Using a Survey to Measure the Effects of Library Instruction on Undergraduates' Source Evaluation Practices

Gina Genova and Regen Le Roy University of Michigan School of Information

Introduction

In Fall 2019, librarians at University of Michigan and University of Michigan School of Information students and faculty collaborated to assess the effects of information literacy instruction on the source evaluation practices of undergraduate students in first-year writing courses using a survey. After the team received approval from the University of Michigan Health Sciences and Behavioral Sciences Institutional Review Board, instruction librarians directed students to voluntarily complete the online survey both immediately before and after instruction sessions. The survey asked students to indicate their confidence for two key information literacy skills and to evaluate one of three randomized online sources. The survey was administered in October and November.

The survey received nearly 600 responses from roughly 350 unique students. Of these student, 227 completed both the pre- and post-tests, and 73 student analyzed the same online source for both the pre- and post-test. Team members started codebook development to analyze survey results in late October and finalized the codebook in early January. While analysis activities are continuing and further research with the sample group is ongoing, the preliminary results offer insight into the potential effects of library instruction on undergraduates' source evaluation behavior.

Methods

At the beginning and end of information literacy instruction sessions, librarians directed students to a Qualtrics survey. The survey took two to three minutes to complete and included questions about their confidence and a source evaluation exercise. This exercise presented students with one of three online sources and asked them to indicate whether it was appropriate for use in an assignment.



Sample sources from an industry blog, Johns Hopkins Medicine, and NBC News

- 1. I can tell if a source I find is credible. (Likert Scale)
- 2.I can tell the difference between scholarly and nonscholarly sources. (Likert Scale)
- 3. How do you feel about using the given source for your research project? (Appropriate / Inappropriate)
- 4. Why do you feel this way? (Open-Ended)

Methods Continued

Inductive codebook development and refinement continued through the survey's administration period. Once survey administration ended, the codebook was finalized. Dedoose was employed to code the open-ended responses and obtain data about code use. Microsoft Excel and OpenRefine were used to obtain descriptive statistics regarding students' qualitative responses.

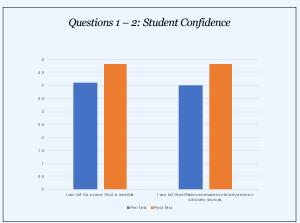
All calculations were completed independently by each team member to ensure accuracy.

Preliminary Results

348 unique students responded to the survey. Of these, 227 completed both the pre- and post-test. The three sample sources were evenly distributed across pre- and post-tests.



Students who completed both tests indicated somewhat increased confidence in their information literacy skills after instruction. Results are shown on a scale of 1 (strongly disagree) – 5 (strongly agree).

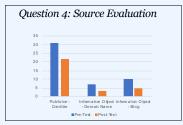


Preliminary Results Continued

The results from the students who completed both tests appear to show a small increase in selectiveness regarding source evaluation. In the pre-test, 114 (50.2%) of respondents indicated they thought their given source was appropriate to use. In the post-test, only 105 (46.5%) did.



Preliminary analysis also shows some promising trends for how students decided whether a source was credible. Current analysis in this area focuses on 73 students who had same sample source for both the pre- and post-tests. Of these 73 students, use of some superficial indicators to judge a source's credibility decreased in the post-test.



Conclusions

From the preliminary results of a survey administered to undergraduate students before and after receiving information literacy instruction, it appears that, after instruction, students became slightly more selective regarding which sources they considered appropriate, felt marginally more confident about their information literacy skills, and relied somewhat less on superficial aspects of a source to determine its credibility.

Considering the marginal results in this preliminary analysis, it was decided that more research with the survey group was needed. Twenty-two of the survey respondents have completed interviews regarding their source evaluation practices.

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