INTRODUCTION

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When we began discussing our vision for a collection on information literacy (IL), our initial conversations revolved around the incredible amount of scholarship and practice that already existed in both Writing Studies (WS) and in Library/Information Science (LIS). Yet, while librarians, writing faculty, and other disciplinary faculty had presented and/or published together, there was still not enough cross-over in disciplinary literature addressed to both faculty and librarian audiences.

One of our goals for this collection, then, was to bring together the rich scholarship and pedagogy from multiple perspectives and disciplines to provide a broader and more complex understanding of IL in the second decade of the 21st century. Further, we hoped that a collection that bridged the disciplinary divide would advance the notion of shared responsibility and accountability for the teaching, learning, and research of IL in the academy: faculty, librarians, administrators, and external stakeholders such as accrediting agencies and the businesses/industries that employ our graduates.

As we issued the call for contributions for the collection, our view of IL was guided by the Association of College & Research Libraries (ACRL) *Information Literacy Standards for Higher Education (IL Standards)* which defines IL as the ability to "determine the extent of information needed, access the needed information effectively and efficiently, evaluate information and its sources critically, 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 legally" (ACRL, 2000). Widely cited since its formal approval by the ACRL Board, the *IL Standards* has seen widespread acceptance by librarians, faculty, administrators, and accrediting bodies. As a result, librarians and faculty have created strong partnerships to develop pedagogy related to IL and the *IL Standards* have been adapted to meet disciplinary contexts.

However, the *IL Standards* also have faced considerable criticism as both research and practice began to highlight and illustrate the shortcomings of a standards- and competencies-based approach. Critiques of the *IL Standards*, theoretically and research-based, have focused on the de-contextualized nature of standards that potentially emphasize a prescribed set of skills. Research

demonstrated that IL is a contextual concept situated in specific information landscapes. For example, Carol Kuhlthau's ground-breaking research on the information search process (Kuhlthau, 2004) clearly demonstrated the process-oriented nature of research and has shaped IL pedagogy within LIS. Christine Bruce's (1997) landmark work on the relational nature of IL, along with the work of others in Australia and Europe (see, for example, Lupton, 2004; Limberg, 2008; Lloyd, 2010), further demonstrated that IL is contextual and that individuals "experience" IL in ways that are dependent on the context of the situation.

Not long after we began work on this collection, ACRL established a task force to review the *IL Standards* and to make recommendations to update them. In recognition of the broad constituency that is impacted by and responsible for IL, the task force consisted of librarians, administrators, and external constituents from accrediting agencies and other relevant associations. Our development of the collection and the Task Force's work to review and make recommendations about the *IL Standards* ensued nearly simultaneously and it became clear to us that the emerging framework based on threshold concepts and metaliteracy was consistent with trends we were seeing in WS and in higher education in general. Recognition of the roles of faculty and librarians within the academy and of the rapidly changing dynamic information landscape all contributed to the impetus for the Task Force's work, resulting in the *Framework for Information Literacy for Higher Education (Framework for IL)*.

The *Framework for IL* is divided into six frames, each with a set of related knowledge practices and dispositions:

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

The *Framework for IL* draws upon both threshold concepts (foundational concepts within a discipline that serve as portals to thinking and practice) and the concept of metaliteracy (Mackey & Jacobson, 2011; Mackey & Jacobson, 2014). Metaliteracy presents a vision for IL as an overarching literacy that places students in the role of both consumer and producer of information within today's collaborative information environments. Metaliteracy also emphasizes four domains of engagement within the information environment: behavioral, affective, cognitive, and metacognitive with metacognition as particularly important for individuals to become self-directed learners required in today's rapidly changing landscape.

Rather than focus on discrete skills, the *Framework for IL* is grounded in core concepts with the intent that implementation would be flexible to allow local contexts to influence the development of teaching and learning practices. The revised, expanded definition of IL accompanying the *Framework for IL* also explicates current thinking of IL as a more sophisticated and contextual concept relevant to student learning throughout their academic careers (and beyond):

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)

The adoption of the *Framework for IL* presents a challenge to all of us who research, teach, and assess IL. The use of the word "framework" intentionally emphasizes that the document is a structure to set the context for ongoing discussions and collaborations between librarians, faculty, administrators, and other stakeholders to connect and to partner for the development of IL programs that are relevant within each program and institution. The *Framework for IL* further challenges all of us involved in IL to learn about and envision what threshold concepts and metaliteracy mean in order to develop pedagogy that facilitates transfer of learning across contexts as well as how these concepts influence and shape research studies and projects related to IL. As the Task Force worked, releasing drafts for discussion, the *Framework for IL* was received positively by many librarians, who began using it to discuss and shape instruction programs even before its approval by the ACRL Board. While it would be easy to view the *Framework for IL* as a marked shift away from the *IL Standards*, in reality it is an evolution based on nearly 20 years of research and practice.

As this collection moved to fruition, we realized, as editors, how much of an exigence the *Framework for IL* was and continued to be. Themes that authors explore in chapters mirror the threshold concepts and metaliteracy principles that ground the *Framework for IL*. The scope of the collection began as an attempt to bridge disciplinary boundaries, which is also a goal of the *Framework for IL*. As we read the submissions, a further vision for the collection emerged as a bridge between past/current knowledge and the future. As such, we defer to Rolf Norgaard and Caroline Sinkinson, the authors of the first chapter, who refer to the Roman god Janus as a potential presiding deity for their essay. We would suggest that Janus, with one face looking back and one looking to the future, further serves as the presiding deity for the collection as a whole: one face looking back and celebrating past and current work on IL and one looking forward to the continued evolution of IL

as the *Framework for IL* continues to take hold and influences our pedagogy, research, and assessment practices.

ORGANIZATION OF THE COLLECTION

Within the dual exigencies of bridging boundaries and creating connections past and future, the chapters presented in this collection facilitate an understanding of how IL has evolved and continues to evolve. Chapters address the core concepts articulated in the *Framework for IL* and demonstrate the relevance of it to higher education; indeed, chapters emphasize how the foundational underpinnings of the *Framework for IL* have been part of our understanding and work in IL, even if unarticulated. Chapters also address related threshold concepts, metacognition, large-scale research studies, programmatic and institutional efforts to institutionalize IL, and pedagogical innovations. Above all, this collection should be viewed as part of the conversation about IL as we adapt to and implement the *Framework for IL*. In that spirit, the book begins with a conversation between WS and LIS as Rolf Norgaard and Caroline Sinkinson engage in dialogue to look back over more than a decade of teaching and learning related to IL and ponder the future.

To continue and build upon the dialogue, we have organized the collection into four sections, each representing a core focus area of IL. Section I situates IL and provides us with understanding of how and why IL is a contextual concept based on threshold concepts and metaliteracy. Section II presents results of research projects which help us to further our understanding of IL and of student learning related to it, particularly the threshold concept of Scholarship as Conversation. Section III explores the already rich collaborations taking place to define IL locally within programs and institutions and to define shared responsibility for IL. Chapters in Section IV describe pedagogical strategies and evaluation of them. This section ends by returning us back to the notion of conversation and collaboration between WS and LIS. Finally, in the afterword, Trudi Jacobson wraps up the collection by reminding us of the complex information landscape we and our students now find ourselves in and how the *Framework for IL* and metaliteracy are providing us with a new lens to facilitate our teaching and learning of IL as shared responsibility.

SECTION I. SITUATING INFORMATION LITERACY

Authors in Section I bring together past theory and practice to situate IL for us by articulating what the *Framework for IL* means for the evolution of IL pedagogy, research, and assessment. Just over a decade ago, in one of the few notable pieces of scholarship to cross disciplinary boundaries, Rolf Norgaard contextualized IL

rhetorically in his seminal paired articles in Reference and User Services Quarterly (2003, 2004). Norgaard and librarian Caroline Sinkinson begin our collection in conversation to look back at the ensuing decade and the progress that has (or hasn't) been made, and to speculate on what the future may hold. Barry Maid and Barbara D'Angelo then articulate how the Framework for IL connects with the Writing Program Administrator's Outcomes Statement and "Habits of Mind," furthering their work to contextualize and rhetoricize IL for WS. Maid and D'Angelo's explanation of the threshold concepts foundational in the Framework for IL as portals to knowledge construction deeply connected to WS, reminds us that our pedagogy and assessment of IL should acknowledge the situated nature of the concept and the ways it extends beyond the classroom to our students' professional, personal, and civic lives. Following on this theme, Dale Cyphert and Stanley Lyle articulate IL within a business context, reminding us that the IL landscape expands beyond academia and WS and that "the functional role of any individual within a large, complex organization is neither linear nor independent, and information is only occasionally objective. . . . Organizational activities are not simple collections of acts performed by discrete individuals, each carrying an individual set of skills, but collectively constituted patterns of interaction, affordance, and social interpretation" (Chapter 3, this collection). The recognition of IL's situated nature within a landscape and contextualized by social, political, and other factors emphasizes the threshold concept that knowledge is constructed within discourse communities and that types of authority may differ based on those communities. As such, they remind us that the conversation related to IL extends beyond academia to the workplace and other contexts.

Kathleen Blake Yancey considers the current moment of information literacy as an ecology by outlining three "periods" in its recent history: (1) the period of all-vetting-all-the-time where gatekeepers assured the credibility of the sources; (2) the period of online access of information; and (3) the most recent, ongoing current period located in an ecology of interacting sources—academic; mainstream; and "alternative." Yancey situates this history within the context of source analysis and the challenge all researchers face when establishing source credibility.

Irvin Katz and Norbert Elliot round out Section I by articulating the importance of defining constructs for assessment and using assessment methods that are capable of evaluating complex concepts such as IL in a way that respects its contextual and process-oriented nature. Their case study is particularly timely as the *Framework for IL* shifts IL away from a skills-based foundation to one that is grounded in metaliteracy. Their chapter addresses the question of how we—librarians, faculty, and administrators—adapt and employ assessments that can effectively evaluate IL within the academy. Katz and Elliot describe Educational Testing Service's iSkills to demonstrate how assessment within a

digital environment can go beyond the mechanized skills-testing of paper bubble tests to a richer and more robust assessment of a construct that is situated, mediated, and remediated—i.e., that information creation is a process in which an information need and data collection and analysis are constantly revisited and revised based on feedback and effectiveness. Katz and Elliot conclude that IL is a threshold concept that requires holistic instruction, a conclusion that is consistent with metaliteracy as an overarching literacy serving as the theoretical underpinning of the *Framework for IL*.

SECTION II. RESEARCHING INFORMATION LITERACY

Section II focuses on large-scale research projects that are contributing to our understanding of IL, in particular, our understanding of students' ability to use information to construct knowledge. The threshold concept of Scholarship as Conversation is clearly evident in the work of these researchers and scholars. Sandra Jamieson leads off Section II with a discussion of results of Citation Project research concerning the kinds of sources students selected for source-based papers in first-year writing, how they incorporated them, and the implications for IL. Following this chapter, Katt Blackwell-Starnes reports on the results of a pilot study for the LILAC Project revealing the impact of students' focus on final product rather than process when completing a research project. Karen Gocsik, Laura Braunstein, and Cynthia Tobery report on the results of a six-year study to research and code wiki assignments to determine how students analyze and use sources. Then Patti Wojhan, Theresa Westbrook, Rachel Milloy, Matthew Moberly, Seth Myers, and Lisa Ramirez describe the results of an analysis of student research diaries and self-assessments to identify trends in students' use of information. Maintaining the focus on student perceptions, Donna Scheidt, William Carpenter, Robert Fitzgerald, Cara Kozma, Holly Middleton, and Kathy Shields describe a collaboration between composition faculty and librarians to study students' perceptions of research with an emphasis on source use.

What all of these authors highlight in their work is the importance of the threshold concept related to the use of information and entering into a scholarly conversation, making them timely and, perhaps, leading to strategies that allow us to adapt practices to help students become information literate.

SECTION III. INCORPORATING AND EVALUATING INFORMATION LITERACY IN SPECIFIC COURSES

Section III highlights pedagogical enactments and collaborations to incorporate IL into the classroom, both in first-year composition and disciplinary subject

courses. The frame Scholarship as Conversation again dominates the themes of these chapters.

Miriam Laskin and Cynthia Haller describe their strategy to help students identify citation trails and the failure of students to identify and work within source networks. From a multimodal perspective, Christopher Toth and Hazel McClure challenge us to consider the use of infographics as a tool for IL pedagogy and provide an example of IL in a digital environment in which information is presented in ways other than text. In a demonstration of the metaliteracy that underlies the *Framework for IL*, they show that students are producers of information through remixing and remediation of information graphically.

Susan Brown and Janice R. Walker describe yet another collaboration for instruction exploring IL in pre-service teacher education classes. They raise the concern that absent a common terminology across disciplines, the focus on IL in both K-12 and higher education is fragmented. Brown and Walker call for "scaffolded, cross-disciplinary, teacher-librarian collaborative interventions" (Chapter 13, this collection) to facilitate shared language and ownership of IL. As such, like so many other authors in this collection, they point to the shared responsibility for IL and for the importance of dialogue.

Rachel Winslow, Sarah Skripsky, and Savannah Kelly describe a collaboration between a librarian and teaching faculty in WS and social science to incorporate the citation manager Zotero to help students learn to use sources. Finally, Diego Méndez-Carbajo raises another issue regarding discipline specificity, noting that the relationship between IL and quantitative reasoning is one that has not been fully explored previously. He provides an effective example of how IL can be integrated into an intermediate level economics course with the use of quantitative case studies. His model is based on how the *Framework for IL* frame Research as Inquiry relates to the economics course as students learn to collect, manipulate, and analyze quantitative information in order to contextualize and apply it.

SECTION IV. COLLABORATING TO ADVANCE PROGRAMMATIC INFORMATION LITERACY

Chapters in Section IV highlight collaborative efforts to develop IL on a programmatic level. Authors in this section describe the partnerships involved in creating and evolving shared ownership of IL within their institutions. In light of the *Framework for IL*, the challenge of encouraging broad-based ownership of IL beyond librarians and individual librarian-faculty partnerships is a timely one, and these chapters give us interesting models that are potentially replicable at other institutions.

Lori Baker and Pam Gladis describe a programmatic effort to institutionalize IL at their small liberal arts college. In particular, they discuss a key issue associated with IL instruction—that of ownership and the required shift of perspective required when the agency of IL becomes institutional. From a different perspective again, Angela Feekery, Lisa Emerson, and Gillian Skyrme explore issues related to the integration and scaffolding of IL throughout a degree program in New Zealand. The results of their action research revealed the shifting perspectives of faculty related to the responsibility for IL within the curriculum as they were introduced to holistic views of the concept. Feekery et al. show us the power of collaboration and conversation to advance IL practices.

Alison Gregory and Betty McCall describe collaborative work to integrate IL vertically into the curriculum at their institution, discussing their recognition that developing IL skills are progressive and the process cannot be taught in one-shot sessions or in one course. Their results also point to the value of collaboration when faculty are pro-active in viewing their role in the development of IL. Beth Bensen, Denise Woetzel, Hong Wu, and Ghazala Hashmi describe the impetus for the Quality Enhancement Plan at their institution and the first step in its implementation in the second semester first-year writing course as part of a planned vertical implementation of IL.

Francia Kissel, Melvin Wininger, Scott Weeden, Patricia Wittberg, Randall Halverson, Meagan Lacy, and Rhonda Huisman round out the collection by presenting a model for faculty-librarian-administrator collaboration related to IL through the establishment of a community of practice, a volunteer work group to develop pedagogical strategies for teaching in courses with research assignments. Kissel et al., then, brings our collection full circle. The community of practice they describe embodies the notion of shared responsibility for IL and for the importance and power of collaboration and dialogue to engage us in advancing IL teaching and learning.

WHITHER IL?

As we reflect on the tremendous amount of research, pedagogical planning, teaching and learning that has enveloped IL since the *IL Standards* were initially adopted, we are impressed with the inroads and advancements that have been made in a short period of time. Yet, we also recognize how much work there is still to be done as Norgaard and Simkinson have so aptly described in their reflective conversation to open this collection. As we finish our work on this collection, the *Framework for IL* has been approved, discussion surrounding it continue at conferences and in webinars, and plans for implementation and development of related resources to facilitate adoption are underway. The

Framework for IL serves not just as a vehicle for evolving our conception of IL and how we help students to become information literate, it serves as a potential vehicle for sharing ownership of the responsibility for IL. Recalling our presiding deity Janus, we believe this collection, as part of the ongoing conversation on IL, serves to help us—librarians, faculty, administrators, external collaborators—to meet the challenge by looking back and learning from the past and looking forward to envision the future.

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