GLOBAL PERSPECTIVES ON INFORMATION LITERACY

Fostering a Dialogue for International Understanding





Global Perspectives on Information Literacy

Fostering a Dialogue for International Understanding

Edited by the ACRL Student Learning and Information Literacy Committee, Global Perspectives on Information Literacy Working Group

With a Foreword by Emma Coonan

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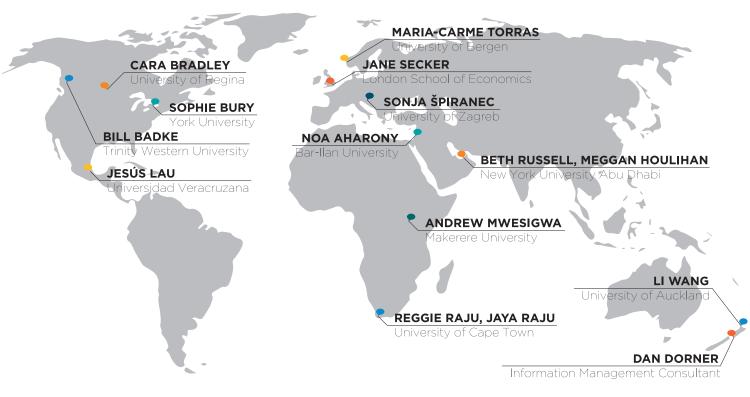
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AUTHORS



Foreword by Emma Coonan

Executive Summary

Information literacy is a concept without geographic boundaries in librarianship. Across the world, academic librarians work toward developing students' abilities to effectively find, evaluate, use, and create information. The approach to teaching these lifelong, cumulative skills can be designed in myriad ways throughout our global environment. This work seeks to share individual international perspectives that, through a unique voice, provide clarity toward how information literacy is viewed, taught, conceptualized, and, in general, approached internationally. The individual voices of our authors provide perspective on the unique challenges and opportunities presented in each region.

Africa

Mwesigwa, of Makerere University, Kampala, Uganda, Africa, explains that in East Africa, information literacy is taught as a stand-alone course and is integrated into the curriculum. He emphasizes the need for instruction librarian training in this region and highlights Makerere University and University of Nairobi as centers for excellence and hubs for information literacy instructional practice. Yet, he notes, there are challenges to information literacy integration overall, including a "rigid institutional culture" and a reticence to acknowledge information literacy as an educational priority in higher education.

Like Dorner in his chapter on Asia/Oceania, Raju and Raju, looking at South Africa, agree that information literacy must be centered within an appropriate social context. They share sobering literacy statistics, including a 70 percent illiteracy rate for Grade 3 learners in their region. Against this backdrop, Raju and Raju insist that South Africans must be self-directed learners who use information literacy skills to contribute to their area's socioeconomic development. In the same vein, the authors see a need for academic librarians to adopt a more proactive stance as educators and instructional collaborators.

Asia/Oceania

Dorner notes in his chapter that the Asia/Oceania region is comprised of over sixty-one countries, including China and India, and in that respect defies a concise overview. Like Bradley in her description of information literacy needs of Canadian indigenous populations, Dorner asserts that information literacy models have been primarily created for use in developed countries and are grounded in Western thought and social structures. With Gorman, he developed an information literacy program model for developing countries, specifying that in order to be effective, a program must consider and address the cultural context within students' learning environment. Dorner questions whether Western models, such as the ACRL Standards and Framework, are suitable for use in Asian cultures.

Wang details the Research Skill Development Framework (RSDF) in use in New Zealand higher education. RSDF was developed as an outgrowth of the ANZIIL (Australian and New Zealand Institute for Information Literacy framework^[1]), which in turn was inspired by the ACRL *Information Literacy Competency Standards for Higher Education*. Wang created a model of information literacy curriculum integration influenced by the RSDF. This model draws upon the

"what, who, and how" of information literacy curriculum integration and can be used to map information literacy programmatic impact. Wang notes that information literacy is well integrated into higher education curricula throughout New Zealand and Australia and that future developments in this region include a greater focus on building student skills with regard to future employability.

Europe

Secker describes the United Kingdom's rich information literacy history, beginning with the development of the SCONUL Seven Pillars of Information Literacy, created in 1999 and updated in 2011. The 2011 version incorporated not just skills, but also information literacy attitudes and behaviors, influencing the focus of the ACRL Framework for Information Literacy for Higher Education. Secker and Emma Coonan's 2011 model, A New Curriculum for Information Literacy (ANCIL), places learners at the center of the information literacy landscape and has also been an influential document. The United Kingdom's professional librarian association, Chartered Institute for Library and Information Professionals (CILIP), began to address information literacy in the 2000s, through the organization as well as the LILAC (Librarians' Information Literacy Annual Conference), beginning in 2004. Advocacy continues in the United Kingdom, primarily through CILIP's Information Literacy Group (ILG), including a forthcoming update of the 2004 CILIP definition of information literacy.

Writing and information literacy are intertwined in Norway, notes Torras. The online tutorial Search and Write advocates for a holistic melding of the two, and there is also close collaboration between writing centers and academic libraries. Torras also details NORDPLUS, a collaborative group devoted to enhancing the role of the academic library in Norwegian higher education. As was evident in Secker's UK chapter, information literacy in Norway is accepted (although Torras notes that information literacy assessment is not common) and a part of the Norwegian higher education student experience.

Špiranec of Croatia offers a different European perspective, reminding readers that Europe itself is divided by a Western perspective that is primarily democratic and capitalist and an Eastern perspective that is more transitional and postsocialist. The environment is critical in the interpretation and instruction deployment of information literacy. Špiranec argues that a more traditional approach to information literacy simply does not work in a more volatile and post-conflict area like Croatia. Critical information literacy (CIL), with its focus on social issues, has more relevance and traction. Špiranec states, "in post-conflict and transitional societies like Croatia and many other countries from the region, multiperspectiveness, as promoted within CIL, seems pertinent for societal reconciliation, reconstruction, and the building of more tolerant pluralistic societies" (p. 114). This inclusion of broader social issues within the context of information literacy lays the path for adoption of information literacy within the higher education curriculum.

Latin America

Lau discusses the Mexican information literacy standards, Normas sobre alfabetización informativa en educación superior. These standards were written to reflect Mexican educational

priorities, yet were also crafted to provide relevant content to the larger international information literacy community. Mexican librarians also find guidance from the IFLA *Guidelines on Information Literacy for Lifelong Learning*, which Lau participated in crafting. Lau notes that there is still much work to be done with regard to information literacy in Mexico, integrating it within the basic education curriculum, as well as higher education. In his words, "México needs citizens skilled in information to contribute and benefit from the world's knowledge output" (p. 64).

Middle East

In the Middle East, Aharony shares her study of Israeli librarians' perceptions of information literacy, finding that librarians in that region view the concept as one under the purview of the library, rather than one that should be taught by faculty. In recognition of people crossing borders and adopting new cultures, she also emphasizes the growing need for librarians to consider the mobility of information literacy throughout an individual's life as they change jobs and adjust to new environments.

Russell and Houlihan cover the development of Western-style university campuses in the United Arab Emirates and Qatar. These new campuses bring with them a Western-centered focus on student learning, complemented by "expat" faculty hired from abroad. This has shaped the face of information literacy in the region to one that is very focused on documents such as the ACRL Standards. The authors point out a disconnect, however, between the K–12 educational systems in the region and the transnational campuses. They recognize a need for a cohesive approach to information literacy in the region that recognizes local needs. Establishing a national library association and local chapters could help support this information-literacy-community-building imperative.

North America

In his chapter on Canadian information literacy, Badke admits that after much effort placed on integrating information literacy into the curriculum, "the task of information literacy needs to be turned over largely to disciplinary faculty, guided by the information literacy expertise of librarians" (p. 24). Badke also notes the very collaborative nature of Canadians, yet points out "Canadian information literacy remains a practice without a central document to define it and without a central body to govern it" (p. 25).

In Saskatchewan, Bradley discusses the significance of the Centre for Evidence Based Library and Information Practice (C-EBLIP), based in Saskatoon at the University of Saskatchewan. The Centre, informed by research practices in evidence-based medicine, asks librarians to mine research questions from their own practice and has resulted in multiple evidence-based, information-literacy-focused Canadian studies. Bradley also discusses Canada's significant indigenous population and the rise of information literacy instruction tailored to the learning needs of that specific audience, including questioning "Euro-centric frames" for categorizing information in favor of those that may exist closer to the lens of indigenous populations. Sophie Bury, at York University in Toronto, highlights the work of Canadian information literacy researchers, including Gloria Leckie's work on faculty information literacy practices, Bill Badke's

explorations of barriers to faculty engagement with information literacy, Heidi Julien's work on information literacy instruction, and Heidi Jacobs's research on critical information literacy, all influenced by a Canadian emphasis on (in Bury's words), "alternative pedagogies rooted in problem-posing approaches where information is recognized as being situated in disciplinary contexts where power relationships come into play" (p. 40).

The diverse voices in this white paper show the influence of culture, politics, and community on information literacy integration within higher education. While Western thought has resulted in established information literacy models in the US, the United States, New Zealand/Australia, and Canada, other developing regions find their articulation of information literacy more frequently shaped by social issues. Critical information literacy is identified as a relevant model for developing countries and post-conflict areas. Across all of the chapters, a commitment to student learning, to helping students gain information literacy and lifelong learning abilities, remains at the forefront throughout our world.

Note

[1] Alan Bundy, ed., Australian and New Zealand Information Literacy Framework, 2nd ed. (Adelaide: Australian and New Zealand Institute for Information Literacy, 2004), http://www.caul.edu.au/content/upload/files/info-literacy/InfoLiteracy/Framework.pdf.

Introduction

Origins and Goal

As one of ACRL's four strategic goal area committees, the Student Learning and Information Literacy Committee (SLILC) contributes to the ACRL Plan for Excellence (http://www.ala.org/acrl/aboutacrl/strategicplan/stratplan) by working toward this strategic goal: "Librarians transform student learning, pedagogy, and instructional practices through creative and innovative collaborations."[1] As a result, in the winter of 2015, the SLILC convened a subset of its membership, the Global Perspectives on Information Literacy Working Group, to explore "transform[ing] student learning" through the creation of new and "innovative collaborations." The idea for a white paper examining global perspectives of information literacy comes from a recognition of the need to build understanding for how information literacy is represented around the world and how it is enacted across and between cultures. The Working Group included representatives from SLILC, the ACRL Instruction Section, the Chartered Institute of Library and Information Professionals (CILIP) Information Literacy Group in the United Kingdom, and the International Federation of Library Associations and Institutions (IFLA) Information Literacy Section. Members drew upon their personal and professional experiences, such as attending international conferences, working abroad, and engaging with global librarianship to bear on the project.

Global Perspectives on Information Literacy: Fostering a Dialogue for International Understanding brings together a variety of librarian voices across cultures into a single document. We aspire to spark a conversation among US and international academic librarians by connecting varied approaches to information literacy in order to gain a better understanding of how librarians are promoting student learning through information literacy across cultures.

Structure and Author Selection

Over the past year and a half, the Working Group had several inquiry-driven conversations about global librarianship. The scope of these conversations spanned several broad questions (e.g., What is global? What is information literacy?) to specific observations, practices, and professional roles of librarians. One of our members shared an observation that given budget constraints, many US librarians do not have the opportunity to attend international conferences and therefore may be missing opportunities to discuss information literacy issues on a global level. Another member, who has presented at international conferences, wondered how students across the globe are supported in higher education and how faculty collaborate with librarians in other cultures. Other questions we considered: How is higher education structured outside of the United States and how does that impact information literacy? What trends in information literacy theory and practice are most impactful? What do our colleagues around the globe see as future trends around information literacy? These questions and many others drove our curiosity to understand the forces that impact and shape information literacy in other cultures. We worked to design a white paper that could increase exposure to international perspectives on information literacy.

Structure

To strike a balance between openness and constraints for our authors, we decided on a semi-structured template approach. We wanted authors to write about information literacy from a personal perspective and to discuss major research trends, models, practices, and the librarian's role in teaching information literacy around the world. Knowing that no author can encapsulate all aspects of information literacy for a region of the world, we provided questions outlined in a template to construct a narrative informed by the information literacy culture in which each author works. We provided authors the following outline that included a mix of required questions and the freedom to choose from suggested topics:

- I. Introduction: Describe your work with information literacy and your role with information literacy during your career. Who are you and why are you here? This could be a place to highlight personal research.
- II. Choose 2 of 4 topics that best reflect your personal and professional landscape:
 - a. Research Trends: What kind of information literacy-related research is being done in your country or region that has impacted your approach to teaching? What are the enduring research questions that have influenced your role as a teacher? Are there trends in methodologies being used to answer research questions? What can librarians from around the world learn from what is being done in your region?
 - b. Models of Information Literacy: What standards/frameworks/models/learning theory/pedagogy or specific paradigms do you most often use for inspiration in your teaching? Why do you turn to these models? What makes them useful? (Note: This could include models from other countries and could reflect the dominant perspective from your region and/or your individual perspective.)
 - c. Theory and Practice = Praxis: Describe the connection between information literacy and student learning from your position or perspective. What is your teaching philosophy? How do you use theory to improve student learning in your classroom?
 - d. The Role of Librarians: Describe librarian education in your country or region. What is the role of librarians in the higher education landscape of your country or region? How were you trained to become a teaching librarian? How do you gain professional development in your area?
- III. Future Visioning and Reflection: Where do you imagine information literacy will be in your country/region in the next five to ten years? Why? What evidence do you have to demonstrate this? What are the key challenges in your position (please highlight concrete examples)? What will it take to get there? Feel free to use the literature to back up your main points.

Author Selection

We used a variety of methods to identify experts on information literacy from around the world. We began our search for authors by relying on personal knowledge and connections

through conferences we had attended, such as European Conference on Information Literacy (ECIL) and the Annual International Federation of Library Associations and Institutions (IFLA) conference, through our wide variety of service on committees, and through a review of the literature. During an exhaustive literature search, we focused particularly on regions that had little or no representation on our expanding list of possible authors. In some areas where we had multiple authors as possibilities, we invited authors to write their section collaboratively. For example, our Canadian authors consulted together to complement and align their chapters.

There were challenges in identifying authors for this paper, both for the Working Group and for the authors. The most significant constraint for this project was selecting authors who were able to write fluently in English; this limited the pool of potential authors, but ensured that the ACRL membership would be able to engage fully with the white paper. While readers will benefit from the notes and references to scholars and practitioners from other regions with whom many may be unfamiliar, the references are largely in English, which reminds us that we are often limited in our perspective by language. Defining and choosing regions to represent was also a challenge, as we knew we would be unable to represent all regions, cultures, and information literacy perspectives in a single document. Furthermore, while the instructions emphasized the limitations, the authors acknowledged the difficulty of writing a perspective representing an entire region. We acknowledge there are many other voices that could be included in this white paper, and we hope the ensuing conversation will encourage additional perspectives to the forefront while connecting more of us together. In the end, the authors contributing to this white paper are a mix of theorists and practitioners from various regions of the world—Africa, Canada, Europe, Oceania, Asia, Latin America, and the Middle East reflecting a broad and diverse set of voices that begin to open a dialogue on how librarians approach the difficult task of increasing student learning.

As we delve into the conversation, we hope you will join us in striving to expand our understandings of information literacy in an international context. As you engage in your own research and work to improve your practice, we challenge you to broaden your reading to include international titles and to extend your engagement in the IL community by reaching out to teaching librarians around the world. Finally, as you read the contributions, we invite you to reflect on how these voices impact and enrich our understanding of teaching theory and practice.

ACRL Student Learning and Information Literacy Committee, Global Perspectives on Information Literacy Working Group

Merinda Kaye Hensley, Chair of ACRL Student Learning and Information Literacy Committee (SLILC), 2015–2016, and Chair of SLILC Global Perspectives on Information Literacy, 2015–2017

Nicole E. Brown, Member of ACRL SLILC, 2015–2017

Ellysa Cahoy, Past Chair of ACRL Instruction Section, 2015–2016

Alan Carbery, Member of ACRL SLILC, 2015–2017

Rhonda Huisman, Chair of ACRL SLILC, 2016–2017

Kacy Lundstrom, Member of ACRL SLILC, 2015–2017

Sharon Mader, Chair of International Federation of Library Associations and Institutions (IFLA) Information Literacy Section, 2013–2017

Jane Secker, Chair of Chartered Institute of Library and Information Professionals (CILIP) Information Literacy Group, United Kingdom, 2015–2018, and Member of International Federation of Library Associations and Institutions (IFLA) Information Literacy Section, 2014–2020

Julie Ann Garrison, ACRL Board Liaison, 2015–2016

Caroline Fuchs, ACRL Board Liaison, 2016–2017

Mary Jane Petrowski, ACRL Associate Director and Staff Liaison to SLILC

Note

[1] "ACRL Board of Directors' Actions, January/February 2015: Highlights of the Board's Midwinter Meetings," College and Research Libraries News 76, no. 3 (March 2015), http://crln.acrl.org/content/76/3/128.full.

Towards a Constructive Unbalancing: The Reflexive Turn in Information Literacy

Emma Coonan

A roar of indignation shook the room. Before the commotion had settled down another teacher had stuck his head in the door to see what the trouble was.

"It's all right," Phaedrus said. "We just accidentally stumbled over a genuine question, and the shock is hard to recover from." [1]

The last two decades have seen a shift in the most fundamental issues of our concern. This transformation can be traced in the thought patterns, concepts, and metaphors through which we see our practice as teaching or instruction librarians and which in turn structure it. Above all, it manifests in a relinquishment, however reluctant, of a monolithic or absolutist vision of information literacy as a singular, constant, and stably definable state, in favour of a relational and embodied phenomenon in which the individual's unique context and connections are of paramount importance. This white paper highlights both the multiplicity of those contexts and the global interconnections between our divergent experiences.

The monolithic vision of IL is grounded in a belief that there are comprehensive and universally applicable standards both for information behaviour and information competency: "right ways" of using information, and measurable levels of attainment in doing so. This idea of a *universal* form of IL that could be not only identified, but also taught and assessed, seemed to take root early on in IL's forty-year history. Corporate definitions and models anatomised the encounter with information into a linear process with a defined end point and mandated an order and a method in which that process should be carried out. The trajectory carried the learner from need identification through searching and locating, through evaluating to citing, and thus to the end of the transaction—as though IL were a convergent force designed to uncover a singular, final answer.

Despite the unyielding solidity of the models, many IL practitioners found the reality of their teaching to be far more fluid, uncovering multiple legitimate approaches to research problems, contradictory yet valid interpretations of evidence, and instances like the one above where, together with our learners, we stumbled over questions to which we could not immediately—or perhaps ever—find stable solutions. We learned that knowledge itself is less about acquiring definitive answers and ways of doing, and more about participating in a dynamic, socially constructed, and endlessly developing work.

Our certainties have been called into question; our equilibrium has been disturbed, perhaps beyond recovery—and we are, I believe, the better for it.

In our own understanding and practice, our roles as information literacy librarians are no longer about guiding students to the "right" resource, and we can no longer position ourselves as mediators, connectors, gatekeepers, or kindly sages. Our use is not in pointing out the right route to academic information, but in exploring and enacting as part of a learning

community the various ways in which knowledge in any domain may be framed, analysed, interpreted, questioned, communicated, and lived. This evolution is captured in the terminological shift from "user education"—something done to learners by librarians—to the language used by the authors in this paper to position their work: curriculum integration, academic development, situated practice.

This growing awareness of the contextual and co-constructed nature of information, reflected in the ACRL's movement from "standards" to a negotiated "framework," allows us to recognise the connections between IL and learning. Once we begin to understand learning as "a qualitative change in a person's way of seeing . . . rather than a change in the amount of knowledge which someone possesses," we perceive that, as a constituent part of the process of learning, IL is not merely additive but transformative. Admitting the validity of information that challenges or contradicts our beliefs, and revising our stance accordingly, is a crucial element of transformative learning and personal development. Thus, engaging in critical encounters with information changes more than the learner's understanding: it also changes the learner, perhaps profoundly.

As a result, this shift towards a more questioning, relational view of IL inescapably brings with it a destabilising of the "ownership" of IL. Within the absolutist vision of IL as a set of universally defined competencies, it is librarians who articulate what information literacy looks like, assess whether learners have met the required standard, and graciously confer the status of "information literate." But once we recognise the transformational nature of the encounter between the individual and information, the agency passes from the librarian to the learner. Once we understand that the value of information varies according to the context within which it is used, we also recognise that it is the individual who is best placed to decide whether and how to deploy that information to make it serve their needs within that context. Rather than a skill conferred by professionals, we begin to see IL as a state of mind, like Bruner's description of academic disciplines as "less repositories of knowledge than . . . methods for the use of mind." From this perspective, information literacy is a critical lens through which we interact with the world and make meaning of it; a way of seeing, and therefore a way of being.

To relinquish the reassuring conception of IL as a "prescriptive enumeration of skills" that is the occupation and the proper preserve of the library may seem a loss to mourn. Yet if we let go of this idea of our practice as a skill set uniquely propounded by librarians and start to see it instead as a "cluster of interconnected . . . concepts," part of a larger enterprise whose purpose is both to educate and to discover, we gain something greater: partnership in a community engaged in the construction of knowledge.

Good teachers don't just do; they are. They model ways of being, approaches and mind sets, that can help learners to decide who and how they want to be. Our role as information literacy practitioners is not to describe a critical relationship with information, but to enact it: to model what an approach based on critical appraisal and discernment, on asking questions, on weighing evidence, on probing arguments, statistics, and claims, looks like, not only in the academic arena but in everyday life.

Adopting this role brings with it one other disconcerting responsibility: to apply as far as we

can the same critical gaze to the underpinning values of our own practice. This movement, which is broadly labelled critical information literacy, represents a reflexive turn in IL thinking which argues that as educators we are inescapably involved in an unequal power structure whose greatest achievement may be the pretence of being innate. Our choice is either to accept or to question that structure: we cannot remove ourselves from it, to criticise it from a position of objectivity. "Neutrality is not an option."

This reflexive position disconcerts once again our achieved beliefs and erodes even the provisional securities of our reflective practice. But, again, that loss of certainty and comfort is compensated for by the possibility of a greater integrity, a deeper insight, and a new awareness of our place as learners and inquirers within a wider community of practice, one which consists of an intersecting set of communities such as that modelled in this work.

The work does not end with the abjuring of our neutrality. Rather, it is from that unstable point that it begins. Radical commitment to a vision of IL that embraces uncertainty, multiple viewpoints, and unfixed knowledge may still be reappropriated by a more determinate position, petrified by institutional pressures, brought to a standstill by economic imperatives surrounding the university (such as ever-increasing calls to demonstrate value through quantitative measures). To maintain our commitment to openness, contingency, pushing beyond "right answers," we need the support and provocation of our peers. If it takes a village to raise a child, it takes a community of practice to maintain a reflective information literacy practitioner: a librarian capable of embracing uncertainty and of turning an unfearing questioning gaze on their own identity and entitlement.

Notes

- Robert M. Pirsig, Zen and the Art of Motorcycle Maintenance (London: Bodley Head, 1974), 205.
- [2] Christine Bruce, Sylvia Edwards, and Mandy Lupton, "Six Frames for Information Literacy Education: A Conceptual Framework for Interpreting the Relationships between Theory And Practice," Innovation in Teaching and Learning in Information and Computer Sciences 5, no. 1 (2006): 1–18, http://www.tandfonline.com/doi/full/10.11120/ital.2006.05010002; Annemaree Lloyd, "Information Literacy Landscapes: An Emerging Picture," Journal of Documentation 62, no. 5 (2006): 570–83, doi:10.1108/00220410610688723.
- [3] Andrew Whitworth, "Communicative Competence in the Information Age: Towards a Critical Theory of Information Literacy Education," *Innovation in Teaching and Learning in Information and Computer Sciences* 5, no. 1 (2006): 1–13, http://www.tandfonline.com/doi/abs/10.11120/ital.2006.05010007.
- [4] Andrew Walsh and Emma Coonan, eds., Only Connect . . . (Huddersfield, UK: Innovative Libraries, 2013), 8-9.
- [5] Association of College and Research Libraries, Framework for Information Literacy for Higher Education (Chicago: Association of College and Research Libraries, 2016), http://www.ala.org/acrl/standards/ilframework.
- [6] Ference Marton and Paul Ramsden, "What Does It Take to Improve Learning?" in Improving Learning: New Perspectives, ed. Paul Ramsden (London: Kogan Page, 1988), 271.
- [7] Jerome Bruner, The Process of Education (Cambridge, MA: Harvard University Press, 1960), quoted in Noel Entwistle, Teaching for Understanding at University (Basingstoke, UK: Palgrave Macmillan, 2009), 1.
- [8] Association of College and Research Libraries, Framework.
- [9] Ibid.

[10] James Elmborg, "Critical Information Literacy: Implications for Instructional Practice," *Journal of Academic Librarianship* 32, no. 2 (March 2006): 193, doi:10.1016/j.acalib.2005.12.004.

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CHAPTER A

Dr. Noa Aharony

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Region: Middle East

Introduction

I am an associate professor in the Department of Information Science at Bar-Ilan University, Israel. I came to the information science field from education, and particularly from educational technology. The combination of educational technology and information science enables me to gain a comprehensive understanding of the information literacy issue. I have taught the information literacy course since 2000. For the first ten years, I taught master's students, and in the last six years, undergraduates. The focus of the course has changed during the years. When I taught graduate students, I concentrated on the broad perspective of information literacy (e.g., learning theories and psychological characteristics such as cognitive styles), as well as on information literacy skills and techniques that students should have as librarians or information professionals who serve their clients. Now that I teach undergraduate students, I focus on information literacy skills and principles they should acquire and understand for future academic studies.

The topic of information literacy is crucial all over the world, as we live in an era of information abundance, and each one of us has to be information literate in his or her professional as well as personal life. Individuals should know how to search for information, how to evaluate it, and how to present it. There is no doubt that the topic of information literacy is in the focus of librarians, information professionals, and educators in Israel; however, only a few studies focusing on information literacy have been conducted in Israel.

A study I conducted in 2010, "Information Literacy in the Professional Literature: An Exploratory Analysis," reviewed various publications dealing with information literacy and the emerging trends reflected over the period 1999–2009 in the Web of Science database. The main results suggest that the term *information literacy* has various characteristics in an additional and interesting context: health and medicine. This finding may reflect a tendency to associate information literacy and health and medicine and stresses people's need for information literacy in that context. The study emphasizes that information literacy is no longer an issue for librarians or educators only.

Another study I conducted with my colleague Jenny Bronstein in 2013, "Academic Librarians' Perceptions on Information Literacy: The Israeli Perspective," seeks to explore Israeli librarians' perspectives towards major components of information literacy. Do librarians find there is a need to redefine the concept? Who do they think should teach it? How do they think Web 2.0 platforms and social networks influence the concept of information literacy? The study used an online survey and data analysis consisting of quantitative and qualitative phases. Findings revealed that, in general, Israeli librarians see little or no need to

revise the traditional definition of information literacy, even though they expand it when including Web 2.0 and digital literacy characteristics within its scope. In addition, respondents think it is more a library role than a faculty role to teach information literacy, and they view positively the possibility of integrating Web 2.0 platforms into information literacy courses.

A third study conducted by Hadas Gur and me in 2015, concentrated on the question of whether personal characteristics such as openness to experience, curiosity, learning strategies, self-efficacy, and technology skills are associated with information literacy level among Israeli undergraduate students in their first year at the university. Results showed that the older students are, the more open they are to experiences and being curious, the higher their computer skills and self-efficacy, the more deeply they learn, and the higher their information literacy level. Thus, personal characteristics, as well as age and computer skills, affect students' level of information literacy.

The Role of Librarians

In Israel, there are two tracks to becoming a librarian. The first is to study at a university and get a first or second degree in library and information science. The second is to study at a college and receive a professional librarian certificate. In order to become an academic librarian, one should have a second degree in LIS.

Not long ago, Israeli students from different disciplines (not LIS) encountered information literacy in various ways. They had to take a course titled, "Library Instruction," "Bibliographic Instruction," or "Information Literacy," where they first heard about the meaning and importance of information literacy. There were different ways to study this subject. In some institutions, students had to take a one-semester course on campus, and in others, it was limited to four or five meetings on campus.

However, this has changed, and the IL course is now delivered only online as a distance course. In most institutions, this instruction is basic and theoretical. Students should follow some modules and then take an exam at the end. Usually, the undergraduates who have to write seminar papers ask the librarian for further, more advanced instruction. Students would like to know how to perform advanced searches on the Internet as well as in professional databases. In these cases the librarian shows them the principles of advanced searching. In the case of graduate students, when they have to write their theses they also turn to the librarian in order to show them more sophisticated search techniques. In addition, there are certain professors from different departments that ask the librarian to enter their classes and explain to their students how to cope with the information overload and how to search effectively on the Internet and in professional databases. In most cases, librarians usually do not follow any official standards or the ACRL Framework for Information Literacy for Higher Education, but rather try to focus on students' or professors' requirements.

Library directors claim that librarians are not familiar with, or experienced in, teaching and lack teaching methods, and thus have difficulties in teaching and instructing their users. In order to facilitate this process, library directors offer workshops so that librarians can learn instructional and methodological techniques. Before instructing students, librarians should

deliver a lesson in front of their colleagues and learn where they should improve. Only if they succeed in this phase can they instruct students. However, librarians still feel that they are not well-prepared for this mission and would like to improve their skills. In reality, even though training workshops are offered, few librarians take part in them.

Concerning Israeli librarians' professional development in general, and information literacy in particular, it seems that they are eager to broaden their horizons. There is one professional organization—ASMI (Association of Israeli Librarians and Information Professionals)—that offers advanced courses for librarians' development. In addition, there are several conferences, such as the public libraries conference or Teldan Information Systems conference each year, that librarians can attend. However, Israeli librarians claim they would like to take more courses and professional advanced studies in order to improve and become better librarians who master the newest technological tools as well as pedagogically useful ones. They add that their opportunities to expand their skills and knowledge are limited (because of time and budget limitations), and they would like to attend more conferences or courses. In my opinion, I am quite sure that because of the economic limitations the situation won't be better in the near future.

Models of Information Literacy

Israel does not have its own standards or frameworks for information literacy, and librarians rely mostly on the ACRL Standards for Information Literacy for Higher Education. While not specific to the Israeli experience, two major current learning theories associated with information literacy are most used in Israel: constructivism and connectivism. [4] I prefer the constructivist theory as one to use when teaching IL to my undergraduate or graduate students.

The constructivist approach proposes that individuals construct knowledge and skills upon their previously existing constructs based on their experiences. In other words, the individual brings to the learning situation already-acquired knowledge, and that knowledge has a strong influence upon how the learner constructs meaning and acquires new knowledge. Further, constructivist theory contends that the process of knowledge acquisition and creation should be active in order to become stored in long-term memory. Instructors who follow the constructivist approach use teaching techniques such as inquiry-based learning, discovery learning, and problem-based learning—activities that focus on learners who take active roles in the learning process. The instructors serve as facilitators or guides. The literature (e.g., Gradowski, Snavely, and Dempsey^[5]) emphasizes the relevance of active learning, a central tenet of constructivist learning theory, to information literacy instruction. Oakleaf and VanScoy note that learning takes place when individuals participate in activities and problem solving.^[6] I find the best learning happens when students try to solve problems, reflect upon their experience, and describe their search or learning process—in other words, when they have activities that make them become engaged in their learning.

Another theoretical framework that can help us understand information literacy teaching is connectivism. In the context of IL, this approach posits that learning takes place when learners make connections between ideas that are found on their personal learning networks and are composed of information resources and technologies. Thus, the individual makes connections

between concepts, opinions, and perspectives that are accessed through Internet technologies such as electronic databases, web search engines, and online information resources. [8] Students acquire skills that should be leveraged and, as a result, will be able to see libraries and library resources as parts of their learning networks.

In my own teaching, I use constructivism in designing the instruction course for undergraduate students. For example, when discussing information evaluation on the Internet, I present different criteria for information evaluation, and afterwards I give students different sites to explore and evaluate. At first, they are asked to work alone and examine the sites. Then they are divided into groups and discuss their evaluations and reach a group decision. This activity causes students to be active and engaged in their learning tasks.

Future Visioning and Reflection

Addressing the future of information literacy in the coming five to ten years, I expect there will be a great change concerning the role of information literacy in the twenty-first-century information society. More and more people will understand that IL is a lifelong learning skill and will acknowledge its importance, effects, and implications on different aspects of our everyday life.

As a result, information literacy will no longer be the sole focus of librarians, information professionals, or educators. Rather, it will become a crucial general characteristic of this time. Consequently, people will probably associate IL with other disciplines, such as medicine and health, or workplaces. As Hicks and Lloyd noted, an information-literate person will be one who knows how to develop a workplace identity, work collaboratively, and participate in a collaborative setting. Such a person will be in higher demand than one who has developed only a set of general skills. [10]

Another consideration is the role of information literacy in the transitional processes of those within new intercultural settings. As greater numbers of people shift from one place to another, habitual and familiar information practices may not work, and the individual has to create flexible information literacy practices to fit within different cultures. [11] Focusing on the Israeli perspective, Israel is a country whose population is combined of people who came, and still come, to their homeland from various parts of the world. Thus, these people confront new norms, habits, or culture, and they have to develop information literacy practices in order to survive and become an integrated part of the Israeli country and community. In addition, in Israel, we may see the same phenomenon that characterizes the entire world where individuals change workplaces during their lifetime, thus having to get accustomed to new customs and rules whenever they make a change. As a result, librarians and information professionals should understand that there is a great mobility in an individual's life, and a person has to be information literate in different cycles and places in his or her life. Therefore, rather than just focusing on library skills or on the library arena, librarians should expand information literacy training and consider it as broad, comprehensive practices that may help people adjust to new environments.

Notes

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CHAPTER B

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Region: North America

Introduction

To provide a vision of information literacy within the context of a country as large as Canada is a challenging prospect. Canadian academic librarians have no singular stance on the definition, theory, or practices of information literacy, though there is a growing consensus that information literacy needs to be integrated within higher education curricula in collaboration with teaching faculty.^[1]

My own involvement with information literacy came about almost accidentally. As an MLS graduate in 1985 and a new librarian, I had no idea that this obscure topic would consume so much of my time and energy. Yet information literacy has proven to be a fascinating and fruitful enterprise throughout my career. My defining moment came with a realization that, though I had earlier assumed that students possessed uniformly adequate research skills, I was mistaken. To put it simply, students at all levels, beginning, undergraduate, and graduate, were showing themselves to be more or less lost in the task of research.

Further investigation proved that this was the case and that the problem was not isolated to my institution. Professors assumed that students learn how to do research by doing research, little provision was being made in the classroom for instruction in information and research skills, and students regularly turned in projects that were far below the standards hoped for by their teachers.

Since there was no consistent voice on information literacy from my colleagues in Canada at the time, I found most of my inspiration for addressing the "information literacy problem" in American, British, and Australian resources. I discovered, however, that in the mid-I 980s there were few instruction models available to tell me how to proceed. Thus I ventured into unknown territory, asking a sympathetic academic dean if I could create a research course required of all students in our small school that eventually affiliated with Trinity Western University. To my surprise, he accepted the proposal, and I became an instructor for an untried course, targeted to both undergraduate and graduate students in separate sections. Even more surprisingly, the course turned into a great success, both in recognition by our professors and in information literacy growth among students. I majored on using topics from research projects in other courses, and the assignments took students through the research process from topic selection to problem statements to finding and evaluating resources to writing the paper. At the graduate level, the course continues to this day in several sections, live and online. [2]

As the information literacy columnist for *Online Searcher* (formerly *Online*) since 2007 and the author of the widely used textbook, *Research Strategies: Finding your Way through the*

Information Fog, [3] as well as numerous articles, book chapters and a scholarly book, I have had ample opportunity to develop both theory and practice in support of furthering information literacy. Yet, though Canadian colleagues and institutions did not have a great deal of influence in my early journey, I find that there is a distinctly Canadian approach to the teaching and writing that I do.

Research Trends

Canadian higher education has several distinctions that have shaped its information literacy path. First, education at all levels is provincial, so there are no federal governing education policies. Second, there are many regional organizations that deal with various aspects of librarianship, but few national ones. The former Canadian Library Association is becoming a consortium of regional bodies, and other than a few organizations like the Canadian Association of Professional Academic Librarians and Canadian Association of Research Libraries, a country-wide voice for issues like information literacy is lacking. Third, Canadian higher education is not accredited in the same sense as are colleges and universities in the United States. While there is a membership body for recognized universities (Universities Canada), the emphasis nationally and provincially is on "quality assurance" rather than accreditation, and there are few regulatory standards. Fourth, Canada encompasses an enormous land mass, thus tending to regionalize most endeavors despite the easy availability of communication technology. Fifth, to the positive side, Canadians tend to be collaborative and to seek solutions to problems rather than building dividing walls.

Some elements of higher education in Canada might be seen as detriments, but they have allowed universities to shape their information literacy programs individually in creative ways, with opportunity for the kind of trial and error that often makes for genius in the end. Strongly informed by American efforts, and by two Canadian-based annual conferences—the Workshop for Instruction in Library Use (WILU) and the Augustana Information Literacy Workshop—librarians across the country have been actively involved in information literacy work from the beginning of this movement.

Not that there has not been regret over the gap in national policies to improve information literacy across the country. Cara Bradley writes:

The relative lack of policy development in Canada and the scattered, incomplete nature of those policies that do exist, have left our country in the undesirable position of lagging behind many others in this area and failing to meet the information literacy-related policy goals outlined by organizations like UNESCO. [4]

Yet librarians and their corresponding faculty have not been inactive. Canada is home to a good number of innovative programs whose creativity, I believe, is enhanced by the absence of stringent requirements placed on institutions by outside regulators. Individual institutions are advancing their information literacy agendas, and provincial bodies are presenting educational outcome statements that carry information literacy language.

Many Canadian information literacy efforts are familiar ones, from one-shot sessions in classrooms to more embedded forms, to various online activities, to full-credit courses. Canadian information professionals have developed, and are familiar with, all the forms of

information literacy available in other countries. Yet, in Canada, there has long been an urge to get information literacy more firmly into the curriculum, with major effort having been devoted for years to much more embedded forms of instruction, [5] despite the ongoing barriers. [6]

While the challenge of integrating information literacy into academic programs remains onerous—too few librarians to go around and too little interest from disciplinary faculty—it has also led to innovative work. Of particular note is the Augustana Campus Library of the University of Alberta, which since the late 1990s has offered corequisite research courses in multiple disciplines, with each being teamed with a disciplinary course. While this program is undergoing revision, it has provided a model for integration of information literacy instruction with university courses, such that term paper requirements for one can form the research skill development assignments for the other. [7]

Theory and Practice = Praxis

It has long been recognized in Canada that, as in other countries, the task of information literacy instruction is too large to be accomplished by the small number of academic librarians available in most institutions. As early as 2003, I argued that information literacy needed to be integrated into the curriculum, not as generic instruction, but in the form of robust, discipline-related credit courses. Yet a program of such courses, if implemented throughout a college or university, would soon overwhelm the library staff, since there would only in rare cases be enough teaching librarians to meet such a goal.

Thus I have concluded that, despite the very large barriers to implementation, the task of information literacy needs to be turned over largely to disciplinary faculty, guided by the information literacy expertise of librarians. The key to such integration comes from an understanding of disciplines, not as bodies of content, but as communities of practice. Every discipline embodies an epistemology (foundational sources of its knowledge), a metanarrative (cultural understanding of its ethos and reason for being), and methodology (how the discipline is advanced). As a result, there is a connection between what information literacy seeks and how disciplines do their work, in that disciplines advance their agendas through research. This makes it possible for librarians to meet faculty on the level of their own educational agendas, seeking to help them emphasize that the practice of teaching how to research must bear equal educational importance to content. While it remains difficult to implement and maintain, a program of enabling students to become effective disciplinarian researchers always trumps those same students merely absorbing content that will soon be obsolete. [10]

My own very fortunate association with Robert Farrell of Lehman College, City University of New York, has led to a model and potential practice for a collaborative approach that enables faculty to promote their own information literacy instruction through class assignment templates developed in concert with instruction librarians. This method encourages faculty to voice their own outcomes for information literacy and then be assisted by librarians to shape assignment templates that further those outcomes. All of this is guided by a theoretical approach to information literacy that takes disciplines seriously and recognizes that buy-in by faculty is essential. We see this as the most sustainable future for information literacy.

While in Canada, as in most countries, information literacy instruction remains on the fringes of academic priority, there is no shortage of librarians who recognize that this is no time for territoriality and that enlisting academia as a whole in the task of creating strong student researchers is essential. It is at the heart of the Canadian ethos, after all, to be both collaborative and persistent.

At my own institution, we have three disciplinary information literacy courses in operation, and our instruction librarians have been involved in the planning for both a new inquiry-based core curriculum and a learning commons which will include a teaching and learning center. Our nursing programs, using evidence-based methods, have had long-standing involvement with an instruction librarian who is seeking to enable professors to take a strong role in furthering student information literacy.

Future Visioning and Reflection

Canadian information literacy remains a practice without a central document to define it and without a central body to govern it. As such, its future could be at risk. There are voices, even within academia, who argue that the ubiquitous nature of information technology now enables everyone to do research without the intervention of librarians. While librarians themselves remain hopeful of greater prominence given to instruction in the future, information literacy is by no means a priority in most institutions and is often advanced only through the vagaries of relationships with specific faculty or administrators. Rarely is it programmatically mandated.

There are, however, grounds for hope. First, the rise of information technology has not made the research task easier, but has instead added complexity to every aspect of information use. Second, the older knowledge-dissemination-through-lecture model of higher education is being challenged in a world in which there is ready access to information. This is leading more institutions to move toward project- or inquiry-based curricula which demand a stronger level of information literacy from students.

If there is to be a sustainable future for information literacy in Canada, first it will be faculty and academic administrators who will need to recognize that education is not simply knowledge acquisition but the development of strong abilities to enlist knowledge in discovery and problem solving. Second, those faculty and administrators will have to grasp that, not only do students currently often lack the skills for the new forms of education, but that there is sound pedagogy available to them to enhance those skills.

Canadian librarians celebrate the words of Andrew Comper, president of the (Canadian) Bank of Montreal, to graduating students at the University of Toronto in 1999:

Whatever else you bring to the 21st century workplace, however great your technical skills and however attractive your attitude and however deep your commitment to excellence, the bottom line is that to be successful, you need to acquire a high level of information literacy. What we in the knowledge industries need are people who know how to absorb and analyze and integrate and create and effectively convey information—and who know how to use information to bring real value to everything they undertake. [14]

In the midst of a transforming educational environment in Canada, driven by technology and

newer forms of pedagogy, information literacy must become a crucial and central educational outcome. Despite a lack of national mandates, we are a force of highly committed instruction librarians who have a strong will to place information literacy deeply into the higher education curriculum. With sufficient commitment from the rest of academia, the sound theory and practice of Canadian information literacy proponents can take root in the heart of higher education.

Notes

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CHAPTER C

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Region: North America

Introduction

Saskatchewan is a sparsely populated Canadian prairie province, and it is where I live and first developed my interest in information literacy. My first Saskatchewan library job was as a medical librarian for the local health region, where I conducted a lot of literature searches. The importance of facilitating the development of information literacy skills in health care professionals became increasingly clear to me; medical emergencies, drug interactions, and rare health conditions don't keep the same nine to five hours as the medical librarian! I worked to help health professionals in many roles (physicians, pharmacists, nurses, paramedics, therapists, residents, and interns) become confident in their information use. Health professionals in rural areas of the region also sought to incorporate evidence into their practice, so I travelled to towns across the southern part of the province and delivered instruction using telehealth technology during prairie blizzards to help these rural professions hone their information literacy skills.

This interest in information literacy among rural and remote populations led to a position as the distance education librarian at the local university, the University of Regina. This shifted my focus to helping students develop information literacy competencies to support not only their studies, but also their broader lives. I taught by telephone, e-mail, online videoconferencing, televised lecture, and travelling to students' communities. My position covered the whole of the vast province, so I had the added thrill of small airplanes to reach remote northern communities. Many of the northern students were First Nations' people and mature students who, unlike on-campus students, had never participated in information literacy programs or encountered the scholarly communication system. This was a particularly beneficial time in my career, as there was a lot of opportunity to introduce students to academic research and writing, but also a chance for me to learn from my students, thinking about academic discourse from those new to and, in many cases, "outside" its bounds.

Distance education library services have subsequently been restructured to fall within the purview of subject liaison librarians, and I have moved to the role of teaching and learning librarian, which coordinates the instructional efforts of liaison librarians and support staff. My research has primarily focused on disciplinary differences in conceptions and expressions of information literacy, including in accreditation standards for professional programs^[1] and in the pedagogical literature of academic disciplines.^[2] I also wrote a book on teaching about plagiarism in disciplinary contexts, where I provided examples of high-profile plagiarism cases that can be used as teaching tools to situate plagiarism education in disciplinary contexts.^[3] Echoes of my earlier experiences with information literacy development in rural and remote populations have not been forgotten, though, and have merged with my experience of an increasingly diverse on-

campus population, leading me to wonder if Canada would be well-served by information literacy policy development. I explored the issue, and its many challenges, in a recent article^[4] and continue to believe that this is a topic deserving further research and action in Canada.

Research Trends

Most academic librarians in Canada are tenured academic staff, and research is an expected part of their role (though institutions vary widely in what they include as "research," with some including only peer-reviewed journal articles, and others including a much broader range of outputs, including reports, classroom innovations, and others). The combination of these research efforts and the significant number of librarians engaged in information literacy work has resulted in an increase in both the quantity and the quality of IL research in Canada in recent years. It is impossible to summarize this diverse body of research, so three broad influences will be discussed instead: evidence-based library and information practice, the scholarship of teaching and learning, and indigenization of the academy.

Saskatchewan is fortunate to be the home of the Centre for Evidence Based Library and Information Practice (C-EBLIP), which is based at the University of Saskatchewan, in Saskatoon. C-EBLIP is "devoted to the idea that practitioner-researchers make a vital contribution to . . . the field and discipline of librarianship." C-EBLIP has increased librarian awareness about evidence-based librarianship (EBL) and led to its application in both information literacy practice and research. EBL, with its origins in evidence-based medicine, challenges librarians to formulate precise, researchable questions arising from their practice, identify and critically appraise relevant research, apply the evidence to their practice, and evaluate the process. Librarians in the region are turning to the literature when making information literacy-related teaching decisions and incorporating the research of others into their daily practice. Many of these same librarians are taking on the challenge of conducting their own research when they can't find the evidence that they need to answer their questions. Examples of regional research on information literacy topics undertaken include Kumaran and Chipanshi's work on the information-seeking behaviour of internationally educated nurses in Saskatchewan, [6] and Maddison, Beneteau, and Sokoloski on flipped teaching of literature searching to undergraduate engineering students. [7] In these and other instances, librarians are starting with a practice-based question and then conducting the research needed to answer this question and improve their practice. The result is a growing body of literature that produces high-quality pragmatic research in response to questions arising in information literacy work.

Another major influence on information literacy research in (particularly western) Canada has been the scholarship of teaching and research (SoTL). SoTL is an international movement in wider academia that encourages teachers to "examine their own classroom practice, record their successes and failures, and ultimately share their experiences so that others may reflect on their findings and building upon teaching and learning processes." Mount Royal University in Calgary, Alberta, is home to the Institute for Scholarship of Teaching and Learning, and this body has been very encouraging to librarians interested in conducting SoTL research. SoTL is a good fit for librarians interested in conducting information literacy research; it blends practice and research in a way that mirrors the working lives of most instruction librarians. Librarians

are teaching and trying to help students develop information literacy skills, and they want to try new things and assess the effectiveness of their efforts, and this is exactly the work that SoTL encourages and values. Margy Macmillan's research on how students read and engage with scholarly articles is an example of how the scholarship of teaching and learning provides a framework for exploring and reporting on information literacy topics in such a way that the findings can inform the practice of others. SoTL has also provided an avenue for librarians interested in conducting information literacy research with faculty. It is an approach with wider validity outside of the library and information studies field, so other academics are more comfortable partnering in this kind of research, knowing that it will be recognized and valued in their discipline.

Indigenization of the academy is a movement that is just starting to have an impact on information literacy practice and research, but it is poised to have a profound impact on Canadian practice in the future. Canada's aboriginal population has suffered from years of systemic injustice and racism. The legacy of residential school abuse has been exposed by the Truth and Reconciliation Commission of Canada's (TRC) reports and *Calls to Action*. The TRC made it clear that postsecondary institutions have a critical role to play in education for aboriginal people and also in educating other Canadians about aboriginal people, cultures, and ways of knowing. Every major Canadian university in Canada's four western provinces has indigenization as a core component of its institutional strategic plan or a separate indigenous strategy. Librarians are beginning to consider the implications of this for their practice, and especially their information literacy efforts.

Research on indigenization with respect to information literacy is in its early days, as is evidenced by the fact that it has primarily been reported at conferences, with little published as yet. Most of this early work is quite pragmatic in nature, such as a panel of aboriginal librarians discussing "Indigenizing Instruction: Transformative Practices from Western Canada" at the Workshop for Instruction in Library Use (WILU), Canada's national information literacy conference.[11] More theoretical work is also starting to emerge; one example is Barbara McNeil, who argues "that while operating under the guise of neutrality, information literacy in Canada has acted primarily in the interest of neo-liberal education and has tended to subjugate and exclude information and knowledge about the realities of colonialism and its impact on indigenous peoples." The librarians at the University of British Columbia's Xwi7xwa Library are early leaders in efforts to impact how Canadians think about information and highlighting the Euro-centric frames through which knowledge has been organized. Their library is a case study of "indigenization of knowledge organization," [13] rather than the traditional "colonial classification."[14] While this initially seems a project about collection and classification, Xwi7xwa librarians are quick to point out that it is an important first step in "Indigenous information literacy," teaching students "to be aware of, and to be critical of, the processes of knowledge organization itself in Indigenous contexts." [15] Much work lies ahead, but indigenization of information literacy will be essential to helping all Canadian recognize their biases and open their minds to multiple sources of knowledge and ways of knowing. It is an important step in responding to the Truth and Reconciliation Commission of Canada's Calls to Action and realizing indigenization goals of Canada's universities.

Models of Information Literacy

Canada does not have its own standards or frameworks around information literacy, instead relying quite heavily on the Association of College and Research Libraries in the United States for guidance. Like US librarians, Canadian librarians are in the early stages of determining the implications of the shift from the *Information Literacy Competency Standards for Higher Education* to the *Framework for Information Literacy in Higher Education*. There are undoubtedly those who lament the change, but most Canadian librarians believe that the *Framework* does, in fact, align more closely with what they are trying to achieve with their information literacy efforts. The frames are simultaneously more challenging to teach with and assess from, but at the same time better reflect the depth of understanding needed by Canadian students in the twenty-first century.

Canada has had a small but growing group of librarians interested in critical theory but, with the exception of work by Heidi Jacobs, there has been little intersection between critical theorists and information literacy (particularly as defined by the *Standards*). The *Framework* seems to be a model which could bring these two solitudes together towards a richer understanding and implementation of information literacy practice.

Canada as a whole is a challenging arena in which to develop shared information literacy resources, practices, assessment, and policies. Education (both K-I2 and postsecondary) is under provincial jurisdiction, which means that all directions are set and decisions made independently by thirteen provincial or territorial governments, rather than federally. This is in many ways beneficial, as it allows for customization to meet the distinct needs of different regions of a very large country, but also poses a challenge in coordinating effort. It goes some way to explaining the lack of national information literacy efforts in Canada, though a look at the United Kingdom reveals ways to move information literacy forward in this environment. The Scottish Information Literacy Project (SILP), [18] in seeking to develop an information literacy framework for Scottish residents from early school age through higher education and onto lifelong learning, built the higher education portion of its work on the Society of College, National, and University Libraries' (SCONUL) seven pillars of information literacy. [19] Wales built upon the Scottish project in order to build its own Information Literacy Framework for Wales, [20] customizing it to the Welsh education system and culture. The United Kingdom could serve as a model for Canada, not only in the content already developed, but also in the iterative nature of the projects, in which each jurisdiction built upon and customized the work of others in order to advance information literacy in terms that work for its own location.

Future Visioning and Reflection

Many individual Canadian academic librarians are doing valuable information literacy work, both in their practice and in their research. That work is all the more outstanding because it takes place in the absence of any national (and limited provincial) structure or support. There is no association or organization with information literacy as a major part of its mandate, no Listserv or communications vehicle for these librarians, no guidelines or standards, and in fact not really a good way to identify those involved in information literacy work across the country. The fact that individual librarians persevere in this work is testament to their belief in

the importance of information literacy for students and for society at large.

It is difficult to pinpoint the cause of this lack of coordination, but it likely arises from a combination of factors, including a large, sparsely populated country, academic librarians stretched thinner and thinner as university budgets stagnate, and a national library association that faltered in recent years and has been disbanded. It is clear, however, that information literacy will not assume a higher profile, garner more support, or be valued by decision makers until something changes. It is also clear that, after years of relative inaction by existing associations, it will have to be a grassroots effort by information literacy librarians that turns the tide. The one exception to the relative lack of coordination of information literacy activities in Canada is the Workshop for Instruction in Library Use (WILU), a stand-alone conference that moves around the country each year and is attended by the subset of IL librarians who find funding to attend in a given year. The librarians involved in and inspired by WILU over the years are perhaps the most likely to start a year-round conversation about information literacy and spark some collaborative projects. It seems daunting to build something like this, but with small steps, it might just work.

Longer term goals (likely five to ten years) involve reaching out beyond the academic library sector to develop and implement a "cradle-to-grave" information strategy and action plan. Canada's school librarians have historically been active in information literacy program planning and development, but they too have been impacted by the demise of the national library association and cuts to teacher-librarian positions. Canadian public librarians have not typically been involved in information literacy efforts (at least under that term), but they have an important role to play in helping all Canadians develop and maintain sufficient information literacy to meet their own needs and constitute an informed citizenry. There is a long way to go, but plans like the Scottish Information Literacy Project and the *Information Literacy Framework for Wales* are inspiring models of what information literacy in Canada could look like. It is time to harness all the information work underway in Canada, coordinate efforts, raise awareness, and develop and implement an information literacy strategy that will help Canada and its citizens move forward.

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CHAPTER D

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Region: North America

Introduction

There's nothing like challenging beginnings as a catalyst for growth! As a new academic librarian in 1999, I was charged with leading a recently established information literacy (IL) task force, even though my MLIS degree had not included curricular offerings which emphasized the teaching role. I remain eternally grateful to my administrators for recognizing my potential (even with little knowledge or expertise), as this sparked in me a great interest in IL. Hannelore Rader's keynote at the first Workshop for Instruction and Library Use (WILU) that I attended in 2000 inspired me as well, as she issued a call to action advocating for academic librarians to advance the IL agenda in higher education. I thought to myself: "I have found my people."

My professional roles in two different Ontario academic libraries have involved both contributing to and leading the development of institutional IL plans on three occasions to date. I think a plan of special note is the one crafted for York University under the leadership of Lisa Sloniowski, our then recently hired Information Literacy Coordinator. Lisa provocatively titled the plan *Information Literacy at York University Libraries: The 2005 Manifesto*, and it garnered attention beyond institutional walls, as we were one of the pioneers of formalized IL plans in Canada. My own leadership roles have included chairing IL committees in two different academic institutions where I have worked at three different points in time. Most recently, in 2010 I was the lead in writing and initiating implementation of York's second formal IL plan titled *Information Literacy Plan 2010–2015: Engaging Student Learning through Partnerships*. This plan reflected a transition of sorts, and a shift in emphasis from information literacy to academic literacies, in light of our increased collaboration with other players in promoting student success and learning on campus in the guise of our newly founded Learning Commons.

My own career trajectory saw a shift in 2010 when I became involved in Learning Commons pursuits. For much of the time since then I have cochaired the committee of Learning Commons representatives with a mandate to collaborate with York's instructors (faculty and TAs) to motivate and equip them with strategies to embed academic literacies instruction in course and program curricula. I have also published about this work with a colleague. Most recently (2016), I have been appointed on a part-time basis to the role of Learning Commons Coordinator at York University Libraries. I am excited about where this new role will take me and glad that information literacy continues to be part of what I do.

IL has been a major focus in my scholarly pursuits for over fifteen years. This has included researching faculty's attitudes, perceptions, experiences, and practice in the domain of IL. I have conducted two studies at York University in this area (one using a survey instrument, and the other semi-structured interviews). ^[4] This has involved faculty across different disciplines. More

recently, as I have become interested in the role of a learning commons in academic institutions, this has translated and expanded to an interest in faculty conceptions, experience, and teaching practice in terms of the academic literacy skills of undergraduates. Other IL research interests of mine include assessment, faculty development, and mainstreaming academic literacies in curricula in higher education. [5]

Research Trends

Canadian academic librarians and LIS faculty have made wide-ranging and influential contributions to the IL literature since the 1990s, when it became a mainstream focus in academic libraries largely influenced by the adoption of ACRL's *Information Literacy Standards for Higher Education*. ^[6]

While Canada does not have any IL framework or guidelines and relies on US policy and national documents to a strong degree, it is fair to say that at least in pockets there is evidence of emerging research and practice which emphasizes a more holistic framing intrinsic to newer IL models, where IL is characterized as fundamentally intertwined with other literacies including writing, academic reading, and other such abilities. In my own research, focusing on Canadian academics, findings align with newer IL guidelines and frameworks, where a more flexible, holistic lens is emphasized, indicating faculty appetite for IL framed as part of a larger academic discourse. These faculty are found to be especially concerned with students' ability to critically engage with information and its sources. [7]

Canadian research has definitely influenced the IL literature, and I have chosen to focus on the following three areas to illustrate the nature of this Canadian voice and to summarize important research contributions: (I) faculty conceptions, experiences, roles, and practices in the domain of IL instruction; (2) IL as part of a larger literacies landscape; and (3) critical information literacy.

Faculty Conceptions, Experiences, Roles, and Practices in the Domain of IL Instruction

Gloria Leckie is an influential and early voice on the theme of faculty perceptions and roles connecting to IL. Her seminal article titled "Desperately Seeking Citations: Uncovering Faculty Assumptions about the Undergraduate Research Process," was published in 1996. Leckie calls out the strong influence that faculty have in shaping the undergraduate experience of assignments. However, because the hindsight effect is at work, she contends that faculty forget what it was like to become acculturated to a discipline and learn its literacy conventions. As a result, a deficit model may prevail, where faculty, operating in expert mode, often fail to understand undergraduates' (novices') obstacles and frustrations with the research process.

This challenge has formed a focus of a small body of researchers in Canada who have engaged in surveys, focus groups, or interviews to tease out more about faculty's IL practices, attitudes, and perceptions in Canadian higher education institutions. A common thread has been the recognition that disciplinary faculty are poised to play a crucial role in teaching information literacy in academe and that the faculty-librarian partnership is critical to success.

A prolific voice in this area is William Badke, one author on the Canadian-focused content in this white paper, who wrote an article in 2005 underscoring the aforementioned barriers to

faculty engagement with IL instruction. This relative inertia on the part of faculty does not ensue from a lack of awareness of students' need for help in developing their IL skills. Faculty's perception of IL skill levels in need of development among their students is uncovered in the research of Anne Cannon, Gloria Leckie and Anne Fullerton, Shelly Gullikson, and Lori Morrison. Yet several studies have shown that a noticeable gap exists between the perceived importance of IL instruction among faculty and its adoption on the ground. My own work, including survey and interview research, has established that faculty care about IL instruction and see it as important in the following ways: They perceive much room for development among students especially in terms of higher-order cognitive skills, including developing a questioning disposition and the ability to evaluate, contextualize, and synthesize information sources.

IL as Part of a Larger Literacies Landscape

In recent years new frameworks and models have given greater recognition to IL as an integral component of a broader suite of academic literacies. [13] In these framings IL and related literacies, such as academic writing and reading, are recognized as part of an iterative, recursive process of academic inquiry involving campus-wide partnerships. While Canada has no such national framework, there are several Canadian scholars who have advanced thinking and scholarship on this theme.

Karen Nicholson argues IL practice can be enriched through adoption of the Academic Literacies Framework of Lea and Street. More specifically, she discusses IL as situated practice, which is contrasted against the generic study skills approach, often associated with a deficit model. To embrace an academic literacies approach, Nicholson elaborates by arguing that IL must be embedded in course contexts with an emphasis on acculturation into disciplinary practices and constructivist pedagogies. The work of Hook and Elmborg (Hook is Canadian) also emphasizes sharing concepts and practices between libraries and writing centers to foster student learning and growth, rather than remaining siloed. [15]

On a related note, over the past five to ten years, Canada's academic libraries have seen a strong growth in learning commons models, which has inevitably fostered a focus on academic literacies (including IL) and partnerships designed to foster them. Moreover, the Canadian Learning Commons conference is now well regarded and an annual national event. A groundbreaking article by Schmidt and Kaufman focusing on the Learning Commons at the University of Guelph explores the conceptual model they developed to frame their services. In this approach, the models and services of the Learning Commons are situated along an instructional continuum, with three main elements featuring at the beginning, middle, and end points as follows: supplemental, integrated, and embedded. Various pedagogical theories that informed both the design and delivery of their program are discussed, including cognitive apprenticeship theories, phenomenographic learning theories, and knowledge construction theories. My own research and practice under the Learning Commons umbrella at York University has drawn specifically on academic literacies theory. [18]

The evolution of physical spaces and services in many of Canada's academic libraries to embrace a learning commons model and foster academic literacy skills development has been

mirrored in pockets in the virtual domain. One of these is SPARK, an award-winning, grantfunded, online modular resource developed by the Learning Commons partners at York University. [19] Funding was awarded under the university's Academic Innovation Fund to help drive innovation in teaching. SPARK, with a focus on social sciences and humanities and a primary target audience of undergraduate students, strives to foster a wide range of competencies, including the ability to develop a topic, to manage time well, to gather and note ideas, to read scholarly materials effectively, to engage in library research, to understand academic integrity principles, and to write and compile academic papers. A fundamental underpinning is the recognition that research and writing are not learned in a stepwise, linear fashion but rather are iterative and recursive. SPARK, a Creative Commons resource, has been adapted or used by other universities, and currently a French version is nearing completion. A second resource, Student2Scholar, launched in 2016, focuses on the development of academic literacies for graduate students emphasizing critical thinking, organization, communication, and research skills. [20] It is a self-paced interactive learning resource funded by the Ontario Online Initiative and developed in partnership between Western University (Faculty of Education, Education Library), University of Toronto (OISE Library), and Queen's University (Education Library). This impressive online learning tool, which is available under a Creative Commons license, can be used by graduate students globally and draws on ACRL's IL Framework. Badges and certificates help students or faculty track achievements.

Critical Information Literacy

In the domain of critical IL, there have been some important contributions from Canadian researchers. One of the best known voices in this area is Heidi Jacobs, [21] and a recent influential review article focused on the topic of critical IL highlights her work. [22] In an article cowritten with Berg, she critiques the ACRL Standards for Information Literacy for Higher Education[23] as deficient in attaining desired goals for an information-literate citizenry because of the barriers implied by step-by-step, skills-based approaches which isolate students from its "social, cultural, historical and technological contexts." They argue for the strengths of the ALA Core Values of Librarianship, which has been neglected in the IL literature. Moreover, appreciative inquiry and critical pedagogy approaches are identified as ways to encourage students to engage with the broader social goals of IL. In a follow-up article, Jacobs argues much would be gained by fostering a critical IL approach characterized by a broader theory-based conception of pedagogy. [25] Tewell's article also references the work by aforementioned Karen Nicholson and identifies it with that of other important authors on critical IL, stating that she "advocates a critical reexamination of information literacy within the skills-driven neoliberal agenda." Close to home, my colleagues Lisa Sloniowski and Patti Ryan at York University draw on Henry Giroux's theory of critical pedagogy for inspiration and argue for an alternative approach that resists neoliberal imperatives and embraces IL policy development and drop-in programming that offers critical sociopolitical interventions at particular historical moments. [27] This includes a description by the authors of library programming they developed to bring social justice and social responsibility to the core of librarian work, as well as recommendations regarding potential future librarian roles in IL policy and programming to give more attention to critical thinking, civic engagement, and social justice.

In summary, when identifying why Canadian researchers have been focused on the importance of critical IL, a review of relevant works reveals motivations also evident in the work of critical IL researchers globally, that is, a reaction to the limitations of the traditional skills-based, "checklist," or standards-based IL frameworks and a concern to embrace alternative pedagogies rooted in problem-posing approaches where information is recognized as being situated in disciplinary contexts where power relationships come into play. In addition, the Canadian higher education system in more recent years has definitely come under criticism by local critical IL scholars for adopting a more corporate approach with a focus on professional curricula to ready students for careers, characterized by the hallmarks of an audit culture. They lament the loss of the core values of traditional liberal arts education at universities, and identify critical pedagogy, including critical IL, as offering a way forward to ensure attention to critical thinking, engaged citizenry, and a recognition of IL as contextual, political, social, and cultural.

The Role of Librarians

In more recent years there have been changes to LIS education in Canada which have fostered stronger foundational skills for new professional librarians in both the theory and practice of IL. In Canada there are six schools offering an ALA-accredited MLIS or equivalent program, and a 2016 review of their websites showed that institutions across the board offer more coverage of IL theory, principles, and practice. However, at all schools this is offered as an elective rather than a required course, so whether or not newly minted Canadian librarian professionals will have this educational qualification will depend on the courses they choose to study while at library school.

It is fair to say that there is no standard requirement or professional designation to train librarians to teach. Heidi Julien's work has focused on the state of IL instruction in Canadian libraries (academic and public). [29] In the case of academic libraries she highlights the lack of pedagogical skills, a predominant reliance on one-shot sessions, and lack of professional and financial support for IL initiatives. Despite these obstacles, Julien discovered IL instructional gains, and a shift in IL priorities emphasizing a shift away from teaching about specific tools to "a more concept-focused (i.e., general research strategies) approach." [30] Her research also finds evidence of an increased emphasis on critical thinking and a growing adoption of technology-enabled instruction.

Future Visioning and Reflection

Academic libraries in Ontario, the context with which I am most familiar, definitely continue to place value on IL programming and instruction, though the degree to which this applies may vary by institution. The landscape is shifting in various ways, however, and this is likely to continue in the near future. The main trends from a Canadian perspective include evolving practices in hiring and positions related to the teaching and learning mandates of academic libraries; the shifting role of academic libraries in fostering broader, institutional strategic teaching and learning goals; and the growing role of quality assurance in Canadian higher education.

I have also noticed a change in both leadership and instructional librarian titles, their duties, and the priorities of hiring committees as the transition from an "IL Coordinator" has evolved to other roles and responsibilities emphasizing teaching, learning, and assessment, with titles including "student engagement," "undergraduate experience," "learning commons," "flexible learning," or "community outreach." This is hardly surprising given stated strategic priorities common in the teaching and learning domain in Canadian higher education such as enhancing student engagement, enhancing the first-year experience (often as a means to improving student retention rates), building partnerships between campus services which support student success, enhancing community engagement and experiential education, and expanding technology- enhanced learning. A quick review of recently formulated strategic plans at large or mid-sized academic libraries in Canada quickly provides a sample evidencing alignment with larger institutional goals, including the aforementioned priorities in the domain of teaching and learning. [31]

Another trend which will inevitably impact the future priorities of academic libraries broadly, including teaching and learning initiatives, is the emergence of quality assurance frameworks. This is certainly a strong reality in Ontario since the emergence of the Ontario Universities Council on Quality Assurance in 2010. The new *Quality Assurance Framework* governs the review and approval of new programs. This means that learning outcomes must now be articulated for courses and programs taught in Canadian universities in line with stipulated degree-level expectations, which may include critical thinking, communication skills, and IL. Cory Laverty has been a leader in exploring implications and recommending practices for IL education in a quality assurance framework. As she explains, this new framework is encouraging academic librarians to account for their impact on the IL skills of students. Cory and her colleagues at Queen's University have identified five learning stages and associated techniques to help librarians respond to this new reality and engage in meaningful assessment, in addition to offering workshops and publishing about their TO-LEAD Curriculum Framework, a model which can be adapted to local needs and can help academic libraries teach IL in a way that fits with this framework.

The new ACRL Framework for Information Literacy for Higher Education has been and will continue to be an influence on the future of IL practice in Canada. Though a US initiative, just one look at the programmes for the WILU conference in the few years since the ACRL Framework emerged establishes multiple references to it and shows that it is definitely driving both the research and practical pursuits of Canadian librarians. Closer to home, the TRY universities—University of Toronto, Ryerson University, and York University—have collaborated to strengthen librarians' practice around the ACRL Framework by jointly hosting workshops, including invited speakers, and by developing a wiki to share resources including both locally hosted workshop details, webinars, and online readings of relevance. That said, this Framework is still relatively new, and librarians in Canada are still grappling with how best to integrate it, and to work with faculty to encourage them to do the same. The ACRL Framework, combined with growing emphasis in Canadian higher education on student-centered approaches, unquestionably provides real opportunities for faculty and librarians alike to engage students with concepts and ideas such as the research life cycle, the value of information, and

other themes closely connected to fostering critical IL abilities. Whether or not these opportunities will be realized remains to be seen.

The IL agenda in Canada has been held back by the absence of national guidelines or policy documentation and a lack of championing by Canadian library associations, combined with the relative absence of coordination among librarians across the country. In this regard, Canada definitely stands apart from quite a number of fellow Commonwealth countries and its neighbour to the south.

On a more positive note, valuable IL research is being conducted by academic librarians in Canada, and this work quite often describes or relates to effective and innovative IL practice. This paper has showcased contributions in the domains of faculty conceptions and practices, growing campus collaborations rooted in shared goals to foster students' academic literacies (including IL), and the area of critical IL. In addition, LIS schools are giving IL more emphasis than they have done in the past so that new professionals are more likely to come to market with knowledge of IL theory and practice. In addition, IL remains an integral element in the professional roles of Canadian subject and liaison librarians in Canada.

In looking at the future of IL in Canada, it is difficult to predict exactly how the landscape will evolve. Canada would do well to follow the example of other countries which have developed frameworks or plans to reflect their distinctive IL values, needs, and priorities, thereby providing a clearer and more assured future. However, the nature of current strategic priorities of many Canadian academic libraries offers grounds for hope. Teaching and learning are typically front and centre with emphasis on the importance of IL skills often contextualized and linked to broader institutional goals such as enhancing first-year experience, growing student retention, revisioning learning spaces, advancing technology-enhanced learning, and fostering community engagement. In addition, a growing emphasis on student-centered pedagogies, including inquiry and experiential approaches, also offers grounds for optimism as student learning in this context is widely known to be fostered by attention to process-based elements, including IL, as students must demonstrate they have learned how to learn.

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CHAPTER E

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Region: Asia/Oceania

Introduction

In this chapter I examine information literacy (IL), and more specifically information literacy education (ILE), based on my experience in the Asia/Oceania region. Whereas IL relates to a set of competencies, I regard ILE to be the process involved in teaching and learning those competencies. I provide definitions of these two terms later in this chapter.

The Asia/Oceania region includes sixty-one countries^[1] and extends from Israel and Lebanon in the west to the Pacific Ocean islands in the east, and from Kazakhstan in the north to New Zealand in the south. It includes China and India, the two most populated countries in the world, as well as small island states like Niue and Nauru. The diversity in populations, politics, cultures, and levels of economic prosperity is immense and greatly affects IL and ILE across the region. Rather than attempting to provide a thorough overview of IL in Asia/Oceania, I reflect on my insights relevant to the development of ILE programs for the region.

I am currently working as a private consultant after having been a senior lecturer in the School of Information Management at Victoria University of Wellington (VUW), New Zealand. During my twenty years at VUW, I was involved in a variety of projects to teach about ILE to librarians in the Asia/Oceania region, and I conducted research into factors affecting ILE in those places.

From 2003 to 2009 I was a member of a small team at VUW that received annual grants from the International Federation of Library Associations and Institutions' (IFLA) Action for Development through Libraries Programme (ALP) to bring librarians from developing countries in the Asia/Oceania region to Wellington for a month-long programme each year on ILE and information technology. The cohort was usually six or seven librarians, and over the years participants came from a wide range of countries, including Bahrain, Lebanon, Mongolia, Pakistan, Nepal, India, Sri Lanka, Bangladesh, China, Myanmar, Thailand, Laos, Vietnam, Malaysia, Indonesia, the Philippines, Fiji, Samoa, the Solomon Islands, and Vanuatu.

I also conducted week-long ALP-funded workshops on ILE in Cambodia, Laos, Vietnam, and Bangladesh with the late Gary Gorman, and I did one in Sri Lanka funded by the International Network for the Availability of Scientific Publications (INASP). In these workshops we examined how local issues affect ILE and how ILE needs to be contextually based. These incountry workshops inspired us to conduct research and to publish journal articles and conference papers on ILE in developing countries.

In the following paragraphs, I provide a brief synopsis of some of the papers and research

on ILE that I have been involved in. In the last of these papers I developed a conceptual model that considers ILE in developing countries from the perspectives of both its receivers (students) and its providers (librarians/teachers).

Research Trends

To begin, I feel it is important to discuss a paper that started the ball rolling. In 2003, Gorman was the lead author of a paper on sustainable development and information literacy that was published in the *IFLA Journal*.^[2] The paper focussed on the need to consider the local context when thinking about how IL can support sustainable development, pointing out the significant differences between countries like Singapore and Myanmar. Gorman observed that "different societies have different realities, different possibilities, different standards" and then went on to say that "information literacy . . . teaches lifelong critical skills of how to understand, interpret and utilize information needed for development, and it does this contextually."^[3] We used these ideas as we developed the ILE programmes in Wellington, the ILE workshops, and as the seed for later research.

In a 2006 paper, our starting premise was that the prevailing models of ILE may be appropriate for developed countries but do not take into account the contextual variables that affect how and why individuals learn in developing countries. [4] These models are firmly grounded in Western social and intellectual structures, following the taxonomy developed by Bloom in the 1950s. We critiqued the existing definitions of IL, including the Association of College and Research Libraries' (ACRL) definition because of the inherent limitations and constraints arising from its sole focus on skills-based outcomes. [5]

The definition we proposed recognizes the social construction and cultural authority of knowledge and the understanding that for people to become information-literate they must acquire an intimate familiarity with the political economy of knowledge ownership and control. We aimed for our definition to bring to the fore the need for individuals in developing countries, in particular, to develop a capacity within the context of their local communities and local cultures to critique existing knowledge and to construct new knowledge on the basis of this critique. And while we acknowledged that Bloom's taxonomy is useful for explaining the acquisition of IL as a linear deductive-style process, it is likely that because of cultural differences the manner in which the majority of individuals in developing countries acquire IL does not follow the same pattern.

From the work of Luke and Kapitzke, we developed an operational definition of IL for use in developing countries. Our definition focused on being aware of factors affecting the creation, communication, and control of information; understanding the situational benefits of using information to resolve needs; knowing how to find and critique information; and understanding how to integrate relevant and appropriate information with existing knowledge to construct new knowledge to resolve specific needs. [7]

We also used Hofstede's dimensions of national culture to illustrate how cultural differences must be taken into consideration in ILE programmes in non-Western countries.^[8] After explaining each of the dimensions, we compared the cultural profiles for New Zealand,

Thailand, and South Korea to demonstrate how culture needs to be considered in ILE.^[9] For example, Thailand's culture exhibits characteristics of high power distance, which reflects a high level of inequality between people in the society, and low individualism, which reflects a collectivist society where people have strong group ties and place the interest of groups such as their extended family before their own interests. In teaching and learning situations, Thai students must show a high degree of respect to their teachers who they expect to be experts. Therefore, the students and teachers in Thailand will be familiar and comfortable with a teacher-centric approach to learning and will be accustomed to learning through the provision of clear paths to follow. And, whereas open discussion and debate might be useful in a classroom in New Zealand, which has high individualism and low collectivism, it would be inappropriate in a collectivist country such as Thailand where students are reluctant to speak their minds because it is important not to lose face. We concluded that when developing an IL programme for a developing country, it is necessary to consider how cultural dimensions affect the ways that students learn and to determine the best pedagogical strategies for teaching the students in that cultural context.

In a 2011 paper, Gorman and I used Laos as a case study to examine how factors such as culture and indigenous (i.e., local) knowledge affect learning and must be considered to plan for ILE that is culturally and contextually appropriate. I travelled to Laos and gathered data through observations and interviews with fourteen teachers at four schools: an urban primary school, an urban secondary school, an urban vocational school, and a rural secondary school. I found the resources available to teachers were few and class sizes were large. We used Hofstede's dimensions of culture to understand the cultural norms inherent in the Lao educational system, and we examined how teachers used the indigenous knowledge held by elders, students' parents, and others in the community to overcome resource deficiencies. Referring to Grenier, we defined indigenous knowledge as "the unique local knowledge which originates from the people who are native to a particular place." We concluded that for an IL programme in a developing country like Laos to be successful, and for genuine learning to occur, the programme developers must make use of the indigenous culture and knowledge, the indigenous teaching and learning methods, and the indigenous contexts.

In a 2012 book chapter, Gorman, Gaston and I stated our concern about the use of decontextualised models of IL (such as the 7 Pillars model described by Webber and the Big 6 model described by Eisenberg) in projects undertaken in less developed countries. [13] We used our experiences from the workshops in Cambodia and Laos in 2008 as the basis for discussing definitional issues of IL related to cultural contexts. The participants in both workshops recognised that for them IL is situated within their unique local contexts and therefore as their level of IL increased they would become progressively more aware of the political, social, cultural, technical, and religious influences on the information they were using. The final report from the Laos workshop emphasised that in developing countries "contextualised information literacy education programmes will . . . be far more effective than other prevailing models." [14]

Models of Information Literacy

After taking a course in higher education learning and teaching. I began to consider the

interrelatedness of teaching and learning along with the impact of cultural context in ILE. I used the background gained in that course for a paper I presented at the LIS Education in Developing Countries Special Interest Group session at the 2012 IFLA World Library and Information Congress.^[15]

I began by examining the ACRL Information Literacy Competency Standards. [16] I found that IL is defined as "a set of skills or competencies that involve cognitive processes such as determining, evaluating and understanding that are applied in relation to specific contexts." [17] Using the definition of education in the Oxford English Dictionary I then the defined ILE as "the process of receiving or giving systematic information literacy instruction, especially at a school or university." [18] This definition takes into consideration the fact that the instruction aspect can be viewed from the student's perspective (receiving) or the teacher's perspective (giving).

I undertook a literature review to identify factors relevant to teaching and learning IL in developing country contexts. The literature spanned a range of disciplines including education, sociocultural studies, cognitive psychology, and library and information studies. I subsequently used the literature as the basis for a conceptual model of ILE in developing countries.

I drew upon a very highly cited paper by Brown, Collins and Duguid, who focused on the importance of situation and context for learning. They contended that knowledge is made up of constituent parts that are "inextricably a product of the activity and situations in which they are produced" and by "ignoring the situated nature of cognition, education defeats its own goal of providing useable, robust knowledge." They reasoned that a learned concept will continue to evolve in the learner's mind as the person uses it in new situations and activities. Tools such as algorithms, routines, and definitions are also important to students' learning, and it is through their use that students understand their value and how to use them.

Culture also is relevant here, and Brown and colleagues stated that "because tools and the way they are used reflect the accumulated insights of communities, it is not possible to use a tool appropriately without understanding the community or culture in which it is used." When stating that "activity, concept, and culture are interdependent" and "learning must involve all three," Brown and colleagues were speaking of the cultures associated with academic disciplines, professions, and manual trades rather than national cultures. Thus, when considering ILE, the culture of the academic disciplines of which the learners are members as well as the culture of the broader community are both important.

A highly relevant point when considering learners in Asian and Oceania countries was made by Johnson and Webber, who stated that "in terms of local and national culture, the information literate person is a self- and socially conscious being, rather than a simple repository of skills and knowledge. This is underlined by cross-cultural difference, where issues of behavior and acceptability of kinds of information become sensitive." [24] Karpov, referring to Vygotsky, noted that during adolescence there is a transition to formal-logical thinking which "makes adolescents capable of self-analysis and of the analysis of their place in the world", and "the society . . . provides adolescents with the tools for such analysis and with their social norms from which their analysis proceeds." [25] I posited that "for young people, this self-consciousness is like an inner reflection, whether consciously or unconsciously realised, about

how they personally relate to the norms and values of the community or society to which they belong."[26]

I related the norms and values of a culture to Hofstede's cultural dimensions, focussing on power distance and individualism versus collectivism. These dimensions are reflected in the extremely interesting perspectives provided by Nisbett in *The Geography of Thought: How Asians and Westerners Think Differently . . . and Why.* Nisbett pointed out that the ancient Greeks "had a remarkable sense of personal *agency*—the sense that they were in charge of their own lives and free to act as they chose"[27] which was reflected in their strong individual identities and their passion to debate issues. It also allowed them to turn their intense curiosity about the world into explanations of their observations based on underlying principles. The ancient Chinese, on the other hand, had a sense of *collective agency*, which, according to Nisbett, made them feel like they were part of "a large, complex, and generally benign social organism where clear mutual obligations served as guide to ethical conduct." Nisbett noted that their sense of collective agency came from Confucianism, China's chief moral system, and was accompanied by an understanding of collective rather than individual rights, a preference for harmony, and the discouragement of forms of confrontation including debate. In addition, their focus was on practicality instead of principle-based theoretical explanations of the world around them.

These differences between ancient Western and Eastern cultures, according to Nisbett, can explain how and why the cognitive habits of individuals from contemporary cultures are so diverse. I commented in my paper that Nisbett's point "raises the question of whether the resources for ILE that have been developed from a Western cultural perspective, such as the ACRL Standards and IL teaching tools, are suitable for Asian societies." [30]

In the literature review, I brought in examples from Hofstede and Hofstede of differences in the situational reactions of students in collectivist cultures from reactions of students in individualist cultures. Rather than repeating those differences here, I refer here to some points made by Hofstede and Hofstede about cultural differences in understanding the purpose of education. In a highly individualist society, education "aims at preparing the individual for a place in society of other individuals" and learning how "to cope with new, unknown, unforeseen circumstances. Education aims to teach students how to learn rather than how to do, preparing individuals for learning as a lifelong pursuit. In a collectivist society, the purpose of education is to teach the skills and virtues for students to become accepted members of society. Learning is meant for the young "who have to learn how to do things in order to participate in society. It is an extended rite of passage." When considering the purpose and meaning of ILE in different cultural contexts—and choosing effective approaches and activities to teach IL in the range of countries in Asia and Oceania—it is critical to understand these differences.

Another important dimension is the age of our target group—university students—who, according to Arnett, are largely "emerging adults." These individuals are in that period of life after their secondary schooling when they are entering into married life and parenthood. Arnett acknowledged that the age range of emerging adults will vary between cultures, and the strength of individualism or collectivism within a culture has an impact on their social and

psychological development. Acknowledging that in Asian cultures emerging adults are becoming more individualistic due to globalisation, Arnett nonetheless stated that when compared to their Western counterparts, emerging adults in Asian cultures are positioned "within narrower boundaries set by their sense of obligations to others, especially their parents." [35]

After reflecting on the literature I posited:

In cultures that have high individualism, the emerging adults are likely to be more individualistic in how they approach tasks because they are expected to be self-reliant. As students, they will speak out in class, feel at ease when trying to do a new task on their own. In collectivist cultures, the students will prefer to work in groups because they are expected to be group oriented. In countries with high individualism students feel more comfortable making decisions in a manner that exhibits reliance on self, whereas in cultures with high collectivism, students feel more comfortable making decisions in a manner that exhibits reliance on, and support for the group. [36]

I used Vietnam and Sri Lanka as examples of countries to which I could apply the knowledge gained from the literature review, and I developed a conceptual model of ILE (figure E.I). Note that it focuses on the factors that influence both the receivers (the students) and the givers (the educators) in the ILE process rather than what the students learn as depicted in other IL models.

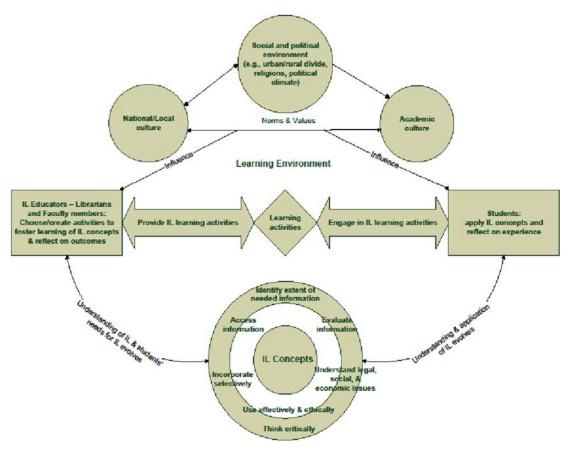


Figure E.1. Conceptual model of information literacy education (Source: Daniel G. Dorner, "Improving the Resources for Supporting Information Literacy Education in Developing Countries" [paper, World Library and Information Congress: 78th IFLA General Conference and Assembly, Helsinki, Finland, August 11–17, 2012], http://www.ifla.org/past-wlic/2012/105-dorner-en.pdf)

I explained the conceptual model as follows:

In the model, the learning environment, as well as the individuals within it, are affected by the norms and values of the national/local culture and the academic culture, both of which are related to the larger social and political environment. Theoretically, the students will become increasingly knowledgeable about IL, building up their understanding of and abilities to use IL's component concepts by engaging in learning activities selected or created by the IL educators, i.e. the librarians and faculty members. As the students self- and socially-reflect on what they have learned, their understanding of IL concepts will evolve, and their ability to use the composite IL concepts will increase, thus increasing the students' ability to learn. IL in essence, becomes a continuum of learning. [37]

In the final part of the paper, I conducted an "immanent critique" of the ACRL Standards and four IL teaching tools. An immanent critique is a method to identify false assumptions to bring about positive changes. My aim was not to identify weaknesses in the ACRL Standards or the four teaching tools but to demonstrate that some parts of them are based on assumptions that make them unsuitable for indiscriminate use in Asian developing country contexts. For example, one tool emphasized that for ILE to be successful, campus librarians must work closely with faculty members to raise their IL awareness and skills, and that the librarians would be able to interact easily with the faculty who would accept them "as important players in their own academic performance as well as in their students'—and that there will be support from the university administration." These assumptions are clearly inappropriate when considered in the context of countries such as Sri Lanka and Vietnam where the level of power distance is high and academic staff consider librarians to be at a much lower status level than themselves. My point was that some components of teaching tools developed for use in Western countries may be inappropriate in non-Western countries.

Future Visioning and Reflection

Today, across Asia and Oceania, large differences exist in the understanding of and support for IL and ILE. In some parts of this vast region there is a growing awareness of the importance of IL to society in general and to students in particular. For example, Majid, Chang, and Foo, in a paper on the IL competency levels of secondary school students in Singapore, reported, "there is now a renewed interest in IL as recent education policies have put more emphasis on 21st century competencies, critical thinking and communication skills." However, Ullah and Ameen stated that in Pakistan, IL is still a new concept and is not well supported. [41] In their research, they found that "IL instruction activities in medical libraries of Pakistan are in their infancy." The disparity in support for ILE and level of IL can be understood in light of the differences between the countries. In Singapore, 96.8 percent of its population of 5,781,728 is literate, and the value of the country's Gross Domestic Product (GDP) was estimated at \$85,300 per capita in 2015, [43] whereas only 57.9 percent of Pakistan's population of 201,995,540 is literate, and the 2015 GDP was estimated at \$5,000 per capita. [44] In Singapore. education is compulsory for children between the ages of six and fifteen, [45] while Pakistan has the world's second highest number of children out of school, with two thirds of them being girls. [46] These two countries provide clear examples of how differences in populations, politics, economic prosperity, and cultures across the region affect ILE.

In Australia and New Zealand, IL at the tertiary education level appears to be strongly

supported even though the resources listed on Australia's Council of University Librarians website were last updated in 2010, [47] and the Australia and New Zealand Information Literacy Framework, second edition (edited by Alan Bundy) has not been updated since 2004. [48] Nonetheless, the resources available on individual university websites (e.g., University of Sydney and Massey University [49]) demonstrate that ILE is an important component of academic libraries' responsibilities. And, according to Folk, Australia and New Zealand have a very similar understanding of IL in postsecondary education to that in the United Kingdom and United States, which she said is supported by the fact that the Framework is based on the ACRL IL standards from 2000. [50] It will be interesting to see if the Australia and New Zealand Information Literacy Institute updates its framework following the adoption by ACRL of its new Framework for Information Literacy for Higher Education in 2016.

Information about the current state of ILE in Oceania's small island states is scarce. This is not surprising given their small populations and their "lack of access to affordable and reliable technologies." [51] Evidence of ILE does, however, exist at the tertiary education level. Searching online I discovered that the University of the South Pacific (USP), a transnational university, requires many first-year students to take course "UU100—Communications and Information Literacy," [52] and even those who are exempted from it must complete the "Information Literacy Module—UU100A" before starting year two of their studies. [53] Although I could not find any information about the IL requirements for USP students in other disciplines, I did find a range of online resources from the Emalus Campus of USP in Vanuatu for UU100, which is very encouraging. As far back as 2006, Murgatroyd and Calvert noted that the USP's Laucala Campus Library in Suva, Fiji, had identified IL as "a major priority area and . . . implemented structured programs that are integrated into the degree course structure for face-to-face students." [54]

In closing, it is important to point out that IL standards and tools have been developed for non-Western settings over the years. These include UNESCO's *Understanding Information Literacy: A Primer* by Forest Woody Horton, Jr., which addresses culture and context as prominent factors to consider for IL program development, and the "Empowering 8" model which was developed in 2004 at a workshop organized jointly by IFLA-ALP and the National Institute of Library and Information Sciences in Sri Lanka. Tools such as these are a positive sign that contextually based resources are becoming available. Nonetheless, it is always necessary to examine their provenance and to consider the issues discussed earlier prior to using these or any other tools as the basis for ILE programs in non-Western developing country contexts such as are found across the Asia and Oceania region.

Notes

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- [18] Ibid.
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CHAPTER F

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Introduction

The aim of writing this paper is to share some personal information literacy (IL) experiences within the Mexican IL national context and to make a contribution to the *Global Perspectives on Information Literacy* white paper of the Association of College and Research Libraries (ACRL).

It was Istanbul, 1995, at the IFLA conference, where I heard the term information literacy for the first time ever. It sounded so relevant because I was directing the Universidad Autónoma de Ciudad Juarez (UACI) Library System that had all that a librarian would wish: budget, organizational status (reported to the university president), brand new elegant buildings, the largest offer of electronic information in northern México, and a great library team recruited at the national level, but information use by students was poor despite the fact that they crowded the building study areas during most days of the term. I came back from Turkey and convinced my colleagues to develop a strategy on this new library education approach to empower our students, and later on our faculty. We invited a researcher doing work on user education and user studies, Patricia Hernandez, to facilitate a workshop to us on user education. This was the kickoff of a successful university IL strategy that later led the country in the field by creating the first institutional compulsory twenty-hour IL training for all new undergraduates, and one for faculty, plus menu-tailored at-request student workshops for faculty, actions that later motivated the university to have information culture as part of the institutional strategic plan. Librarians changed their library orientation role to facilitate students' learning of information use. Two state-of-the-art electronic classrooms were built, and librarians had further teaching training. These steps led to some research and paper writing to fully get IL moving, and not only at the university and national level. Some conference papers were delivered to explain the thennew IL approach and identified that an IL national conference was needed. The first Spanishspeaking information literacy conference was organized, a meeting that has run biennially since 1997. The conference proceedings books, in which selected papers were published, became the first general IL literature under the label of information skills development in the country. The conference was also the platform for creating the Mexican Information Literacy Standards in 2002, the first and only adopted standards in the Ibero American region that were approved by the National Council for Library Matters of the National Association of Universities and Higher Education Institutions. [1] These standards were inspired by the ACRL standards, so that the ACRL president of the time even came to the conference to kick them off.[2]

IL became the main topic of my research as a tenured librarian, and IFLA became my platform for learning, sharing, and promoting IL. First I joined the former IFLA Round Table on User Education, where I became chair, and during my term, the round table was converted into a full IFLA Information Literacy Section, and I became its first chair. Most of my early papers

were devoted to solving the practical challenges of adopting IL and developing institutional IL strategies. The work of the IL team at IFLA was successful in getting IL projects involved at UNESCO, which provided generous funding. Then, years later, I worked as researcher for some of the UNESCO projects to develop IL international indicators with Ralph Catts. After three years or so, IL was conceptually merged with media literacy, under the broader term media and information literacy (MIL). In working on that concept, I had some of the most enriching learning experiences with media professionals. Among the UNESCO projects, an outstanding one was the drafting of the Global Media and Information Literacy Assessment Framework, an MIL assessment methodology that is currently being pilot tested by UNESCO with teachers from seven Latin American countries: Brazil, Chile, Colombia, Ecuador, Grenada, Guatemala, and Honduras.

Models of Information Literacy

The information literacy standards of ACRL have guided, in general, my IL work. [6] They were the inspiration, as stated in the first section, for creating the Mexican standards that, in turn, have been the framework for most of my IL activity in the country. [7] My undergraduate course Information Competencies for Learning, a six-credit online learning experience that I have taught since 2006, aims to convey the eight Mexican standard competencies. The Mexican standards, which were based on the ACRL Standards, were constructed to reflect local educational priorities. The second model, used for international work, was the IFLA Guidelines on Information Literacy for Lifelong Learning; I had the opportunity to lead the drafting of those guidelines. [8] These guidelines aimed to be more neutral in content so that they would be relevant to the international library community. The compiling of the IFLA Guidelines included consulting other standards that were available at international level. Again, the ACRL Standards were the first that we reviewed, followed by the Australian and New Zealand standards, the SCONUL Seven Pillars of Information Literacy for the United Kingdom, other information literacy standards created by states in the United States, such as Colorado and California, as well as the pioneer standards created by the American Association of School Libraries (AASL).[9] The IFLA Guidelines that included these standards were translated into twelve languages and became the backbone for UNESCO's early IL work as well as for the new MIL approach. [10] The Global MIL Framework was based on IFLA's Guidelines, as well as the conceptualization of the merged concept. Along with this work, other publications were released to support the IFLA Guidelines; the creation of these publications included the drafting of the IL marketing manual and a worldwide competition to create an IL logo.[11] Study of the new ACRL Framework is a task to undertake in trying to grasp its benefits in day-to-day IL work, because it offers broad conceptual guidelines that are useful for IL planning but has limited practical action focus, a characteristic that was part of the success of the ACRL Standards.

IL teaching in the country, and certainly mine, is normally guided by an educational constructivist approach, basically built on Jerome Brunner's theoretical framework, where students take part in the active process of learning by selecting and transforming information to make decisions, thus "relying on his or her cognitive structure that give[s] meaning and organization to experiences, going beyond the given information." [12] The theory fits perfectly with IL inquiry learning goals, where "learners construct new ideas or concepts" based on their

knowledge."[13] In addition, most Mexican universities have undertaken, at least on paper, a competencies-oriented pedagogy that has an underlying constructivist approach. However, to undertake a constructivist approach is a challenge because learning activities have to be designed with students' action in mind, as well as an active assessment process, where students can learn to evaluate themselves, a challenge to any IL instructional designer. The mentioned six-credit online IL course has been my permanent teaching test exercise and has been a model or inspiration for other universities' IL courses, such as CETYS University, Consorcio Clavijero (a Veracruz online higher education institution), and universities in Guatemala and Brazil.

My IL pedagogy has also been inspired, on the other hand, in the empowerment concept and critical pedagogy (see table F.I). Empowerment, as defined from the psychological point of view by Robert Adams, is "the process that gives power to individuals, people, communities and organizations to gain control of over their lives." [14] "The concept suggests both individual determination over one's own life and democratic participation in the life of one's community, often through mediating structures such as schools, neighborhoods, churches, and other voluntary organizations. Empowerment conveys both a psychological sense of personal control or influence and a concern with actual social influence, political power, and legal rights." [15] The empowerment concept was in turn based in the earlier critical pedagogy theory of Paulo Freire, who worked on educational empowerment and liberation of impoverished farmer communities in Brazil [16] and later inspired authors such as Douglas D. Perkins and Marc A. Zimmerman, who studied Freire's social development focus from the psychological point of view. [17]

Information Literacy Model



Table F.I. Information literacy model

Freire's critical pedagogy is combination of education and critical theory that is summarized by Ira Shor as the "habits of thought, reading, writing, and speaking which go beneath surface meaning, first impressions, dominant myths, official pronouncements, traditional clichés, received wisdom, and mere opinions, to understand the deep meaning, root causes, social context, ideology, and personal consequences of any action, event, object, process, organization, experience, text, subject matter, policy, mass media, or discourse." [18]

Critical pedagogy to empower information users is a relevant approach to IL, a field that promotes critical-thinking skills in learners or citizens so that they are aware of their information needs and develop critical skills in using information. It is even more relevant to

media literacy, where media—such as enhanced reality, marketing, and politics—normally has more subjective content and intentions than information itself, which, at least as librarians see it, is more academic. All media and information outcomes have two general layers: the first one that is normally the social, economic, or political motives that creators, processors, and information distributors may consciously or unconsciously place on it; the second one is the way information is presented to the public that may disguise elements of the first layer. Therefore, information, as well as information literacy, are contextual because both are products of the place(s) where they emerge or take place.

The Role of Librarians

Library education in México is normally offered at the undergraduate level. Out of the nine library and information schools, seven offer an undergraduate LIS degree (five offer just this level), two additionally offer master's degree studies, and the remaining two offer only graduate studies. There is a doctoral program at Universidad Nacional Autónoma de México (UNAM), one of just a few in Spanish-speaking Latin American countries. This excludes Brazil, which has several doctorate-granting LIS schools. The names of programs have evolved from library science to library and information science (LIS) and lately to just information science, or other subject combinations such as knowledge management and information services. None seem to teach information literacy courses or information pedagogy in their programs. The IL subject is normally touched upon in user-related courses, but no specific IL teaching training is included in the curricula. LIS education normally takes a traditional approach to library operations and bibliographic organization, so more information user-oriented courses are needed, such as IL facilitation. However, there other postgraduate programs outside the LIS realm that offer alternative pedagogy programs, such as doctoral programs in departments of education at some universities. My own personal graduate library training was at Denver University at a time when there were no similar LIS programs in México. I later worked on a PhD at Sheffield University in England, becoming the second professional to get a doctoral degree in library and information studies in México. My pedagogical learning has been gained by teaching research methods courses in general undergraduate and graduate programs and by taking instructional design and general pedagogical courses during my academic career.

Future Visioning and Reflection

Information literacy is still in the early stages in México. Universities have led the IL role, and there are some excellent examples of their progress. However, basic education has limited IL efforts, where IL gets confused with digital literacy—that is, teaching how to use computers and tablets, but without facilitation of information content management skills. An information access and content project that emerged in 2000 was Enciclomedia, which began having a real impact until the academic year 2004–2005 and ran until 2009. The program was an important information and communication technology project that included equipment and an information system based on textbooks for fifth and sixth grade and other multiple information resources. This scheme was replaced by the program Digital Skills for All, which provides computer equipment and Internet access to pupils. The program contributes somehow to improving basic digital literacy in elementary schools, although IL training is hardly included, something

that México urgently needs in order to improve the quality of its basic education. The country has the lowest scores in reading and writing among the OECD country members. "The average student scored 417 in reading literacy, mathematics and science in the OECD's Program for International Student Assessment (PISA), lower than the OECD average of 497." Any IL investment to improve pupils' learning will move México to a better educational attainment and certainly to a higher level of socioeconomic development because IL enables students to be more information-literate and therefore to have better learning performance. [22]

Universities, mainly state universities and some of the large private institutions, have created credit-bearing information literacy courses, such as the state universities of Baja California, Ciudad Juarez, Campeche, Veracruz, and private institutions like ITESM, and UDLA. A smaller number, perhaps exceptions, have embedded IL in the curricula, among them Universidad Autonoma de Ciudad Juarez and CETYS University. This IL progress creates a challenge to the library profession because México needs more librarians or information professionals and a better geographical distribution of them. Those who graduate tend to stay where LIS schools are. A recent case, CETYS Universidad, a private institution with 6,500 full-time enrolled students and an excellent information culture strategy changed the curriculum to require all first-term undergraduates to take a newly created six-credit IL course (Information Management), which meant that more than twenty student groups had to take the course, which in turn demanded at least ten librarians to do the teaching job, if each of them facilitated learning in two groups. [23] The solution was to call upon professionals from other fields. The alternative for this university is to offer the course online, but still, the number of IL facilitators needed will be greater than the current number of librarians (five), and the number of librarians is scarce in the rest of the state of Baja California.

The expected IL future is to have greater awareness and further action of IL at the higher education level, where institutions will hopefully move from IL credit course requirements to curricula-embedded IL, and if possible to an institutional IL framework. At the basic education level, there is a more limited hope of IL development, although recent education reforms may improve information skills development in children by having better trained teachers. Information competencies assessment is another great national need at all levels, so hopefully some recent test and trials in higher education institutions may generate instruments so that universities have data about their undergraduates' information competencies in the next few years. Research on IL processes and conceptual foundations will increase, as IL is becoming a more popular research subject among graduate students doing theses, especially at the UNAM doctoral program and master degree-awarding schools. The number of theses in IL has increased year by year, and additionally some researchers undertake or focus more of their work on IL, such as the leading inquiry work done at Instituto de Investigaciones Bibliotecologicas y de Información, the major library research center in México and in Latin America. IL publications have consequently increased in México, as can be seen at the Mexican wiki of Mexican IL national literature and at the IL Ibero American website run by Alejandro Uribe-Tirado. [24] Research is needed, especially research focused on problem solving, as México and other developing countries have specific IL socioeconomic development needs, where education tends to lag behind society's current information needs. México needs citizens skilled in information to contribute to and benefit from the world's knowledge output.

Twenty years have passed since the Istanbul IFLA conference: two decades that have seen IL progress in México. However, there is still a long IL road ahead to walk. The three greatest challenges in higher education, putting aside basic education that lags behind, are to communicate to higher education officials the benefits that IL brings to learning processes, to convince faculty that IL has to be part of their strategic learning goals, and to collaborate with them so that their courses become a fertile IL ground.

Notes

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CHAPTER G

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Region: Africa

Introduction

I have worked as an academic librarian at Makerere University (Mak) since 2010. Therefore, I have accumulated experience in information literacy as a practicing librarian and scholar. I have conducted research and published in academic librarianship. I have participated in various information literacy programmes at Mak, which include Learning and Teaching in a Digital Age (LATINA), Information Competence and Management (ICM) annual graduate course, Scholarly Communication and Research Management training, and so on. I have taught courses and modules that reflect my areas of specialisation, which include digital literacy, scholarly communication and publishing, bibliometrics, open-access publishing, institutional repository management, self-archiving, digitisation, data curation, information systems management, and related areas. Since 2013 I have been a member of the IFLA Standing Committee on Information Literacy. From 2012 to date, I have also served as a member of the technical and internationalisation committees of the Open Library for Humanities. I am presently pursuing a PhD in information systems at Makerere University.

Mak is the oldest and most prestigious university in East Africa. Having started in 1922, Mak later became affiliated with the University of London. It was called the University of East Africa, which built capacity for the rest of the regional universities to start. Mak's continental ranking puts it among the top five universities in the whole of Africa and the best outside South Africa. Its regional influence has attracted students from neighbouring countries. The information literacy courses and programmes at Mak have therefore benefited a great deal. In 2012 and 2013, Mak Library (Maklib) ran the LATINA course for students from Kenya, Tanzania, and Uganda. In a partnership with librarians from the Swedish University of Agricultural Sciences (SLU) Library, Maklib reviewed its ICM course content and ran a joint information literacy course, which was dubbed Information Literacy and Scholarly Communication. It drew students from Uganda, Rwanda, Kenya, Ethiopia, and Sweden. This paper, therefore, reports my experience as an academic librarian at Mak and interaction with librarians in the East African region.

Models of Information Literacy in East Africa

Information literacy (IL) in East Africa is both a practice and a taught discipline. In this context, practice means training of users, whereas taught discipline means a distinct subject taught as part of university curriculum. Our librarians are tasked with the job of passing on information literacy skills to both walk-in users and those on appointment. This may be done following a formal training program or in an informal way. Sometimes users may have special training needs while others may need general exposure to access library resources. Information

literacy practice often ranges from basic to advanced content depth and coverage (see table G.I).

Taught program	Academic Librarians' Professional Practice
Taught course in curriculum	Formal and informal interaction with users

Table G.I. Continuum of information literacy in East Africa

My experience of information literacy in my local context shows that as long as it was not a formal instructional program, it was not known as information literacy. In the traditional sense, for many, an information literacy program had to take on a form of a classroom setting. However, our librarians are becoming more aware of individual or group initiatives, which are aimed at facilitating information literacy in their institutions. As a result of this trend, librarians have embraced information literacy—related activities. Some have taken this path as a way of bettering the services offered to library patrons with an end goal of facilitating information access.

The Role of Librarians

The Fragmented but Complementary Roles of Librarians' Specialization

It has often been said, "different folks, different strokes." [4] This is true of information literacy approaches in East Africa. Information literacy programs tend to be determined by the information literacy team. Often one librarian conceives an information literacy training idea and thereafter forms a team with other librarians with whom they share either an area of specialization or a theme of common interest. A fully blown activity is then developed till execution. In other settings, information literacy programs are inspired by librarians' experiences at information searching. Some have reported that in the course of their graduate education, it was quite a challenge to access information and to get around the library. This has inspired them to spearhead the formation of information literacy programs. An example of this was a former library director at Makerere University and first female professor of information science, (Maria G. N. Musoke) who, having experienced difficulty in accessing information while writing her doctoral dissertation, was inspired to propose a formal information literacy course at Makerere University as part of her postdoctoral activities. Her puzzle question was "If a librarian finds access difficulties, how much more would it be for a non-librarian?" The course, which was named Information Competency and Management (ICM), is a formal graduate course with credits, taught predominantly by academic librarians and faculty from communication science and laboratory-based research disciplines. It has run for more than eight years to date.

Other information literacy initiatives include training of trainers. Several institutions in East Africa provide information literacy training for librarians in order to reskill them in the various state-of-the-art tools and literacies. The dynamics in digital and information technology have

made it a necessity for librarians to stay on the cutting edge and relevant to the needs of patrons. Moreover, it is an era where the librarian is faced with various categories of users, whose needs may not be foreseen. East African librarians have, through experience, learnt that skills acquired are the skills passed-on.

Academic librarians were motivated for further training by the need to acquire research skills, which can then be passed on to users. The main argument for this was that we did not only teach students but we had to teach their teachers and lecturers. Librarians needed to be skilled researchers themselves if they were to effectively teach professors information literacy in a research-supportive role. This justified librarians' employment on academic or faculty tenure terms.

By virtue of the fact that it has not been the practice to have subject librarians in the East African region, save for a few isolated cases, the majority of institutions have librarians whose professional training has been primarily in the library and information sciences. It implies that we largely have a cadre of professional librarians by training and thus have to be ready to take on the role of information literacy teaching despite user or student discipline background. The challenge with this model has been that we have had the need to invest in learning the particular discipline-specific needs of our users, while at the same time acquiring pedagogical training ourselves. The advent of the flipped classroom has also changed the terrain of our teaching.

Training as a function of information literacy programs means that librarians have to interface with users either at a reference service level or in a classroom setting. It is common to find librarians subconsciously shy or uncomfortable with that part of their work, while others are so good at it and you could categorize them as good teachers. However, with practice some have outgrown shyness and have become great instructors. Perhaps it would be a good idea for library schools in the region to emphasize the part of curriculum that deals with public speaking and presentation to groom confident librarians. To attempt to improve this situation, the practice has been that institutional library appointment and management committees recruit, appraise, and deploy librarians according to their strengths and potential contribution in the roles of deployment.

In institutions where librarians are also lecturers, it is a default role to teach information literacy. In fact, in some institutions, the library as a service unit and the library and information school are managed as a single entity. It naturally follows that in such institutions, information literacy programs are formal taught courses embedded as part of the curriculum and taken by several students.

Digital literacy is driving and intertwined with information literacy, in addition to the literature search strategy skills training. Digital literacy programs in East Africa have taken on the form of training patrons to use digital tools and gadgets for the purpose of learning, teaching, and research. Users are introduced to Web-based e-learning environments and massive open online courses (MOOCs). It has become a reality to librarians in East Africa that IT and digital skills are pivotal for one's career success.

Secondly, the changing user or learner needs have caused an unprecedented need for librarians to upgrade their skills in order to remain relevant in the information age. Academic and research libraries have increasingly become more learner- or user-centered than before. Despite the resource constraints, librarians have had to meet the challenge of proactively interfacing with their users. It has necessitated innovative ways to provide information literacy programs because of the changing role of libraries and librarians. One of the ways has been to change former book-stack areas into learning or instructional areas. The user has been brought center stage in discussion of planning of libraries in East Africa. Librarians are more openminded and aware about the need to poise library services in a way that allows for more interaction with users than before. It has required advertising information literacy sessions on campus bulletin boards and mailing lists as well as scaling up the number of sessions available for users to be trained in various aspects of information access. Sometimes these efforts have taken on the shape of proactive visits to faculty, individual user training appointments, and allowing room for walk-in training sessions, especially with busy users. This is in recognition of the fact that some of our students have jobs and therefore any time available for their training is precious.

Creative use of library space has allowed information literacy to thrive and pushed academic librarians to deliver beyond traditional expectations. The adoption of the learning and research commons at Makerere University Library has opened more opportunities for user instruction than before. The research commons is space in the library which has been dedicated to researchers and graduate students, with dedicated librarians available throughout to provide impromptu guidance and instruction in certain aspects of information literacy to researchers and graduate students.

Outreach actions and book donations by librarians to improve the instructional and academic life of schools in Uganda have contributed to information literacy in those schools. In a study that I carried out, I discovered that such actions inspired many students and the teachers of the beneficiary schools. [5]

The Future of Information Literacy: Preparation for Academic Librarians

There are indications that, globally and locally, academic librarians are preparing themselves for the teaching role in the future. In the past ten years, more librarians have enrolled for postgraduate education than previously imagined. Benchmarking activities with partners in the global north, such as between Maklib and University of Bergen Library, among others, have provided synergies and learning experiences, which has built the capacity of librarians in East Africa to embrace and ably handle academic librarianship roles. As librarians embrace the teaching and research degrees both at master's and doctoral levels, the future of the teaching role prospects, which is the foundation for information literacy, become brighter. This is true as there is evidence to show that academic librarians who have graduated with higher degrees have by default started their teaching career. Despite the fact that some librarians could have started on their journey in librarianship with pessimism about the profession, they have ended up seeing opportunities unfold as they embrace the teaching roles of the jobs.

Under the umbrella of the consortium of Uganda University Libraries (CUUL) and in the

spirit of library cooperation in Uganda, several training of trainers sessions have been carried out to enhance librarians' pedagogical skills and knowledge to operate in an ever-changing academic environment. As a result, several of the librarians have reported the ability to adapt to the user needs, which points to the fact that it is not obvious that librarians have full expertise but require refresher training, just like professionals in other disciplines.

Given the fact that many a librarian's foundational and first undergraduate qualifications were rooted in the library and information science field, they have realized and pursued further education in the broadness of the field, which embraces information science in general, informatics, and computing. Other areas of graduate specialization by librarians have included health informatics and librarianship, system librarianship, systems science, and so on, to mention but a few. This has opened up the horizons of what academic librarians can do in terms of information literacy teaching and supporting users and students in their particular areas of study. Generally, as librarians realize that there is more to the profession than the technical processing and retrieval of information material within the comfort of their libraries, they have embraced the instructional role.

The uptake of information literacy has given impetus to "out of the box" information literacy functions such as community outreach. Librarians at Makerere University in Uganda, for example, have contributed to improving information access to current health information and practices by health workers in rural Uganda who would have otherwise not accessed such information due to remoteness and information technology inaccessibility. Makerere University medical librarians have edited and repackaged health information into the biannual *Uganda Health Information Digest*, which contains current health tips and is distributed to rural Uganda health units. ^[9] Librarians have also trained rural health workers in access to electronic resources where access is possible. ^[10] It has been reported that student-librarian and librarian-faculty relationships have improved owing to the growing enthusiasm for teaching by academic librarians. ^[11] Users who value the information provided to them have tended to push for more actions in that direction ^[12] such as those provided by librarians. ^[13]

Higher education institutions have made deliberate efforts to support the capacity building of libraries and librarians owing to the proven student performance improvement courtesy of information literacy done by librarians. Researchers and faculty have often reported the tremendous skills gap covered by information literacy training. This implies that more needs to be done, especially where information literacy is rather unstructured and irregular.

Future Visioning and Reflection

Capacity Building as a Cornerstone for Sustainable Information Literacy

Makerere University Library's experience shows that capacity building is a never-ending process which requires attention and a rational and optimal investment of resources. As it has been said that a journey of a thousand miles begins with one, that is the story of many of the East African higher education institutions in terms of capacity building towards information literacy.

However, it will take deliberate and consistent efforts to support the work of librarians for

information literacy to thrive in East Africa. Whereas what has been done so far is phenomenal, it requires relentless initiatives and institutional buy-in for it to be sustainable. The percentage of institutions with formal information literacy courses which have been embedded in the curriculum is still very low in the region. Where they exist, their sustenance is dependent on available capacity to teach. However, the triangle of the pedagogically unqualified or unskilled librarians and those without teaching or research degree qualifications is bottom heavy. This necessitates more incentives and financial resources towards the training of librarians.

In some institutions there is need for a whole change of mind set about the teaching roles of librarians. It is common for establishments in some higher education institutions to fail to understand the crucial and complementary role that academic librarians play. Some institutions have made progress in correcting this misconception. In such instances, institutional policies clearly spell out the teaching role of librarians and indeed acknowledge that librarians are partners with the teaching academics in the teaching, learning, research, and outreach mandates of higher education institutions. In other institutions, this is not the case. More often, the work and definition of the librarian in an academic setup is restricted to information material custodianship and total disregard of the fact that information literacy is a prerequisite for information access.

However, there is a trend of institutional mentorship and benchmarking. Key higher education institutions, including Makerere University and the University of Nairobi, among others, with strong information literacy programs have become centres of excellence and hubs, which exemplify the practice of information literacy. These have, therefore, become models in the region, which have provided avenues for benchmarking and peer mentorship. It is common to see delegations of faculty including academic librarians visit other higher education institutions for the purpose of learning and sharing experiences. This has also been done through the staff exchange programs amongst regional institutions. If this trend continues, there will be some semblance of change in the right direction, as models of information literacy teaching will be replicated, as has already been witnessed.

Some of the hindrances for progress to be registered are likely to be rigid institutional culture, the failure of information literacy to be acknowledged as an institutional priority, as well as failure of librarians to rise to the occasion and to proactively portray our academic and scholarly partnership role. I suggest that librarians need to blend traditional role-play and progression in theory and practice with full acknowledgement of the implied social contract that we have in our roles in higher education. I emphasize our role to improve the present situation while acknowledging the fact that sustained change comes from within.

There is a growing desire to have information literacy embedded in curriculum. This comes on the backdrop of poor information competence among many research students, especially at the graduate level. This has been attributed to the absence of a special skilling program at the undergraduate level. It has been noted that undergraduate education is foundational. Any skills not acquired at the undergraduate level are areas of struggle in graduate education. The large numbers of students at the undergraduate level make it even worse for meaningful and quality undergraduate supervision. The quality of students churned out at the undergraduate level has

predetermined the areas of weakness at the graduate level. One of the most affected areas of competence is information literacy. It is therefore suggested that undergraduate students receive some form of information literacy training as part of their graduation requirements. For this to happen, higher education institutions will need to make use of their academic librarians and introduce information literacy training in order to create a critical mass of information-literate graduates who will use skills acquired not only for their graduate education and research but also for lifelong learning purposes and a crop of information-competent citizens.

Similarly, the high student-to-librarian ratio, despite the recommended standard, has made information literacy arrangements worse. Where librarians have to multitask and serve many students, time allocated to information literacy has shrunk. Where information literacy does not exist, the chances of it ever happening have been reduced because then librarians have gotten immersed in several roles. There are competing interests in time allocation, and information literacy is likely to suffer the consequences of an overwhelmed library workforce. This is likely to be one of the major challenges. It is therefore incumbent upon the higher education sector to holistically tackle the challenge of the number and role of academic librarians in relation to the growing student numbers. Information literacy therefore has implications for the quality of research and education not only in Uganda and East Africa, but globally.

Notes

- [1] For example: Maria G. N. Musoke and Andrew Mwesigwa, "Informing Policy and Practice through Assessment of New Library Books' Usage at Makerere University," *Library Collections, Acquisitions, & Technical Services* 16, no. 3 (2017): I–16; Andrew Mwesigwa and Agnes Namaganda, "Tracing the Benefits of the Learning and Teaching in a Digital World (LATINA) Training Programme in E. Africa" (paper, Information Literacy Satellite Meeting, World Library and Information Congress, Limerick, Ireland, August 2014).
- [2] Mwesigwa and Namaganda, "Tracing the Benefits."
- [3] Lotta Hansson, "Innovative Doctoral Education—Training of Transferable Skills to Build for Tomorrow's Research Quality: A Collaboration with Makerere University," in *Innovative Doctoral Education for Global Food Security 2013*–2014, ed. Lotta Hansson, Malin Planting and Arvid Uggla (Uppsala, Sweden: SLU Global, April 2015), 47–68, http://www.slu.se/globalassets/ew/org/andra-enh/uadm/global/rapporter/innovative-doctoral-education-global-food-security-2013-2104.pdf.
- [4] Steven A. Stahl, "Different Strokes for Different Folks? A Critique of Learning Styles," American Educator 23, no. 3 (Fall 1999):27–31.
- [5] Andrew Mwesigwa, "An Academic Library as a National Reference Library: Contributions of Makerere University Library in Promoting Civic Literacy" (paper, World Library and Information Congress, Singapore, August 2013).
- [6] Emily P. Frank and Amanda B. MacDonald, "Eyes toward the Future: Framing For-Credit Information Literacy Instruction," Codex: The Journal of the Louisiana Chapter of the ACRL 4, no. 4 (2016): 9–22; Maria G. N. Musoke and Ane Landoy, "Building the Capacity of Librarians through Collaboration: The Experience of the University of Bergen and Makerere University Libraries with Their Partners in the North and South," chapter 13 in Collaboration in International and Comparative Librarianship, ed. Susmita Chakraborty, (Hershey, PA: IGI Global, 2014), 137–47, http://www.igi-global.com/book/collaboration-international-comparative-librarianship/75483.
- [7] Musoke and Landoy, "Building the Capacity."
- [8] Mwesigwa and Namaganda, "Tracing the Benefits."

- [9] Maria G. N. Musoke, "Enhancing Access to Current Literature by Health Workers in Rural Uganda and Community Health Problem Solving" (paper, IFLA World Library and Information Congress, Lyon, France, August 17–23, 2013); Maria G. N. Musoke, "Access and Use of Information by Primary Health Care Providers in Rural Uganda: A Qualitative Approach," *International Journal of Decision Support System Technology* 2, no. 2 (April 2010): 1–9.
- [10] Maria G. N. Musoke, *Informed and Healthy* (Cambridge, MA: Academic Press, 2016); Musoke, "Outreach to Rural Health Units"; Musoke, "Access and Use of Information."
- [11] Alison A. Kinengyere and Gorreti K. Tumuhairwe, "Preparing for the Next Generation Librarianship: A Look at Innovations to Tailor Library and Information Workforce to Match the New Environment in Makerere University, Uganda" (paper, World Library and Information Congress: 75th IFLA General Conference and Council, Milan, Italy, August 23–27, 2009), http://www.ifla.org/past-wlic/2009/100-kinengyere-en.pdf.
- [12] Musoke, Informed and Healthy.
- [13] Musoke, "Outreach to Rural Health Units."

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CHAPTER H

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Region: Africa

Introduction

Institutions of higher education in South Africa are products of segregation and apartheid, either as institutions that were advantaged by the system or those that were disadvantaged. Despite the lingering legacy of apartheid, there is a great deal of optimism in the potential that higher education institutions possess in contributing to the consolidation of democracy and social justice and to the growth and development of the economy. To realise this potential, the Council on Higher Education developed strategies for the reconfiguration of the higher educational system characterized by quality and excellence, equity, responsiveness, effective and efficient provision, good governance and management.

The authors are products of an apartheid educational system at both the school and higher education levels. Coming from struggle backgrounds, they view information literacy from the perspective of the oppressed—the South African majority. As members of the oppressed community, they had to attend schools that did not have sufficient classrooms, with much teaching and learning taking place under a tree. In essence, school libraries were nonexistent, and information literacy (or even the basics of library education) were totally foreign concepts. There were a sprinkling of public libraries for black people. Again, given that there was no or little access to public libraries, information literacy was not in a black person's dictionary.

Progression from the school education system to the higher education system did very little to engender an understanding of library literacy, let alone information literacy. The fact that there was only one higher education institution in the country for the Indian community (the authors are Indian South Africans), one of the authors went to a higher education institution that was "reserved" for Indians while the other had to apply to the Minister of Education for permission to study at a "white university." In essence, the grounding in the utilization of the library and its resources was anything but weak.

Reggie Raju's area of research expertise is research support librarianship. As the current Deputy Director for Research and Learning at one of the leading research universities on the African continent, he provides direction to the section with regard to, amongst others, the implementation of "information literacy." He holds the view that information literacy is fast becoming an important segment in research support service delivered to all of the user communities, including researchers, academics, and students.

Jaya Raju's area of research expertise is LIS education and workplace knowledge and skills

requirements and the implications of this for the former. She is currently Associate Professor and Head of an LIS school at a research-intensive university. The LIS school and its academics enjoy a close synergy with the university library, which is strongly focused on new services such as research support. This has sensitized the LIS school to the need for academic librarians to know the pedagogical foundations of teaching and learning in order to effectively deliver information literacy-related programmes and has led the school to develop curricula in the area of teaching and learning in its postgraduate programme.

Theory and Practice = Praxis

It is near impossible to discuss the provision of information literacy without interrogating South Africa's chequered history as this has had a significant impact on the future of the delivery of library and information services. The legalised discrimination of blacks has created an unequal society. In enacting discriminating laws, the minority government of the time was of the view that "there is no place for [the Bantu] in the European community above the level of certain forms of labour. . . . What is the use of teaching [the Bantu] child mathematics when it cannot use it in practice? . . . Education must train people in accordance with their opportunities in life, according to the sphere in which they live." To eradicate decades of systemic discrimination, new legislation, new strategies, new practices, and such must address these past inequalities en route to transforming the South African higher education system to serve a new social order, to meet pressing national needs, and to respond to new realities and opportunities. The first democratically elected government in 1994 had to lay the foundation for the development of a learning society which can stimulate, direct, and mobilise the creative and intellectual energies of all the people towards meeting the challenges of reconstruction and development.

Dorner and Gorman posit that information literacy must be predicated on local culture; we can now add to that the historical dimension. [2] Information literacy programmes must take cognizance of the African development context and address issues related to societal development and individual empowerment. [3] Saleh justifies this inclusion, that is, the historical dimension, when he says that South Africa's present status is influenced by its historical memory of apartheid rule which has delayed educational revival. [4] The impact has been so deep-seated that, in a national study to measure literacy levels in primary schools, it was found that the majority of learners in Grade 3 and Grade 6 could not read and count. In one of the provinces which is also the economic hub of the country, 70 percent of the province's Grade 3 learners were found to be illiterate. [5] The poor schooling does little to prepare students for success in the higher education stream. [6]

South African government institutions recognise the importance of information literacy in fast-tracking South Africa's development into the knowledge society realm. The National Council for Library and Information Services has documented the fact that the role of libraries in literacy and information literacy education is not sufficiently recognised. The reading and information needs of large numbers of South Africans are not being met, as most do not have access to library and information services or are forced to put up with inferior services. The Council points out that the lack of functional and information literacy is a major impediment in

the workforce and affects productivity.

In proposing an intervention, the Council encourages the embedding of information literacy in the curriculum at primary, secondary, and tertiary levels. It goes as far as stating that it is the task of librarians to ensure that information literacy programmes are designed and delivered at their libraries to all groups who require information literacy skills which are essential for participation in modern democracy and are necessary for social inclusion. The Council also alludes to the fact that libraries have a critical role to play in nurturing democratic values by providing access to diverse views, encouraging critical thinking, and teaching information literacy. [8]

The language used by government institutions is synonymous with excellence in information literacy delivery. Education has long been recognised as providing a route out of poverty for individuals and as a way of promoting equality of opportunity. The achievement of greater social justice is dependent on equitable access by all sections of the population to quality education. National government promotes the view that education must embrace the concept of lifelong learning, recognising that learning takes place throughout a person's life and in many forms. Unfortunately, there is a major void between government ideology and practice. We concur with the sentiments expressed by Soudien that not enough consideration is given to the devastation that the apartheid system had on the education system—from primary school education to tertiary education.

Before engaging in discussion on the delivery of information literacy programmes at higher education institutions, it is worth examining the higher education landscape. The South African higher education environment was re-landscaped in 2000 to redress, *inter alia*, the aforementioned apartheid higher educational system. In the re-landscaping process, the thirty-six public higher education institutions were reconfigured to create twenty-three such institutions; in the last two years, three new universities were added. The fundamental purpose of the re-landscaping was to level the higher education playing field through the redistribution of skills and resources.

Smaller universities and technikons (vocationally focused, technology-oriented higher education institutions) were merged to form new entities, including traditional universities, universities of technology, and comprehensive universities. Six comprehensive universities were created to offer a combination of academic and vocational diplomas and degrees. The universities of technology (UoTs), of which there are six, focus on vocationally oriented education and offer, in the main, diplomas. The remaining eleven institutions are traditional universities offering theoretically oriented university degrees. [12]

Unfortunately, the re-landscaping of higher education has not done much to level the higher education playing field. For many black students, the gap between poor school education and university is a bridge too far. Exacerbating the divide is the fact that many of the black students are first-generation university enrollments. In an effort to bridge the divide, most institutions offer foundation and extended curriculum programmes, in which the basic three-to-four-year undergraduate degree programme is extended by a year. Despite the noble intentions, extended studies programmes have negative connotations because only black students

participate. We view this "noble gesture" as a failure as the pass rate in these programmes is less than 35 percent. [13]

The higher education landscape became more skewed as the previously advantaged and well-resourced institutions attracted, amongst others, the best students, academics, international collaboration, and funding. The best librarians gravitated to the better resourced institutions, taking critical skills to institutions that were already relatively well endowed with skills and resources. The skewing of the landscape is evident in the graduation rate and research performance. Karen MacGregor points out that ten of twenty-three public universities produce 86 percent of all research and 89 percent of all doctoral graduates. [14] MacGregor goes on to point out that the situation is exacerbated as South Africa "lacks the dense networks between universities, state and business that are found in other countries, which facilitates the movement of people, knowledge, expertise and experience between universities and the public and private sectors and innovation." [15]

It is against this background that one needs to connect the information literacy dots within South Africa.

The Role of Librarians

Cultural imperatives, historical circumstances, and rapid advancement of relevant technology pose, individually and collectively, unique challenges to developing country libraries wanting to mimic western models of information literacy. Be that as it may, we use the generally accepted definition of information literacy as a starting point for the South African information literacy dialogue.

The ACRL Framework for Information Literacy for Higher Education defines information literacy as "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." The earlier ACRL definition of information literacy was "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."[17] The more recent definition brings to the fore the research component, be it research at the undergraduate or postgraduate levels. It views concepts such as "reflective discovery," "understanding of how," and "creating new knowledge" as critical pillars in a research environment. The understanding of how information is produced and valued lends itself to the addition of dissemination as a pillar in information literacy. In the developing world context, there is an urgency for the sharing of knowledge (scholarly information) for the growth and development of society. An in-depth understanding of how information is produced and, more importantly, valued would significantly influence dissemination, especially in forums that improve accessibility to the widest readership possible. Information, in the current digital age, is disseminated via social media (Facebook, Twitter, blogs, wikis, and such) and websites (including repositories) or published in toll platforms. It is critical to give serious consideration to reliability, authenticity, veracity, and such when disseminating information, especially when using the social media platform.

It is suggested by Behrens that literacy is an evolving concept and that it should be regarded as a continuum which incorporates the concept of information literacy. [18] Michael Wooliscroft; Robert Coravu; Karin de Jager and Mary Nassimbeni; Mathew Moyo and Judith Mavodza; and others agree that literacy has evolved, over the decades, into information literacy. In the 1970s, the emphasis was on ensuring the user extracted the greatest benefit from using a library; the focus was on library instruction, that is, how best to use the library. In the 1980s, the concept had grown into the broader concept of user education. Here was the inclusion of all activities that relate to making the best possible use of library resources, services, and facilities. The fundamental purpose was to help users to be self-reliant in locating, sorting, and repackaging information. In the 1990s, there was another bend in the road, with the term library literacy being used to refer to the acquisition of a range of skills relating to identification of and familiarity with sources and information-seeking processes, usually through formal bibliographic instruction and informal user education. This evolution is significant in order to plot where South African libraries are in terms of the information literacy evolutionary trajectory (see figure H.I for this evolutionary process and concomitant competencies).

The evolution of literacy into *information literacy* has brought about a paradigm shift as there is no reference to information resources or to the place where it can be found. Information literacy is significantly influenced by commensurate technology and is starting to respond to social-economic imperatives with lifelong learning becoming front and centre. As posited by Midrar Ullah and Kanwal Ameen, "information literacy and lifelong learning are the beacons of the information society, illuminating the courses to development, prosperity and freedom."

For the developing world context, the siamese relationship between information literacy and lifelong learning is absolutely critical. This relationship will empower people in all walks of life to seek, evaluate, use, and create information effectively to achieve their personal, social, occupational, and educational goals. Information literacy has moved literacy into the realm of a basic human right, promoting social justice and social inclusion. Especially within the South African context, the inclusion of the previously disenfranchised into mainstream society is the ambition of the current government and all relevant stakeholders.

[21]

This new dimension to librarianship brings a new set of challenges to South African librarians. This is the first time South African librarians are confronted with concepts which they were not taught at LIS schools. Librarians are now compelled to engage concepts that are directly related to principles of research, locating appropriate literature, analysing the literature to determine relevancy, reliability, authenticity, and veracity. Further, the use of the information for the generation of new information takes for granted the ethical use of information for the construction of new information for dissemination, be it a seminar paper, thesis, or a research paper.

Given the lingering legacy of apartheid perpetuates the ill-preparedness of students, especially among the black majority, for study at institutions of higher education and their commensurate contribution to society, South African librarians are challenged to grow critical-thinking skills and lifelong learning. Hence, in a functioning higher education institution, librarians are compelled to focus on developing critical-thinking skills and the preparation of the user for lifelong learning. Historically, where education was a domesticator, where regurgitation

or rote learning was the norm, information literacy was confined to imparting skills to access prescribed or recommended material. In this context, the library was at the epicentre of "learning." In an environment where the students are being skilled with critical-thinking skills, the library is no longer the epicentre—research is now at the epicentre. Information literacy is now much more closely aligned to new imperatives relating to research support—the move from providing support to the researcher to becoming a collaborator in the research process; that collaboration is in the form of partnering in the teaching process or engaging in "embeddedness" in the curriculum.

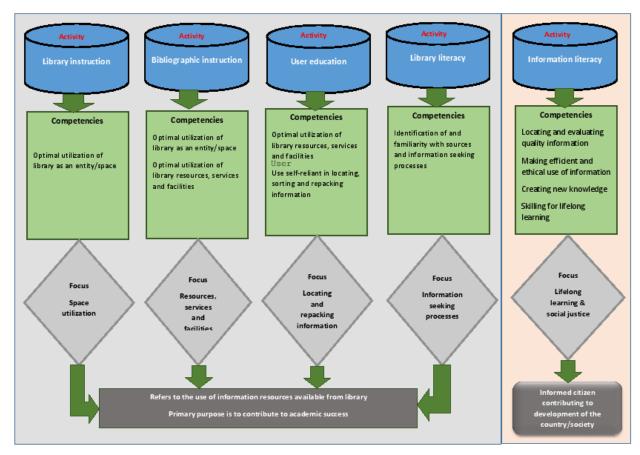


Figure H.I. Evolutionary process and concomitant competencies (adapted from Michael Wooliscroft, "From Library User Education to Information Literacy: Some Issues Arising in This Evolutionary Process" [paper, COMLA Workshop, Gabarone, Botswana, July 1997], http://www.otago.ac.nz/library/pdf/tandlpapers_MJW.pdf; Karin de Jager and Mary Nassimbeni, ""Institutionalizing Information Literacy in Tertiary Education: Lessons Learned from South African Programs," Library Trends 51, no. 2 [2002]: 167–84; Robert Coravu, "Library Literacy: The Step before Information Literacy," e-LIS: E-prints in Library and Information Science, accessed January 27, 2017, http://eprints.rclis.org/14540/1/library_literacy_vs_information_literacy-comunicare_sibiu2%E2%80%A6.pdf.)

Unlike in higher education institutions in the global North, librarians in South Africa are still considered as administrators and "stampers of books." This status has done very little to improve the image of the librarian who does not have the necessary *locus standi* or the *gravitas* to assume a leadership role in this research collaboration. Further, the librarian is not trained or sufficiently skilled to take on this leadership role. Be that as it may, until such time as relevant skills are taught in LIS schools and librarians are skilled in research methodology and

processes, the librarian would have to be a co-partner in this aspect of research support.

The constant change to the information landscape has influenced learning which has become a continuous process, and lifelong learning emerges as a key graduate attribute in the twenty-first century. Changes in pedagogy necessitate an attitudinal change on the part of educators. The role of the educator has moved from being a disseminator of information in the classroom to being a facilitator empowering students to become autonomous learners through resource-based learning outside of the classroom; pedagogy has moved from education as a domesticator (one direction transfer of information—educator to student) to education as a liberator (educator as a facilitator in the learning process). In the education as a liberator paradigm, information is critical to facilitate collaborative learning. [22]

Hence, it is imperative that sound information literacy programmes are rolled out to support the changing pedagogy and the quest for the graduate attribute of lifelong learning. In furtherance of this change, information literacy provides the constructs for "learning how to learn." The significance of the information literacy—based model for learning how to learn is that it facilitates deep rather than surface learning and provides the opportunity for individuals to develop as independent, self-directed lifelong learners. Therefore, as asserted by Anna Klebansky and Sharon Fraser, in order to be a learner and an informed global citizen, an individual needs to acquire information literacy—associated lifelong learning skills and capabilities. This assertion is supported by Alan Bundy, who says that lifelong learning is intertwined with self-directed or independent learning and participative citizenship. We hold the view that self-directed learning is a significant intervention when working towards a South African citizenry that has active contributors to the socioeconomic development of the country and the continent.

Future Visioning and Reflection

In the South African higher education environment, despite the current challenges, there is a thrust towards education as a liberator, and the role of the academic is that of facilitator. This thrust is underscored by the drive by South African higher education institutions to become research-intensive or research-led. This push will influence both postgraduate and undergraduate study. The fact that some institutions have already expressed the view that research begins at the first-year level confirms that the South African higher education system will, in the future, be driven by a research agenda. The role of the educator as facilitator would come a lot more to the fore, again at both the postgraduate and undergraduate levels. In this new paradigm, the role of the supervisor in postgraduate studies would be similar, albeit at an introductory level, to that of the lecturer (facilitator) at the undergraduate level.

In this changing higher education paradigm, research is key as education is developed along constructivist epistemologies—students generating their own knowledge. Up to this point, information literacy has been associated with undergraduate (and to some extent postgraduate) studies. In the new paradigm, the scope of information literacy is exponentially expanded to include, amongst others, the academic and the researcher as new elements such as open-access and self-directed learning now become front and centre. In the openness—social media—constructivist era, the user is both the consumer and producer of information; hence, the need

to understand and implement information ethics and intellectual property principles becomes an essential cog of information literacy programmes. It is envisioned that in the near future, librarians would have to evolve from providing a reactive service to becoming proactive collaborators in the research process, providing the lead in newly constructed information literacy programmes underpinned by a research agenda.

Notes

- [1] The Bantu Education Act, 1953 (Act No. 47 of 1953; later renamed the Black Education Act, 1953) was a South African segregation law which legalised several aspects of the apartheid system. Its major provision was enforcing racially separated educational facilities.
- [2] Daniel Dorner and G. E. Gorman, "Contextual Factors Affecting Learning in Laos and the Implications for Information Literacy Education," *Information Research*, 16, no. 2 (2011), http://lnformationR.net/ir/16-2/paper479.html.
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- [13] Soudien, *Transformation*.
- [14] Karen MacGregor, "Higher Education in the 20th Year of Democracy," *University World News*, no. 317 (April 27, 2014), http://www.universityworldnews.com/article.php?story=20140425131554856.
- [15] Ibid.
- [16] Association of College and Research Libraries, Framework for Information Literacy for Higher Education (Chicago: Association of College and Research Libraries, 2016), http://www.ala.org/acrl/standards/ilframework.

- [17] Association of College and Research Libraries, Information Literacy Competency Standards for Higher Education (Chicago: Association of College and Research Libraries, 2000), http://www.ala.org/acrl/standards/informationliteracycompetency.
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- [19] Michael Wooliscroft, "From Library User Education to Information Literacy: Some Issues Arising in this Evolutionary Process" (paper, COMLA Workshop, Gabarone, Botswana, July 1997), http://www.otago.ac.nz/library/pdf/tandlpapers_MJW.pdf; Robert Coravu, "Library Literacy: The Step Before Information Literacy," e-LIS: E-prints in Library and Information Science, accessed January 27, 2017, http://eprints.rclis.org/14540/1/library_literacy_vs_information_literacy-comunicare_sibiu2%E2%80%A6.pdf; Karin de Jager and Mary Nassimbeni, "Institutionalizing Information Literacy in Tertiary Education: Lessons Learned from South African Programs," *Library Trends* 51, no. 2 (2002): 167–84; Mathew Moyo and Judith Mavodza, "A Comparative Study of Information Literacy Provision at University Libraries in South Africa and the United Arab Emirates: A Literature Review," *Library Review* 65 no. 1/2 (2016): 93–107, doi:10.1108/LR-06-2015-0069.
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- [22] Wooliscroft, From Library User Education.
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CHAPTER I

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Region: Middle East

Introduction (Elizabeth A. Russell and Meggan Houlihan)

This paper will highlight the development, growth, and projected outlook of information literacy initiatives in the Middle East with a focus on the Gulf region, which includes the United Arab Emirates (UAE), Qatar, Saudi Arabia, Bahrain, Iran, Iraq, Kuwait, and Oman. The Middle East has a significant and valuable history in higher education and establishing world-class higher education institutions. Regional "homegrown" educational institutions include Zayed University and Khalifa University in the UAE, King Abdullah University of Science and Technology in Saudi Arabia, the University of Tehran, and Al-Azhar University in Cairo, long regarded as one of the oldest institutions of higher education in the world, and numerous others.

The Gulf region's long-standing commitment to education combined with economic wealth has resulted in the development of educational institutions as a priority. In recent years, many Gulf countries, most notably the UAE and Qatar, have begun to embrace Western-style higher educational institutions, often establishing new transnational campuses. Many of these new branches stem from universities located in countries such as the United States, the United Kingdom, and Australia. According to Hanauer and Phan,

Of the estimated 100 branch campuses currently operating worldwide, more than a third are in the Arab region. There are nearly 60 transnational institutions and programmes in the Middle East today and of these, over 80% are located in the Persian Gulf with staggering concentrations in the United Arab Emirates and Qatar. Nearly half these institutions are affiliated with universities in the United States, while the rest are spread across several other mostly Western and Asian nations. [1]

Newly established transnational campuses often bring with them programs and curricula that are heavily influenced and modeled after their home institutions. In many cases, the academic library is no exception. Academic programs offered at these institutions are often tailored to suit the local needs of the community. For example, NYUAD offers a Bachelor of Arts in Arab Crossroads, a multidisciplinary program situated to bring a better understanding of the Arabian Peninsula to the global community. Similarly, many of these institutions also recruit faculty and staff from abroad. These expatriate workers, or "expats," bring with them their teaching methodologies, practices, and training from their home countries and apply them in the Gulf. In researching this white paper and drawing on their own experiences, the authors found this to be true in the majority of transnational campuses studied. Most of the expat academic librarians draw on professional education and experiences gained before moving abroad.

With an increased interest in higher education, IL has rapidly developed in the Arabian Gulf, but the IL landscape is at a crossroads. IL practitioners and educators alike are trying to address the complex nature of serving international students attending branch campuses, while navigating the complex nature of local needs. Continued education and support for IL are needed. Moving forward, one must consider current models of information literacy, research trends, and paths for future development.

Models of Information Literacy (Elizabeth A. Russell)

Academic libraries in the Gulf follow varying information literacy models for different reasons. The region has not developed its own framework for teaching IL skills in higher education, though this is certainly an area for exploration and collaboration in the future. Additionally, the reliance on expats who bring with them their own experiences in teaching IL skills shapes the models used to teach students. Readers of this white paper might assume that as librarians in the Middle East, we are teaching local students in ways that differ greatly from the prevalent methods or models used in the West. However, it's important to note that the authors of this chapter are American expats teaching IL skills to a mostly international student body that hails from over 100 countries, including the United Arab Emirates. This is not an uncommon scenario in the UAE, where many professional librarians come from abroad and universities have a diverse population of students. The country itself is a global melting pot of cultures, with immigrants accounting for nearly 85 percent of the country's population. It's also important to note that we are academic librarians at a transnational campus of a Western institution, New York University, whose curriculum is that of a Western-style liberal arts and research university.

I received my library science degree from an ALA-accredited university in the United States and spent the first three years of my academic career teaching undergraduates basic information literacy skills at a mid-sized midwestern university. Most of my instructional style drew on ALA's Information Literacy Competency Standards for Higher Education. Our instruction program focused on teaching students how to identify information needs and then efficiently and effectively locate the answers. We conducted many one-shot library instruction sessions but also embedded ourselves into courses, working with students on long-term assignments that required more extensive use of library resources. When possible, we incorporated active learning techniques to move away from lecture-style classes and also spent a lot of time developing online tutorials to supplement in-class instruction. I find that at NYUAD, my instructional style did not change substantially; I still focus on incorporating active learning techniques into my instruction whenever possible, and I guide my instructional practices by the newer guidelines, the ACRL Framework for Information Literacy for Higher Education. What has changed is that we have to consider that some of our students come with varying degrees of experience doing research in libraries. Some students came from secondary schools with libraries and school librarians who taught information literacy concepts, while others did not. I don't think this is a situation unique to our institution or this region, though: academic librarians in the United States also teach IL concepts to students with varying levels of experience in research tools and methods.

The majority of Western-style academic libraries in the region that follow an IL framework, such as NYUAD, follow ACRL's standards, formerly the *Information Literacy Competency Standards for Higher Education* and now the ACRL *Framework*. According to Flanagan and Wiebe, "In the UAE all national public universities modeled on western institutions have libraries that include information literacy instruction as a core service." At the AUS library, "Classes and assessments are designed to scaffold students' IL skills within the framework of the Association of College and Research Libraries Information Literacy Competency Standards for Higher Education." A range of teaching styles are used, including active learning approaches and the integration of technology using clickers and online polling. In this way, UAE Western-style university libraries teaching methods do not differ greatly from peer institutions in the United States and Canada. Given that in the Gulf region, many of the academic librarians are themselves expats, it makes sense that most of us tend to use models and frameworks from our home countries. At AUC, the majority of faculty librarians have an ALA-accredited degree, as do the majority at NYUAD, all earned from institutions in the United States and Canada. [8]

Like our colleagues at Western academic libraries, we are still contemplating how to best integrate the new ACRL Framework into our library instruction program. We are also still trying to figure how to adapt that for our global student body. Librarians in the Gulf look forward to reviewing threshold-based lesson plans and assessment activities, as ACRL makes more supporting materials available.

According to Houlihan, Furno, and Spencer, IL programs at AUC and AUS both used ACRL's *Standards* "to enhance and improve the existing information literacy programs at AUC and AUS and reinforce information literacy as a key component in the path towards academic excellence." The Libraries and Learning Technologies 101 course at AUC "was designed to teach all of the ACRL IL standards to freshmen" while AUS's General Education Program includes an IL outcome that proposes that students should be able to "identify and access information resources efficiently and effectively based upon the ACRL standards." [10]

Moyo and Mavodza's 2016 comparative study of information literacy programs at academic libraries in the United Arab Emirates and South Africa found that the majority of programs were also guided by the ACRL *Standards* but that they were often tailored to the local students' IL needs. Even among national universities, including Zayed University, Khalifa University, and United Arab Emirates University, there were differences in the way IL programs are administered and taught. Nationally, there is no singular IL framework to follow. In the coming years, several national universities will be merged into a single institution, which could provide a unique opportunity to establish a national IL framework.

At King Fahd University of Petroleum and Minerals Library (KFUPM) in Saudi Arabia, the instruction program also follows a Western model and "was able to tailor the US information literacy model to meet their local needs. Presently, KFUPM offers its academic community a variety of IL programs, including the library-orientation, the library-user program, the library-integrated English courses, and the information-searching skills course." [12] Similarly, our first-year library instruction program at NYUAD focuses on introducing first-year students to an academic library through a library open house to familiarize them with "places and faces,"

orientation sessions, integration into the First-Year Writing Seminar, and the incorporation of a library workshop into the First-Year Dialogue series, a program that helps students navigate the introductory year of their academic career.

Since many of these universities use the same frameworks, we need to continue to move toward cohesiveness in the region while also recognizing our local population's needs. Click and Houlihan write in their chapter "Library Instruction Programs at American-Style Academic Libraries outside of United States" that "it is clear the majority of the institutions surveyed have based their instruction programs on American standards but have adapted these standards to meet the needs of diverse student populations." For example, simplifying terminology, such as calling bibliographic instruction with the simpler phrase research skills, will help communicate main objectives to ESL learners.

At NYUAD, we are guided by the ACRL Framework while incorporating our own teaching styles and methods. We emphasize active and group learning over lecture-style demonstrations. The library has strong partnerships with the campus writing center (so strong the writing center moved into the library) and often collaborates on research and writing partnerships, including the annual Long Night against Procrastination, a biannual event where students receive dedicated research and writing help until 3 a.m., with motivational snacks. Our First-Year Experience Librarian works diligently with the faculty who teach in the core curriculum as well as those who teach in the writing program to integrate information literacy early on in our students' academic career.

Speaking from a personal perspective, the authors have found that while there may be a few differences in information literacy approaches abroad, much of what we teach and how we teach it remains the same. The authors tend to mostly use the same models they would if they were in a classroom in the United States. However, we maintain a flexible, user-centered approach. For example, we have simplified the language used to explain IL concepts to nonnative English speakers, using more approachable terminology and reviewing basic library definitions as needed. We've also adapted our language and search examples to suit local needs. We steer away from usual slang terminology and idioms when teaching. During one of our peer-reviewed IL sessions, a colleague noticed that we addressed the class by saying "come on, guys" which in a local context automatically excluded the female students from answering. UScentric search examples don't work well, as many of our students do not closely follow Western mainstream popular culture, thus eliminating search examples that many of our Western colleagues might use in an IL classroom. Another example of catering to local needs is offering a Conducting Research in Arabic workshop, where one of our Arabic-speaking colleagues demonstrates how to find Arabic language resources in our catalog. Being mindful of cultural norms will help us adapt our teaching styles to ensure we reach all of our students.

For the most part, however, the authors have found that methods and models used in the IL classroom (in our experience) have depended more so on the academic setting the program is situated in and not necessarily the geographic location. For example, the students at NYUAD are high-performing, come from rigorous academic backgrounds, and have strong English-language skills. While some may not have been exposed to conducting research in an academic

library, they are nonetheless highly motivated learners who are quick to adopt new methods and techniques. This is not to say that we couldn't do more to tailor our information literacy efforts to our global student population. This is still an area of information literacy development that the authors are exploring.

Research Trends (Meggan Houlihan)

LIS practitioners in the Arabian Gulf have produced a notable body of literature related to information literacy (IL), but there is still much regional work to be done. In order to gain a better understanding of the daily practices and research interests of librarians in Arabian Gulf, it is helpful to break down recent publications into three main categories: innovative teaching practices, programmatic approaches in the Gulf, and IL assessment.

Librarians in the Arabian Gulf, like many Western librarians, have focused on improving their daily IL practices by studying instructional activities and innovative library instruction sessions. Bendriss, Saliba, and Birch experimented with the effectiveness of a flipped IL classroom to prepare budding scholars for the rigor of medical school. Martin, Birks, and Hunt developed Infoasis, a homegrown online learning module developed at Zayed University in 2005, and the trio later assessed the impact and relevance of Infoasis in 2010. The authors concluded that with specific updates to the program, Infoasis was a useful tool for Emirati students and suggested that the tool continually be assessed. It should be noted that Infoasis was specifically designed with Emirati students in mind; thus, language and examples were customized to meet local needs. For example, images of people used in the tutorial were all of Arab descent to better connect with students.

Librarians in the region have also taken care to document the development and launch of their successful IL programs in an effort to help others avoid common mistakes and duplicate successes. Ashoor highlighted the development of the IL program at King Fahd University of Petroleum and Minerals (KFUPM) in Saudi Arabia. Ashoor suggested that developing countries should adopt an established IL framework and adjust according to local needs and literacy rates. When the American University of Sharjah (AUS) Library was being designed, supporting information literacy was a main objective. The library was built to accommodate interactive learning spaces that allow for group collaboration and promote learning. Flanagan and Wiebe recently outlined the major developments of libraries and library services in the Gulf region, including identifying information literacy as a "foundational element of most libraries."

Librarians across the globe, and we are no exception, are continually trying to improve the effectiveness of their IL instruction sessions and programs through assessment, both formative and summative. The growing focus on assessment has also extended to librarians in the Arabian Gulf. Furno and Flanagan administered pre- and posttests to students enrolled in an entry-level English course and identified weakness within their one-shot teaching methods. The authors concluded that their learning outcome of "identifying key components of a scholarly article" was not being met, and they should revisit lesson plans and make adjustments accordingly. Two colleagues and I, Christine Furno and Jayme Spencer, outlined the assessment efforts at our respective institutions, AUC and AUS, and the growth in IL program development. [22]

I find that librarians located in the Arabian Gulf are invested in the same day-to-day issues and research topics as American librarians, and as a result, publish short studies and "what we did well" pieces that commonly appear in American journals and edited volumes. In addition, many regional librarians are attempting to address higher-level conceptual issues, such as the complex nature of teaching information literacy to diverse student populations and implementing the ACRL Framework in an international context. Many librarians are also using original research methods and mixed methods to gain a better understanding of complex topics. These two recent publishing trends are innovative, and without more advancements regional literature will not develop.

My former colleague, Ilka Datig, explored the concept of "What is a library?" and how international students perceive libraries. Within this study Datig delves into the question of how we can improve library services and outreach based on our understanding of diverse student views on the subject. Datig also suggests further research on the topic, including polling librarians on their definitions of libraries and interviewing upper-level students to see if views on libraries differ from those of new students. [24]

Amanda Click, Claire Wiley, and I conducted a systematic review of library literature and international students in order to better identify trends in the LIS field related to international students. We reviewed a twenty-five-year period of literature, 1990–2014, and used this data to track key findings and recommendations in LIS literature. We found that LIS scholars made recommendations related to "library instruction," "campus collaboration," "library staff training," "assessment," and "cultural understanding/awareness." Recommendations were related to: "campus collaboration," "staff training," "assessment," "cultural awareness," and "library instruction." For example, collaboration with other campus groups, including the office of student life, often makes students feel more comfortable in an academic library setting. We hope that applying a scientific research method to library research will help others bridge the gap from "what we did" literature to original research. Together we will be publishing a number of follow-up articles, also using original research methods to study international students.

Salaz and McGregor published a recent book chapter concerning the adoption of various international frameworks, such as the ACRL *Framework*, at transnational campuses. ^[27] The authors suggested that when conceptual tools, such as the ACRL *Framework*, are deployed on transnational campuses local factors must be addressed, including the "political and economic objectives of higher education systems." ^[28] Successful instruction of international students will heavily rely on the classroom teaching of these frameworks.

Johnston, Partridge, and Hughes studied how international students, specifically English as a Foreign Language (EFL) students, understand information literacy. [29] In this innovative study, the authors utilized phenomenology in order to document the IL experiences of female Emirati students. Four major areas of IL understanding were identified: process, quality, language, and knowledge. [30] Ultimately, the authors found that EFL students have difficulty with IL due to language-related issues.

The studies highlighted above have had the greatest influence on my research practices, and

I believe they will have a lasting effect on the Gulf region and the international library community. The studies listed above tend to use original research methods to explore their research question, which provides greater insight and more detailed results. As much as I appreciate and value "what we did articles," I believe the use of original research methods to explore IL issues is crucial. Furthermore, grounding IL research in theory will help create superior studies and result in stronger recommendations to the field. Although such studies are time-consuming, regional and international librarians need to tackle tough research questions with methodically sound studies in order to make clear advancements in the field.

Historically, there has been an active and engaged LIS research community in the UAE and the Gulf, and there is much to learn from this body of literature. Librarians from around the world have had the opportunity to collaborate on research projects that identify and study many aspects of information literacy, specifically focused on issues related to the Gulf and our unique student populations. Together we must systematically make recommendations that inform our teaching of international students. Globally, librarians would benefit by reading this diverse body of literature, especially as the number of Gulf citizens travelling abroad for their university education continues to grow.

Future Visioning and Reflection (Meggan Houlihan)

We feel that the role of academic libraries in the Gulf region is bright and burgeoning; information literacy is a crucial to the success of all future library- and reading-related initiatives. Librarians in this region should be optimistic. Regional support from government entities, universities, regional and international library organizations, and local businesses will continue to make a lasting impact on the development of libraries and information literacy.

The government of the UAE has spearheaded the growth of libraries in the country. There is a strong emphasis on preserving the Arabic language and local heritage. The UAE's tremendous support for reading and library-related initiatives resulted in 2016 being marked as the "Year of Reading," which has provided resources and support to promote reading to all ages and create generations of avid readers. [31] I helped organize a UAE Reads event here at NYUAD, where invited all local universities to read and discuss *I Am Malala* followed by a screening of *He Named Me Malala*. The largest library in the Arab world, the Mohammed bin Rashid Library, is set to start construction next year and, once completed, will provide access to 1.5 million print volumes, I million audiobooks and 2 million e-books. [32] This library will serve as the bridge between library services, cultural heritage, preservation, and the academy.

Neighboring Qatar has quickly followed suit. The Qatar National Library will serve as a national library, public library, and academic library, all under one roof. Central to its mission is to help users become "information literate." The Qatari government also launched a national reading campaign in 2016 to help introduce young readers to books, along with several other initiatives. This shift in thinking and programmatic approaches to library services will help Qataris and expats alike become lifelong learners. [34]

Regionally, there are several free and fee-based professional development opportunities. The home-grown Information Literacy Network of the Gulf organization (ILN) offers free

workshops, through the generous support of local universities and businesses, on current topics every year. Recently, the organization hosted a series of workshops on user experience design, threshold concepts, and assessment, throughout the Emirates and Doha. As mentioned previously, the ILN will also offer LIS research methods workshops this academic year. As the current Chair of the ILN Professional Development Committee, I can say with confidence that the organization is working toward serving all types of librarians in their efforts to create, sustain, and assess information literacy programs. We're actively collecting data to improve our outreach and professional development opportunities.

The Special Libraries Association-Arabian Gulf Chapter (SLA-AGC) and the American Library Association (ALA) both offer fee-based conferences and workshops. SLA-AGC offers LIS professionals in the Gulf the opportunity to participate in annual conferences on a wide array of topics that vary by year. Although I have never attended SLA-AGC, I have heard from other librarians that presentation quality is developing. SLA-AGC is charging \$350 for nonmembers and \$300 for members for its 2017 annual conference.

ALA has teamed up with the Sharjah International Book Fair (ALA Sharjah) to bring in regional and international library experts to the only ALA conference held outside of the United States. The downside to ALA-Sharjah and SLA-AGC is that they are quite costly for the amount and quality of programming offered; this year ALA Sharjah cost \$165 USD for onsite registration for ALA members and \$190 USD for non-ALA members. This also raises the question of what other types of professional development opportunities these organizations offer their members in the region to generate lasting impact. I attended the ALA-Sharjah 2016 conference and found that the lack of international context in conference presentations left the audience looking for more. NYUAD librarians assisted with the development of a regional panel focused on academic librarianship to help establish a programmatic academic librarian track. The conference would better suit local participants, the vast majority of whom are not American, by diversifying speakers and bringing American, international, and local perspectives to library issues.

While the Gulf has a burgeoning library community and professional development opportunities are on the rise, the diverse communities of library staff and education levels can cause unevenly distributed professional development (PD) offerings. I find that many PD opportunities are geared toward entry-level librarians, while the more experienced librarian might not feel as if there are as many opportunities. Another consideration is continued PD funds for international travel. Many universities and schools have seen a decrease in PD funding with the decline in oil prices.

Although the IL community in the Gulf region is growing and libraries are becoming a prominent part of the community, success still depends on continued support for high-quality library education, which is currently fragile. The American University in the Emirates is the only university in the UAE to offer a master's degree in library and information science. This program is accredited by the UAE Ministry of Higher Education and Scientific Research. The Al Jazira Institute, an Abu Dhabi vocational school, used to offer a diploma in library studies, but it has recently closed. Currently, there is one accredited library program at University College

London, Doha, but there are many whispers of this program closing in the near future. As far as the authors know, there are no current plans to create more library science programs in the region. A national library organization, as argued by Johnston, Mavodza, and Jirjees, could help solve the library education and professional development problem. A national library organization could establish and approve library school curriculum, while developing a regional plan for the development of library services and professionals. Establishing local chapters of support for library professionals is another area ripe for opportunity.

In regard to the future of information literacy in the Gulf, one must also consider access to Arabic language professional development opportunities and library materials. A majority of professional development events in the Gulf are held in English, sometimes with Arabic translation. Emirati and Arab librarians need access to IL support in Arabic in order to suit local needs. Also, without properly translated materials, non-English language speaking librarians and scholars cannot utilize articles, white papers, books, committee reports, and various other resources. For example, to the authors' knowledge, there are no current Arabic translations of the ACRL Framework. This essential work must be translated in order to make it more widely accessible.

We both feel that we are in a unique higher education environment and that is reflected in our thoughts and practices on the integration of information literacy in a global context. We bring with us our own background and standards, drawn from ACRL's *Framework* and ALA-accredited library science degrees from US institutions. We work in a region that lacks its own standards, and thus we teach what we know. This is not to say that there isn't work to be done on examining what it means to teach IL in a global context. Moving forward, we must base our IL advancements using original research that studies our local population. We can't continue to insert Western IL principles into non-Western academic settings without consideration for our diverse population. We must develop our own framework that considers the local educational environment by asking our students the fundamental question, "What is a library?" and using their responses to guide us.

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CHAPTER J

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Region: Europe

Introduction

Information literacy (IL) has developed from a niche interest in higher education libraries in the late 1990s to a significant issue now recognized across the United Kingdom (UK) library and information profession. Arguably the role of librarians as teachers and educators facilitating the development of IL is the most important aspect of library and information work today. While open access might free up research papers and open data sets facilitate new types of research, these movements rely on an information-literate population who understand not only how to access data and information, but what to trust, how to manage vast quantities of data and information, and how to analyse it to create new knowledge.

My professional career in libraries dates back to the mid- to late 1990s, when much groundwork was done to build a digital library infrastructure, but also important developments took place to consider the role that librarians play in supporting learning. My PhD examined how historians used information that they obtained from newspapers in their own research, which at the time was called a "user needs analysis." Were the research conducted today, it would be quite clearly situated in the discipline of information literacy. Following my PhD, my interest in IL stemmed from a project I worked on to digitize core readings to support student learning through technology. This project required an understanding of copyright issues and experimented with emerging technologies, such learning management systems (LMSs) to deliver library resources to students. However, through my early career, first at University College London (UCL) and later at London School of Economics and Political Science (LSE), as support was provided for students using technologies such as LMSs, the growing need to develop students' IL skills was recognised. The easier librarians made it for students to access readings online, the more faculty claimed students that no longer knew how to do research or failed to go beyond the prescribed readings. Through facilitating access to resources, had librarians inadvertently disempowered students and made them less likely to learn to use the library? Hence, the value of IL, embedded into a discipline and delivered in partnership with faculty and the need to have informed discussions about learning outcomes and the literacies we are seeking to develop in our students.

IL has evolved into a discipline in the United Kingdom and a topic of much fascination for those who are passionate about the role of libraries in knowledge creation. The work of the Information Literacy Group (ILG), which is a special interest group of the Chartered Institute for Library and Information Professionals (CILIP), has done much over the past fifteen years to raise the profile of IL. My role today as chair of this group, but also as a founder member of the group, makes me well-placed to write this paper. It is also timely, as the ILG and CILIP are currently undertaking a project to refresh the CILIP definition of information literacy, which

was first developed in 2004.

Information literacy has come a long way in a short space of time in the United Kingdom. This paper shares the experiences of work to disseminate knowledge, firstly about IL, and secondly, the expertise that librarians and information professionals can provide to those in other sectors. The paper shares some of the strategies we have employed in the United Kingdom for IL advocacy to those outside the library profession and how our ambitions align with Paul Zurkowski's vision that he stated back in 1974, when he first advocated for "universal information literacy." [1]

Research Trends

It wasn't until the mid-1990s that IL began to be formally recognised in the United Kingdom as a key area of work for librarians. This began in the higher education sector following the Follett Report in 1993. The review highlighted the role of libraries in supporting teaching and research. Consequently in 1994, pioneering work was funded by the higher education funding councils through Jisc for a project called EduLib. The project aimed to provide librarians with the opportunity to acquire or further develop their existing teaching skills in order to ensure the design and delivery of effective information skills training programmes. This was to be achieved by developing a nationally recognised and accredited network of library trainers. The aim was to equip EduLib trainers with both the networked information skills and the pedagogic skills required to make the use of electronic libraries an everyday part of learning, teaching, and research. EduLib involved a cross-disciplinary team of practicing librarians, academic colleagues, and educationists. Arguably, these types of collaborations remain key to success in IL initiatives today.

Models of Information Literacy

In 1998, the Society of College, National and University Libraries (SCONUL) put together a task force to investigate what it then termed "information skills" in academic libraries. There was a concern that information technology skills and "information handling" skills were being conflated. What resulted in 1999 was SCONUL Seven Pillars of Information Literacy, which was in many ways a UK equivalent to the ACRL Standards. The Seven Pillars moved away from more traditional language of "user education" or "information skills" and provided a definition of IL. The model included seven elements that training should cover, as well as highlighting good practice elsewhere in the world. It was widely influential in UK higher education libraries as a means of framing IL and planning training sessions for students. While the model was clearly library-based, it recognised the need for library staff to work collaboratively with academic and staff development colleagues. Following on from this in 2002, Jisc funded the Big Blue Project, which developed a taxonomy of IL^[5] which synthesised several IL models currently in use around the world at that time, such as Doyle, SCONUL, ACRL, and the Council of Australian University Libraries (CAUL), [6] and drew together the main characteristics of these into a new iterative framework. For this reason the model bears many similarities to other IL models. The Big Blue model is now known as the i-skills cycle.[7]

A number of parallel developments in the academic research community took place in

tandem with practitioner-based research. Susie Andretta's doctoral research was published in 2005 and was based on a phenomenographic study. She also wrote an influential book, *Information Literacy: A Guide for Practitioners.* Sheila Webber and Bill Johnson have been prolific writers and researchers in the field of IL, and their work, for example, IL for higher education, is highly regarded. Mark Hepworth and Geoff Walton's work demonstrated the link between inquiry-based learning and IL and brought together cognitive psychology, constructivist theories, and pedagogy. Their practical teaching examples showed how theory can be applied to practice. John Crawford and Christine Irving, through their work in Scotland, not only put IL onto the political agenda but also carried out research into IL and the workplace. Drew Whitworth's work *Radical IL*, which is itself, in part, a discourse on the development of IL as a concept, has produced a mature theoretical foundation for future scholarship for IL practitioners and researchers alike. Last

SCONUL updated the Seven Pillars of Information Literacy in 2011 in response to calls from IL teachers for a more nuanced model. The revised version includes attitudes and behaviours as well as skills and competencies and grouped the seven pillars into a new, circular arrangement in order to break away from the implication of linear progression suggested by their original composition. The 2011 revision also noted the possibility of moving "down" as well as "up" a pillar—that is, that rather than being a static quality, the degree of an individual's information literacy can change over time and in different contexts. The revised SCONUL model therefore continued to focus on the desired actions to be performed by the individual. To some IL theorists, however, this implies the idea of a universal standard at which an individual should perform in order to qualify as "information literate," which in turn raises problematic questions about how that performance should be tested and who does the testing. Other models, such as my own work with Emma Coonan to develop A New Curriculum for Information Literacy (ANCIL) developed in 2011, took an alternative approach by placing learners, their own contexts, and their choices around information at the centre and advocating for a highly collaborative landscape of academic information support and development with the library sharing "ownership" with other colleagues in higher education and with learners themselves. [13] This research and the resulting curriculum have been used by numerous libraries throughout the United Kingdom and influenced thinking in the United States when the ACRL Framework was revised in 2014.

A point worthy of note here is the plethora of literacies and frameworks that have sprung up in the UK education sector in parallel with developments in IL. In recent years the term digital literacy has gained much credence, and the current model, developed by Helen Beetham for Jisc, recognizes information and media literacy as part of digital literacy. While it is valuable to see IL and librarians' role in a wider model, one of the issues is potential confusion, particularly when discussing terms such as media literacy, digital literacy, and academic literacies with senior managers in higher education and policy makers. This point was highlighted in a recent conference symposium, where the use of competing and often misunderstood terms was argued to make it difficult to develop true collaborations across professions. Also as noted later in this paper, these "competing" literacies have an impact on the attempts by librarians to advocate for IL beyond their sector. Finally, there is also growing interest in critical literacy

amongst librarians in the United Kingdom, and this approach is starting to influence information literacy practice and research. The role of expertise, increasingly awareness of filter bubbles and "echo chambers" and value of "truth," is becoming increasingly recognized by policy makers since the European Union Referendum in the United Kingdom, which may potentially provide a valuable opportunity for librarians and information literacy experts.

The Role of Librarians

The United Kingdom's professional body for librarians, CILIP, was relatively slow to recognise and define IL. It was not until 2004 that they created the following definition of IL: "Information literacy is knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner." [17]

However, the definition was an important step to recognising the value of IL across the UK library profession, not just within the higher education sector. The group is currently working to refresh and update this definition in line with the CILIP "Strategic Plan 2016–2020: Shape the Future," which now recognises much more explicitly the importance of IL.

Interest in IL in the library profession grew significantly from 2000, when many librarians attended the eLit (or E-literacy) conference held in Glasgow, which looked at the overlapping concepts of e-learning, information technology training, and IL. Up until this point, the community was largely served by a Listserv. However, at this and subsequent eLit conferences, the value of a dedicated group was first discussed. In March 2003 a group of librarians met to discuss establishing an IL special interest group and agreed to petition CILIP. At the time CILIP were reviewing their special interest groups and decided that a subgroup reporting to the Community Services Group should be formed. This group finally became a full special interest group of CILIP in July 2012, and the full history is outlined in a publication by Secker and Walton. One of the first significant actions of the group was to start planning for a national conference, and the first LILAC (Librarians' Information Literacy Annual Conference) was held at Imperial College in March 2004. It attracted over 100 delegates and proved to be a great success. Therefore, plans were quickly put in place to repeat the conference the following year.

LILAC has become regular feature on the library conference circuit, attracting some important keynote speakers and moving around the United Kingdom. By the time of its tenth anniversary in 2014, LILAC had attracted delegates from over thirty different countries and had an international reputation. However, the conference was an important means of disseminating good practice and research about IL amongst researchers and practitioners in the United Kingdom. LILAC also had a strong research focus, so it was not simply a conference to share "tricks and tips" about your teaching, but accepted papers on creative approaches to teaching, IL assessment, and more recently on how IL overlaps with other literacies such as digital and academic literacies. LILAC is also recognized around the world and always attracted large numbers of delegates from North America.

When ILG became a full special interest group of CILIP in 2012, it received greater recognition and a number of other benefits (current membership stands at over 1,100 members). The group plays an important role in sharing good practice through running the

Information Literacy website (http://www.informationliteracy.org.uk), organizing workshops and training, offering funding for member events, carrying out policy and advocacy work in conjunction with CILIP, such as responding to government consultations, and many more activities.

The Journal of Information Literacy (JIL) has been another important means of disseminating knowledge and encouraging high-quality research in IL. It is a peer-reviewed open-access journal, founded in 2007 and supported by ILG. The first editor-in-chief was Sheila Webber from the University of Sheffield. The journal has an international editorial board and is planning a special ten-year issue. The current editor-in-chief is Dr. Emma Coonan, and in addition to publishing papers from researchers and practitioners in the United Kingdom, it attracts high-quality papers from around the world.

Both Wales and Scotland have made significant progress in the field of IL in recent years with support from and involvement of past and present ILG committee members. Developments in these two nations indicate what smaller countries might be able to achieve when advocating for IL to be embedded throughout education. The Scottish Information Literacy Project, led by John Crawford and Christine Irving, ran from 2004 to 2010. It was originally formed to link schools (K–I2) to higher education, but one of the key outputs, the Scottish Information Literacy Framework, also has a primary education, a workplace, and a lifelong learning focus. The project's work continues today, led by the Scottish IL Community of Practice, who run events, maintain a project website, and continue to lobby for IL as a right for Scottish citizens.

Meanwhile in Wales, the Welsh government funded the Welsh Information Literacy Project from 2010 until 2015. The project aimed to develop "cross societal IL and committed to a new project that would promote its understanding and development in education, the workplace, and the wider community in Wales." A key output of this project was the National Information Literacy Framework for Wales. In the closing conference in March 2015, it was agreed that a steering group would continue to meet, at least annually, and that the project will continue to have a presence on the Welsh Libraries website. The CILIP IL Group agreed to host the resources on their website, and they maintain links with the steering group.

Future Visioning and Reflection

Information literacy has made significant progress in the United Kingdom since the mid-1990s. However, the next big challenge is to reach outside the library world. There has been an increasing focus in the UK government on what are termed "digital skills." The ILG are currently undertaking advocacy and outreach work to build up awareness of the link between digital literacy or digital skills and IL. This is particularly important as it highlights the critical role of libraries at a time when many public libraries, which are funded via local authorities, have suffered major funding cuts. In 2015, the House of Lords (the upper house of the Parliament of the United Kingdom) published a report on the shortage of what it termed "digital skills." However, this was equated largely with computer literacy. The report failed to see the overlaps between digital and IL and revealed a lack of recognition for the valuable work that information professionals undertake. Meanwhile, in 2016 the Science and Technology

Committee highlighted the £16 billion Digital Skills gap, but again largely did not define this term or recognize the valuable role that librarians might play.

Librarians in higher education make up the majority of ILG members. However, in the United Kingdom, knowledge of IL outside this sector is still low. Therefore a recent priority has been for the group to undertake advocacy work with organisations outside the library sector, to highlight the overlaps between IL and issues such as digital literacy, employability, and digital inclusion. An example of this advocacy work in the schools sector is a partnership between ILG and the TeenTech initiative, which promotes science, technology, and innovation to students in the eleven-to-sixteen-year age range. This partnership followed an ILG response to the UK Digital Skills Task Force's interim report, Digital Skills for Tomorrow's World, in January 2015. [24] The idea to launch a TeenTech award that recognises excellence in research and IL came out of a meeting between the ILG Chair and the CEO of TeenTech. The award is partly to get IL recognized by teachers at school (K-I2) level and to build links between the higher education and school sector. The Research and Information Literacy Award was launched in June 2015, and in the first year, the ILG judges scrutinised all forty finalist projects according to five criteria related to IL. Meanwhile in 2016, the award was open to all TeenTech entrants, who received dedicated guidance and support from ILG in the form of a series of "Research Smarter" guides. [25] The judges look for projects that have used a variety of information sources, performed well-constructed search strategies, evaluated the information they found, used and synthesised it to inform their project, and appropriately acknowledged their sources. With ILG as a sponsor of TeenTech, the ambition is that librarians' expertise is recognised in schools, and IL is seen as vital to the development of future science and technology leaders.

Beyond the education sector, ILG have also organized TeachMeet events to bring together public and academic librarians with support from the charity the Tinder Foundation (now known as Good Things Foundation), who work in the digital inclusion field and run the United Kingdom's online centres. We are also in discussions with the charity Age UK and exploring possible collaborations over supporting the development of digital and information literacy skills amongst older people. Most recently ILG have contacted the Digital Skills team in the UK government's Department for Culture Media and Sport to highlight the role of librarians, particularly in public libraries. This advocacy work is partly due to the cross-sectoral nature of ILG, but also to ensure that everyone, not just those in higher education, might have the opportunity to become information literate.

Developing the Evidence Base

In 2014 the ILG launched its Research Bursary Scheme, offering funds of up to £10,000 for high-quality research. The bursaries recognize that although research into the effectiveness of IL has been published fairly widely, there are pockets of research that have either not taken place at all or have not reached beyond the academic domain. These areas include research in the third sector, various aspects of the workplace, citizenship, and elsewhere. Bursaries are open only to UK-based ILG members and can be used to release staff to work on a specific research project. Three projects have been completed to date, but quite a number are still ongoing, which you can read more about on the Information Literacy Group's research

bursaries page (http://www.informationliteracy.org.uk/researching/projects). The topics have included

- Go Digital Newcastle, which brought together public and commercial organisations, local charities, and community groups to create a digital support network for residents and businesses in Newcastle upon Tyne.
- Determining the Value of IL for Employers (DEVIL), which developed a methodology that allowed for the identification of quantitative and qualitative data that demonstrates the benefits of developing IL in the workplace and assesses the return on investment of such initiatives.
- Learning, Lending, Liberty, which identified how Scottish school libraries support the
 capacity of young people to be responsible citizens through political participation. This
 research identified the role libraries played in supporting young people's political
 participation in two major political events—the Scottish Independence Referendum 2014
 and the UK General Election 2015—and was part of a growing interest in research
 exploring critical information literacy in the United Kingdom.

Further projects are currently underway, and the most recent projects funded under this scheme will be exploring how Syrian refugees find and gather information to help them resettle in the United Kingdom and the role of information discernment in tackling issues such as radicalization amongst young people. What we are starting to see in the UK is the emergence of a far more socially aware dimension in LIS research that extends beyond higher education and is a common theme amongst new professional conferences such as LISDIS.^[28] In the most recent conference, there were an increasing numbers of papers in which the library (academic, public, or school) is located as an instrument of social justice.

The United Kingdom is also witnessing a shift in approach towards research participants, which echoes a wider change in methods and research perspectives: LIS research is focusing more now on differences and individuals' experience, and there is a growing interest in using phenomenography and ethnography, whereas in the past we were all about measuring information-seeking behaviour. This reflects a different emphasis in the profession as we now look much more at how information is used, communicated, and interrogated in different contexts, rather than trying to prescribe the "right way" for it to be found.

It is difficult to predict where IL might be in the United Kingdom in the next five to ten years with the pace of change we have seen recently. If IL is adopted by key academics in related disciplines such as media studies, education, or psychology, and knowledge spreads outside the library sector, then it has a strong future. In the schools sector, initiatives such as TeenTech, but also the Extended Project Qualification (EPQ) that many schools are adopting to give secondary level students experience of research, place the librarian as central to learning. There seem also to be opportunities for cross-over with the health sector and psychology, with new opportunities to explore issues such as trust in relation to health information and to better develop an understanding of what has been called "critical information literacy." The evidence is clear from the increasingly important role of ILG as

advocates outside the library sector and the range of exciting projects we are starting to fund. IL has found its way into the political arena too, and the 2016 UK referendum over the decision to leave the European Union (Brexit) clearly demonstrates that our society is calling for training and education in information discernment.[31] However, there are clear challenges ahead as mentioned, with cuts to library budgets not just in the public sector. We are also seeing a broadening of traditional library qualifications to encompass subjects such as data analytics, knowledge management, and aspects of digital security. These new roles for librarians arguably all compete with the role of the librarian as an educator and researcher in their own right. However, the biggest challenge is arguably to get people who are working in different disciplines and professions but clearly talking about the same thing, using different terminology, to come together and realise that there is common ground. Events such as the Debates conference, organized by Geoff Walton with support from the ILG, managed to do this to some extent, bringing together information professionals, academics, psychologists, educationalists, business academics, and arts and creative academics, [32] but there is a long way to go. ILG hope that over the next year, through updating the CILIP definition of IL, with support from our professional body, we might more clearly articulate the value of IL, not just as a foundation to learning, but as something that underpins democracy, promotes social justice, and is a fundamental human right in the digital world.

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CHAPTER K

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Region: Europe

Introduction

Information literacy (IL) is a widely accepted and firmly established mission for libraries around the world. Nevertheless, it is challenging to make meaningful general remarks on the state of IL in different regions of the world. This specifically refers to European countries, which have historically experienced dividing lines between Western (democratic, capitalist) and Eastern European (transitional, postsocialist) regions and can therefore still be characterized as very diverse. When analyzing IL developments in Europe, it is important to bear this context in mind because it directly influences developments in education, librarianship, and specifically in IL.

In this paper, I will describe IL in the context of practice and research in Croatia, but with references to developments in South-East European/Central European countries, which share common features, historical developments, and traditions.

My insights are based on my own daily immersion in academic life, spanning almost twenty years of research in IL and fifteen years of teaching in the LIS (library and information science) field. As an LIS professor at the Department of Information and Communication sciences at the University of Zagreb, I teach courses on IL and information behaviour and practices to bachelor and master LIS students and doctoral students in information and communication sciences, as well as an elective course on IL and new learning environments at the bachelor level to students from different study groups, mainly humanities and social sciences. Doctoral studies in information and communication sciences are enrolled not only by information professionals, librarians, and teachers, but also many journalists, which has inspired us to widen our research topics towards evaluation, critical thinking, credibility, and new participative media environments in the context of IL.

Besides insights that stem from my work as a teacher and researcher in the LIS field, I will present impressions and conclusions gained from participation at regional events and meetings with IL as a central theme, and also from my role as the general cochair of the European Conference on Information Literacy (ECIL),^[1] an event that has taken place annually in Europe since 2013.

First I will give an overview of contextual features which have influenced the state of the art of IL in South-East European countries, in particular the profound transformations that had occurred in the educational sphere in previous decades, and their manifestations in IL. Then I will consider some of the idiosyncrasies of these processes in South-East Europe, focusing on an observation of how they had been reflected within IL practice and research. In the second part of the article, I will argue that a pure functional approach to IL, as determined by current

educational policies, is not sufficient in a transitional and post-conflict society as Croatia, while critical information literacy, which agenda lies in facilitating not only personal, but also social transformation, provides a much more appropriate framework. Thus, in analyzing possible, quite opposite agendas (functional vs. critical), I will examine key IL issues and identify major obstacles and opportunities, taking into account contextual features of the country or region.

Setting the Context: IL in South-East European Countries (SEE)

IL is a highly contextual phenomenon, circumscribed by social, technical, historical, and even political factors. When analyzing current IL research and practice in Croatia, it is therefore necessary to describe contextual features influencing the current state of the art. Like many countries from the region, Croatia went through an overturn of its political system and transformations of social and cultural developments. In the whole region, the last quarter of century was marked by the emergence of new countries, the establishment of new boundaries and frontiers. Some countries, like Croatia, were additionally impacted by wars during the early 1990s, which made the ongoing societal and economic changes very explosive. Any understanding of IL developments needs to be contextualized within these social and historical dynamics.

Prior to describing contemporary trends and the context determining the trends, it is necessary to look back and provide some explanations on early developments, which make clear that South-East Europe was (and probably still is) one of the regions which is lagging behind global IL developments. Two major events provided first outreaching insights into the developments: the UNESCO-CEI (Central European Initiatives) Workshop on Information Literacy held in Ljubljana in 2006, and UNESCO's TTT workshop held in Ankara, Turkey, in 2008.[3] At both events, it became evident that in many countries from the region, the vast majority of librarian time was spent doing one- or two-hour sessions at the invitation of the discipline and subject faculties or providing basic generic instruction to incoming freshmen (but even this limited approach was not the rule). The rare perception of librarians as qualified teaching personnel was identified as a major reason for this rather poor state of IL. On the administrative level, the main hurdle keeping librarians from offering credit-bearing courses is the requirement of holding the rank of professor (tenure-track). Therefore, librarians are usually not assertive enough about their teaching capabilities and responsibilities and have to struggle to get their voices heard in the classroom. In order to work on this rather unfavourable position, many experts from the region agreed that it would be necessary to offer courses at LIS schools where future librarians could gain specialized theoretical and practical knowledge on IL (e.g., understanding IL, how to develop IL programs, pedagogical considerations, etc.). Such approaches, oriented towards teaching future IL professionals, were not the norm in LIS schools or departments in the SEE region in the first decade of 2000.

Research Trends

IL research in SEE countries, Croatia included, is still in its infancy. The number of studies conducted is still relatively small and, as previous discussion has shown, rather constrained by factors such as the position of the academic librarian. As a result, IL in Croatia is still in an early, precursory state, which is evident from the main research themes prevailing in the last decade

(2005–2015). At this time, we saw the beginning of interest in the meaning of IL resulting in conceptual papers and textbooks on definitions, the interest in users and their information skills and attributes, surveys on the range of IL programs and services academic libraries are providing to their users, and ways of integrating IL into higher education curricula.^[4]

Transformations in higher education as well as societal developments have influenced and enriched the research territory in IL, which today is characterized by multiple, and even opposite directions. First, I will briefly discuss the higher education context, and then the wider societal development and reflect on how both influence conceptualizations and research in IL.

Higher education in Croatia and other SEE countries went through tremendous changes and reforms. The first wave of transformations begun with the fall of Communist states in Europe, when educational systems started being less governmentally subsidized and begun to function as institutions driven by market requirements. In such an environment, it became increasingly important for higher education institutions to be able to demonstrate quality, accountability, and efficiency. A second general trend defining and changing higher education in the last decade was educational reforms. The most significant was the Bologna Reform, aimed at redefining the mission and roles of universities. The described developments have been wholeheartedly supported and pushed by governments, since the Bologna Reform is often explained as being part of the necessary adjustment and integration to the European Union. [5]

The described transformations and reforms have set the framework for policies in higher education in many countries, including Croatia. In 2014, the Croatian government passed a Strategy for Education which sets out the main directions in higher education, namely the promotion of excellence, competition, and close cooperation with industry. Thus, higher education institutions are expected to be subordinate to economic development, to change and adapt according to the needs of (labour) markets, by concentrating on skills and competencies for the benefit of employers and the wider economy.

Linking higher education to labour market needs is also visible in IL research. Information-related competencies certainly have the potential to strengthen the focus on employability in higher education and bring higher education closer to employer needs. In 2014 we started a project funded by the University of Zagreb with the aim of mapping the concept of information literacy against expectations of employers.

Insights from our research were published in several works in 2014 and 2015 and can be summarized as follows:

- Although not explicitly emphasized by employers by using the term, IL is implicitly considered as a foundational skill.
- According to employers, higher education needs to place emphasis on collective and communicative dimension of IL (teamwork, sharing information).
- Teachers cited attributes such as defining information needs, constructing search strategies, and use of sources as highly desirable.
- Students feel that curricula do not focus enough on employability attributes and generic

competencies, and they feel insecure and unprepared.

What emerged from our study is the genuine mismatch between employers' perspectives and current approaches to IL in higher education. In the context of higher education, IL is characterized by a resource-based approach, oriented towards resources or documents that need to be found, evaluated, used, cited, and so on. In the workplace context, however, employers value communicative or collective dimensions of IL, which focus on the social and relational aspects of information practices.

The above research accentuates and explicates the link between higher education and the world of work. Thus, placing such an emphasis suggests that IL conceptions and practice should be driven largely by factors and requirements that reflect the realities of the workplace. Additionally, such an IL conception conforms to wider educational policies, and by supporting current policies and educational agendas through responding to employers' requirements, IL could certainly achieve better acceptance in higher education. However, with an approach to IL that accounts for daily economic issues and supports instrumental or purely administrative goals, it is questionable whether more substantial aims of education, and specifically IL, are met. Core aims and values of IL transcend functional-defined skills and focus on educating people in how to examine their environment from an independent point of view, how to investigate and critically evaluate their environment, or even transform it by pursuing interest in the common good.

Thus, different narratives and strategies are possible to infuse IL into higher education; one is to adapt to current demands in higher education and respond to instrumentally and pragmatic economic concerns focusing of workplace productivity and business interests. On the other hand, we may claim that it has always been the agenda of IL to educate responsible citizens, by informing them what alternative views or values exist and widen their information and life horizons. A purely pragmatic approach to IL that supports the business or market logic of higher education holds an irony expressed by Davies and Petersen: "[the] transformation of universities into enterprises may occlude the very work of producing the innovative knowledge that makes universities the creative hub of the so-called knowledge economy. . . . [t]his focus on end-products may put them at risk of losing the capacity to fulfil (or even to feel) the desire to carry out significant, creative or critical intellectual work." [8]

A counter-discourse to the described tendencies entails the positioning of critical, ethical perspectives and a social justice agenda in the very heart of education. Such values certainly belong to the continuum of IL narratives, but clearly to the part known as critical information literacy (CIL). CIL provides an adequate conceptual counterbalance to the described pragmatic, but nevertheless limiting perspective of IL, incorporating but not being limited to instrumental and functional dimensions (e.g., how to pursue an aim or fulfil a specific task) and encompassing ethical issues and issues associated with critical thinking and awareness. [9] It is CIL that challenges the myth of information as a neutral and objective, apolitical thing and brings an understanding of how power and information are linked. With this, IL is less conceived purely as a means to achieving one specific and instrumentally defined purpose, an important framework for moving away from a single narrative approach to one based on

multiperspectivity.

CIL offers a far more adequate framework than entirely functionally determined IL conceptualizations in transitional and post-conflict societies such as Croatia. After the fall of the Berlin Wall in 1989, many of the countries from the region have gone through the process of nation- and state-building and, in some countries, conflicts that unleashed profound violence, ethnic cleansing, and genocide during the 1990s. The creation of new states was accompanied by the promotion of certain ideologies which influenced education and the production of textbooks, especially in some subjects like history. [10] Historical events were slanted to reflect particular perspectives, which sometimes leads to simplistic stereotyping of interpretations (e.g., about the cause of armed conflicts) or discrepancies between personal or individual and collective memories. Thus, in post-conflict and transitional societies like Croatia and many other countries from the region, multiperspectiveness, as promoted within CIL, seems pertinent for societal reconciliation, reconstruction, and the building of more tolerant pluralistic societies.

Guided by our insights gained through CIL research, we have started to rethink and modify our IL syllabuses. In 2005, when we started the first IL course, it was conceptually very much rooted in library user education. Thus, future librarians were introduced to IL as a professional domain focused on teaching users how to use tools, resources, and strategies for using specific library information sources. On the practical level, the course was inspired by the ACRL Standards. In 2014, we started to remodel our IL syllabus inspired by CIL and lately the ACRL Framework for Information Literacy for Higher Education. Instead of dealing with information handling and use by explaining steps and the "how-to" in finding, evaluating, and using, we started to discuss the need for socially conscious interactions with information, where IL is regarded as critical, awareness-raising, empowering, and so on. A major emphasis is put on questioning perspectives instead of providing answers and social dimensions of information where all information interactions involve communities and people as creators, co-creators, and filters of information.

Role of Librarians

Although IL as a concept has a clear educational aim that transcends libraries boundaries, it remains a fact that in Croatia mainly IL is a "librarian thing." By this I mean that IL is mainly a concern of librarians since other faculty are rarely involved in IL activities. A "library-centric" perception of IL is also visible when analysing the content or structure of IL-related activities in the Croatian higher education. The majority of libraries offer courses and information literacy sessions sporadically, ad hoc, or carry out introductions to libraries and their resources ranging from one to four hours, usually at the beginning of academic semesters. One of the reasons for such a rather limited approach is the lack of starting points to build IL initiatives. Encouraging starting points are policy statements or strategies, guidelines, or advocacy through professional bodies such as library associations.

In Croatia, strategies and regulations in the domain of higher education use vocabulary directly connected to IL (e.g., lifelong learning, learning-how-to-learn). However, the term IL is not explicitly used. In order to connect these typical IL descriptors (lifelong learning, learning-how-to-learn) to the library domain, it would be necessary that professional bodies raise the

profile of IL through systematic advocacy. However, the main professional body, the Croatian Library Association, does not have a division, section, or interest group devoted to information literacy, which scatters minor IL initiatives or practices in different sections and groups and hinders the visibility of IL as a central mission of the library association. One of the first activities of this body, which included the attempt to provide a definition of IL and IL vocabulary in Croatian language, was the translation and publication of the IFLA Guidelines on Information Literacy for Lifelong Learning. [13] The translation of the Guidelines was published in 2011, which shows how slowly the recognition of IL as a focus of library activities went. After the translation of the guidelines, no IL standards or frameworks were developed. Despite the obvious lack of professional support (in the form of standards or models) or formal requirements from higher education authorities, librarians in Croatia are integrating IL into their daily work mainly by relying on the ACRL Standards from 2000^[14] and by using different forms of instruction; they teach individually, in face-to-face session, or by preparing Web-based IL tutorials. Creditearning courses are rare and still an exception. But, in whatever form they teach it, the level of their engagement and activities in IL depends on the librarian's understanding of IL developed during their own professional education.

This correlation was established in prior research conducted in the region, which showed that countries with well-developed library schools have more positive IL developments and initiatives. [15]

Thus, the education of librarians is a key precondition for the status of IL. Library and information professionals in Croatia are educated at three Croatian universities: Zagreb, Osijek, and Zadar. The first graduate program in library studies was founded in 1977 at the Faculty of Humanities and Social Sciences, University of Zagreb. Postgraduate studies in librarianship were offered from 1961, also at the University of Zagreb. From 1998, library and information education was offered at the University in Osijek and from 2003 in Zadar. Although formal LIS education in Croatia has quite a long tradition, it was not before 2005 that courses related to IL have become part of the curricula in LIS schools. Before that, contents related to user education were taught marginally within courses related to information or reference services. Today IL education is integrated in all LIS programs, through courses named IL or courses related to information behaviour with coverage of IL.

The question to be addressed is what kind of theoretical and practice-related perspectives are underlying these IL courses. The IL practice and research landscape is not robust, but rather fluid and dynamic, and therefore IL can be conceptualized in very different ways. At my own institution, the Department of Information Sciences at the University of Zagreb, syllabi have gradually changed, from linear, skill-based approaches inspired by the ACRL Standards to IL conceptions with more critical and transformative touches which are associated with more ambitious goals and values of democracy, social responsibility, and civil engagement. For instance, instead of educating future librarians on how to teach the information cycle, we discuss their responsibility in questioning the information cycle. Reconceptualizations of the course have already been and will be, continuously inspired by the ACRL Framework.

Of course, changing the contents and syllabuses of IL courses cannot directly change the

organizational culture and perceptions, that is, the fact that academic librarians are perceived as supporting personnel and a service profession rather than an academic discipline. I believe that approaches focusing on generic, discrete skills influenced by the *Standards* did not provide a solution to the problem, but rather strengthened the marginal position of librarians.

Developing LIS IL courses in the direction of critical IL offers a way to contrast these perceptions by broadening information literacy's scope to beyond the walls of libraries and suggest that librarians' roles are not to just fill students with a predefined concrete set of skills but rather to work towards critical thinking and action by interpreting information in broader social, political, cultural, and economic contexts. New themes that emerged from this direction are authority issues, credibility and trust, new modes of scholarly dissemination and recognition, self-representation, social constructions of knowledge, political dimensions of information, and so on.^[16] We cannot expect immediate effects of redesigned course content and increasing understandings about potential scopes of IL in higher education, but we hope that they will influence organizational cultures in the long term.

Meanwhile, academic libraries in Croatia are offering IL workshops and classes, restricted to very limited classroom engagements in the form of one- or two-hour sessions at the beginning of PhD programs or academic semesters, while credit classes are more or less an exception. Such a positive exception is the Central Medical Library at School of Medicine, University of Zagreb (CML), which has been participating in all educational activities of its parent institution, whereat the participation in the graduate MD program is of particular importance. As a part of the compulsory course Introduction to Research in Medicine, the CML independently performs an instructional module on medical information resource. Similarly, the Faculty of Electrical Engineering and Computing at Zagreb University also offers a for-credit course entitled Research, Publications and Responsibility in Science led by librarians. Still, in both cases, at least one of the librarians on the team has the status of academic personnel with tenure, which is not the norm in Croatian academic libraries and thus a barrier for implementing and integrating IL in higher education.

Future Visioning and Reflection

Croatian academic librarians, as many librarians in South-East Europe, face many challenges in pursuing IL as a core professional value and area of daily practice. Inhibiting factors can be identified at the professional level as well as the level of organizational culture. At the professional level, there is a clear lack of starting points to build IL initiatives, like policy statements, guidelines, or systematic advocacy through professional or library associations. Even more serious are barriers occurring at the organizational level; academic librarians are struggling to find ways to transcend the boundaries of libraries and include faculty in IL discourse and practice. Academic librarians are not perceived as faculty but more as service or administrative staff and cannot offer credit-bearing courses if they do not hold a tenured professor rank. There are few positive examples of credit-bearing IL courses, where the requirement of tenure is met (e.g., School of Medicine, University of Zagreb) or librarians build partnerships with academic staff, mainly within different courses related to scholarly communication, academic writing, publishing, and so on.

While there are ways to meet challenges and barriers occurring at the professional level (e.g., guidelines), there is no simple, short-term solution to problems occurring at the organizational level. As an LIS professor, I think that more solid foundations for the IL agenda in the future can be laid through a twist in educating future librarians in IL, which will have a direct impact upon how IL is perceived in the profession. Currently, the primary focus of librarians' education on IL is mainly upon the required skills and tools, on how to educate the users to solve their information problems through a step-by-step structure inspired by documents like the ACRL Standards. Such an approach certainly makes sense because it coincides with the current higher education agenda foregrounding notions of accountability or workplace requirements, and with this we could secure a better position for IL in academia.

However, this approach contrasts with other aims and values of higher education and specifically IL, like critical thinking, social responsibilities, civic engagement, and so on.

The tension between two university agendas is also a tension in possible IL approaches: shall we prepare students to fit into the market economy as consumers and workers or citizens and active and reflective participants of democratic societies. Shall we teach IL as a way of supplying or finding answers or posing questions? Isn't higher education, as well as IL, supposed to expand people's minds and raise their consciousness?

For Croatia, as well as other post-conflict societies, I think it is far more important to conceive IL as a discipline which is inspired by the critical literacy agenda. in the long term, widening the conceptual terrain of IL by introducing critical perspectives into it is a better way to change organizational cultures that have inhibited the position of IL in the context of higher education. By including broader social, political, or economic issues in information, IL will more easily transcend library boundaries, and academic librarians will manage to carve out their educational mission and identity.

Notes

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CHAPTER L

Dr. Maria-Carme Torras

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Region: Europe

Introduction

My work with information literacy (IL) started in 2003, when I was hired as a senior academic librarian at the University of Bergen Libraries, Norway. The insights into IL education provided in this paper are thus from the perspective of a practitioner. I have also been a member of the Information Literacy Section at the International Federation of Library Associations and Institutions (IFLA) since 2005. I chaired the section from 2009 to 2013. I am currently a member of the IFLA Governing Board. Advocacy for IL as key to access to information is on our strategic agenda. Further, I have collaborated closely with UNESCO on initiatives to build capacity and to promote IL worldwide from a multidisciplinary perspective. More specifically, I have contributed to IFLA's collaboration with UNESCO intergovernmental Information for All Program (IFAP). I am also a member of the international steering committee of the UNESCO initiated Global Alliance for Partnerships on Media and Information Literacy (GAPMIL).

Constant interests in my career have been building the capacity of library staff as IL educators and enhancing the role of academic libraries as real partners in education and research. My interests are reflected in my publications^[4] and in the variety of national and international initiatives to train trainers in IL in which I have participated. Bringing about change in academic libraries to adapt to the information and educational environment has become an increasing concern for me in my current position as library director.^[5]

There is no single organization or body that is responsible for IL in Norway, but changes in the higher education landscape have had a clear impact on the development of IL. Back in the early 2000s, when I started working at the University of Bergen, Norwegian academic libraries were building teaching capacity in order to improve their user education. The Norwegian Quality Reform, introduced in 2002 as a result of the European Bologna process in higher education, required a focus on student active learning and frequent assignment writing. [6] Norwegian higher education institutions recognized a need to develop student critical thinking, academic integrity, writing, and information-searching skills. Against this background, the role of the library as an educational partner in student learning gained visibility. Many academic libraries seized this opportunity and made information literacy education a strategic priority. The state of practice before the Quality Reform was that library courses had a strong focus on sourceand teacher-centered bibliographic instruction. They were generally not embedded in the curricula. Not all library staff members recognized teaching and counseling students and researchers as a library core activity, and neither did faculty. Therefore changing mind sets inside and outside the library became just as critical for success as professional development and resource allocation.

I was charged to lead the library teaching group at the University of Bergen. The group was tasked to develop IL programs at the University Library. My academic background and teaching experience were seen as valuable to this work. We were asked to identify professional development needs and suggest relevant capacity building, as well as developing IL courses and materials, both face-to-face and online. Close collaboration with faculty and embedded IL education in the curricula were important goals for the library to achieve.

The Norwegian Qualifications Framework, introduced in 2009, has been decisive to embedding IL in the curricula. This framework builds upon the European Qualifications Framework for Lifelong Learning. It describes learning outcomes (knowledge, skills, and general competencies) expected from all candidates after each completed educational cycle (BA, MA, and PhD). Some of the listed learning outcomes directly relate to IL, which means that IL competencies need to be included in the learning outcomes description of degree programs and courses. In turn, there must be an alignment between expected learning outcomes, learning activities, and assessment, which has made easier the task of embedding IL education in the curriculum. Given these formal requirements, it seems reasonable to think that IL is well integrated in Norwegian higher education.

Models of Information Literacy

Although Norwegian library and information science education is changing, there has been little educational and learning theory in the curriculum. This means that library practitioners need professional development right from the outset. In-house training, mentoring, and attendance of seminars, conferences, and university teaching development programs are important initiatives to build the library staff's educational capacity. The recruitment of academic librarians specializing in educational theory and pedagogy has also been very valuable to building capacity at the library.

Pedagogical practice is the result of specific values, underpinning learning theories and professional experience. An essential goal in building capacity at the academic library has been to establish common educational knowledge and a practice base or platform. This has had a dual purpose. One has obviously been to empower library staff as educators. The other purpose has been to trigger a change of mind sets, from conceptions of teaching as a secondary, ad hoc library task, heavily teacher- and source-centered, to an understanding of teaching as a core library activity that is student- and learning-centered. Constructivism and sociocultural theory lie at the heart of this paradigm shift away from traditional bibliographic instruction. Bibliographic instruction builds upon a behavioristic approach, which looks upon learning as knowledge transmission from teacher to student. From a constructivist perspective, we understand learning as a process of meaning construction. Learning happens by doing and reflecting. The teacher facilitates learning situations where students engage with real problem solving. These learning situations support student knowledge construction. Sociocultural theory has been very influential in Norwegian education over the last thirty years. From this theoretical perspective, learning is understood as a social phenomenon. Learning occurs through engaging with activities in interaction with others in a given context. Teachers and peer students act as mediators and help the student advance in his or her learning process.

From the constructivist perspective, Carol Kuhlthau's Information Search Process (ISP) has been central to the development of our teaching practice at the library, as well as her insights into librarian intervention in the student's learning process. ^[9] Kuhlthau describes information searching as a process consisting of the following stages: task initiation, topic selection, prefocus exploration, focus formulation, information collection, and search closure. The ISP encompasses specific feelings, thoughts, and actions at each stage. Her insights into the ISP and educational intervention have been extremely helpful in developing an understanding of the variety of librarian roles in teaching and guiding students. Maria-Carme Torras and Tove Pemmer Sætre provide a discussion of counseling models for the academic librarian. ^[10]

The value of Kuhlthau's work can be illustrated by giving some attention to the pre-focus exploration stage of the ISP. In Kuhlthau's view, this is the most challenging stage for students.

Students try to obtain a general overview of the selected topic. They identify key issues in order to narrow down their topic and formulate a preliminary research question. They locate relevant information and may read a lot, trying to relate the information from different sources to their existing knowledge. They may easily feel that they are drowning in a sea of information. Feelings of uncertainty, confusion, and frustration are associated with unclear thoughts about the research question. As thoughts become more focused gradually, they give way to feelings of increased confidence. Even though uncertainty is part and parcel of the research process, it can hinder student progress if it becomes too dominant. The question is then how the librarian can best support the student at this stage. As Gunnar Handal and Per Lauvås point out, supervisors need to be able to change counseling styles in accordance with where the student is in the research process. Drawing upon Handal and Lauvås's work and Kuhlthau's intervention categories (e.g., identifier, counselor), Torras and Sætre discuss a multiplicity of counseling roles for librarians.

In the research process, the ISP goes hand in hand with the academic writing process. Kuhlthau points at some of the connections between the two processes. Understanding the relationship between information searching, academic writing, and learning is necessary to design IL education that is appropriately tailored to the student's situation and needs. Unlike in the United States, Norwegian universities do not have a tradition of embedded academic writing in the curricula. The extent to which students receive academic writing instruction in the course of their studies may vary from institution to institution and from degree to degree. From a socioconstructivist perspective, the work of Norwegian scholar Olga Dysthe and her colleagues has been central to developing our understanding of academic writing and its connections with information searching and use. [13]

For Dysthe writing is key to learning throughout the research process. She singles out writing "for thinking" as a useful method that helps students clarify, formulate, and organize their thoughts. Writing for thinking is not meant as a final product for assignment. It is private, informal, exploratory, and process-oriented. Dysthe and her colleagues further claim that this kind of writing helps internalize knowledge and activate the unconscious. In their view, writing helps students with their information searching, just as searching and reading information help them progress in their writing. Writing is dependent on reading selected literature about a

topic. At the same time, selecting literature is dependent on good information-searching skills. Writing should start as early as possible in the research process. Early writing can help students define their information needs more easily. Further, writing before reading helps students to formulate their own thoughts, without drowning in all the authoritative voices of the field. As one reads, writing helps establish a dialogue with the literature and gain a personal understanding of it. A question worth exploring for librarians is what kind of role they may play in the student's academic writing process. For instance, Torras and Sætre discuss the potential texts for thinking can have in the interaction between students and librarians to support the student's creative development of ideas and concepts at the early stages of the research process. [14] The attention to academic writing in library user education is bringing about some very interesting developments in academic support, which I will address in the next section.

Theory and Practice = Praxis

The development of IL education at Norwegian academic libraries in the 2000s was characterized by the production of open educational resources. The open IL tutorial Search and Write (Søk og Skriv) provides a good example of IL education that builds upon Kuhlthau's ISP model. This tutorial was originally developed to improve BA and MA students' information-searching and referencing skills.

As regards PhD students and young researchers, we gradually realized that Search and Write, as most of our face-to-face IL education, did not address their specific needs in a satisfactory way. We also recognized the need to work in a more evidence-based way, if we were to succeed in providing relevant IL education for this target group. Taking a collaborative approach to this challenge, we embarked on the Nordic project Information Management for Knowledge Creation. [16] Firstly we carried out a study to gain a better understanding of PhD students' information needs and behavior. The study consisted of a systematic literature review and focus group interviews of supervisors and PhD candidates at different stages of their doctoral work at a selection of Norwegian and Danish universities. [17] The study revealed support needs like publishing strategies to improve research visibility and more effective literature searching, especially in interdisciplinary research. Based on the study findings, we developed the online tutorial PhD on Track, which has the following components: reviewing and discovering research, sharing and publishing it, and evaluating and ranking it. [18]

Both Search and Write and PhD on Track are being continuously developed. The tutorials have not only proved to be a useful resource for students, but they have also been a good tool for professional development, as well as providing faculty and librarians with relevant teaching materials.

For some time now, academic libraries in Norway, as in other Nordic countries, have recognized the need to bring their IL education closer to academic writing instruction. The literature in both academic writing and IL points at similar student challenges and areas where support is needed. Examples of challenges are selecting what to read from a large amount of available sources, narrowing down a research question from a general topic, structuring a text, drawing conclusions, and referencing and documenting sources to support one's arguments. Despite the overlaps between academic writing instruction and IL education, they have lived

quite separate lives in Norwegian higher education. Fortunately, there is now a growing interest in joining in efforts and expertise. Academic libraries and faculty members specializing in academic writing have been exploring new opportunities to develop a more holistic approach to student academic support at our universities. Collaboration has been fruitful in the further development of the online tutorial Search and Write. Usage statistics, as well as student and expert evaluations, have revealed a need to incorporate academic writing components in the tutorial. Modules on academic reading and writing have now been produced in collaboration with academic writing specialists at the University of Bergen.

Academic writing theory and practice are also having an impact on face-to-face library user education. An exciting development in the collaboration between information literacy and academic writing specialists is the emergence of academic writing centers in Norwegian higher education. Over the last six years approximately, ten academic writing centers have been created at higher education institutions all over the country, many of them inspired by US academic writing centers.

There are variations in the way these centers are organized and resourced, as well as in the range of services they offer, but they all try to foster collaboration between faculty staff, academic writing specialists, and librarians. The writing center at the University of Bergen is an interesting case in the way it aims to integrate and embed its services. The center was established as a joint pilot project (2014–2016) between the University Library and the Arts and Humanities Faculty. The center is located at the Humanities Library and staffed by academic librarians, faculty academic writing specialists, and student tutors. The main center activities are individual counseling, composition workshops and other courses—some of them curriculum embedded—tutor training, as well as research and development work. The center moves away from IL education and academic writing instruction as disconnected support activities. Through close collaboration, the center staff aim to design a model of academic support that brings in appropriate expertise and activities at different stages of the student research process. [19] Academic writing expertise in composition, argumentation, and text structure blends with library expertise in efficient information searching and referencing styles, for example. The result is better tailored and more frequent intervention in the student's research process. Student learning benefits from the academic writing teacher, the librarian, and peer students' interaction and feedback along the way.

At the center, obvious questions arise concerning responsibilities, expertise, and task sharing. "Trespassing" traditionally established boundaries of authority is a particularly challenging issue. The role and legitimacy of the academic writing center when compared to those of faculty lecturers and supervisors are not matters of easy definition or consensus. Both academic writing and IL specialists recognize the need to increase their knowledge of each other's area of expertise. The writing center makes a good arena for mutual capacity building and for training others, such as newly recruited staff and student tutors.

An evaluation of the center is being carried out at the time of writing. The evaluation will be important to deciding on the future of the center. There is an expressed interest in extending the writing center services to the rest of the faculties. Initially the writing center was

established for Arts and Humanities students, but in practice it serves students from other faculties as well. My concern, which I share with the rest of the university management and my center colleagues, is how to work out a sustainable model for the writing center, especially at a time of growing economic austerity.

Future Visioning and Reflection

It is difficult to make predictions about the future of IL in Norwegian higher education. Looking back, I see that IL education has really been embraced as a core library task. For the last fifteen years, libraries have developed their teaching capacity, designed courses and materials, and worked hard for IL embedding in the curriculum. Nevertheless, successful stories of embedded IL education and close faculty-library collaboration do not guarantee that our IL practice actually contributes to student deep learning. There are some warnings in the IL literature that concern me. Louise Limberg and Olof Sundin, amongst others, observe that student learning may be limited by narrow conceptions of IL. [20] Narrow conceptions lead to teaching practice that focuses on procedure and tools rather than on knowledge content, and on defining information needs and search terms, rather than on developing the research question. Wendy Holliday and Jim Rogers find that classroom discourse may also strengthen the focus on finding sources rather than on learning about a topic.[21] Narrow conceptions of IL do not support deep learning. Rather, they promote a student understanding of research as fact finding and as locating an adequate number of right sources. In my view, narrow conceptions of IL can be reinforced when IL education is delivered with a disconnect between librarian and lecturer learning activities, despite formal embedding in the curriculum.

Assessing IL learning outcomes has not been a priority in Norwegian higher education. As a consequence, it is difficult for academic libraries to evaluate the impact of their teaching on student learning and to demonstrate its value. It is my impression that assessing learning has felt like a daunting task for libraries, partly because they generally lack expertise in assessment of learning. On the other hand, there is still some disconnect between library and faculty, which makes it difficult to understand assessment as a joint responsibility. If Norwegian higher education is to move forward with IL education, assessment is a task that can no longer be postponed.

On a more positive note, I think that the academic writing center, with its convergence of IL and academic writing support, grants us a unique opportunity to redesign library education. As I mentioned above, academic writing is generally not embedded in the curriculum, but information literacy is. This gives us a good platform for rethinking and trying out new ways of delivering not only IL education, but also academic support on the whole. If lecturers, academic writing specialists, and librarians join in efforts, we can design better learning activities that promote critical thinking, analysis, scrutiny, and a deeper understanding of a topic. The aim is to design academic support for deep learning. Turning this aim into reality will require a thorough discussion of roles, responsibilities, and task sharing. In addition, at a strategic level, we need to make sure that IL and academic writing are on the university agenda. In the case of the University of Bergen, the action plan for the new strategy (2016–2022) includes developing library and writing center services as a specific action to create an attractive university learning

environment. At an organizational level, roles and responsibilities need to be clearly assigned. The Teaching and Learning Board at the University of Bergen is having discussions about whether the academic writing center should be a centralized unit serving the whole campus or whether services should be faculty-based. In the current climate of budget cuts, resource allocation is a challenging issue that hinders progress in our conversations. Professional development is necessary as well, but this is a more easily attainable goal, when one thinks about all the expertise that the different stakeholders at the university have and can share with each other.

Finally, I would like to single out online IL education on campus and in blended and distance education as one task that will be intensified in the near future. Online education is transforming learning. Libraries need to increase their knowledge of digital education so that they can understand their role in the digital environment. The library at the University of Tromsø has just released iKOMP, the first Norwegian student MOOC in information literacy. More attention needs to be devoted to digital IL education. At a Scandinavian level, the University Libraries of Aarhus, Bergen, and Lund have initiated a NORDPLUS-funded joint project to strengthen the role of the digital academic library as a scholarly resource and as an educational partner in Nordic higher education. The main deliverables of this project are building capacity, establishing a Nordic IL community of practice, and developing open educational resources to enhance the quality of learning in the digital environment.

Notes

- [1] An example of my contribution is this publication: Alton Grizzle and Maria-Carme Torras, eds., Media and Information Literacy (Paris: UNESCO, 2013).
- [2] Information for All Programme (IFAP) website, accessed January 20, 2017, http://www.unesco.org/new/en/communication-and-information/intergovernmental-programmes/information-for-all-programme-ifap. For an overview of IFLA and IFAP collaboration, see Maria-Carme Torras, "IFAP-IFLA Collaborative Activities in the Period 2008–2013," in *Information for All Programme (IFAP) Report 2008–2013* (Paris: UNESCO, 2014), 97–98.
- [3] GAPMIL (Global Alliance for Partnerships on Media and Information Literacy) website, accessed January 20, 2017, http://www.unesco.org/new/en/gapmil.
- [4] Among my publications on IL education and the role of academic libraries, I would like to highlight the following: Maria-Carme Torras, "Access to Knowledge as a Social Practice: Information Literacy Education for MA Students," in *Libraries Driving Access to Knowledge*, ed. Jesús Lau, Anna Maria Tammaro, and Theo Bothma (Munich: Saur, 2012), 191–213; Maria-Carme Torras and Tove Pemmer Sætre, *Information Literacy Education* (Oxford: Chandos, 2009); Therese Skagen, Maria-Carme Torras, Sissel Hafstad, Irene Hunskår, Solveig Kavli, and Susanne Mikki, "Pedagogical Considerations in Developing an Online Tutorial in Information Literacy," *Communications in Information Literacy* 2, no. 2 (2008): 84–98; Maria-Carme Torras and Therese Skagen, "User Education at the Digital Library: Physical and Intellectual Access to Information through Digital Literacy," in *Aspects of the Digital Library*, ed. Kari Garnes Ane Landøy, and Angela Repanovici (Laksevåg, Norway: Alvheim og Eide Akademisk Forlag, 2006), 75–86.
- [5] See, for instance, discussions in Andrew Whitworth, Maria-Carme Torras, Bodil Moss, Nazareth A. Kifle, and Terje Blåsternes, "Changing Libraries: Facilitating Self-Reflection and Action Research on Organizational Change in Academic Libraries," New Review of Academic Librarianship 20, no. 2 (2014): 251–74.
- [6] Kunnskapsdepartementet, "Kvalitetsreformen," August 14, 2002, https://www.regieringen.no/no/dokumenter/kvalitetsreformen-agust-2002/id87898.

- [7] Kunnskapsdepartementet, "Nasjonal kvalifikasjonsrammeverket for høyere utdanning," last modified October 13, 2014, https://www.regjeringen.no/no/tema/utdanning/hoyere-utdanning/nasjonalt-kvalifikasjonsrammeverk/id564809.
- [8] European Union, *The European Qualifications Framework for Lifelong Learning*, accessed September 11, 2016, https://ec.europa.eu/ploteus/sites/eac-eqf/files/leaflet_en.pdf.
- [9] Carol C. Kuhlthau, Seeking Meaning, 2nd ed. (Westport, CT: Libraries Unlimited, 2004).
- [10] Torras and Sætre, Information Literacy Education.
- [11] Gunnar Handal and Per Lauvås, Forskningsveilederen (Oslo, Norway: Cappelen, 2006).
- [12] Torras and Sætre, Information Literacy Education.
- [13] Olga Dysthe, "Writing at Norwegian Universities in an International Perspective: From Indirect Strategies of Strengthening Writing to the 'Quality Reform," in *Teaching Academic Writing in European Higher Education*, ed. Lennart Björk, Gerd Bräuer, and Lotte Rienecker (New York: Kluwer Academic Publishers, 2003), 151–64; Olga Dysthe, "What Factors Influence the Improvement of Academic Writing Practices? A Study of Reform of Undergraduate Writing in Norwegian Higher Education," in *Traditions of Writing Research*, ed. Charles Bazerman, Krut Robert, Karen Lunsford, Susan McLeod, Suzie Null, Paul Rogers, and Amanda Stansell (New York: Routledge, 2010), 31–43; Olga Dysthe, Frøydis Hertzberg, and Torlaug L. Hoel, *Skrive for å lære*: *Skriving i høyere utdanning* (Oslo, Norway: Abstrakt forlag, 2000).
- [14] Torras and Sætre, Information Literacy Education.
- [15] Search and Write was developed jointly by the academic libraries at the University of Bergen, Oslo; Bergen University College; and the Norwegian School of Economics. The tutorial is available at http://www.sokogskriv.no/en.
- [16] Information Management for Knowledge Creation (2010–2013) was a joint project between the libraries at the Universities of Oslo, Bergen, Aalborg, and the libraries at the Bergen University College and the Norwegian School of Economics.
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- [18] PhD on Track is available at http://www.phdontrack.net.
- [19] Maria-Carme Torras and Pål Steiner, "Information Literacy and Academic Writing: Intertwined Processes, Integrated Services" (keynote presentation, Creating Knowledge VIII Conference, Reykjavik, Iceland, June I–3, 2016), abstract accessed September 11, 2016, http://www.upplysing.is/?Page=509.
- [20] Louise Limberg and Olof Sundin, "Teaching Information Seeking: Relating Information Literacy Education to Theories of Information Behavior," *Information Research* 12, no. 1 (2006), http://www.informationr.net/ir/12-1/paper280.html.
- [21] Wendy Holiday and Jim Rogers, "Talking about Information Literacy: The Mediating Role of Discourse in a College Writing Classroom," portal: Libraries and the Academy 13, no. 3 (2013): 257–71.
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CHAPTER M

Dr. Li Wang

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Region: New Zealand and Australia

Introduction

I work at the University of Auckland (UoA), which is located in Auckland, the largest city in New Zealand. The UoA is the largest and top-ranked university in New Zealand based on the Quacquarelli Symonds (QS) World University Rankings. I have been interested in information literacy education since the late 1990s when I was an engineering subject librarian in the University Engineering Library. I still remember how frustrated students were when they could not find the best information for their assignments or research topics. I contacted course lecturers and talked to them about the problems their students were experiencing and the support I could offer. I then offered information literacy (IL) tutorials via selected academic courses. These were normally a "one off" or "add on" session which was taught once in each semester or once a year. I found that after we had offered "one off" sessions, the students involved did not have the opportunity to continue to learn and apply IL capabilities in later classes as part of the same course or via other courses. Students were also inclined to view IL tutorials as a "library session" and thus did not pay much attention to them.

I struggled to work out the best way to systematically integrate IL across the academic curriculum. I started to search for IL integration research and found many articles on the experience of librarians working with academic staff in IL teaching via an academic course, which was useful. However, I also found this investigation frustrating. There were many practical examples but not much research on how to integrate IL across an academic program. I could not find an IL integration model that I could use or adapt for this purpose.

I started to study for my doctor of education (EdD) in 2005 in the Education Faculty of the University of Waikato (New Zealand), where I gained useful knowledge of curricular design and learning theories which I have applied throughout my PhD study. I then transferred to a PhD at Queensland University of Technology, supervised by Professor Christine Bruce and Dr. Hilary Hughes, where I have shaped my work to target librarians and academic staff who are interested in the curricular mapping and integration of IL. As result of this study, I have developed a curriculum mapping and integration of IL model. [1]

Thinking back to when I started to work in the IL field, my understanding of information literacy (IL) was quite narrow, mainly focused on class teaching and resources development. Through ten years of research and practice, I came to understand that information literacy is much more than just teaching and developing resources. As figure M.I illustrates, IL involves IL theories and research, IL frameworks or standards developed by various library associations, as well as IL education including K–I2, higher education, workplace, and lifelong learning.

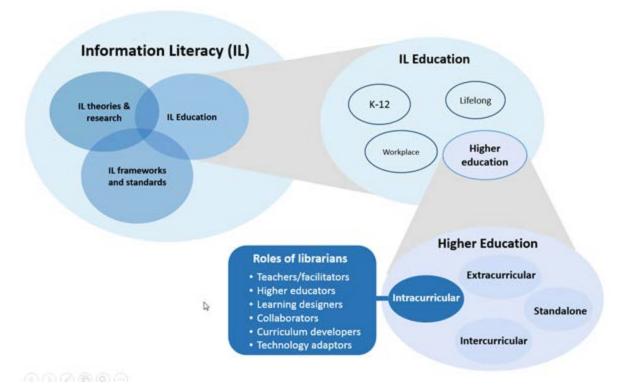


Figure M.I. Three key areas in the IL field. The focus of this chapter is on higher education with an integrated approach

From figure M.I, we can see clearly that curriculum integration (the intra-curricular approach) is a subset of IL in higher education, which is in turn a subset of IL education. Research shows that a curriculum integration approach is the most effective way of providing IL education in the higher education. The integrated approach is also supported by constructivist learning theories and sociocultural learning theories.

This chapter will explain the Wang model of curriculum integration of IL, which I developed through my PhD research. The model incorporates elements of the RSDF model, which is commonly used in higher education in New Zealand and Australia.

Models of Information Literacy

Research Skill Development Framework

A number of new IL models or frameworks in higher education have emerged in recent years. In particular the Research Skill Development Framework (RSDF; see figure M.2) has been developed and widely used in Australian and NZ universities to provide scaffolding opportunities for students to develop their study and research skills from a lower level (supported/guided) to a higher level (completely independent). The Framework covers research processes, from clarifying required knowledge to finding, evaluating, organizing, analyzing, and applying information. RSDF was developed based on the Australian and New Zealand Institute for Information Literacy framework (commonly referred to as ANZIIL). This IL framework is based on the ACRL Information Literacy Competency Standards for Higher Education.

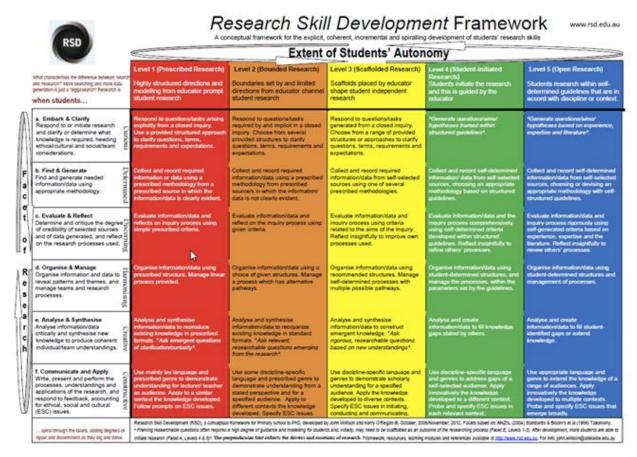


Figure M.2. RSD framework (Source: "RSD Frameworks," Research Skill Development for Curriculum Design and Assessment, University of Adelaide, accessed January 26, 2017, http://www.adelaide.edu.au/rsd.)

Wang IL Integration Model

The IL integration model which I developed consists of three interconnected elements of curriculum integration: What, Who, and How (see figure M.3).

The WHAT element incorporates elements which form the basis of the intended curricula (i.e., what an institution expects its students to learn). This can include graduate attributes or practitioners' requirements from official organizations and institutions (e.g., the Institute of Professional Engineers New Zealand). It could also include IL guidelines or frameworks endorsed by the institution.

The WHO element of the model outlines the key stakeholders in IL curricular integration, including academic staff and other learning support. It provides parameters around how to communicate and establish relationships with those stakeholders and effective ways to collaborate when working with multiple parties in designing IL curricula.

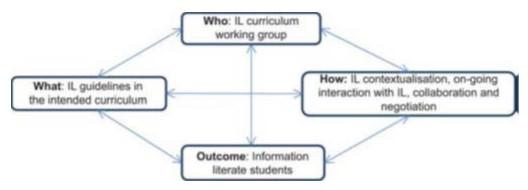


Figure M.3. Wang model of curriculum integration. (Source: Xiaoli Wang, "Integrating Information Literacy into Higher Education Curricula: An IL Curricular Integration Model" [PhD thesis, Queensland University of Technology, 2010], 159, https://core.ac.uk/download/pdf/10903843.pdf.)

The HOW element of the model focuses on how to analyze and map the curriculum and design IL integration activities based on student-centered learning theories, IL theories, and research. IL theories such as "Six Frames for Information Literacy Education" and the new ACRL Framework for Information Literacy for Higher Education inform how IL is integrated into the curriculum, [7] alongside learning theories such as sociocultural theories, the revised Bloom's taxonomy, and the Research Skill Development Framework. [8] IL curriculum integration is in turn manifested through learning outcomes, course assignments, class activities, and assessments. Figure M.4 shows more details of the Wang integration model.

Curriculum Analysis and Mapping

Curriculum analysis and mapping are essential for effective curriculum integration of IL education. A curriculum analysis process enables librarians to understand curriculum content and structure and to identify potential IL curriculum integration opportunities.

Curriculum analysis here means a way of studying an academic program, including official lists of courses and their content, examining how the curriculum is organized, delivered, and evaluated, with the aim of increasing awareness of curriculum content, structure, and the relationship between courses as well as student experiences. Curriculum analysis answers questions such as: "Who is teaching what?" "Are we operating efficiently and effectively!" [9]

Curriculum mapping here means research methodology designed to analyze and compare academic program or degree curriculum data based on required knowledge and capabilities, for example, graduate attributes or organizational or practitioner accreditation, with a view to identifying gaps, redundancies, and misalignments in the program curriculum. [10] It provides opportunities to improve curriculum development. Curriculum mapping answers questions such as: Has the degree or program curriculum met the requirements of the institutional graduate profile or professional body requirements? Are there any gaps in the program or degree curriculum?

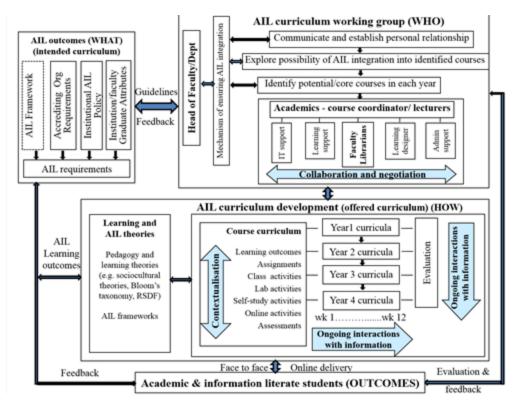


Figure M.4. Wang model of curriculum integration of information literacy (What-Who-How). (Source: Li Wang, "Curriculum and Curriculum Integration of Information Literacy in Higher Education," in *Developing People's Information Capabilities: Fostering Information Literacy in Educational, Workplace and Community Contexts*, ed. Mark Hepworth and Geoff Walton [Bingley, UK: Emerald, 2014], 37.)

Curriculum analysis is the precursor to curriculum mapping. Curriculum analysis provides a great opportunity for librarians to understand the faculty program or degree curriculum content and structure, as well as who is teaching what. This assists in identifying appropriate curriculum access points for the curriculum integration of IL because the "process allows participants to clearly articulate their intended outcomes and visually evaluate how those outcomes fit into the student experience." [12]

Once the faculty program or degree curriculum structure and content are analyzed, the curriculum can be mapped against the institutional or faculty graduate attributes or the requirements for organizational accreditation. Mapping provides librarians with an opportunity to identify information literacy gaps and to fill these gaps by integrating IL into the curriculum.

Two Case Studies at the University of Auckland

The Wang IL integration model was applied to analyze and map different program curricula. Below are two different examples of curriculum analysis at the UoA: an engineering program and a bachelor of health science program.

The engineering program in New Zealand and Australia is normally a cohesive, well-structured program where an entire cohort take the same core or compulsory courses from

year I to year 3 or year 4. If IL is integrated throughout core courses in each year, then IL education can reach all students of the program through their three or four years of study at the university.

Figure M.5 outlines an analysis of an engineering program curriculum. Before analysing any program, it is essential to collect all course information about what is included in the program and who is teaching what. Information gathering can be from the course website or learning management system, from the course book, or through contact with the course coordinators or lecturers. Learning outcomes, course assignments, tests, and assessment also provide key information about the course.

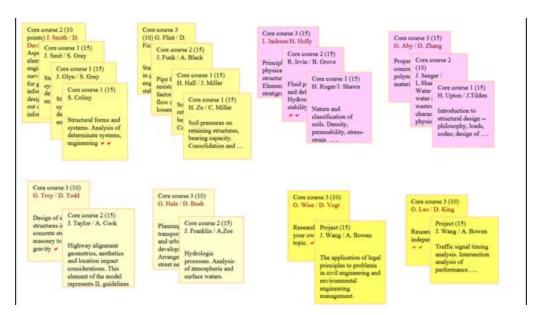


Figure M.5. Curriculum content analysis in an engineering program. (Source: Xiaoli Wang, "Integrating Information Literacy into Higher Education Curricula: An IL Curricular Integration Model" [PhD thesis, Queensland University of Technology, 2010], 173, https://core.ac.uk/download/pdf/10903843.pdf.)

From the curriculum analysis, we can get a clear picture of what is taught in each year and who is teaching which courses of the program. It can also identify the potential core courses (e.g., the core courses contain a research opportunity or component) for integration of information literacy, as shown the courses in yellow in figure M.6.

However, many programs in New Zealand and Australia are not as prescribed as the engineering program is. For example, in arts or science programs, there may not be core or compulsory courses in each year at all, so it is a challenge to target the entire cohort in the program with IL integration. The bachelor of health sciences program at UoA is a good example of a nonprescribed program in which there are no compulsory courses in any year. This means that instead of identifying core courses, curriculum structure analysis must identify the prerequisite courses (see figure M.7). IL curriculum integration can then reach the largest number of students possible if we target at the prerequisite courses as highlighted yellow in figure M.7.

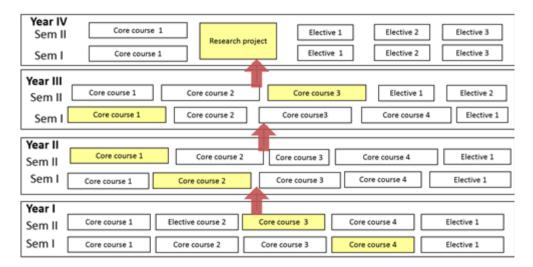


Figure M.6. Curriculum structure analysis in an engineering program. (Source: Xiaoli Wang, "Integrating Information Literacy into Higher Education Curricula: An IL Curricular Integration Model" [PhD thesis, Queensland University of Technology, 2010], 172, https://core.ac.uk/download/pdf/10903843.pdf.)

Systematic curriculum analysis and subsequent curriculum mapping constitute a powerful tool for identifying IL-related gaps. Figure M.8 illustrates a recent curriculum mapping exercise (a revised version) undertaken in collaboration with faculty teaching staff where IL capabilities were mapped against university graduate profile and attributes. The program curriculum was mapped against all IL-related graduate capabilities listed in the UoA Graduate Profile (see appendix). The mapping exercise clearly highlighted the gaps in academic and information capability—related attributes.

Librarians then collaborated with faculty teaching staff, learning support service librarians (learning designers), and learning advisers to fill in the gaps by integrating academic and information literacy capabilities into the curriculum from year 1 to year 3 or 4.

Role of Librarians

Academic librarians in many New Zealand and Australian universities are now involved in faculty teaching and learning. The role of librarians has substantially changed and evolved in the last ten to fifteen years as higher educators, curriculum developers, collaborators, learning designers, and technology adapters.

Librarians' roles will continue to change and evolve to align with development of university teaching and learning strategies. For example, the UoA has a number of strategic-level policies and systems which have provided librarians with new opportunities to integrate IL through a top-down approach. These include

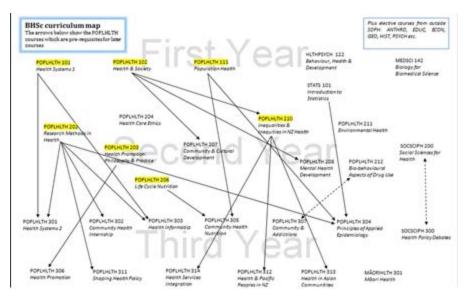


Figure M.7. Curriculum analysis in a health program (Source: Lynne Petersen, "BHSc Curriculum Map—Prerequisites and Course Relationships" [unpublished programme curriculum mapping documentation, School of Population Health, Faculty of Medical and Health Sciences, The University of Auckland, Auckland, 2015, 1.)

- Implementation of a new graduate profile at the university. Implementation of
 the new Graduate Profile provides an opportunity for librarians to work with the
 University Deputy VC (academic), Director of Learning and Teaching, Teaching and
 Learning Quality Committee, as well as faculties to integrate IL-related graduate
 attributes into curricula across all disciplines.
- Development of a university-wide learning and teaching plan. UoA is in the process of developing a learning and teaching plan which will shape university learning and teaching over next three years. This provides an ideal opportunity for librarians to work with the Director of Learning and Teaching to include curriculum integration of IL as part of the wider vision and strategy of teaching and learning at the university.
- Uptake of a new learning management system (LMS) with potential for learning design. In 2016 the university adopted Canvas as its new LMS. Many faculty teaching staff are still learning how to utilize the new system. Librarians are able to play a pivotal role working as learning designers when collaborating with faculty on curriculum integration of IL.
- Faculty program curriculum review and redevelopment. The UoA conducts
 regular program curriculum reviews. During the review period librarians have the
 opportunity to work with program review committees and faculty deans to conduct
 curriculum analysis, curriculum mapping, and curriculum integration of IL to build student
 IL-related capabilities across programs.

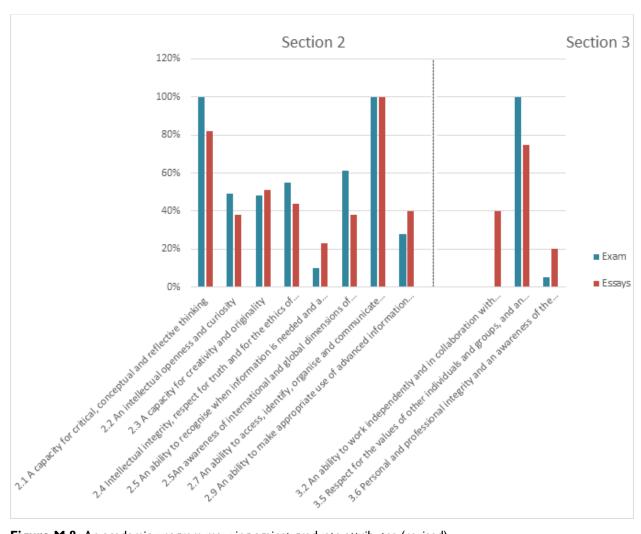


Figure M.8. An academic program mapping against graduate attributes (revised)

University-wide initiatives such as those indicated above provide an ideal framework for working closely with faculty at a strategic level to explore the best way to integrate IL into program curricula. Such initiatives enable closer working relationships with, as well as ongoing support from, senior management staff such as the University Deputy Vice Chancellor (Academic), the University Director of Learning and Teaching, as well as the deans of each faculty.

Future Visioning and Reflection

IL research and education in New Zealand and Australia has developed rapidly in last ten to fifteen years. Many academic librarians in New Zealand and Australian universities are actively working to integrate IL into the curriculum in collaboration with faculty staff. IL researchers are also very active, and this has resulted in an increase in published literature in this area.

While it is difficult to accurately predict future trends in IL education in higher education in New Zealand, the following initiatives and activities are likely to become more prevalent.

A Curricular Integration Approach with Both a Top-Down and a Bottom-Up Approach

As mentioned, many university libraries in NZ and Australia have successfully worked with faculty to integrate IL into the curriculum. However, most IL integration has been implemented using a bottom-up approach, that is, librarians work with individual course coordinators to integrate IL into a particular course. The key issue with this approach is that it is not sustainable. It is contingent on continuity of teaching responsibility. If a course coordinator or lecturer leaves the program or course, or the librarians or learning advisers leave the job, the whole collaboration and integration can collapse, meaning starting from scratch with a new collaboration.

Therefore working at a strategic level and taking a top-down approach is a much more sustainable model of IL integration. This does not preclude continuing with a bottom-up approach, but a top-down approach allows for stability and continuity across a particular program as well as contributing to buy-in from teaching staff across a whole department or faculty. A top-down approach can be done from a university level, for example, including IL integration as part of the university teaching and learning strategy, or from a faculty level to include IL integration as part of faculty or department curriculum development process.

Emphasis on Developing Students' Capabilities and Employability Aligned with University Strategy

Since the late 1990s, it has been the norm to develop institutional graduate attributes in many New Zealand and Australian universities. For example, six key themes of graduate capabilities of UoA graduates are Disciplinary Knowledge and Practice, Critical Thinking, Solution Seeking, Communication and Engagement, Independence and Integrity, and Social and Environmental Responsibilities. Many universities not only develop graduate attributes but also make sure they are implemented through the delivered curriculum. The key focus of graduate attributes is to develop students' capabilities, as well as employability. This provides a perfect opportunity for librarians to make a contribution to student capability development in collaboration with faculty and institutional policy developers. IL education in this context needs to extend information seeking and evaluation to be a part of students' IL capabilities and lifelong learning development.

Scaffold Students' Learning from a Lower Level to a Higher Level across Entire Degree Programs

Rather than taking IL integration into one course within a curriculum, more focus will be placed on IL integration into program curriculums. Curriculum analysis and mapping, as well as curriculum integration models, can be very useful for this approach. The RSD framework will continue to be applied to build students' capabilities from a lower level to a higher level.

Extend Information Literacy Integration to Include Academic and Information Literacy Integration

Many universities have merged student learning services into the library. This fosters strong collaboration to provide academic and information literacy support to student learning. The extension of curriculum integration of academic literacy and information literacy capabilities

provides libraries with more opportunities for librarians and learning advisers to work with faculties to support student learning in both areas and integrate both academic and information literacy.

At the University of Auckland, the library has changed its name to Libraries and Learning Services to reflect its nature of services. The Career Development and Employment Service department has also recently merged into the UoA Libraries and Learning Services. This provides even more opportunities for collaboration and curriculum integration of academic, information, and work literacies across the program curriculum with a view to further developing graduate capabilities and employability.

In conclusion, curriculum mapping and AIL curriculum integration are currently well established at many New Zealand and Australian universities. In the next five to ten years, academic and information literacy education will shift its focus from a bottom-up approach to a top-down approach, with emphasis on developing students' capabilities and employability and with a view to scaffolding students' learning from a lower level to a higher level across entire degree programs.

Acknowledgement: Many thanks to my colleagues Tricia Bingham for proofreading and organizing the referencing for the chapter.

Notes

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Appendix: University of Auckland Graduate Profile

A student who has completed an undergraduate degree at The University of Auckland will have acquired an education at an advanced level, including both specialist knowledge and general intellectual and life skills that equip them for employment and citizenship and lay the foundations for a lifetime of continuous learning and personal development.

The University of Auckland expects its graduates to have the following attributes:

I Specialist knowledge

- I. A mastery of a body of knowledge, including an understanding of broad conceptual and theoretical elements, in the major fields of study.
- 2. An understanding and appreciation of current issues and debates in the major fields of knowledge studied.
- 3. An understanding and appreciation of the philosophical bases, methodologies and characteristics of scholarship, research and creative work.

II General intellectual skills and capacities

- 1. A capacity for critical, conceptual and reflective thinking.
- 2. An intellectual openness and curiosity.
- 3. A capacity for creativity and originality.
- 4. Intellectual integrity, respect for truth and for the ethics of research and scholarly activity.
- 5. An ability to recognise when information is needed and a capacity to locate, evaluate and use this information effectively.
- 6. An awareness of international and global dimensions of intellectual, political and economic activities, and distinctive qualities of Āotearoa/New Zealand.
- 7. An ability to access, identify, organise and communicate knowledge effectively in both written and spoken English and/or Māori.
- 8. An ability to undertake numerical calculations and understand quantitative information.
- 9. An ability to make appropriate use of advanced information and communication technologies.

III Personal qualities

- 1. A love and enjoyment of ideas, discovery and learning.
- 2. An ability to work independently and in collaboration with others.
- 3. Self-discipline and an ability to plan and achieve personal and professional goals.
- 4. An ability to lead in the community, and a willingness to engage in constructive public discourse and to accept social and civic responsibilities.

- 5. Respect for the values of other individuals and groups, and an appreciation of human and cultural diversity.
- 6. Personal and professional integrity and an awareness of the requirements of ethical behaviour.

Approved by Senate: 3 March 2003

(Source: "University of Auckland Graduate Profile," University of Auckland New Zealand, 2003, https://cdn.auckland.ac.nz/assets/central/about/teaching-and-learning/documents/University%20of%20Auckland%20UG%20Graduate%20Profile%20-%202003%20-%20old.pdf.)

Reflection

We aspire to spark a conversation among US and international academic librarians by connecting varied approaches to information literacy in order to gain a better understanding of how librarians are promoting student learning through information literacy across cultures.

When we embarked on this project, the Working Group did not anticipate the depth of commonalities that would emerge between chapters. Throughout the contributions from across the globe, we see a range of experiences, understandings, values, and aspirations. We are struck by the observation that librarians are largely united by their shared professional experiences, trying to conceive of information literacy as a discipline and linking it to critical literacy approaches, of the need to teach information literacy embedded into the disciplines and to demonstrate librarians' credibility as educators. We recognize there is much to be learned from the countries represented in this white paper, all of which shape a colorful continuum of information literacy. While there are stark differences between cultures (for example, Asia/Oceania, or Northern and Southeast Europe, where the social and political factors, in what Špiranec refers to as "transitional and post-conflict" societies, have influenced the development of information literacy research and practice), we do not see a dividing voice between Western and developing countries, but rather a rich tapestry of information literacy in different contexts that demonstrates how education and information literacy are viewed and practiced around the world.

What does a global perspective look like for information literacy? Is it like looking through a camera lens, challenging us to find just the right light, distance, and angle? Or does the lens widen to a panoramic view, forcing us to see beyond the boundaries for a shared point-of-view but where we are still limited by our own experience? We recognize that while we can find common phrases or practices throughout these chapters, or connect a related theme or project to our own experience, this white paper is not meant to be a prescriptive lens. Nor is it meant to prescribe a global definition of information literacy; there are already many definitions authors could (and did) draw upon including the new ACRL definition of IL, UNESCO, and ANCIL. The lived experiences of the authors and readers will each have its own view, one that is affected not only by our choices and abilities but also by the context in which we find ourselves.

We asked fifteen authors to reflect on research trends, models of information literacy, theory and practice, the role of librarians, and envisioning the future of information literacy. As we consider the ideas presented by the authors, we frame the discussion around the three following perspectives:

- Powerful Focus—Situating Information Literacy
- Panoramic View—Culture and Critical Information Literacy
- Kaleidoscopic Picture—What Did We Learn? Where Does It Lead Us?

Powerful Focus—Situating Information Literacy

One of the most striking lessons that emerges across the collection is that information

literacy is a "highly contextual phenomenon," as Sonja Špiranec tells us, and that "differences in populations, politics, economic prosperity, and cultures across regions affect ILE [information literacy education]," as Dan Dorner notes. While we can recognize a shared vision in the perspectives of information literacy that are presented throughout the chapters of this white paper, we can also see the authors views have developed and are evolving within specific contexts and cultures. While some contexts may be more familiar to us, such as Canada, New Zealand, Norway, or the United Kingdom, others, such as South Africa, Uganda, Mexico, the Arab Gulf region, Asia/Oceania, and Croatia, represent developing, transitional, and post-conflict societies in which information literacy is shaped by different educational, professional, and institutional challenges. The historical context of a developing country, for example, is particularly striking in Jaya and Reggie Raju's description of "the devastation that the apartheid system had on the education system—from primary school education to tertiary education."

As varied as these contexts may be, we also see similar threads throughout: a move toward a learner-centered and constructivist approach, a grappling with the changing role and status of librarians, the necessity of building capacity for librarians to fully engage in the teaching role, and the possibility and responsibility for information literacy to interact with and impact other sectors of society by moving beyond the walls of the library. We can use these threads to examine not only cross-country comparisons, but also to look through this lens at these same issues within our own US context.

Authors draw upon multiple models for inspiration, including frameworks, guidelines, and standards developed on their own or by their institutions or central organizations and from other countries and contexts and adapted to their needs. [2] While there is an awareness of the ACRL Framework for Information Literacy for Higher Education, it is not so much the use or awareness of the Framework that is significant, but rather the similarities among the chapters in theory and pedagogy that all represent a shift away from a focus on procedures and tools to a broader and more conceptual approach to information literacy regardless of models used. Torras observes that "narrow conceptions [of IL] lead to teaching practice that focuses on procedures and tools rather than on knowledge content, and on defining information needs and search terms, rather than on developing the research question . . . [and] do not support deep learning." Spiranec reports that at the University of Zagreb, "syllabi have gradually changed from linear, skill-based approaches inspired by the ACRL Standards to IL conceptions with a more critical and transformative touches which are associated with more ambitious goals and values of democracy, social responsibility, and civil engagement. . . . Reconceptualizations of the course are continuously inspired by the ACRL Framework [for Information Literacy for Higher Education]."

The changing role and status of librarians is an issue everywhere, and particularly in developing and transitional societies, where the need for librarians to be in a teaching and research role is constrained by the educational models and power structures that still place librarians in supporting or administrative roles (see especially Špiranec, Mwesigwa, Lau, and Raju and Raju). Across the board, the growing enthusiasm for the teaching role of librarians is bringing about new roles for libraries that we can identify with, such as the transformation of library space from stacks to research commons (Mwesigwa) and the creation of academic

partnerships with writing centers (Torras) and student learning services (Wang).

Information literacy progress is evident, but this very success is hindered by the need for greater numbers of well-prepared librarians. Information literacy education is dependent on library education. There are not enough librarians to address the growing student populations, not enough librarians who have the educational preparation or inclination to assume teaching roles, not enough library schools to build capacity, and not enough geographical distribution of the best and the brightest (see especially Mwesigwa, Raju and Raju, Lau, and Russell and Houlihan). Capacity building for librarians in teaching roles is crucial at all levels and is the responsibility of both the profession and the higher education sector.

Panoramic View—Culture and Critical Information Literacy

In these times of conflict and turmoil around the world, what shines through in reading across the chapters is our commitment to information literacy as a shared common culture as well as our ability through a common understanding to break down barriers to accessing and understanding and creating new information, whatever those barriers may be and wherever they come from. In developing and transitional societies, information literacy has a more urgent role in creating an educated citizenry who can forge a sustainable future for countries and regions. Information literacy is ultimately about helping people to make sense of problems they experience in their lives and helping them to use knowledge and information in an informed way to solve problems and make decisions. In this vein, Aharony challenges us to consider an expanded role for information literacy in the "transitional processes of those within new intercultural settings" and as a result, our responsibility to prepare students for a world in which they will inevitably encounter, communicate, and work with people throughout their lives representing a multitude of life experiences, contradictions, and perspectives.

It is within the realization that culture impacts how we define, teach, and develop information literacy that critical IL is gaining prominence for librarians in all corners of the world, and there is growing research at the intersection of critical pedagogy and information literacy highlighted throughout the chapters. For example, Dorner focuses on the wide cultural distinctions within the Asian and Oceania countries and their impact on information literacy strategies by emphasizing "the need for individuals in developing countries, in particular, to develop a capacity within the context of their local communities and local cultures to critique existing knowledge and to construct new knowledge on the basis of this critique." Lau's research and approach to IL combines constructivism and critical IL as inspiration to empower his students, preparing them to think critically, most specifically as applied to media literacy. Bradley points out that every major Canadian university is focused on not only educating aboriginal people, a population that has "suffered from years of systemic injustice and racism," but also, in turn, "educating . . . Canadians about aboriginal people, cultures, and ways of knowing." Bury notes that Canadian librarians "lament the loss of the core values of traditional liberal arts education at universities, and identify critical pedagogy, including critical IL, as offering a way forward to ensure attention to critical thinking, engaged citizenry, and a recognition of IL as contextual, political, social, and cultural." In offering this panoramic view of information literacy, we are introduced to how librarians across the world are using critical IL

strategies to shape the librarian's role in preparing students to interact with information across cultures and across time, an effect on higher education that we cannot quantify but where we are united in our commitment.

Kaleidoscopic Picture—What Did We Learn? Where Does It Lead Us?

The thirteen chapters in this white paper open a door to the information literacy conversation around the world. However, we recognize this project has only scratched the surface for beginning to examine the commonalities and differences in approaches to information literacy by our colleagues outside the United States. As noted in the introduction, there is a limitation to this conversation that keeps us from being able to call this a true global perspective—the contributions were limited to English-speaking librarians, and undoubtedly this has real impact on the scope of IL discussed here. For example, while the Framework has dominated US conversations at conferences and on Listservs in the past year and has consequently been part of much international conversation, as Russell and Houlihan point out, the Framework has not yet been translated into Arabic, representing a disconnect between their work at an English-speaking university in Abu Dhabi and the local librarians. They also acknowledge, "We can't continue to insert Western IL principles into non-Western academic settings without consideration for our diverse population." We recognize that we are missing voices from many other regions, including Francophone Africa, the Middle East, Russia, India, Pakistan, China, and Japan, and that chapters on the Arab Gulf region and Asia/Oceania, while written by authors with direct and intensive experience with these areas, do not represent native perspectives. If we are to examine a true global perspective for information literacy, one of the primary goals should be to break down language barriers by securing the resources to create translated materials, in all directions. We wonder—if more of the research and models in information literacy are translated, what kinds of conversations will ensue?

In addition, if we are to have a truly global conversation on information literacy, we also need to develop an evidence base that speaks to and across cultures. This includes learning from librarians engaged in similar activities but approaching those activities from different cultural perspectives (e.g., Wang's curriculum analysis and mapping and Badke's recommendation to focus on disciplines as communities of practice) and considering international needs when designing research initiatives, planning conferences, and developing models, frameworks, guidelines, and so on. We recognize that many of our stumbling blocks are similar, and readers of this white paper will benefit from being exposed to scholars and practitioners from other regions through the extensive references in each chapter.

We learned that we need to learn a lot more.

Where does this lead us today? After we have explored differences and similarities between and across regions and cultures, we can look to future directions to forge a more concrete action plan (or plans) for how we might assist each other with common goals for advancing IL in our countries and beyond the walls of the library. First, for example, we should examine IL work already in motion such as the International Federation of Library Associations and Institutions' (IFLA) strong strategic and practical agenda for realizing the UN sustainable development goals that advocate for the essential role of libraries. Second, we could consider

exploring additional opportunities for developing library partnerships across countries (e.g., the example of Makerere University in Uganda and University of Bergen in Norway, as noted by Mwesigwa). Third, we need to build our international awareness around already active initiatives such as the work being done by UNESCO and regional library organizations (Nordic, African, Arab, Russian, etc.). We want to encourage refinement of the global perspective that is emerging from the voices of this white paper by looking outside the United States to gain a deeper understanding for what is happening in IL around the world.

Are there hidden or unexamined avenues we should be exploring, collegial relationships we should be building, grants and projects we should be initiating, to continue this conversation? Technology can enable us to have those conversations if we can identify the connections that will get us started. Moving forward, we invite US librarians to seek out conversations with librarians with similar interests in as many ways possible (e.g., attending and reading abstracts from international conferences, searching international IL journals, and reaching out to new colleagues to ask questions). In order to move from a global perspective of information literacy to an examination of global impact, we will need to start with building relationships.

The common light pouring through these chapters reveals our struggles with information literacy—as librarians, as teachers, as curriculum designers, and perhaps most especially, as learners ourselves—but also our triumphs. Regardless of our context, we share a commitment to IL's potential for transformation, both internally, following Emma Coonan's perspective that "it takes a community of practice to maintain a reflective information literacy practitioner: a librarian capable of embracing uncertainty and of turning an unfearing questioning gaze on their own identity and entitlement," and externally, heeding Jane Secker's call to "more clearly articulate the value of IL, not just as a foundation to learning, but as something that underpins democracy, promotes social justice, and is a fundamental human right in the digital world."

Notes

- [1] Chartered Institute of Library Information Professionals, "Information Literacy: Definitions," accessed February 21, 2017, http://www.informationliteracy.org.uk/definitions/definitions-of-il.
- [2] For more information about the IL policies, institutional guidelines, standards, and frameworks used around the world: International Association of University Libraries. "Information Literacy Policies and Standards at IATUL Member Libraries." University Library of the Technical University of Munich: Munich, November 2015. Accessed January 21, 2017. http://www.informationliteracy.org.uk/definitions/definitions-of-il/#squelch-taas-accordion-shortcode-content-2.

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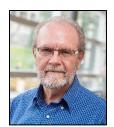
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