CST 110 Asynchronous Information Literacy Instruction & Assessment
Preliminary Assessment Results & Next Steps

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INTRODUCTION

Information literacy is a key component of the general education course, CST 110: Communicating Effectively.

Librarians teach a one-shot information literacy session to more than 50 sections of this course each semester, packing a semester's worth of information literacy into one overwhelming 55-minute class.

Staffing, workload and student-engagement concerns led a team of CST instructors and librarians to develop interactive tutorials using Guide on the Side (GotS) software. In a survey conducted in 2012, 18 out of 19 CST instructors answered "yes" when asked if they would use an asynchronous, online, information literacy (IL) learning module. During the fall semester 2013, 259 students completed a pilot program that implemented two out of five proposed modules.
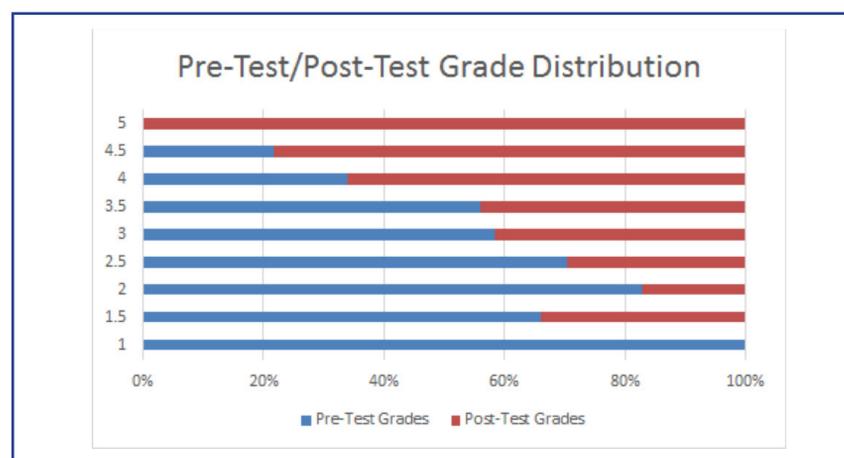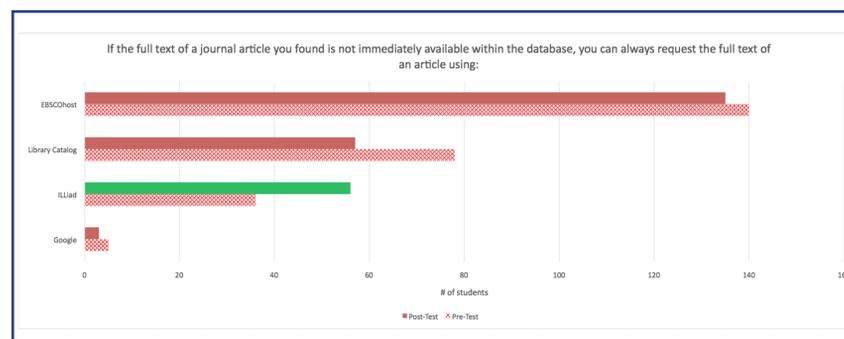
RESEARCH QUESTIONS

After developing learning objectives and shaping content to meet them for our pilot of the first two modules, we assessed student learning using the following research questions:
• Do students begin the CST 110 course already having an exemplary understanding of IL concepts?
• Does the post-test data suggest that students have mastered the learning objectives for each module?
• Does the data suggest that students' understanding of IL learning objectives has improved significantly?

METHODS

We built two GotS tutorials: Using the Murphy Library Catalog and Finding Articles. Of the approximately 1,150 students enrolled in CST 110 for fall 2013 we developed a 10-question, pre- and post-test, sampling 259 students in 12 sections of the course during fall 2013.

Participating CST 110 instructors offered the pre-test via D2L during the second week of classes with a post-test administered via D2L to these same students after completion of the first two modules, no later than three weeks after the pre-test. Students received credit for completing both the pre-and post-test. These 12 sections of CST 110 also participated in a face-to-face IL session focusing on evaluating resources. In order to test for impact from that library day on student learning, we administered the post-test to 6 sections before their IL session and 6 sessions after the IL session.

If the full text of a journal article you found is not immediately available within the database, you can always request the full text of an article using:

Harry Potter and the chamber of secrets / by J. K. Rowling ; illustrations by Mary Grandpre.

Using the image above, what information would you need to find this book on the shelf in the library:

Pre-Test/Post-Test Grade Distribution

RESULTS

We had 247 students complete both the pre- and post-tests. Students scored a mean of 65% on the pre-test and 73% on the post-test. We had 6 sections take the post-test after their library day session. Those sections scored a mean of 74% on the post-test, while the 6 sections taking the post-test before they had their library day session scored 72%.

A repeated measures ANOVA was used to determine if there was a significant gain in post-test scores over pre-test scores, with the library day used as a between-subjects factor. It was found that there was a significant difference in pre- and post-test scores (p-value=.000), but that the library day did not have a significant impact (p-value=.326).

We created an assessment rubric in which we considered a score of 4.5 or 5 exemplary (4% of students scored at this level for the pre-test while 18% scored at this level for the post-test), 3.5/4 proficient (50% of students scored at this level for the pre-test while 55% scored at this level for the post-test), 2.5/3 competent (41% of students scored at this level for the pre-test while 26% scored at this level for the post-test), and 1-2 not competent (5% of students scored at this level for the pre-test while 1% scored at this level for the post-test).

Of the ten quiz questions, students scored on average of 80% or better on six of the questions covering our learning objectives.

NEXT STEPS

• Offer GotS modules to all sections of CST 110.
• Develop the remaining modules. (Evaluating Sources, Citations and Plagiarism)
• Rewrite questions that were confusing or problematic.
• Up to 97% of students met some learning objectives in the pre-test. We will adjust content accordingly.
• Adjust content in GotS for questions that did not improve or decreased significantly from the pre- to the post-test.
• Offer this resource to other CST classes and disciplines.
• Consider adding a control group to compare to other delivery methods.

ACKNOWLEDGEMENTS