



Evidence Summary

Library Research Courses that Follow Universal Design Principles and Best Practices for Online Education of Special Needs Students Improve Student Learning Experiences

A Review of:

Catalano, A. (2014). Improving distance education for students with special needs: A qualitative study of students' experiences with an online library research course. *Journal of Library & Information Services in Distance Learning*, 8(1-2): 17-31. doi: 10.1080/1533290X.2014.902416

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Abstract

Objective – To evaluate student experience with an online library research course that follows best practices about distance education for special needs students.

Design – Questionnaire and semi-structured interviews.

Setting – A large private college in the United States of America.

Subjects – Seven female students, both undergraduate and graduate, each with different physical and cognitive disabilities.

Methods – Students were recruited from respondents to a survey about accessible

library services, with a \$50 gift card incentive. They took an online information literacy course that had been adapted for students with special needs, using universal design for learning and best practices in distance education for special needs students and in library instruction. Upon completion, students answered a questionnaire about the course learning activities. Students were then asked to participate in in-depth, semi-structured interviews on their learning preferences and study skills.

Main Results – Students expressed overall satisfaction with the course, especially the clear organization and the ability to choose from various types of assignments for their final project. They expressed a preference for click-through, step-by-step instructions for tutorials.

Five of the seven students participated in in-depth interviews, which revealed some common themes in their overall online learning experience: the challenge of obtaining extended time on tests; overcoming reluctance to participate in online discussions; the need for regular communication with instructors; and the need for clearly stated expectations and timely feedback.

Conclusion – Student feedback confirms best practices identified in the literature on distance learning and on special needs students. The need for clear instructor expectations, clear course organization, and frequent interaction with the professor are common to all distance learning situations, but students with special needs are particularly in need of such well-structured instruction. Librarians should always determine accessibility before selecting software and tools to be used in online instruction. Accessible online library instruction should include information about resources for students with special needs; it should provide the same content in varied formats; and it should offer students options for assignment formats. Much research remains to be done to compare students with special needs in online and face-to-face courses, and to determine factors that improve the success of students with special needs in online courses.

Commentary

This article provides a thorough review of the literature on library instruction to students with special needs, as well as a useful summary of best practices for online teaching to students with special needs and of the principles of universal design for learning (UDL). But the main contribution of the article is the empirical study of special needs students' perceptions of an online library research course, revised according to these principles and best practices. The study opens the way to new research on the effectiveness of online library instruction regarding accessibility.

However, the authors provide little information about the methods used for the

study. The questionnaire is not included and the reader does not know who administered it and how, nor the types of questions used. Regarding the follow-up interviews, no details are given about the interviewers, whether the questions were pre-tested, or how the answers were analyzed. There were only seven respondents, each with a different disability, which does not allow for generalization and limits the results obtained from the interviews. Furthermore, as the author recognizes, the respondents were self-selected and had external motivation. This does not allow for replication of the study (Koufogiannakis, Booth, & Brettle, 2006).

The author points out that there is a need for both structured and diverse online instruction – instruction that provides guidance through learning steps, but also offers a range of optional formats for learning objects and assignments. The findings are consistent with the UDL approach, and no reader can disagree with the author's conclusion that consideration of learner differences should drive all instruction, not just that addressing students with disabilities.

Regrettably, the study is confined to student perceptions of online instruction and does not attempt to measure how well the students actually did in the class. A pre-test was done (p. 23), but there is no mention of a comparison with final student achievements. The reader can only conclude that when the author affirms that universal design principles can improve distance education, she is referring to student satisfaction rather than actual performance.

Finally, one interesting contribution of this article is its suggestion that online library instruction is unique because it requires the use of complex information systems that may be especially challenging for students with disabilities. Yet the article does not dwell on the aspects of the redesigned course that included instruction on such information systems. At the same time, the article also emphasizes that many of the needs of students with disabilities are not specific to library instruction but apply to all online courses. In

fact it is striking that the interviewees' comments are often similar to those of students without a disability. Future exploration of what makes online library instruction unique or similar to online courses in other fields would be welcome.

References

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(2006). ReLIANT: Reader's guide to the Literature on Interventions Addressing the Need of education and Training. *Library and Information Research*, 30(94), 44-51. Retrieved from <http://www.lirjournal.org.uk/lir/ojs/index.php/lir/article/view/271>