Do Online Learning Modules Have a Role in Information Literacy Instruction?

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Introduction
Information literacy (IL) instruction often involves 50-minute “one-shots” mainly consisting of lecture/demonstration. In-class tutorials and learning modules with built-in quizzes designed around the ACRL standards and learning outcomes can potentially reinforce learning through activities fostering active-learning and student engagement (Blummer & Kritskaya, 2009; Holland et al., 2013; Kellum & Riley-Huff, 2011; Silver & Nickel, 2005; Thormes, 2012). Quizzes also can be used to assess student learning of IL concepts. The purpose of this research was to determine if adding in-class tutorials to library instruction sessions positively impacts student learning of IL concepts.

Research Question & Hypothesis
RQ: Does the addition of in-class learning modules and quizzes in a 50-minute session positively impact student learning of IL concepts?
H1: Adding in-class tutorials and quizzes to 50-minute library instruction sessions reinforces learning of IL concepts and engages learners.

Methods
Undergraduate students from eight courses participated in a quasi-experimental study using repeated measures to determine how the addition of online tutorials to IL instruction affected the learning of ACRL Standard Three (Evaluation) and Standard Five (Responsibility). A pretest/posttest results showed improvements in scores, although not at level of significance, however suggesting the tutorials may have a positive impact on student learning of ACRL Standards Three and Five. Open-ended responses indicated that students preferred completing the learning modules in class as part of a library session as opposed to outside of class. This contradicts the current trend of “flipped classes” and suggests that students appear to prefer the integration of online tutorials with instruction sessions and that assigning tutorials to be done outside of class may be challenging to librarians. Limitations of this research include a very small sample size, participants, use of a convenience sample, and a lack of comparative data on students receiving IL instruction without a tutorial. Consequently, these results cannot be generalized to a larger population.

Future Research
Further research will include classes receiving only 50-minute instruction sessions encompassing library research, evaluation and responsibility skills without the tutorials. Comparisons will be made with instruction-only classes and instruction/tutorial classes. A more thorough qualitative analysis will be conducted on the open-ended responses. Additional tasks will be based on themes identified from the qualitative responses.

Quantitative Data
Preliminary analyses assessed students in the tutorial group and consisted of two paired-sample t-tests to test for differences between pre- and post-tests for ACRL Standard Three (Evaluation) and ACRL Standard Five (Responsibility). For ACRL Standard Three (Evaluation), there were no differences between pre (M = 2.95, SD = 1.63) and posttest (M = 3.28, SD = 1.63), t(58) = 1.43, p = .109 (See Figure 1). Additionally, as shown in Figure 2, there were no significant differences between levels of pre (M = 3.57, SD = 1.40) and posttest (M = 3.63, SD = 1.54) for ACRL Standard Five (Responsibility), t(58) = .56, p = .58.

Qualitative Data
Open-ended responses were collected from students who participated in the learning modules. Responses were analyzed on a preliminary level and broad themes emerged around how the tutorials might be improved and best utilized:

Discussion
Results study trended toward support of the hypothesis that adding in-class tutorials and quizzes to 50-minute information literacy sessions reinforces learning of information literacy concepts and shows potential for engaging learners by providing an active learning activity. Pretest/posttest results showed improvements in scores, although not at level of significance, however suggesting the tutorials may have a positive impact on student learning of ACRL Standards Three and Five. Open-ended responses indicated that students preferred completing the learning modules in class as part of a library session as opposed to outside of class. This contradicts the current trend of “flipped classes” and suggests that students appear to prefer the integration of online tutorials with instruction sessions and that assigning tutorials to be done outside of class may be challenging to librarians. Limitations of this research include a very small sample size, participants, use of a convenience sample, and a lack of comparative data on students receiving IL instruction without a tutorial. Consequently, these results cannot be generalized to a larger population.

References
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