

This is an electronic version of an article published in:

Labelle, P.R., & Nicholson, K. (2005). Student information research skills: Report on a Quebec-wide study on information literacy. *Feliciter*, 51(1), 47-49.

Student information research skills: report on a Quebec-wide study on information literacy

Patrick R. Labelle

Karen Nicholson

Information literacy teaching and practice within the curriculum improves student research and critical thinking skills, promotes lifelong learning, enhances employability, and prepares students to live as informed and responsible citizens. In an effort to better equip university students with the appropriate skills and knowledge required for them to succeed in finding, evaluating and using information effectively, academic librarians continue to work toward developing and implementing information literacy instruction programs.

If academic librarians are convinced of the need for information literacy instruction, it is through years of observing students' difficulties in conducting information research. To date, however, these observations have remained largely anecdotal. While literature relating to information literacy activities, programs and issues abounds, few studies have focused directly on the information-seeking abilities of new students.¹ The most significant research has been reported by Caravello et al. (2001),² by Seamans (2002)³ and, most notably, by Dunn (2002).⁴ In her multi-phase study, Dunn set out to determine what students actually know about finding, using and evaluating information in order to assess the effectiveness of services and instruction. In addition to these studies, Julien and Boon (2004) recently reported on the outcomes of information literacy instruction programs in three Canadian academic libraries through comparisons between pre-test, post-test and post-post-test results as well as through interviews conducted with individual students.⁵

Academic librarians widely believe that information literacy instruction is most effective when integrated into the curriculum and addressed in course objectives.⁶ In order to persuade campus colleagues likewise and to confirm the real and pressing need for this type of instruction, additional quantitative research is required. *Information Literacy: Study of Incoming First-Year Undergraduates in Quebec*⁷ is one such research project that attempted to gauge student information competence upon entering university. While contributing to the dialogue initiated at the "Information Literacy in Libraries: A National Forum" CLA Pre-Conference session held in June 2004, the following overview of this Quebec-wide study highlights noteworthy findings that will be of value to the Canadian academic library community as it continues to promote information literacy instruction.

Quebec-wide study

In Fall 2003, the Conference of Rectors and Principals of Quebec Universities (CREPUQ) published *Information Literacy: Study of Incoming First-Year Undergraduates in Quebec*, an ambitious, collaborative research project conducted by Dr. Diane Mittermeyer (Graduate School of Library and Information Studies, McGill University) and members of the CREPUQ Sub-Committee on Libraries' Working Group on Library Instruction.

The objective of the study was to determine the information research skills of incoming undergraduate students entering Quebec universities in order to provide academic libraries with reliable data to support recommendations for further incorporating information literacy within the university curriculum.

Students' knowledge of various aspects of the information research process was measured using a multiple-choice questionnaire. Respondents were surveyed on their ability to identify concepts, develop effective search strategies, understand characteristics of various document types, employ search tools efficiently to retrieve relevant results and use those results appropriately. More than 3,000 students from across Canada, about to commence their first-year of undergraduate studies at 15 Quebec universities, completed the questionnaire, representing an overall response rate of nearly 57%.

Eleven of the 20 multiple-choice questions had a success rate of 36% or less. The results show that students are unfamiliar with the structure and contents of library catalogues and fail to distinguish them from other bibliographic databases. They are unaware of the concept of controlled vocabulary tools and their usefulness in locating meaningful search results. In addition, students have difficulty using Boolean search operators to create well-designed search queries. These lacunae may have a direct impact on the quality of coursework and assignments as time spent searching for information detracts from time that could perhaps be spent more productively in reading, analyzing and using information.

Those questions in the study that focus on students' ability to interpret the information they find are more telling still: only 35.8% of students were able to identify a bibliographic citation associated with a journal article, and even fewer students, 14.9%, recognized the characteristics of a scholarly journal. Many faculty members require students to make use of scholarly, peer-reviewed journal articles in their assignments; it is questionable whether or not students are, in fact, able to locate and use these articles as necessary.

Not surprisingly, the study indicates that students frequently use the Internet to find information for their research needs. As a result, it is crucial that students be able to evaluate online information. In spite of this, only 23% of students surveyed were able to identify evaluation criteria such as currency, authority and site sponsorship that should be applied to material found on the Web.

The study also reveals that many students may be at risk of inadvertently committing plagiarism. Nearly 73% of respondents failed to identify when it is necessary to include a reference to the information source when quoting word for word or paraphrasing from it. The need to educate students about the ethical and legal aspects of information use is obvious as reported cases of plagiarism in academe are increasing each year. Many plagiarists plead ignorance. Students may hesitate to cite all sources consulted for fear their work will not appear to be original; what they fail to understand is that citing sources testifies to the breadth of their research and demonstrates good scholarly practice.

For many students, successfully negotiating the transition between high school or CEGEP and university proves challenging. Some may experience "library anxiety" as they attempt to navigate their way through the complex and intricate maze of information research in the

academic library. As it currently stands, first-year undergraduate students entering Quebec universities are ill-equipped to deal with increasingly information-intensive learning environments. In fact, the report concludes that "... a significant number of students have limited knowledge, or no knowledge, of basic elements characterizing the information research process."⁸ Therefore, it is imperative that they acquire the proper abilities needed to locate, evaluate and use information effectively in order to achieve academic success.

The findings of this study reconfirm the urgent need to address information literacy within universities throughout Quebec and across Canada. Since its publication in 2003, the report has stimulated dialogue between librarians, faculty members and university administrators, on various campuses in the province, about the role and place of information literacy instruction in higher education. Although many challenges remain before the study's recommendations can be fully achieved, *Information Literacy: Study of Incoming First-Year Undergraduates in Quebec* provides useful data that supports librarians' claims, validates years of anecdotal evidence of gaps in student information research abilities and makes an important contribution to the limited literature on the information literacy skills of incoming university students.

¹ Martha J. Whitehead and Catherine A. Quinlan, "Information Literacy in Higher Education," *Feliciter* 49, no. 1 (2003), 22-24.

² Patti S. Caravello, et al., *UCLA Library – Information Competence at UCLA: Report of a Survey Project*, Spring 2001, <http://www.library.ucla.edu/infocompetence/index_noframes.htm> (21 October, 2004).

³ Nancy H. Seamans, "Student perceptions of information literacy: insights for librarians," *Reference Services Review* 30, no. 2 (2002), 112-123.

⁴ Kathleen Dunn, "Assessing Information Literacy Skills in the California State University: A Progress Report," *Journal of Academic Librarianship* 28, no. 1 (2002), 26-35.

⁵ Heidi Julien and Stuart Boon, "Assessing Instructional Outcomes in Canadian Academic Libraries," *Library & Information Research* 26 (2004), 121-139.

⁶ Integration of information literacy into the curriculum represents one of the characteristics of "best practices" in information literacy programs. See American Library Association, *Characteristics of Programs of Information Literacy that Illustrate Best Practices: A Guideline*, 2004. <<http://www.ala.org/ala/acrl/acrlstandards/characteristics.htm>> (21 October, 2004)

⁷ Diane Mittermeyer, et al., *Information Literacy: Study of Incoming First-Year Undergraduates in Quebec*, August 2003, <http://crepuq.qc.ca/documents/bibl/formation/studies_Ang.pdf> (21 October, 2004).

⁸ Mittermeyer, p. 7.