Information Literacy from Students' Perspectives:
Final Report

Researchers:
Joan Morrison, Lead Investigator
Eve Poirier, Diane Reid, Pam Young Interviewers

Library Services – Student Life
NorQuest College

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Introduction

NorQuest College is the province of Alberta's largest comprehensive community college. The College is based in the city of Edmonton with two campuses, and has regional campuses throughout central Alberta. In the 2009-2010 academic year the College had 5,680 full load equivalent students. The most unique feature of NorQuest College is the diversity of its student population. The College has students from over 125 countries, with 60% of the student population born outside of Canada, and 21% stating Aboriginal ancestry. The population of the College is 71% female and 64% of students are over the age of 24 *(NorQuest by the Numbers).*

NorQuest Library works closely with its student population. In the 2009-2010 academic year the Library performed 80 information literacy instruction sessions and hosted 1005 classes in our two libraries. Library information literacy instructional sessions are based on the standards set out by the Association of College and Research Library (ACRL) section of the American Association of Libraries. The *Information Literacy Competency Standards for Higher Education* section on "Information Literacy Defined" claim the standards to be global in scope, applicable to "all learning environments and all levels of education." The standards are broken down into the following skills:

- Determine the extent of information needed
- Access the needed information effectively and efficiently
- Evaluate information and its sources critically

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- Incorporate selected information into one's knowledge base

- Use information effectively to accomplish a specific purpose

- Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally

In the 2009 academic year the NorQuest Library Coordinators began planning to write a strategic plan for information literacy at NorQuest and wanted to base that plan on empirical evidence gathered from NorQuest students. The Library coordinators asked: are these ACRL standards and this type of comprehensive plan the best match for the needs of NorQuest students in our unique multicultural environment? This question developed into an applied research project that focused on interviewing NorQuest students and analyzing their perceptions of information literacy (often referred to in the literature as 'IL'). The Library then used the data gathered to make informed decisions on the design of an evidence based information literacy strategy to best meet our students' needs.

Methodology:

NorQuest Applied Research Advisory Committee Research Ethics Board granted approval to the applied research project in November 2010. The researchers then solicited student volunteers from the first and second year cohorts in the Social Work diploma program, which has a multicultural focus. The Researchers did class presentations which described the research question and applied research process.

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The Researchers performed interviews with 14 students in January 2011. The interview prompts were based on previous research on perceptions of information literacy completed by Clarence Maybee (2010) and Christine Bruce (1997). In a one-on-one interview setting we asked the students to describe the following:

- Tell me a story about when you used information for school for an assignment.

- Tell me a story about when you used information for a purpose outside of school.

The decision was made to frame the question as a story-telling experience to ensure the students were relaxed and not intimidated by a formal interview process. The hope was also that the students, through their stories would share more of their perceptions about information literacy along with strategies they used. If the students had difficulty formulating their story we asked, but were not limited to, the following questions:

- Can you tell me about an assignment you did?
- How did you start? (more open than "Where did you start?")
- What challenges did you face? What did you find difficult?
- How did you know when you had enough information?
- How did you know the information was good?
- Where did you look for the information?
- Did the information you used meet your needs?
- How did you choose what information to use?
- What did you do with the information?
- Have you ever had a challenge or difficulty with information? (If two stories are success stories)

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No demographic data was collected. In the interview process and students were asked not to discuss the interviews with their classmates. Audio recordings were made of each interview and the recordings were converted into transcripts by the Library staff. Qualitative data and affective responses were coded and grouped into themes using methods described by Cresswell (2008). As we generated findings our broad theme and results were presenting to the Social Work students to cross-check and confirm our analysis of the interview transcripts.

Observations:

Analysis of interview transcripts show that the ACRL *Information Literacy Competency Standards* were used by students, for both their academic and personal research. The students described framing their question, finding and evaluating information, using citation rules, using information to accomplish a specific purpose, and incorporating new information into their body of knowledge. The students also gave their affective responses to working through the research process; they described feeling confident, intimidated, hesitant, and most frequently frustrated. The students described the services they valued, and through the course of the interviews the Researchers found that the students were unaware of several key Library services and resources. We found that the ACRL *Standards* are applicable to NorQuest students, but that Library services need to be focused on our students' unique requirements and concentrated on the skills that are generating the most frustration.

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When students tried to determine the extent of their information need they often framed their research question based on the requirements of the essay assignment. Social Work students usually research topics in psychology or the social sciences, looking at Aboriginal or multicultural groups, or marginalized populations. The students began their research work with very specific objectives. Students described researching for essays where their instructors required that students must use a minimum of 5 references from current, Canadian, academic journals to produce a 10-12 page essay.

Students expressed frustration when they searched for the information they needed. They struggled through the search process using NorQuest Library databases, and described having more success searching on the open internet and in print books. Students preferred information they had gathered through personal interactions, conversations and interviews for their personal or academic information needs. One on one, person to person interaction is highly valued.

Students described confidence in their ability to evaluate information. They felt that they could recognize bias or irrelevant information. The students focused on incorporating information into their knowledge base and expressing that information in their required essays. When asked, most students described receiving good grades for their academic research work.

The skill of using information effectively to accomplish a specific purpose is further described in the ACRL standards as using new and prior information, reflecting on past successes, failures, and finding alternative strategies. The students we interviewed frequently spoke proudly of how they are self-taught, learning through the

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labour intensive and sometimes frustrating method of trial and error. Any Library plans focusing on using information effectively must be respectful of student self-identity.

The Library team had initially expected to hear a lot of student frustration around the ethical use of information and proper citing of sources using the rules set out in the Publication Manual of the American Psychological Association (APA). Analysis of the entire cohort of students' interview transcripts revealed that this was rarely discussed and is not considered a significant issue in the analysis of our results.

Recommendations:

The theme most articulated by students was their frustration with database searching, which is required in their research essay writing assignments. They were not sure which database was best to use, and did not have specific search strategies. Some students understood that they needed to use specific search terms, but were not sure how to proceed. They found database searching to be complicated and time consuming. Students described finding databases more difficult to use than print books or open Internet searching using Google. Students were hesitant to ask for library assistance with their database searching; when students did get assistance it usually came from their classmates.

The Library has several strategies to address student frustration with finding information. The Librarians will actively advocate for all classes that have a research component to schedule an information literacy session. In the past these sessions were not mandatory in the Social Work program and were planned sporadically by individual

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Social Work instructors. We recommend that information literacy skills be scheduled into course curriculum and its inclusion be supported by the academic division and its Dean and Chairs.

Students in the Social Work program described struggling with the research process and were frustrated with the lack of appropriate library instruction they had received. The students were new to the research process and described that they had little previous experience using databases or handling required scholarly resources. Several students recounted working through a time intensive process of researching alone or with the help of their classmates. Some students received an in-class demonstration of database search strategies provided by a Librarian, but the demonstration was described as being too fast. The students preferred methods of instruction are hands-on, in small groups, or one on one. Face to face personal interactions are highly valued. Students also expressed that instruction on database use came too late in their academic term.

As a result of the feedback on library instruction NorQuest Library will work with the College's instructional divisions to place information literacy instruction in appropriate locations within our program offerings. We will advocate with the Faculty of Foundational and Intercultural Studies to have information literacy instruction incorporated into the curriculum for Upgrading 30 level students in Social Studies and English courses. This strategy would help prepare Upgrading students to transition into post-secondary level courses. Post-secondary programs need to have information

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literacy instruction sessions in the first term of all their research intensive diploma level programs.

Students describe having difficulty finding Canadian research on a wide range of social issues. They also have difficulty finding research on Aboriginal peoples in Canada. Students' assignments require that the information be both Canadian and current. Students often found that their results contain research from Australia – as the subject heading 'Aboriginal Australians' is used in databases and the students are searching with the term 'Aboriginal,' a term more frequently used in our College. The students would most likely get better results using the older term 'Indians of North America' which is still an extensively used official Library of Congress subject heading. Students struggle to select an appropriate term and this reflects a wider debate around terminology for First Nations, Métis,and Inuit peoples (Grandish 11).

The Library will continue to focus on purchasing and providing access to Canadian resources. NorQuest Library added the *Ebrary Canadian Public Policy Collection* of 18,000 Canadian reports and government documents in August of 2011. The Librarians will continue to create instructional tools and use research strategies that focus on directing students to Canadian resources.

When students were searching for information they described several challenges. Students described how they started by finding resources on their own, independent of Library help. They described a pride in their independence and would consult with their classmates as a first strategy when they did not find the type of information they needed. Students did not come to the Library reference desk to ask for

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help. In the interviews student said that they did not know that help was available or they did not ask for help because they felt the Library staff were too busy and were only available for 'other students.' Students also described some dissatisfaction with the help they had received from Library staff, the interaction was too fast, or the resulting resources did not meet their needs. These interactions occurred while the students were experiencing their own stress around their academic deadlines and balancing those deadlines with personal challenges.

Throughout the interview transcripts students struggled to describe the research activities they perform. They were not familiar with the standard databases used in their discipline. They did not have the terminology to describe their searches and search terms and did not explore alternative search terms. Students described using Google, but only in the most simple ways i.e. "I Googled" – which often produced unsatisfactory results. They were often frustrated by the results of their online searches – either using Google or databases, but did not know alternate strategies to improve their results. This question of students' use of terminology needs to be analyzed in more detail and will be considered as a future research project. The transcripts would require a second set of analyses to find out what students were attempting to describe and unable to articulate. In the interim the Library will be investigating ways to improve students' discipline specific research vocabulary.

In the NorQuest Library 2011-12 Operational Plan we initiated 5 teams, two of which, the Orientation Review Working Group and the Information Literacy Working Group, will investigate strategies to remove real and perceived barriers to students

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getting the Library help they need. At the start of the 2011-12 fall term the Library staff completed an intensive 3 week promotion to focus our attention on student service and to promote our program specific online research guides.

The Library's Information Literacy Working Group is continuing to plan activities that will resolve student challenges that came to light through working on this applied research project. The entire Library team will continue a student focused service strategy, now known by the acronym NODWOD for 'no-off-desk-work-on-desk' during the first 2 weeks of each new term. By focusing on students, not paperwork or other job related tasks we want to send the message to students that they are the Library's top priority, that we are welcoming and helpful and ready to assist them. This will be combined with a beginning of term promotion of subject specific Library Research Guides and handouts given directly to students whom we approach during the start of term. These promotions directly resulted from our research where students describe being very frustrated with database searching, which is required in their research essay writing assignments and their hesitation to ask for Library research assistance.

A series of other promotions have resulted from our research, these include:

- promoting ebooks and streaming video – to ensure students can find our newest resources

- promoting the new *Canadian Public Policy Collection* for Canadian and Aboriginal content and

- a promotion to define basic research terminology: scholarly and peer-reviewed journals

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Finally, the Library department has a member on the newly formed College-Wide
Learning Outcomes Committee working with the specific goal of including information
literacy skills in the new list of College-Wide Learning Outcomes.

Conclusions:

      This applied research project has given the Library team the evidence to
advocate on behalf of students to ensure that information literacy standards are
included in College-Wide Learning Outcomes, and program curriculums. The results
have been presented to the College's Academic Council showing the gap between
program assignment requirements and student skills.   Since the dissemination of these
research results, information literacy has appeared in the NorQuest College
Comprehensive Institutional Plan 2011 – 2012. Information literacy is gradually
becoming part of the day to day language of NorQuest College for both Foundational
and Post Secondary programs.

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