CHAPTER 1

Convergences of and for Media and Information Literacy Instruction in Higher Education

D. Oberg

University of Alberta, Edmonton, AB, Canada

1.1 INTRODUCTION

The filing on February 2, 2015 of the *Framework for Information Literacy in Higher Education* by the Board of Directors of the American College and Research Libraries (ACRL) section of the American Library Association signaled some convergences in conceptions of media and information literacy (MIL). Two groups within the library sector traditionally have been committed to MIL instruction—school librarians and academic librarians—but in the past their theoretical and practical approaches to this work to a large extent have been quite different, and the developments in each field have been largely invisible to the other sector.

This chapter presents several approaches to MIL instruction: from school libraries, the process approach exemplified by Guided Inquiry (Kuhlthau, Maniotes, & Casperi, 2007, 2012) and from academic libraries, Informed Learning (Bruce, 2008) and the Framework for Information Literacy in Higher Education (ACRL, 2015). Several convergences between these approaches offer opportunities for "educators of educators"—school librarians, academic librarians, K-12 teachers, college and university teachers, and educators of teachers and of librarians—to draw upon and perhaps align their practices with the best in the theories and practices of both sectors.

Practitioners in both sectors of education have much to learn from each other, and the work of practitioners in each sector affects the work in the other sector. My special concern over a long career has been the education of teachers and school librarians, preparing them for their work with children and youth in K-12 schools. Academic librarians have been my partners in this endeavor, and my research on how teachers use libraries in their teaching has shown that they were influenced by their experiences with university librarians during their preservice teacher education (Oberg, 1993).

The concept of "educators of educators" in the title and content of this book reflects the awareness that MIL instruction can be initiated in many different ways, by individuals and by groups, carrying out many different roles in teaching and learning. Most often, the phrase "educators of educators" brings to mind university faculty members responsible for preparing university students for professional practice as teachers and librarians, but in the area of MIL education, this is not always the case. For example, students in a college class experiencing difficulty with the library searches necessary for completing an assignment might ask for help from their instructor who then accesses help for the class from the library staff. School librarians often provide informal professional development in MIL for their school leadership staff as part of initiating a whole-school approach to curriculum-integrated MIL instruction (Oberg, 2009). University faculty may reach out to academic librarians to discuss making improvements to a course assignment (Shorten, Wallace, & Crookes, 2001). College accrediting bodies may require that colleges give evidence of student achievement of information literacy outcomes in the college curriculum, which brings academic librarians and teaching faculty together to revise, implement, and evaluate information literacy-based curricula (Thompson, 2002).

1.2 MIL INSTRUCTION IN SCHOOL LIBRARIES

What is regarded as exemplary MIL instruction in school libraries has changed over the years: a source approach, during the 1960s and 1970s; a pathfinder approach, through the 1980s; and a process approach, beginning in the 1990s. The process approach has been implemented over the past 25 years under many different "labels" in the school libraries field; information literacy, MIL, inquiry-based instruction, and Guided Inquiry are just a few.

The process approach to teaching MIL emphasizes thinking about information and using information within a problem-solving perspective. It does not discard the knowledge from earlier approaches, such as the knowledge of tools, sources, and search strategies, but it does emphasize that this knowledge is to be developed within the teaching of thinking and problem-solving (Oberg, 1999, 2004).

The process approach is theory-based and grounded in research from the fields of education and of library and information studies (LIS). From education comes learning theory, and from LIS, information seeking behavior theory. For example, from education comes the knowledge that learners vary in the level of abstraction that they can handle, depending on their cognitive development and their prior knowledge and experience. Also from education come the constructivist concepts of learners actively building or constructing their knowledge and of learners experiencing changes in feelings as well as changes of thoughts as they use information. From LIS comes the knowledge that users of information progress through levels of question specificity, from vague notions of information need, to clearly defined needs or questions, and that users are more successful in the search process if they have a realistic understanding of the information system and of the information problem. From both education and LIS comes the understanding that students learn more about MIL when MIL instruction is connected to and integrated with disciplinary content and assignments.

The work on MIL instruction in the school libraries sector has been strongly influenced by the seminal research of Carol C. Kuhlthau whose doctoral work investigated the experiences of high school seniors completing library-based research assignments. Kuhlthau brought to her research a deep understanding of student learning, beginning from her early career as a kindergarten teacher and a school librarian. Kuhlthau's Model of the Information Search Process showed the affective, cognitive, and physical changes that learners experience as they complete a research project from task initiation to presentation. The process approach to inquiry goes beyond the location of information to the use of information, beyond the answering of a specific question to the seeking of evidence to shape a topic. It considers the process of a search for information as well as the product of the search. It calls for an awareness of the complexity of learning from information: learning from information is not a routine or standardized task, and it involves the affective as well as the cognitive domains. Throughout the process, learners benefit from support in dealing with the feelings, thoughts, and actions that are part of their information search process.

The goal of instruction is "to instill in students a sense of the process of learning from a variety of sources of information" (Kuhlthau, 1995, p. 1). This is true for college and university students as well as K-12 students; it is also true for professionals who engage in information use for solving problems—see, e.g., research into the use of information by financial analysts and judges (Kuhlthau, 2003). By providing opportunities for information users, whatever their age and stage of life, for reflecting on their feelings, thoughts, and actions throughout the process of learning through

the use of information, information users develop an awareness and understanding of their own personal learning experience as well as an awareness and understanding of their new content knowledge. This metacognitive aspect of the process approach to MIL is critical to developing abilities related to self-directed learning, lifelong and life-wide.

1.2.1 Instructional Models in the K-12 School Library Sector

Kuhlthau's Model of the Information Search Process is the basis of the Guided Inquiry Model (Kuhlthau et al., 2007). Guided Inquiry is a model to guide MIL instruction in K-12 schools; the model is based on six principles:

- Children learn by being actively engaged in and reflecting on experience.
- Children learn by building on what they already know.
- Children develop higher-order thinking skills through guidance at critical points in the learning process.
- Children have different ways and modes of learning.
- Children learn through social interaction with others.
- Children learn through instruction and experience in accord with their cognitive development (Kuhlthau et al., 2007, p. 25).

Guided Inquiry offers a process model for teaching content and information use in an integrated and meaningful way (Table 1.1).

Instructional models support teachers and librarians in providing opportunities to develop students' metacognitive abilities. As demonstrated in the *Focus on Inquiry* model (Alberta Learning, 2004), developed

Open	Invitation to inquiry, open minds, stimulate curiosity
Immerse	Build background knowledge, connect to content, discover
Evolara	interesting ideas
Explore	Explore interesting ideas, look around, dip in
Identify	Pause and ponder, identify an inquiry question, decide direction
Gather	Gather important information, go broad, go deep
Create	Reflect on learning, go beyond facts to make meaning, create to
	communicate
Share	Learn from each other, share learning, tell your story
Evaluate	Evaluate achievement of learning goals, reflect on content, reflect
	on process

Table 1.1 Phases of the Guided Inquiry process (summary)

Kuhlthau et al. (2012, pp. 1-6).

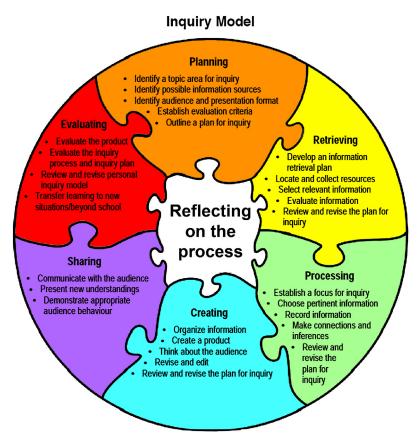


Figure 1.1 Focus on Inquiry Model (Alberta Learning, 2004, p. 10).

in Alberta, Canada, reflecting on the process is critical throughout the process for developing metacognitive understandings and strategies (http://open.alberta.ca/publications/0778526666) (Fig. 1.1).

1.3 MIL INSTRUCTION IN ACADEMIC LIBRARIES

In academic libraries, MIL instruction is offered under many terms; bibliographic instruction, library instruction, information literacy, and informed learning are a few.

What is regarded as exemplary MIL instruction in academic libraries has changed over the years: however, the requirement of one-shot instructional models continues as a challenge in many academic library settings. Current approaches to MIL instruction in academic libraries are exemplified by the Framework for Information Literacy in Higher Education (ACRL, 2015) and Informed Learning (Bruce, 2008).

1.3.1 Framework for Information Literacy in Higher Education

In North America, academic librarians and their partners in higher education have been looking for new approaches to enhance their longstanding guidelines for MIL instruction, the *Information Literacy Competency Standards for Higher Education* (ACRL, 2000). As noted by Johannessen in her chapter about source criticism, the 2000 *Standards* are based on a behavioristic view of information literacy which emphasizes measurable skills that are not subject-specific, but generic and transferrable. According to the 2000 *Standards*, the information-literate student:

- Determines the nature and extent of information needed;
- Accesses needed information effectively and efficiently;
- Evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system;
- Individually or as a member of a group, uses information effectively to accomplish a specific purpose;
- Understands many of the economic, legal, and social issues surrounding the use of information, and accesses and uses information ethically and legally (ACRL, 2000, pp. 8–14).

Each of these five competencies has a number of performance indicators (22 in all) or measurable learning outcomes.

ACRL has recommended that the 2000 *Standards* be sunsetted (removed from active use) by July 1, 2016, in favor of the new *Framework*. The 2015 ACRL *Framework for Information Literacy in Higher Education*, is built around six core concepts, or frames:

- Authority is constructed and contextual;
- Information creation as a process;
- Information has value;
- Research as inquiry;
- Scholarship as conversation; and
- Searching as strategic exploration.

Each core concept is illustrated through knowledge practices and dispositions. Knowledge practices are ways in which learners can demonstrate their understanding and use of the core concepts, or frames, while dispositions are related to the attitudes and values that underpin the core concepts. For example, one of the frames, Searching as Strategic Exploration, states that: "Searching for information is often nonlinear and iterative, requiring the evaluation of a range of information sources and the mental flexibility to pursue alternate avenues as new understanding develops." Learners who are developing their information literate abilities "utilize divergent (e.g., brainstorming) and convergent (e.g., selecting the best source) thinking when searching" (a knowledge practice) and "exhibit mental flexibility and creativity" (a disposition) (ACRL, 2015, p. 9).

As Carncross (2015) notes, the implementation of the *Framework* requires a shift in the focus of instruction from skills to process. This is well illustrated by comparing the definitions of information literacy of the *Standards* and the *Framework*:

Information literacy is 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, p. 2)

Information literacy is the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning.

ACRL (2015, p. 3)

It is not expected that the frames or core concepts be taught as standalone skills or that they be taught in a specified order. Instead, it is expected that these core concepts of MIL are developed as part of an integrated approach to instruction, as part of disciplinary or content learning, not taught in isolation from content.

1.3.2 Informed Learning

Informed Learning is "using information, creatively and effectively in order to learn" (Bruce, 2008, p. viii). The idea of Informed Learning builds upon Bruce's early research with university faculty in Australia from which emerged "seven faces of information literacy" (Bruce, 1997). Informed Learning is the kind of learning made possible through evolving and transferable capacity to use information to learn in education, in the workplace, and in community settings.

Three principles underpin Informed Learning:

- 1. Informed Learning takes into account learners' experiences.
- **2.** Informed Learning promotes the simultaneous development of discipline learning and process learning.

3. Informed Learning is about changes in experience (Bruce, 2008, pp. 12–13).

These principles shape the work of librarians and teachers in developing programs of media and information education. Not only must librarians and teachers be aware of students' learning experience, they must help their students be aware of their own learning experience. This means building relevant experiences into the curriculum, and ensuring that the students have opportunities to reflect on their experiences and to apply what they have learned to "novel contexts." Librarians and teachers need to create learning activities that allow students to experience both information use and subject content in an integrated way. Librarians and teachers need to help students see the world in new and complex ways as they develop new and complex ways of working with information. This means that school librarians and academic librarians need to collaborate with teaching faculty in developing programs of MIL education that are integrated with curriculum, with courses, and with programs.

The seven faces of Informed Learning describe the different ways that information use can be experienced and suggest different focuses or goals for learning design:

- 1. The information awareness and communication experience;
- 2. The sourcing information experience;
- 3. The information process experience;
- 4. The information control experience;
- 5. The knowledge construction experience;
- 6. The knowledge extension experience;
- 7. The wisdom experience.

The six frames of Informed Learning provide a conceptual framework for analyzing theoretical influences that shape teaching and learning related to MIL instruction: content; competency; learning to learn; personal relevance; social impact; and relational. Each frame or lens applies to a goal for learning about information and about subject content and includes a view of: information literacy; information; teaching and learning; curriculum focus; content; and assessment.

1.3.3 Convergences

Throughout this chapter and throughout this book, readers will recognize a number of convergences between these approaches for MIL education. Here is a starter's list of convergences.

1.3.3.1 A Process Approach

Current models guiding MIL instruction emphasize teaching the process, not standalone skills. The process of using information to learn is not linear, but highly individual, flexible, and more recursive than might be suggested in traditional models outlining how to use information for learning. Working from the core concepts or frames of the 2015 ACRL *Framework* will suggest important shifts that need to be made in the conceptualization and practice of MIL education. The frames resonate strongly with those in the school library field. Twenty years ago, school library researcher Ross Todd laid out five principles of effective information literacy instruction:

- **1.** Instruction is a conversation.
- **2.** Effective teaching of information literacy consists of four essential component processes: discursive, adaptive, interactive, and reflective.
- 3. Action without useable feedback is not productive for the learner.
- 4. The design of information literacy programs should be open.
- **5.** Establishing an effective learning environment is critical to successful information literacy instruction. (Todd, 1995a, pp. 65–67)

1.3.3.2 An Integrated Approach

Current models of MIL instruction involve the simultaneous consideration of information use and disciplinary content. Research has shown the power of teaching skills and concepts within a meaningful context, within courses and across programs (see, e.g., Klinger, Lee, Stephenson, Deluca, & Luu, 2009; Shorten et al., 2001; Thompson, 2002; Todd, 1995b). For starting points in the design of curriculum-integrated information use activities, school librarians can turn to the plethora of curriculum documents provided to educators in K-12 schools; academic librarians, on the other hand, must generally turn to their teaching faculty for that information. Here is where the one-shot approach to MIL instruction entrenched in many institutions presents difficult challenges: skills taught in isolation from meaningful disciplinary content are soon forgotten.

1.3.3.3 A Collaborative Approach

Librarians and teachers bring different expertise to MIL education. Collaboration is critical but often difficult to explain and implement. Montiel-Overall (2005) proposes four models or levels of TLC, or teacher and librarian collaboration: A, coordination; B, cooperation; C, integrated instruction; and D, integrated curriculum. The levels of collaboration, from A to D, appear to have increasing potential for positively affecting learning, especially where there is attention paid to: (1) interest; (2) level of involvement; (3) improved learning; (4) innovation; and (5) integration in teacher and librarian collaboration. Finding a place to start with collaboration is often difficult. Here Bruce's *Informed Learning* text offers conceptual frames for identifying the views that librarians and teachers bring to the learning design table.

1.3.3.4 Attending to the Learner's Experience

Learning design needs to start with awareness of students' background knowedge and experience. This includes drawing from research about the feelings, thoughts, and actions experienced by individuals involved in inquiry activities. Here Kuhlthau's 2003 *Seeking Meaning* text is an invaluable resource, for providing vivid descriptions of the phenomenon of inquiry as well as for providing practical advice and strategies for interventions in the difficult stages of the inquiry process.

1.3.3.5 Supporting Metacognition and Reflection

Learning design needs to consider the importance of the learners' or inquirers' thinking about their personal learning processes. At all levels of education, students should be given opportunities to understand that inquiry is a personal and highly individual learning process. Reflecting on their process in writing or in conversation with others (peers, faculty, librarians) will help students to develop their metacognitive skills—thinking about their thinking and thinking about their feelings—and to develop strategies for monitoring and enhancing their personal learning process.

1.4 CONCLUSION

For "educators of educators"—school librarians, academic librarians, K-12 teachers, college and university teachers, and educators of teachers and of librarians—these convergences invite exploration of the foundational theories and best practices of both the school library sector and the academic library sector. As noted earlier, practitioners in both sectors of education have much to learn from each other, and the work of practitioners in either sector affects the work in the other sector.

Academic librarians in colleges and universities are being expected to work in collaboration with teaching faculty in ways that have long been the expectation for librarians and teachers in K-12 schools. In colleges and universities, academic librarians face many challenges in developing programs of MIL instruction (Julien, 2005), including "prescriptive guidelines which encourage a surface learning approach; delivery by librarians who may lack both educational training and power to influence the curriculum; and poor assessment methods" (Johnston & Webber, 2003, p. 335). School librarians often face similar challenges. We can and should learn from each other; sometimes we can even work together across institutional divides (Oakleaf & Owen, 2010)!

REFERENCES

- ACRL. (2000). Information literacy competency standards for higher education. Retreived from: http://www.ala.org/acrl/standards/informationliteracycompetency.
- ACRL. (2015). Framework for information literacy in higher education. Retrieved from: http://www.ala.org/acrl/standards/ilframework.
- Alberta Learning (2004). Focus on inquiry: A teacher's guide to inquiry-based learning. Edmonton, Canada: Alberta Learning, Learning Resources Branch.
- Bruce, C. S. (1997). Seven faces of information literacy. Adelaide, Australia: AUSLIB Press.
- Bruce, C. S. (2008). *Informed learning*. Chicago: Association of College and Research Libraries, A Division of the American Library Association.
- Carncross, M. (2015). Redeveloping a course with the Framework for Information Literacy for Higher Education: From skills to process. College & Research Libraries News, 5(76), 248–250, 273.
- Johnston, B., & Webber, S. (2003). Information literacy in higher education: A review and case study. *Studies in Higher Education*, 28(3), 335–352. Available from: http://dx. doi.org/10.1080/03075070309295.
- Julien, H. (2005). Education for information literacy instruction: A global perspective. Journal of Education for Library and Information Science, 46(3), 210–216.
- Klinger, D. A., Lee, E. A., Stephenson, G., Deluca, C., & Luu, K. (2009). *Exemplary* school libraries in Ontario. Toronto, Canada: Ontario Library Association.
- Kuhlthau, C. C. (1995). The process of learning from information. School Libraries Worldwide, 1(1), 1–12.
- Kuhlthau, C. C. (2003). Seeking meaning: A process approach to library and information services (2nd ed.). Westport, CT: Libraries Unlimited.
- Kuhlthau, C. C., Maniotes, L. K., & Casperi, A. K. (2007). *Guided Inquiry: Learning in the* 21st century. Westport, CT: Libraries Unlimited.
- Kuhlthau, C. C., Maniotes, L. K., & Casperi, A. K. (2012). Guided Inquiry design: A framework for inquiry in your school. Santa Barbara, CA: Libraries Unlimited.
- Montiel-Overall, P. (2005). Toward a theoretical understanding of teacher and librarian collaboration (TLC). *School Libraries Worldwide*, *11*(2), 24–48.
- Oakleaf, M., & Owen, P. L. (2010). Closing the 12–13 gap together: School and college librarians supporting 21st century learners. *Teacher Librarian*, 37(4), 52–58.
- Oberg, D. (1993). Use of libraries in teaching by novice and experienced teachers. *School Libraries in Canada*, *13*(3), 14–19.
- Oberg, D. (1999). Teaching the research process—For discovery and personal growth. In: Section of School Libraries and Resource Centers, conference proceedings of the 65th IFLA conference and general council, held in Bangkok, Thailand (Booklet 3, pp. 52–60). Available online: http://www.ifla.org/IV/ifla65/papers/078-119e.htm.

- Oberg, D. (2004). Promoting information literacies: A focus on inquiry. In: Conference proceedings of the 70th IFLA general council and conference, section of School Libraries and Resource Centers, Buenos Aires, Argentina. Available online at: http://www.ifla.org/IV/ifla70/papers/088e-Oberg.pdf, 14 pp. Also available in translation (Spanish and French).
- Oberg, D. (2009). Libraries in schools: Essential contexts for studying organizational change and culture. *Library Trends*, 58(1), 9–25.
- Shorten, A., Wallace, C., & Crookes, P. A. (2001). Developing information literacy: A key to evidence-based nursing. *International Nursing Review*, 48, 86–92. Available from: http://dx.doi.org/10.1046/j.1466-7657.2001.00045.x.
- Thompson, G. B. (2002). Information literacy accreditation mandates: What they mean for faculty and librarians. *Library Trends*, 51(2), 218-241.
- Todd, R. J. (1995a). Information literacy: Philosophy, principles, and practice. *School Libraries Worldwide*, 1(1), 54-68.
- Todd, R. J. (1995b). Integrated information skills instruction: Does it make a difference? *School Library Media Quarterly*, 23(2), 133–138.