we use the data to influence the next year's lesson, either with content in the tutorial or how we deliver the content to the students.

Additionally, tutorial data is communicated to First-Year department directors and in a report to the University provost.

COVID19 Implications

While tutorial assessment was originally designed to influence future lesson planning, plans changed to allow for a more flexible teaching model. In the fall of 2020, these seminar classes, including the library visit, were moved entirely online. Having the tutorial already developed allowed for ease of transition to this model. Few updates were made to the content of the tutorial, allowing information literacy to continue to be introduced in this online environment as a required component of the course. Parts of the 2019 in-class visit were made available through videos and optional for students to view.

Related Links:

- [First-Year Programs Academic Foundations LibGuide](#)
- [2019 First-Year Programs Library Assignment Tutorial](#)
- [2019 Assessment Rubric](#)
- [2019 Pre- and Post- Tutorial Test Questions](#)

