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Including Student Voices in Instructional Design: Community College Students with Below-Proficient Skills Talk About IL Instruction

Abstract: First-year college students with below-proficient IL skill levels were identified through a standardized IL test. Interviews and focus groups were conducted with a subset of these students. This paper will focus on the findings of the focus groups and describe how these findings are informing the design of the intervention.

Résumé : Les étudiants universitaires de première année ayant une maîtrise de l'information inadéquate ont été identifiés au moyen d'un test normalisé sur la maîtrise de l'information. Des entrevues et des groupes de discussion se sont déroulés avec un sous-groupe de ces étudiants. Cette communication s'attarde aux résultats des groupes de discussion et décrit comment les résultats sont pris en compte dans la conception de l'intervention.

1. Introduction

“Attaining Information Literacy” is a three-year IMLS-funded project that is identifying and responding to the needs of first-year community college students with below-proficient information literacy (IL) skill levels. This project, now in its second year, involves LIS school faculty collaborating with community college librarians to develop and deliver an effective intervention for such students. Students with below-proficient IL skill levels have been identified through the use of a multiple-choice, validated test of IL skills. Interviews have been conducted with 57 students, and six focus groups have been conducted with an additional 64 students. This paper will focus on the findings of the focus groups and will describe how these findings are being used to inform the design of the intervention.

2. Background

For nearly two decades, librarians and researchers have been emphasizing the importance of information literacy skills for academic success and personal fulfillment, yet evidence suggests that many students enter college without having attained competence in information literacy (Jiao and Onwuegbuzie 1998; Massey-Burzio 1998; Maughan 2001; Seiden, Szyborski, and Norelli 1997; Valentine 1999). A study by the Educational Testing Service found that of 3000 college students and 800 high school students who took the ETS Information and Communication Technology Test, only 13 percent achieved scores that would indicate they are information literate (Foster 2006). A pilot study that included 51 first-semester students at a Research I university found that 45% scored in the below-proficient range on the Information Literacy Test, a standardized, validated test developed at James Madison University (Gross and Latham 2007). Moreover, a recent survey of nearly 900 college students found that 40 percent of them feel that they have “some gaps” in their ability to do research (Peter D. Hart Research Associates/Public Opinion Strategies 2005).

3. Theoretical Frameworks

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This project is employing three theoretical frameworks in investigating the needs of community college students with below-proficient information literacy skill levels: competency theory, the imposed query model, and the relational model of information literacy. Competency theory (Kruger and Dunning 1999) suggests that, in a given knowledge domain, people with low skill levels are unlikely to recognize their deficiencies and are also unlikely to recognize competence in others. A pilot study conducted by Gross and Latham (2007) found that competency theory applies in the domain of information literacy. The imposed query model (Gross 1995) indicates a significant distinction between self-generated queries, which are information-seeking tasks that arise from personal information needs and interests, and imposed queries, which are information-seeking tasks that are given by one party (the imposer) to another (the agent). The relational model of information literacy (Bruce 1997), rather than emphasizing attributes of information literacy, focuses instead on users' varying conceptions of and experiences with information literacy, information literacy instruction, and what may be called the "information landscape."

4. Research Questions

Expanding on what we have learned from the interviews, we have developed the following research questions related to the focus group data:

1. Do first-year community college students' conceptions of IL vary for self-generated and imposed information seeking?
2. What skills do first-year community college students see as necessary to be a competent information seeker?
3. How do first-year community college students think that the knowledge base necessary for IL is best achieved?
4. How do first-year community college students think that the skills necessary for IL are best achieved?
5. How do first-year community college students prefer to learn new material?
6. What do first-year community college students say would motivate them to attend an IL instructional session?

5. Methodology

First-year students at two community colleges were recruited to take the Information Literacy Test (ILT) (James Madison University n.d.), a computer-based, multiple-choice information literacy test developed by researchers at James Madison University (Cameron, Wise, and Lottridge 2007). The test was used to identify students with below-proficient information literacy skill levels. In spring 2009, 57 students with below-proficient skill levels were interviewed.

In fall 2009, 64 students with below-proficient skill levels were recruited to participate in six focus groups (three at each community college). The primary purpose of the focus groups was to identify the kinds of instructional strategies that students found most appealing and effective ways of communicating the availability of information literacy instruction to students.

Based on the data collected in the interviews and the focus groups, the researchers are currently developing criteria for the intervention. The intervention will then be developed, pilot tested, refined, delivered to students, and evaluated over the next year and a half.

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6. Findings

The six focus groups were recorded and the recordings were transcribed. The researchers coded the data and tabulated the results. Analysis of the data provides insights into below-proficient students' conceptions of and experiences with information seeking and information skills instructions.

Demographic data. Of the 65 students who participated in the focus groups, 37 (56.9%) were female, and 28 (43.1%) were male. A variety of majors were represented among the students, with the predominant majors being Business (18.5%), Nursing and Allied Health (13.8%), STEM (10.8%), General Studies (9.2%), Social Sciences (9.2%), and Criminal Justice (6.2%).

1. Students' perceptions of IL in imposed vs. self-generated information seeking. With both imposed and self-generated information seeking, students preferred to use the Internet and other people; the library was mentioned only in relation to imposed information seeking and even then by only 12.3% of students (and the same was true with databases). Students identified people with knowledge as preferred sources in both kinds of information seeking. With self-generated seeking, such people tended to be friends (18.5%), while in imposed seeking they tended to be professors (16.9%), tutors (9.2%), or librarians (4.6%).

2. Students' perceptions of skills necessary to be considered competent in IL. Students considered the key skills for imposed information seeking to include research (26.2%), understanding the assignment (12.3%), organization (10.8%), understanding the topic (9.2%), and writing (7.7%). They considered the key skills for self-generated information seeking to include planning (13.8%), social skills (7.7%), research (7.7%), computer skills (6.2%), and organization (6.2%).

When asked whether the skills required for imposed and self-generated information seeking were similar or different, students noted some similarities and some differences. Similarities included research (20.0%), organization (10.8%), use of similar source types (7.7%), and computer skills (7.7%). Differences included work vs. pleasure (9.2%), doing the task for someone else vs. for one's self (7.7%), having to vs. wanting to (6.2%), and use of different source types (6.2%).

3. Students' perceptions of how the knowledge base for IL is best achieved; and
4. Students' perceptions of how the skills for IL are best achieved. In general, students made no distinction between knowledge base and skills. However, they did discuss effective teaching techniques in some detail. Students like to be given the opportunity to practice new skills (29.2%), and they prefer demonstration (16.9%), real-life examples (13.8%), visual aids (13.8%), and handouts (9.2%) in instruction. In addition, they appreciate the opportunity for interaction, including receiving personal attention from the instructor (13.8%), being able to ask questions (6.2%), and doing group work (6.2%). Instructor personality was cited by a number of students as a key factor in effective instruction. In particular, students respond favorably to instructors who demonstrate a sense of humor (7.7%), enthusiasm for the material (6.2%), a caring attitude (3.1%), respect for student opinion (3.1%), and a willingness to be helpful (3.1%).

5. Students' preferences for ways of learning new material. When learning new material,

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most students prefer small classes (40.0%) or a combination of small classes and personal tutorials (23.1%). Some prefer only a personal tutorial (12.9%), while relatively few prefer online instruction (9.2%).

6. *Students' perceptions of how they would be motivated to attend in IL instructional session.* Students state that they would be motivated to attend an instructional session on information skills if they felt they needed the skills (15.4%), if the instructor had a reputation for being a good teacher (10.8%), if the class was known as fun class (6.2%), and if it offered personal benefit to them (4.6%). In addition, students would be more likely to attend a class that was relatively short in duration (6.2%), offered at different times (4.6%), and held in a convenient location (4.6%). Some students indicate they would be motivated by rewards such as food (7.7%), college credit (7.7%), or if the class were required (4.6%).

7. Significance

This project seeks to include a new dimension to the ongoing conversation about how best to ensure that students gain the information literacy skills they need to compete in the workplace, be life-long learners, and become informed citizens. By exploring student views of what constitutes information literacy and information seeking success, what place information literacy has in their lives, and what kinds of assistance and training they see as useful, this project is providing important input for the design, development, and implementation of an information skills intervention aimed at reaching students with below-proficient information literacy skills.

8. Acknowledgments

The researchers wish to thank the Institute for Museum and Library Services for supporting this work, Bonnie Armstrong and Debi Carruth for assisting with the focus groups, and the librarians at the participating community colleges.

9. References

Bruce, Christine. *The Seven Faces of Information Literacy*. Adelaide, Australia: Auslib Press, 1997.

Cameron, Lynn, Steven L. Wise, and Susan M. Lottridge. "The Development and Validation of the Information Literacy Test." *College and Research Libraries* 68 (2007): 229-236.

Foster, Andrea L. "Students Fall Short on 'Information Literacy,' Educational Testing Service's Study Finds." *The Chronicle of Higher Education*, 27 October 2006, sec. A, p. 36.

Gross, Melissa. "The Imposed Query." *RQ* 35 (1995): 236-243.

Gross, Melissa, and Don Latham. "Attaining Information Literacy: An Investigation of the Relationship Between Skill Level, Self Estimates of Skill, and Library Anxiety." *Library & Information Science Research* 29 (2007): 332-353.

James Madison University. *The Information Literacy Test*. n.d.
<http://www.jmu.edu/assessment/wm_library/ILT.pdf> (10 April 2010).

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Jiao, Qun G., and Anthony J. Onwuegbuzie. "Perfectionism and Library Anxiety Among Graduate Students." *The Journal of Academic Librarianship* 24 (1998): 365-371.

Kruger, Justin, and Dunning, David. "Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments." *Journal of Personality and Social Psychology* 77 (1999): 1121-1134.

Massey-Burzio, Virginia. "From the Other Side of the Reference Desk: A Focus Group Study." *The Journal of Academic Librarianship* 24 (1998): 208-15.

Maughan, Patricia Davitt. "Assessing Information Literacy Among Undergraduates: A Discussion of the Literature and the University of California-Berkeley Assessment Experience." *College & Research Libraries* 62 (2001): 71-85.

Peter D. Hart Research Associates/Public Opinion Strategies. *Rising to the Challenge: Are High School Graduates Prepared for College and Work? A Study of Recent High School Graduates, College Instructors, and Employers*. Washington, DC: Peter D. Hart Research Associates/Public Opinion Strategies. Achieve, Inc. 2005, <<http://www.achieve.org/node/548>> (10 April 2010).

Seiden, Peggy, Kris Szymborski, and Barbara Norelli. "Undergraduate Students in the Digital Library: Information Seeking Behavior in a Heterogeneous Environment." Paper presented at *ACRL Eighth National Conference*, April 11-14, 1997. Nashville, Tennessee. 1997, <<http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/nashville/seidenszymborski.cfm>> (10 April 2010).

Valentine, Barbara. "Students Versus the Research Paper: What Can We Learn?" Paper presented at *ACRL Ninth National Conference*, April 8-11, 1999. Detroit, Michigan. 1999, <<http://www.ala.org/ala/mgrps/divs/acrl/events/pdf/valentine99.pdf>> (10 April 2010).

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