

ONTARIO SCHOOL LIBRARY IMPACT PROJECT

MEASURING THE INFORMATION LITERACY SKILLS GAP

School and academic library professionals in Ontario have observed **significant gaps in the information literacy skills of high school students transitioning to post-secondary education.** With the increasing reliance on e-learning and online resources, ensuring that all students have well-developed, practical information literacy skills is critical to their college and university success and career transition.

To better understand these gaps and how to address them, the Ontario Library Association (OLA) initiated the Ontario School Library Impact Project (OSLIP) to investigate the impact of school libraries on the information literacy skills and abilities of students entering post-secondary education in Ontario.

KEY FINDINGS

- Access to school libraries and qualified school library professionals is inconsistent across the province, with rural students particularly likely to have no access to these vital learning resources.
- Most Ontario students surveyed had no access to information literacy skills instruction from a teacher-librarian in their critical final year of high school.
- First-year university students lack the information literacy skills needed to meet the demands of college and university course assignments.
- Investments in school libraries and in school librarians make a positive and significant difference in students' academic achievement.

WHAT IS INFORMATION LITERACY?

Information literacy refers to multiple competencies that allow students to find, critically assess, process and create information.

This research was designed to examine the 12 key information literacy skills as defined by the Ontario Model of Discovery and Inquiry**.

**See page 23 of [Together for Learning](#), for the Ontario Model of Discovery and Inquiry

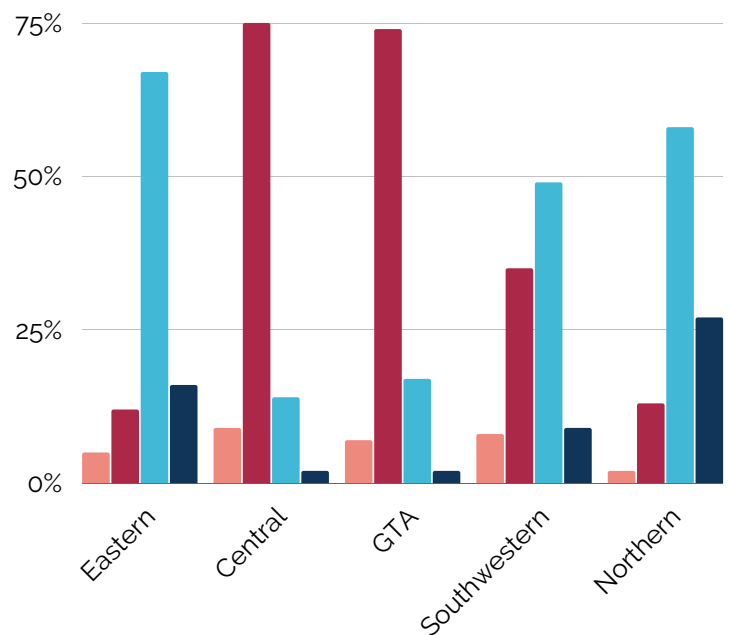
ACCESS TO SCHOOL LIBRARIES IN ONTARIO

Provincial data shows that access to school libraries and qualified school library instruction is extremely uneven across the province.

ONTARIO SCHOOL LIBRARIES

The active presence and participation of qualified librarians and the form and content of their classroom support are what make the most significant differences. Smith (2013) found that "curricular mandates are insufficient to ensure information literacy (IL) is incorporated into instruction and teachers are ill-prepared to instruct IL effectively" (p. 216).

Across the three university groups who participated in this research study, **32 of 112 respondents reported that they had received instruction from a teacher-librarian in their last year of high school.**



- Both teacher-librarians and library technicians
- Teacher-librarians only
- Library technicians only
- Neither teacher-librarians nor library technicians

Data on elementary school libraries obtained from People for Education (2019). Regional data on secondary school libraries is unavailable.

RESEARCH DESIGN

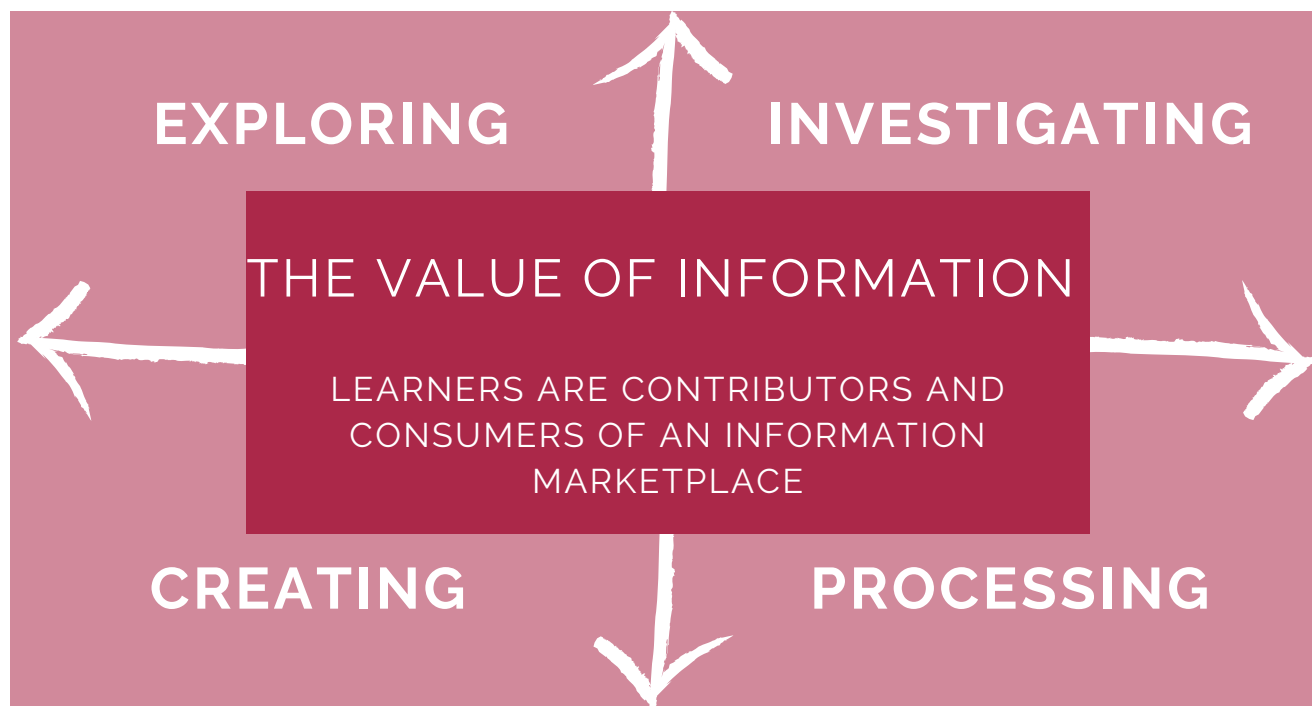
METHOD

The OSLIP study used a mixed methods approach, including:

- Literature review;
- Questionnaires for first-year students at three Ontario universities; and;
- Interviews of first-year university students.

This research was designed to examine the 12 key information literacy skills as defined by the Ontario Ministry of Education's Model of Discovery and Inquiry (2007). The ACRL Framework for Information Literacy for Higher Education (2015), developed by the Association of College and Research Librarians (ACRL), also informed the study design and analysis, since it is the framework used most commonly among academic librarians.

The Figure below identifies the four key areas of activity that are reflected in both inquiry frameworks. Questions were mapped to these four quadrants for analysis.



LITERATURE REVIEW

30 YEARS OF RESEARCH

Thirty years of international research has established that the active presence and participation of **qualified librarians make a positive and significant difference in student academic achievement.**

KEY FINDINGS

- High-quality library programs and librarians who share their expertise make a positive impact on student learning, on student graduation rates and on students' mastery of academic standards.
- Investments in school libraries and in school librarians make a difference in student achievement.
- Many first-year university students exhibit academic skill deficiencies. This remains unchanged for fourth-year students.
- Academic libraries and librarians often are not prepared to or able to address the needs of university students with academic skill deficiencies.



**“When schools have high-quality library programs and librarians who share their expertise with the entire school community, student achievement gets a boost”
(Lance & Kachel, 2018, p. 15).**

Lance, K. C., & Kachel, D. E. (2018). Why school librarians matter: What years of research tell us. *Phi Delta Kappan*, 99(7), 15-20. Retrieved from <http://www.kappanonline.org/lance-kachel-school-librarians-matter-years-research/>

SELF-ASSESSMENT QUESTIONNAIRE

KEY FINDINGS

- There was no meaningful differences in the respondents' self-assessments, regardless of the information literacy instruction they had received. Almost all responses fell between 5 and 6 on a scale of 1-7, (1 = "Strongly Disagree"; 7 = "Strongly Agree.")
- In open-ended questions, respondents who had benefited from instruction from a teacher-librarian in their last year of high school made more positive comments about their library experiences. They also more frequently mentioned learning core skills related to research, writing and citation.

RESPONDENTS

Fall survey respondents n= 165
Winter survey respondents n= 31

METHOD

OSLIP questionnaires were administered online to first-year undergraduate students at the end of the Fall and the Winter terms of the 2019-2020 academic year.

QUESTIONNAIRE DESIGN

IL Skill self-assessment

Respondents rated their competence in relation to 12 IL skills identified in the Ontario model.

High School Library experience

Respondents shared their high school library experiences from a personal perspective.

Comparison between High School and University

Respondents commented upon and compared their experiences with library staff and resources during high school and during their first year at university (Winter 2020 only).

INTERVIEWS

METHOD

At the end of the Winter term, four first-year students from the University of Toronto were individually interviewed. The interviewers used an interview guide based on that used by Allison Head and her colleagues from Project Information Literacy in the United States.

KEY FINDINGS

- All respondents noted differences in expectations of instructors between high school and university related to the types of sources supporting their work.
- The research and selection strategies applied in senior high school instruction have less application and relevance in a university's information environment, where the library's vast digital and physical collections easily overwhelm a novice searcher.
- Students noted the value of assistance from various human intermediaries in both high school and university contexts, including their teachers and professors, teaching assistants, and library staff.

“

...in high school years. There definitely wasn't a library database, but I usually started with Wikipedia and then see if there is a fact or topic that is going to help me with my assignment.”
- Student Interviewed

RESPONDENTS

Four first-year students were identified through convenience sampling by academic librarians at the University of Toronto.

KEY FINDINGS & RECOMMENDATIONS

SCHOOL LIBRARIES IMPACT STUDENT ACHIEVEMENT

Thirty years of international research has established that **the active presence and participation of qualified librarians makes a positive and significant difference in student academic achievement.** Most Ontario students surveyed had no access to information literacy skills instruction from a teacher-librarian in their critical final year of high school.



ENSURE THAT LIBRARY PROFESSIONALS LEAD

All students must have access to **school library professionals** to help develop the information literacy skills they'll need after they graduate. Ensure that school library professionals are **empowered in all Ontario schools to lead the school strategy on information literacy.**

INFORMATION OVERLOAD

Students interviewed reported **feeling overwhelmed by the library's vast digital and physical collections,** as well as differences in instructor expectations between high school and university research requirements.



DEVELOP STUDENT RESEARCH SKILLS

To adequately prepare secondary students for the college and university environment, **high schools must provide access to and training on a broad range of quality databases and other information sources.**

ALIGNED INSTRUCTION

First-year students lack the information literacy skills needed to meet the demands of college and university course assignments. **Students noted that the research and selection strategies applied in senior high school are not as sophisticated as what is expected in a university environment.** Academic libraries and librarians often are not adequately prepared or resourced to address academic skill deficiencies.



INCREASE COLLABORATION

Increase **collaboration between secondary school library professionals and academic library professionals** to better support students bridging the gap.