Partners in learning: Building an information literate institution

BUILDING AN INFORMATION LITERATE INSTITUTION
BY BILL JOHNSTON AND SHEILA WEBBER

A lot has been done on Information Literacy (IL) in higher education worldwide, over several decades. However, the task of fully developing IL within each college and university and across all aspects of institutional activity remains incomplete. The organizational development task is formidable but should not be shirked given the importance of IL to education, research, graduate employability, and a host of other key missions. The pivotal importance of IL has been highlighted in the recent UNESCO (2013) resolution on Media and Information Literacy.

We have developed the concept of the Information Literate University (ILU: Johnston and Webber, 2003) over the past decade as a strategic model to help colleges and universities to meet the socioeconomic challenges within an emergent global information culture. Our vision of the ILU requires everyone in the university to become information literate whether administrators, students, researchers, librarians, or faculty.

Management for information literacy implies rethinking internal communication and structures. It also means greater ability to function as a knowledge-creating organization and to develop a more creative response to an increasingly complex external environment. The ILU concept is grounded by the reality of progress in present day institutions, their organizational development, and the evolution of their relationships with the wider community. The orientation is forward looking, treating IL initiatives as anticipatory actions designed to better fit the university for its purposes in the rest of the 21st century.

In its Strategic Plan 2010-2015, Okanagan College identifies the key directions of Engagement, Learning and Teaching, Student Transition, Collaboration and Partnership, and Sustainability. We will focus on one, Engagement, to elaborate our approach.

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References

In turn, staff and faculty need development and support from college administration, human resources, and the executive level so that an information literate approach to curriculum development is resourced, fostered, and rewarded. An ILU is also sensitive to the changing needs of its communities, proactive at finding out about their needs, effective at engaging them as partners, open and accessible as a knowledge organization.

A college does not become information literate by accident. It requires conscious organizational development, addressing IL as a strategic issue and involving everyone within the college (staff, faculty and students) as partners in defining a way forward to a successful information literate future. This is a worthwhile task for a college which aims to transform lives and communities.

* Image provided by authors Johnston and Webber

* Contributing authors: Bill Johnston is an Honorary Research Fellow, Centre for Lifelong Learning, University of Strathclyde, Scotland and Sheila Webber is a Senior Lecturer & Director of the Centre for Information Literacy Research, Information School, The University of Sheffield.

www.okanagan.bc.ca/ilt
In 1974 the term “information literacy” (IL) was first coined by IL pioneer Paul G. Zurkowski. According to Zurkowski an “information literate individual is anyone who has learned to use a wide range of information sources in order to solve problems at work and in his or her daily life” (Bell & Kelt, 2013). Forty years later Zurkowski’s definition is still valid yet has expanded to encompass a wide landscape of IL developments interwoven with an array of emerging technologies where competence is required to succeed in society—in all levels of education, in the workplace and as lifelong learners.

IL has been defined by the Association of College and Research Libraries (ACRL) as a set of abilities requiring individuals to “recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information” (ACRL, 2000). The ACRL suggests that IL forms the basis for lifelong learning and is “common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning” (ACRL, 2000).

UNESCO’s definition of IL in the Alexander Proclamation (2005) “takes a broader view that goes beyond learning, stating that: ‘IL empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals. It is a basic human right in a digital world and promotes social inclusion in all nations’” (Secker & Coonan, 2011). Johnston and Webber define IL as “the adoption of appropriate information behaviour to identify, through whatever channel or medium, information well fitted to information needs, leading to wise and ethical use of information in society” (2003).

In 2000 the ACRL adopted the Information Literacy Competency Standards for Higher Education which has become a key framework for teaching IL skills by academic librarians in North America.

The *ACRL Standards are “the defacto definition of information literacy” (Bell, 2013) and are comprised of the following five core competencies where the information literate student:

1) Determines the nature and extent of the information needed.
2) Accesses needed information effectively and efficiently.
3) Evaluates information and its sources critically & incorporates selected information into his or her knowledge base and value system.
4) Individually or as a member of a group, uses information effectively to accomplish a specific purpose.
5) Understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally. (ACRL, 2000).

This group of standards, although currently under review, has become one of “the most essential document[s], related to the emergence of [IL] as a recognized learning outcome at many institutions of higher education” (Bell, 2013). The ACRL Board of Directors have cited that the recent rethinking and reframing of the standards has been instigated by the “emerging models of [IL], recognizing the development of multiple new literacies and the need to provide a stronger continuum of literacy from K-16” (ACRL Insider, 2013).

**Being information literate means “having the ability to access representations of meaning, generally as language in the form of texts, but also in voice, images, performance and meaningful objects...” (Hepworth & Walton, 2009).**

IL standards or frameworks are the underpin of information literacy programs and assist educators in the delivery of IL skills to learners. The ACRL Standards join many other IL models, frameworks and projects from around the world such as:

- SCONUL: The Seven Pillars (The UK)
- ANCIL: A New Curriculum for IL (UK)
- ANZIII: Australian New Zealand IL Framework
- Six Frames of IL for Education (Australian)
- National IL Framework Scotland
- Welsh Information Literacy Project & The Information Literacy Framework for Wales

**References**


*ACRL released on February 20, 2014 the first draft of a revised framework for information literacy in higher education, to replace the 2000 ACRL’s Competency Standards. The draft Framework for Information Literacy for Higher Education may be found at [http://acrl.ala.org/standards/?page_id=133](http://acrl.ala.org/standards/?page_id=133)
METALITERACY: ADVANCING LEARNING AFTER LITERACY
BY TRUDI E. JACOBSON AND THOMAS P. MACKEY*

In the years since the Association of College and Research Libraries Information Literacy Standards for Higher Education were adopted in 2000, the changes in the information environment, in our students, and in modes of learning have been dramatic. These iconic standards are showing their age. Frustrated by omissions in the standards, we introduced a new model called “metaliteracy” (Mackey and Jacobson, 2011) and have continued to develop this framework through our own work and that of a Metaliteracy Learning Collaborative. This partnership allowed us to expand our original learning objectives, and embark on the development of a new badge system. In fall 2013 we facilitated a Metaliteracy MOOC as a collaborative venture between our institutions (http://metaliteracy.cdprojects.com).

Metaliteracy: Reinventing Information Literacy to Empower Learners (forthcoming spring 2014) includes this definition:

Metaliteracy expands the scope of traditional information skills (determine, access, locate, understand, produce, and use information) to include the collaborative production and sharing of information in participatory digital environments (collaborate, produce, and share). This approach requires an ongoing adaptation to emerging technologies and an understanding of the critical thinking and reflection required to engage in these spaces as producers, collaborators, and distributors. (Mackey and Jacobson, 2014)

At a recent metaliteracy conference, Richard Fogarty, a historian from the University at Albany, mentioned that the meaning of the Greek word meta is “after” unlike its current English usage. He argued that metaliteracy then is what takes place after literacy, since traditional definitions of literacy focus on reading and writing and metaliteracy argues for an expanded conception of both literacy and information literacy. In Metaliteracy we also trace the origins of meta and examine the postmodern meanings appropriate for today’s de-centered and collaborative learning environments. This new prism for understanding the role of metaliteracy opens opportunities for disciplinary and library faculty members to collaborate on the development of metaliterate learners.

Metaliteracy promotes a very different approach that needs to be present in the teaching of both groups. Students rarely see themselves as producers of information, only as consumers; even though they may be very creative with emerging technologies outside of school. In many cases, they have only produced papers meant solely for the eyes of their instructors. Writing for a broader audience, and working in collaboration with others, requires a new set of abilities. Metaliteracy, unlike information literacy, also encourages students to reflect in metacognitive ways about their own roles in our society.

Metaliteracy has four learning goals, each with its own set of objectives:
1. Evaluate content critically including dynamic, online content that changes and evolves, such as article preprints, blogs, and wikis
2. Understand personal privacy, information ethics, and intellectual property issues in changing technology environments
3. Share information and collaborate in a variety of participatory environments
4. Demonstrate ability to connect learning and research strategies with lifelong academic, and professional goals (http://metaliteracy.org/learning-objectives/)

Metaliteracy is empowering because it provides a new way to think beyond the traditional standards to envision a future of pedagogical possibilities. We have applied these concepts with learners and colleagues in the classroom and in projects such our blog, badging system, and MOOC. We welcome conversation about metaliteracy, and participation in developing it further. Please join us at metaliteracy.org

References

*Contributing authors: Trudi E. Jacobson, Distinguished Librarian, Head, Information Literacy Department, University at Albany tjacobson@albany.edu
Thomas P. Mackey, Dean, Center for Distance Learning, SUNY Empire State College Tom.Mackey@esc.edu

*Image provided by authors Mackey & Jacobson

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The United States Forum on Information Literacy defines information literacy as “the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand” (United States National Forum on Information Literacy, 2014). Like many definitions, this has grown to include skills needed to navigate the digital world as well as the non-digital world. All four actions that pertain to information literacy—identifying, locating, evaluating, and using information—are common in the field of education technology. When building an online course, for example, deciding what resource to use is one important activity, especially when there are many sources of such information.

In this short article, one emerging topic in education technology—open educational resources—will be defined and its close relationship to information literacy will be described.

Open Educational Resources (OER) can be defined as “materials used to support education that may be freely accessed, reused, modified, and shared by anyone” (Downes, 2011). While still in the adoption stage, the use of OER is slowly gaining momentum.

One significant advantage of OER is that there is no cost to either the professor or the students. As it relates to information literacy, OER need to be identified (does an OER exist in this area?), located (if so, where is it?), and evaluated (is this resource of good quality?).

It is often a challenge to locate OER but with the advent of some repositories such as OpenStax College and our very own Open BC Campus, it is easier to both locate and evaluate informational resources that could be used in a college course. Both sites include peer reviews of OER to help with evaluation. It should be noted that OER can include articles or e-texts but also lesson plans, audio tracks, multimedia, or any other type of learning material.

References


For years, the Whatcom Community College (WCC) Library has been looking for ways to ensure that all students attending WCC are familiar with Information Literacy. Our Library Information Literacy Mission Statement states “Information literacy instruction is a primary mission of the Library. We conduct classes customized for specific disciplines; provide one-on-one consultation at the reference desk; and provide a suite of tutorials through our website.”

Reaching every student, however, is an ambitious undertaking. We often spoke of our efforts as the “shotgun approach” to IL instruction. Without a campus-wide initiative, we had no systematic approach to ensure that every student from WCC had some exposure to Information Literacy (not that everyone doesn’t use IL competencies when they use information).

The opportunity to adopt a campus-wide system of tracking Information Literacy in the curriculum (at the point of need) came with the adoption of our new WCC Core Learning Abilities. Core learning abilities (CLA) are “overarching skills that are emphasized throughout many courses in all programs at WCC; they define the skills the college expects its students to develop by the time they graduate.” Perfect.

The work of adopting the college’s five new CLAs was done by the Outcomes Assessment Committee (OAC). The OAC is overseen by the Office of Assessment and Institutional Research. As the place of origin indicates, the college identified the CLAs as skills that instructors use in their curriculum and are measured in student success.

The first year after the CLAs were approved (2012-2013), the OAC finalized a set of preliminary rubrics, including indicators and examples, for each CLA. The next step was to create a curriculum map, assigning each discipline a CLA to measure and a year to measure it. In the winter of that year, the library offered a four-session faculty workshop on Information Literacy: how to identify the competencies, how to recognize it in their existing curriculum, how to add it to their curriculum (at the point of need), and how to assess it.

The following year (2013-2014), Information Literacy as a CLA was chosen as the first CLA to be used and assessed in the classroom. With the curriculum map in place and the IL scoring rubric completed, the college assigned the first cohort the task of identifying, using, and measuring Information Literacy in their classrooms. Hurray!

WCC is now in the process of embedding IL instruction into curriculum campus-wide. We have a system of assessment in place that the library can use to measure student success in IL competencies. The expected rush of faculty reaching out to the library to get advice on embedding IL into their curriculum has not happened. I see that as a good thing. Professors at WCC have Information Literacy on their radar. We are looking forward to using the data from the first cohort and will soon be mapping our next plan of attack for IL in the classroom!

The IL report, rubric, curriculum map and faculty presentation ppts can all be found @ http://faculty.whatcom.ctc.edu/InstResearch/IR/DirectIndicatorsCollegeOutcomes/CLAHome/InformationLiteracy/InformationLiteracy.html

*Contributing author Kiki Tommila is an Associate Professor, Information Literacy, Whatcom Community College, Bellingham, Washington.

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part of our key performance indicators for the College. As well, the results from individual questions are really interesting. For example, the score for the question “Discussed ideas from your readings or classes with others outside of class” was the highest (discussed most often) compared to the other Canadian colleges. It is interesting to see our strengths and also where we could improve.

Rob: So, where do we improve?
Jan: (laughs) Well, everywhere, I suppose.

But our scores were in line generally with other colleges. Nova Scotia Community College leads many of the benchmark question scores, though, so we could look at improving in comparison with them.

Rob: How do we find out more about the results?
Jan: The report that was sent to the board is posted internally on the Reports tab in myOkanagan under surveys. The frequency and means of the survey questions are on the Institutional Research website above. And the benchmark scores are also available from the ccsse.org website, along with the survey instrument and a lot of other information. If ILT members have more questions, they can contact me directly at jpbrien@okanagan.bc.ca

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In modern practice it is expected that health care providers use up-to-date evidence-based practice (EBP) in the treatment of patients. Evidence-based practice is explicitly linked to information literacy skills; the ability to access and evaluate current research information is critical in health care professions (Boruff & Thomas, 2011). We have a responsibility to educate graduates not only to enter practice, but to have the skills to progress in their careers in a constantly evolving health care system.

Therapist Assistant students progressively build their information literacy skills throughout their two-year program. Michelle Ward collaborates with instructors by presenting a lecture/workshop series in a first-term class that targets an introduction to research skills including accessing library databases and the development of information literacy skills. There is a subsequent workshop in the second term supporting an instructor’s journal article research assignment. In the second year, the students continue to advance their information literacy skills, which culminates in a collaborative initiative in the final term that empowers graduates to be critical consumers of research information and to be well-informed of how to access current research information as alumni. For example, following an introduction to critiquing research, students are given a selected article to critique the individual sections in groups, and then present their opinions to the whole class. For follow-up, each student selects and critiques an article of clinical importance to them for an individual take-home assignment.

Students are fortunate to have this support in developing their EBP and information literacy skills throughout their college program. In our latest initiative to the graduating second year class, Michelle presents a unique toolkit of strategies on how to access current rehabilitation research in varying contexts practitioners may find themselves. Graduates are encouraged to sustain contact with OC library resources and librarians by taking advantage of alumni privileges available at each of OC’s campus libraries. Therapist Assistant liaison librarian Anne Cossentine maintains a program-customized LibGuide to which the students work in library sessions and which provides students with reference points to be independent and self-directed in their research practices. (http://libguides.okanagan.bc.ca/tad)

Students are refreshed on their LibGuide, which remains accessible to them on the library webpage, and on locating research references via the library’s OCoPus search engine. If employed by, or partnering with, health authorities, graduates should seek out those authorities’ library resources plus the in-person services of librarians and via their resource webpages. In remote locations, public librarians can support professionals in research and in keeping their information literacy skills honed. Building information networks with allied professionals such as librarians and colleagues is a key strategy in EBP. We also highlight open-access evidence-based portals and clinical research databases, reputable free medical databases, governmental, health-professional association, and research agency websites. All of these resources are detailed under the Alumni tab of the Therapist Assistant LibGuide. The authors would be pleased to be contacted to discuss this initiative further if you wish.

References

We have a responsibility to educate graduates not only to enter practice, but to have the skills to progress in their careers in a constantly evolving health care system.
and lifelong learners. In the September 2012-August 2013 academic year, 5,918 students in 281 classes received research process and skills instruction by eight OC librarians across four campuses.

In the fall of 2009, the Library Department and the English Department launched a pilot project that formally included embedding IL wording into all first-year English course syllabi and scheduling research instruction into all first-year English course timetables. In 2010 the pilot project, referred to as CILRI (Course Integrated Library Research Instruction), was reviewed and accepted by both the English Department and the Library. CILRI is now delivered as an ongoing program on all four campuses and integrates librarian-led research process skills into all first year English courses in conjunction with research-based projects. In 2011 CTCL (Community and Technical College Libraries) Innovation Achievement Award was awarded to the librarians of Okanagan College Library for the development and implementation of CILRI stating that “[w]hile the primary achievement of CILRI is the expansion of instructional opportunities for students to develop research and critical thinking skills, one of CILRI’s additional benefits is the strengthening of relationships between librarians and teaching faculty …[and] because of CILRI, the Library is now better placed to be a full partner in the teaching and learning role of the College (Canadian Library Association, 2011).”

References

THE EVOLUTION OF INFORMATION LITERACY AT OKANAGAN COLLEGE: FROM STUDENT TO INSTRUCTOR

Okanagan College was a different place 20 years ago when I spent my days shuffling through its beige corridors as a wide-eyed student negotiating the various challenges of a first-year course-load. Many of the differences between OUC then and OC now are superficial in nature—OUC had a smaller, less developed campus with fewer buildings, an old-fashioned sign and, of course, a different name—but other variances are more subtle. The numerous library orientations that I experienced during the first week of every term fell into this latter, less obvious category.

Back in the “olden days,” as the expression goes, technology was a bud of its present-day bloom. The library at the Kalamalka campus had a handful of hulking computers, but they were unwieldy for anything but the most rudimentary tasks. The Internet was a whisper among a sub-culture of “techies” with the IT acumen to know what was to come, but for the rest of us, the easiest way to find a book was to ask a librarian to lead us to it. Needless to say, this reliance created a need for large-scale lessons in information literacy (IL) (if the term even existed back then) which took the form of a library orientation for each class in the term’s first week or two.

The orientations produced instant results. I came away knowing how to look up a book at a computer station, which then gave me the confidence to delve into the stacks to locate it. I don’t recall being able to request books from other campuses, but I’m sure that the capability existed. Thanks to the librarian’s expert tutelage (and let’s be honest, the repetition didn’t hurt) I became informationally literate. The problem was that I wouldn’t be tasked with putting my newly acquired skillset into practice for another six or eight weeks, when I’d need to start conducting research for my term papers. The knowledge gradually faded into the oblivion of disuse, so when I marched into the library in late October to start compiling secondary sources, I was back at square one—being led to a book by an infinitely patient librarian.

Two decades later, I find myself seated at the front of the class, scheduling library orientations for students who have access to the world’s e-books in their pocket. Experts say that our attention spans have decreased. I don’t know if this is the case, or if they’ve just evolved to allow for multitasking, but I know one thing: Today’s students learn best in “real time.” They can’t learn how to use the databases in September and then be expected to realize the knowledge in November. If the information went in one ear and out the other for me 20 years ago, it doesn’t even make it past the earlobe for modern students—unless they get it when they need it. This is why I’m a huge supporter of Course-Integrated Library Research Instruction (CILRI), and why I schedule library orientations on the same day that I brief my students on the term paper.

The how of IL might’ve changed, but the what and why are the same as ever. Students need to be literate in information retrieval because that’s what learning is all about—expanding the horizons of personal knowledge. Fortunately for students, IL is keeping pace with their evolution.

“[I]nformation literacy should be transformational for the learner, changing their attitude, behaviour, outlook, and even their world view” (Secker & Coonan).

“With its focus on critical thinking and reasoning, information literacy is vital to students’ ability to learn while enrolled at Okanagan College and throughout their working life” (Okanagan College Library Department, 2013). Information literacy transforms lives: Students acquire research process skills, engage with their research, have conversations with their research, and ultimately create new information in the process.

Connect with your subject liaison librarian at: http://www.okanagan.bc.ca/Student_Services/students/library/about/contact/librarians/ liaison.html

Today’s students learn best in “real time.”

www.okanagan.bc.ca/ilt
Recently I decided to tackle research skills in my Political Science classes head-on by helping students to ‘walk through’ the research process throughout the term, from the initial outline to the final genuine article.

**LESSONS LEARNED AT RESEARCH BOOTCAMP: STUDENTS & INFORMATION LITERACY**

**BY DR. ROSALIND WARNER, ILT FELLOW FOR ARTS**

**General Principles:**
- Break down the essay-writing process into stages: outline, research journal, first draft, and final draft.
- Provide a skeletal outline and allow students to ‘fill in’ the necessary information as they gather it.
- Offer inspiration, guidance, warnings, encouragement, & information in low-stakes ways.
- Assume no or very little previous knowledge of how to write an academic essay or prepare research.

**Learners...**
- Want to know the purpose of their assignment, not just the requirements.
- May give up on searches that don’t solve their problem or have too many ‘rabbit trails’.
- Prefer information ‘on-demand’, when they are trying to solve a specific problem in the moment want to strike off on their own if need be.
- Dislike having to learn the ‘nuts and bolts’ of citation styles during the writing process, they put it off until writing is done.
- Often don’t see the connection between key words and search results.

**To help...**
- Discuss the audience, type of project, and its context within the discipline under study.
- Link searches directly with specific problems needing to be solved.
- Explain reasons for learners to seek and accept help.
- Point learners to resources [like libguides] that are designed for their assignment.
- Separate learning ‘citation styles’ from the writing process, then bring them back together.
- Emphasize that searching is trial and error, but that even ‘errors’ can be useful.

**Research tasks for learners:**
- Find three different definitions of a key concept, summarize & compare them.
- Perform three different keyword searches, compare the results.
- ‘Find the errors’ to learn citation styles, proofreading and analytical skills.
- Make a point-form outline of an article, research one point.
- Draw a concept map to visualize the research process.

**RESEARCH BOOTCAMP**

This article is about what I discovered along the way about how students actually prepare essays, and it led to some real surprises!

**POSTER PROJECTS**

Posters were produced by second year science students in Ecology 203, Vernon Campus, For more information please contact Laurie Donovan, Biological Sciences.
VISUAL LITERACY

All creatures with sight visually interpret their environment, whether an eagle hunting for rabbits or an explorer mapping his journey. What complicates visual interpretation today is the increase in both quantity and use of visual images to communicate information. The “comics” guru, Will Eisner (1996), recognized this transformation in regards to storytelling and visual art during his decades long career as an artist.

“The latter half of the 20th century has experienced an alteration in the definition of literacy. The proliferation of the use of images as a communicant was propelled by the growth of a technology that required less in text-reading skills. From road signs to mechanical use instructions, imagery aided words, and at times even supplanted them. Indeed, visual literacy has entered the panoply of skills required for communication in this century (p. 3).”

While the notion of visual literacy is not new, visual literacy standards for higher education have evolved, and are currently defined as the ability to find images, to interpret and analyse them effectively, to cite them correctly, and to create and manipulate them. This definition is expanded on by Hattwig, Bussert, Medaille & Burgess, (2013).

Databases help students limit their inquiry to scholarly articles by removing magazines and newspapers from the results list (among other things), but students still have difficulty efficiently evaluating the resulting “hits.” Book and literature reviews, even introductions, are often mistakenly assumed to be scholarly articles, just because they are in a “journal.” Finding scholarly articles on the internet is even more difficult for students, with the huge variety of results a Google search provides.

The Okanagan College Library Information Literacy Group decided to produce a poster to help students discern a scholarly article. Creating the poster was an interesting learning experience for members of the Information Literacy Group. To demonstrate the core elements, we attempted to bring together visual and textual information in a clear, interesting and humorous format. Countless revisions were required along the way. We focused on seven steps:

- To seek input from staff and faculty
- To use copyrighted images ethically – (since none of us could draw a rat)
- To include humour
- To consult a graphic designer

The final result, it is hoped, will help students identify the main components of a scholarly article. We welcome feedback from students and instructors to determine if the poster works. Thank you to everyone who contributed. Please take the time to view the poster soon at your campus library.

References


For suggested readings please go to the Information Literacy LibGuide http://libguides.okanagan.bc.ca/CILRI

www.okanagan.bc.ca/ilt
Teacher, why exactly shouldn’t I cite Wikipedia or use Google to research my paper?

Are you ready to answer this question? If not, then perhaps you, like me, have not yet developed an adequate Information Literacy (IL) strategy. Until recently, my IL strategy consisted of a typical professor’s cringing, knee-jerk adamant rejection of open-source, collaborative information sources like Wikipedia or reliance on Google. I’ve been rethinking this position, not at the least because of my own responsible and healthily skeptical use of online information. Rather than dictating my personal standards about the most commonly used information sources in this digital age, my new emphasis is on assisting students to develop their own IL strategies. My IL strategy is based on answers to two questions.

Why Information Literacy?

Students and educators need an IL strategy that helps navigate our complex and uncertain contemporary environment. Yes, certainly, we live in an information revolution-led digital age defined by rapid-fire technological changes and proliferating information resources. More worrisome, our modern condition features some real-world problems: diminishing government and corporate transparency and accountability; scientists muzzled or forced to alter reports; a surveillance state/society diminishing privacy rights; prevalent ideological biases from trusted information sources; the end of objective journalism; scholars’ commissioned research for industry; paper mills; rampant illegal digital downloading; false positives/negatives on health tests; false memoires or other high-profile cases of plagiarism; “casino capitalism” based on Ponzi-scheme types of scams. In such uncertainty, IL might require asking: Whose information should I trust? How can I not be “a sucker”? Evidently, IL competencies are survival skills, not merely research writing techniques.

How to Teach IL as a Life-Long Learning and Survival Skill?

In striving to better embed IL and critical thinking skills, attitudes, and knowledge into my courses, I employ a few techniques. A useful reference is the Association of College and Research Libraries’ (ACRL) report on standards, indicators, and outcomes (Information Literacy Competency Standards for Higher Education).

*Transparency:* Grading rubrics setting out my expectations and class standards for assignments allows for a transparent display of my views on students’ skills in selecting, evaluating, and applying new information in their assignments. Addressing plagiarism, and the ethical, legal, and social mis/uses of information is now a central component. I ask students to reflect on their selection and evaluation of information sources in a brief methodology section of assignments, such as an essay abstract and annotated bibliography.

*Discussion:* Igniting class discussions about what is IL (and how it differs from computer savvy) and critical thinking helps to assess student attitudes and understandings. Empirical studies continually show students are over-confident about their IL proficiency, prompting such questions as: Do you note any ideological biases in this news report? Do you trust this reliability of this report? How reliable is Wikipedia compared to a traditional textbook? How would you feel if your doctor, lawyer, accountant, or mechanic searched Google or consulted Wikipedia when confronted with a problem? Do students realize that one of the best search engines, Google, will retrieve at most 25% of information available (Devine & Egger-Sider, 2009)? What are some ways to better search Google, or to find information “beyond Google”? Do they know the way to the library, or what librarians do?

*Collaborative Standards and Peer Review:* To promote self-directed learning, students could discuss information validity and credibility in small groups, and could be asked to come up with the criteria to guide peer-reviews or instructor assessment of assignments.

Finally, I strive to upgrade my own IL skills in our contemporary era. The truth, I know, is out there.

Reference

How widely is the definition of IL understood? When I think about information literacy...I have this innate understanding of what it is and know exactly what it is. But you sit down and ask somebody to define it, it can take a very long time because it's a very complex thing. In preparation for this [interview]...I was surprised by the complexity of it. There are five competencies necessary to be information literate and so it's may be more complex than I imagine and may be more complex than others imagine.

As an institution, are we fostering information literacy in a meaningful way? I think we're doing a good job and the library really leads the way because so much of the new technology is centered or accessed through the library. I know as an English instructor, in terms of research, that things are dramatically different today than they were five years ago and certainly fifteen years ago. Going back to the five IL competencies...determining the nature and extent of information needed; accessing it; critically evaluating it; using it effectively; using it ethically---well, that's big! It's always been a challenge to evaluate sources, and now that there is so much more information available that part of IL has become so much more important. The challenge now is to help people go back and say critical thinking is actually the key part of this. That's the area where we could work harder to improve on.

Are there any simple things that we could do to increase information literacy at our institution? One thing is to dig into that definition. Recently at a staff retreat on critical thinking...it was very interesting...we have instructors who are teaching different subjects in the upgrading program at different levels. There is tremendous diversity in our student population...and yet as we began to get into critical thinking I thought I know what this is. English instructors teach it when approaching a writing project. Math people teach it, science people...it's scientific inquiry and so when we recognize that we were all actually teaching the same skill it allowed us to step back and say, maybe we could name this, identify it and bring a kind of cohesive approach to something that we're teaching in many different rooms to many different people. I think with information literacy and instruction that we could do the same thing across the institution and just step back and say...I'm teaching you how to use this app or teaching you how to access this information or how to paraphrase or how to read a scientific journal...but this is information literacy and the critical thinking skills that you would use in any other course in any other subject and many occasions in life. So, maybe it's stepping back and recognizing the core component of this, which I believe is the critical thinking part.

Has reading more about information literacy changed how you view IL? Yes...to the point of overwhelming me! I thought, okay information literacy, I'll book you and we'll go to the lab and learn how to use the databases. That's just the start. I think students are overwhelmed by that information and so I guess that's the thing that occurs to me is the complexity of this task and it's been made more complex because of technology. The filters that used to exist...I can remember in high school if you had a National Geographic and a good encyclopedia you were home free. Well those filters aren't there and so now students have a lot more work to do processing the information--critical thinking skills are the key.

What are the challenges around promoting information literacy? On a superficial level it's very simple. Information literacy is just understanding how to get information and use it and yet because it incorporates critical thinking, I think that maybe the challenge is going back to those basic things that we need to teach and learn, and that's really the challenge in underscoring or emphasizing the key role that critical thinking plays in information literacy.

Craig Smith was interviewed by Vernon Campus Librarian Jennifer Siglaet
The Google Generation, or “Generation Y,” consists of individuals born after 1993; digital natives who have grown up in a world heavily reliant on the Internet and web technologies (Joint Information Systems Committee, 2008). Provide a task such as “find three authoritative articles on (topic),” and an academic may head straight to an online database or conduct a quick search in a reputable journal. Conversely, give the same task to many students and their information-seeking strategy will almost always begin on the Web and more specifically with Google (Detlor, Booker, Serenko, & Julien, 2012; Mizrahi, 2010; Griffiths & Brophy, 2005). To be perfectly honest though, can you blame them? Enter a poor search query into a database and get zero results. For a growing number of students the convenience of time saved from using Google outweighs the importance of accuracy and the learning process (Colón-Aguirre & Fleming-May, 2012).

This concept of finding something “close enough” has been proven across disciplines using Rational Choice Theory (satisficing), and Gratification Theory (Connaway, Dickey, Radford, 2011; Pirolli, 2005; Chatman, 1991). In an information-seeking context, convenience, time, familiarity of use, and accessibility are the main criterions students use when choosing information sources and strategies (Connaway, et al. 2011). Rather than the information content itself, these criteria are based on the methods used to find and obtain information, deeming reputable and reliable information sources irrelevant.

Adding to the matter is the fact that students think they are quite capable of finding information online and are confident in their information-seeking skills (understandable considering the poor search query example) (Gustavson & Nall, 2011). Students are clearly capable of using a search engine and other online resources, but they do not necessarily know how to get quality information from these sources (Wong, Stelmaszewska, Bhimani, Barn & Barn, 2009). Rempel and Cossarini (2013) recently noted the tendency undergraduates have to overestimate the reliability of online sources. Students lack of information literacy skills and competencies are hidden in their false sense of self-assurance (JISC, 2008). When they only turn to search engines, students miss the unique, peer-reviewed, and highly valued resources only available through library or private subscriptions (Porter, 2011). With the Google Generation becoming accustomed to conveniently accessible information, rather than quality information, it is taking a toll on their information literacy skills (Rempel & Cossarini, 2013).

Information Literacy strives to go beyond poor scholarly practices as a means to suffice and attempts to give students a system by which they can successfully gather, analyze, and use information (ACRL, 2000). Through learner-centred instruction sessions that build upon previous meetings, research guides tailored to specific classes and assignments, and search tools that adapt to changing expectations of online and efficient access, library services are beginning to equip Generation-Y students with the vital information literacy skills needed to thrive in a dynamic digital world.

References


One of the things that the last 50 years will be remembered for is the massive increase in the amount of statistical information that we are bombarded with on a daily basis. Today, we endure a steady flow of news reports featuring the latest political polls, the daily release of Statistics Canada surveys and reports, scholarly articles awash with the latest data from the field, public opinion polls, infographics, and mega data provided by the newest kid on the block “Big Data.”

Unfortunately, misinterpretation of statistical information is a relatively common occurrence. In order to help our students avoid misinterpretation, including incorrect use of statistical information, we need to ensure that “Statistical Literacy” becomes part of every student’s critical thinking toolkit.

Statistical Literacy requires many abilities. First and foremost, students need a basic understanding of mathematical principles underlying the creation of statistical information. Next, they need guidance in how to identify, analyze, interpret, and properly apply statistical information (United Nations Economic Commission for Europe, 2012, pp. 5-6).

Our students need not become full-blown statisticians and research methodologists. They do need to develop a basic understanding of how statistical information is created and interpreted. This included an awareness of type of data used to create the report (survey, census, or administrative data set). Including the capacity to understand common statistical terms used in such reports and surveys. Furthermore, a general understanding of methodology used to collect the data, the basic statistical measures, and graphic tables employed by creators of such statistical information is always of value.

Intermediate level students will need the ability to understand the limitations of the methods used to collection the data, fluency in more advanced statistical concepts, and terms (for example, labour force participation rate, mortality rate, sample size, etc.). In addition, they may need a more in-depth knowledge of such concepts as probability statements, level of confidence, margin of error, etc.

Some students will need an advanced level of Statistical Literacy including the ability to understand sophisticated statistical terminology such as standard deviation, variance, regression to the mean, correlation coefficient, etc. (United Nations Economic Commission for Europe, 2012, p. 7).

Statistical Literacy is more than numeracy. It includes the ability to read, understand, and apply statistical information and data. Statistical Literacy will enhance the overall literacy of our students and equip them to better understand the wide variety of statistical information that they will be exposed to as part of their studies and in their personal lives.

If you are interested in learning more about how to incorporate Statistical Literacy into your courses including basic statistical information and analysis, specialized statistical research databases, and how to access Statistics Canada data sets please contact me at gbede@okanagan.bc.ca or give me a call at local 4751.

References

Thought Spot: Thoughts arising from this issue “Building an Information Literate Institution”

What strategies do you use to integrate *information literacy into your course work? *Including visual, data, digital, media, metaliteracies...

Reflecting on the above question please share your thoughts and experiences at THOUGHT SPOT.

To access online discussions in Thought Spot:
► Log into myOkanagan then click on “Groups” in the upper right hand corner of the screen.
► Search the Groups Index for “Thought Spot” which will bring up the “ILT Thought Spot Group”.
► Click “Join”.
► Click on one of the “Thought Spots” which will take you to an online discussion on that topic. Please feel free to start a new discussion topic related to enhancing the practice of learning and teaching. Thank you. Any questions? Please contact an ILT Fellow!
On behalf of the ILT, I would like to welcome Dr. Beverlie Dietze as the new Director of Learning and Teaching at Okanagan College (OC). Beverlie is an experienced post-secondary professional who has spent nearly three decades in the sector in a variety of roles that include faculty member, department head, director, and campus dean.

Most recently Dr. Dietze has been working as an Assistant Professor at Mount Saint Vincent University in Halifax and concurrently as an online Adult Education Facilitator with Brock University in St. Catharine’s, Ontario – a position she has held for nine years.

Her experience working in the college sector is notable, specifically, her depth of knowledge in learner-centred curriculum development, leadership, and in the development of collaborative partnerships.

The ILT is eager to begin working with Beverlie as it moves forward its agenda of enhancing learning and teaching at Okanagan College. Since the establishment of the ILT in 2009, the organization has made significant progress with limited resources, but there is so much more it could and should be doing.

The ILT members look forward to benefitting from Beverlie’s wealth of experience and proven success in learning and teaching, as we seek to establish new collaborative relationships with a variety of stakeholders in the OC community.