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Foreword

Although the oft-cited quip that the *web changes everything* may not be true in a literal sense, it certainly has changed the role and function of teachers and academics, the function of libraries, and the work of librarians. This change has been derided by some as creating an ecology of interruptions that trains our brains to process only the inconsequential and that at surface levels only (Carr, 2010). More optimistically, web pundits such as Clay Shirky (2010) have argued that the Net affords the creation of a "cognitive surplus" that has created and will create more powerful tools and contexts that exponentially expand human creativity and productivity. Regardless if one views this cup of knowledge as half full or half empty, all agree that information production, storage, and distribution is undergoing radical change. It follows, then, that need for harnessing the tools and techniques of the new learning technologies requires corresponding new literacies and new ways to help each of us acquire these literacies.

The authors of the chapters in this text are at the forefront of this often-disruptive change. They quite rightly note that the relationship between students and libraries has changed due to the ubiquitous accessibility of the most-used library resources. They also describe how the relationship between faculty and the library has changed from one in which libraries and librarians served to assist faculty in accessing and storing discipline-related texts to one in which librarians act as cocreators, media aides, mentors, distributors, literacy instructors, and colearners with faculty members. But perhaps most important are the references in this text to the changing nature of knowledge itself. From a knowledge-scarcity model, we are moving to one of information abundance, where knowledge resources are not only available in vast quantities but at very low costs and encapsulated in multiple formats and media. Knowledge is also much more deeply networked to other objects and to humans, such that a deep ecological context of mutual dependency among producers, users, and owners emerges. These changes and related increases in complexity cry out for explanations, observations, case studies, and examples that guide our actions and attempt to properly use these resources. While these chapters do not yet provide universal best practices, much less predictive theories of use, they help us understand and develop interventions that allow us to learn more effectively and more efficiently.

As the title of the text indicates, each of the chapters struggles with instructional designs that are rooted in developing new forms of information literacies. It is easy to argue that most students of today are digital natives (Prensky, 2001) and thus their familiarity and comfort operating networked tools makes them experts. However, when one goes beyond the sensationalistic literature of pundits to empirical research studies,

one finds that students today have mostly surface-level understandings of how these technologies work and even less capacity to evaluate and create their own digital artifacts (Kennedy et al., 2009). The chapters in the text and the summaries and overviews of the editors demonstrate the need for the types of collaborative (librarians plus subject matter expert) interventions and instructional designs in this text. But you will also find that most of the interventions described and evaluated here walk the talk and are designed to be delivered fully online or in blended learning contexts. Beyond the obvious "learning by using," which online contexts necessitate, is the efficiency, accessibility, and, it is hoped, reusability that online learning resources afford. Thus, the reader benefits not only from the ideas; by examining the digital artifacts created and the evaluation surveys and tools presented, this text helps each of us implement and evaluate our own information literacy projects—online.

Unlike the latest versions of popular Web 2.0 books with their focus on the wow factor, the chapters in this text are grounded with real technologies, the real expectations and responsibilities of teachers and students, and the real (if emergent) reconceptualizations of disciplinary knowledge. Thus, in the chapters that follow you will glimpse the way that the visions of the networked society are being instantiated in real learning contexts—to the benefits of the actors and hopefully by extension into your own learning contexts.

Many of the authors frame their teaching and their personal learning in constructivist frameworks in which individuals and groups work to create and re-create knowledge structures in relevant and personal contexts. However, peeking through, and partially as result of the affordances of the powerful networking tools used, is an even newer conception of knowledge building and sharing based on connectivist ideals (Downes, 2006; Siemens, 2005). Connectivism brings constructivism to the networked era by noting the necessity of connecting ideas, resources, and humans in networks of knowledge. These networks are then nourished, sustained, and enhanced in formal courses to become lifelong learning assets beyond graduation.

Many of the chapters in the book focus on the evolving definitions and function of information literacy and its attendant skills. Obviously, information literacy retains the traditional librarian role of helping learners to locate and decode information. It goes beyond the postmodern task of helping learners identify voice and critically examine the inherent bias in all information resources. We see librarians helping scholars and students create and re-create knowledge resources and, just as important, how to share and contribute their insights back to networked and collective knowledge. Further, in this text we see the emergence of librarian functions that help scholars devise means by which information flows (and not in fire-hose-size dosages) to learners rather than students searching for information. Finally, we see examples of librarians creating resources with disciplinary colleagues that persist beyond formal educational use to make knowledge freely available for lifelong learners, those without access to institutional resources, and to the growing number of amateur scholars working outside institutional walls.

If any readers harbor doubts as to the ongoing relevance and need for librarians in an era of "google anything," these notions will be disabused by reading this text. The roles of librarians have become much more complex in a networked era but have also become much more interesting. The collaborations, partnerships, resource building projects, and Web 2.0 technology demonstrations so aptly described in this text will provide not

only inspiration but also practical ways in which the work of a networked library has come to life in a diverse and international set of postsecondary institutions.

It is common to end a foreword such as this by noting the audience who will gain the most from reading the chapters that follow. I won't disappoint the publisher by concluding that everyone should read this book! But that "everyone" obviously includes two target audiences: First are those, like the chapter authors, who are professionals working in libraries and teaching and learning centers in formal education and in corporate training contexts. A second and larger audience is teachers, professors, academics, and trainers from diverse disciplines who are looking for help and insight into ways to use networked tools to enhance their teaching but, more important, to enhance the learning of their students. If you have not yet been challenged to develop an online or a blended learning course, it is only a matter of time. It is true that death and retirement sometimes allow our colleagues to avoid mastering new information literacies, but it is little fun waiting for either to happen! Be assured that members of at least these two major target audiences will find the theories, literature reviews, cases, stories, learning objects, and evaluation tools detailed in this text to be invaluable aides to their personal and professional growth and enjoyment.

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Preface

As online learning continues to expand in scope and influence, faculty and librarians are working collaboratively to design innovative programming in blended, hybrid, open, and fully online modes. The strength of these partnerships contributes to effective teaching practices, allowing for an exchange of ideas about emerging technologies, pedagogical theory, disciplinary perspectives, and student learning outcomes. While there are many challenges to faculty and librarians working together, including institutional barriers, differences in technology experience, and changing notions of library instruction, collaborative approaches to online learning lead to innovation and renewed practices.

This book presents eight original models for teaching information literacy online. Each chapter is coauthored by a faculty-librarian team and describes successful online strategies for collaborative information literacy instruction. The author teams provide theoretical frameworks for real-world practice, presenting disciplinary and institutional contexts, as well as essential details about program planning and assessment. Each team describes multiple technologies to engage students online, including reusable learning objects, Web 2.0 resources, learning management systems, open wiki environments, online portals, and the virtual world of Second Life. This book provides a global perspective from the United Kingdom's Open University and the University of Manchester, in addition to the six U.S. institutions such as the University of Central Florida, The University of Massachusetts Dartmouth, and Indiana State University. The disciplines are represented at the undergraduate and graduate levels and include business and accounting, computer and library science, history, English, women's studies, education, social work, as well as curriculum instruction and media studies.

In his book *Theory and Practice of Online Learning*, Terry Anderson argues that "the challenge for teachers and course developers working in an online learning context is to construct a learning environment that is simultaneously learning centered, content centered, community centered, and assessment centered" (Anderson, 2004: 54). Anderson defines an interrelated set of concerns, from content to learning outcomes, that instructors and designers must address in an integrated manner. In well-designed online learning environments, students actively explore content in dialogue with one another using a range of interactive technologies. According to Anderson:

> There is no single, right medium of online learning, nor a formulaic specification that dictates the kind of interaction most conducive to learning in all domains with all learners. Rather, teachers must learn to develop their skills so that they can respond to student and curriculum needs by developing a set of online learning activities that are adaptable to diverse student needs. (Anderson, 2004: 54)

This is a flexible and diverse approach to online learning that considers the needs of learners within a range of curricular contexts. We see this methodology demonstrated in this book as well, as faculty-librarian teams from multiple disciplines analyze the design of learner-centered assignments and courses in online environments. The collaborative approaches vary from blended and hybrid to open and fully online, with a primary emphasis on how to engage students in critical thinking and information literacy. As Anderson (2004: 42) asserts, "the greatest affordance of the Web for educational use is the profound and multifaceted increase in communication and interaction capability that it provides." This enhanced level of interactivity is integral to developing information literacy online, continuously connecting learners with one another and the instructor while challenging them to create and produce in these environments as informed citizens and lifelong learners.

TRENDS IN ONLINE LEARNING

We have seen the rapid expansion of online programs at community colleges, four-year institutions, universities with graduate- and doctoral-degree programs, through nontraditional adult education programs, and via international distance-learning initiatives. According to the report *Learning on Demand: Online Education in the United States*, 2009, coauthored by I. Elaine Allen and Jeff Seaman (2009: 1), "Online enrollments have continued to grow at rates far in excess of the total higher education student population, with the most recent data demonstrating no signs of slowing" (see also Allen and Seaman, 2010). In support of this assertion, the same report argues that "over 4.6 million students were taking at least one online course during the fall 2008 term; a 17 percent increase over the number reported the previous year" (p. 1). In addition, a report by the U.S. Department of Education (2007) argues that "sixty-one percent of 2-year and 4-year institutions reported offering online courses, 35 percent reported hybrid/blended courses, and 26 percent reported other types of college-level credit-granting distance education courses in 2006–07" (p. 2). This report identified a widespread and growing use of online courses and programs. Based on these trends, online learning is having a significant impact on teaching and learning, and the term itself continues to be defined and redefined in multiple ways.

One of the key findings from a meta-analysis of online research studies by the U.S. Department of Education (2009: xiv) is that "students who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction." This finding indicates that online learning is more than an enhancement to traditional classroom practice and must be taken seriously as a pedagogical approach in its own right that impacts student learning in a positive way. This report challenges some of the assumptions about face-to-face instruction as better than online learning because it asserts that "learning outcomes for students who engaged in online learning exceeded those of students receiving face-to-face instruction" (p. xiv). At the same time, this research also promotes blended models that combine in-class and online teaching by arguing that "instruction combining online and face-to-face elements had a larger advantage relative to purely face-to-face instruction than did purely online instruction" (p. xv). According to Scott Jaschik (2009) from InsideHigherEd.com, this

finding "could be significant as many colleges report that blended instruction is among the fastest-growing types of enrollment." Overall, online learning continues to advance, not only the number of courses and programs, but also in the way this form of education positively impacts student learning and how it is perceived as an effective and diverse form of pedagogical practice.

INFORMATION LITERACY ONLINE

Technology considerations have been addressed to some extent through the development of information literacy in higher education, and more recently we have seen stronger connections between online learning and information literacy. Initially, the American Library Association's (1989) "Presidential Committee on Information Literacy: Final Report" acknowledged the ongoing development of technology by suggesting that in the future "one would see more information technology than is evident today, and it would be important to people not only in itself but also in regard to its capacity to help them solve problems and create knowledge." Although this document does not mention online learning specifically, it does acknowledge the impact of technology on information literacy and focuses on the problem-solving capability of information-literate citizens.

The Association of College and Research Libraries (ACRL) made a key point related to distance learning by stating that "the challenge for those promoting information literacy in distance education courses is to develop a comparable range of experiences in learning about information resources as are offered on traditional campuses" (2000: 4). Distance-learning courses and programs have progressed considerably since 2000, but this assertion about developing comparable experiences for students in distance-learning environments continues to inform how these courses and programs are developed and perceived. It reinforces the idea that online learning must be as effective as face-to-face, and that the traditional classroom is the baseline for comparison. This perspective does not fully address the unique dimensions of online learning and how teaching online is an innovative and effective practice.

The Middle States Commission on Higher Education (MSCHE) supports the design of comparable educational programs for distance-learning environments. In the document *Characteristics of Excellence in Higher Education: Eligibility Requirements and Standards for Accreditation*, MSCHE (2006) reinforces the relationship between the library and distance learning initiatives as a consideration for accreditation by arguing that "learning resources fundamental to all educational and research programs and the library, are adequately supported and staffed to accomplish the institution's objectives for student learning, both on campuses and at a distance" (p. 10). The accreditation standards address information literacy in online modes by requiring institutions to show "evidence of how the institution assures that students and faculty have sufficient technological skills and those information literacy skills that are necessary to access and to use effectively the information resources available at a distance" (p. 59). By recognizing the emergence of distance and distributed learning modes, accrediting agencies such as MSCHE support the overall learning objectives for critical thinking and information literacy in these online environments. Distance learning is also addressed by MSCHE (2002) in the guidebook

Distance Learning Programs: Interregional Guidelines for Electronically Offered Degree and Certificate Programs, but the references to information literacy in this document are somewhat brief. Institutions are encouraged to provide library resources for "training in information literacy including research techniques" (p. 16), but this statement does not define a highly substantive or synergistic connection between the two concepts. The actual standards for accreditation, however, at least acknowledge the presence of distance and distributed learning and the need for comparable support.

In *Standards for Distance Learning Library Services* (2008), ACRL emphasized the importance of "access entitlement" for all library users by stating that "every student, faculty member, administrator, staff member, or any other member of an institution of higher education, is entitled to the library services and resources of that institution, including direct communication with the appropriate library personnel, regardless of where enrolled or where located in affiliation with the institution." ACRL acknowledges how online library services have blurred the lines between brick-and-mortar institutions and online endeavors since students have access to information online in any context. In addition, ACRL emphasizes the importance of collaboration in these environments by arguing that librarians and administrators need to collaborate "with teaching faculty in distance-delivered programs to integrate information literacy into courses and programs in order to foster lifelong learning skills."

Information literacy instruction has built a presence online, especially with ongoing changes in technology and increased institutional support for these initiatives. Online programs advanced in numbers and influence in the 1990s, as illustrated in the extensive annotated bibliography *Library Services for Open and Distance Learning: The Third Annotated Bibliography*, by Alexander L. Slade and Marie A. Kascus (2000). The authors of this book presented more than 750 publications related to library services and online learning between 1995 and 1999. In 2005, a book titled *Exploring the Digital Library: A Guide for Online Teaching and Learning* by Kay Johnson and Elaine Magusin included three chapters that address faculty-librarian collaboration, and one of those three chapters examines information literacy specifically. In 2007, ACRL published *Information Literacy Programs in the Digital Age: Educating College and University Students Online* by Alice Daugherty and Michael F. Russo. This book presented more than 24 case studies about information literacy in a variety of online modes. Although these two books do not focus on faculty-librarian collaboration, the expansive scope of each volume demonstrates how widespread these initiatives have become.

BOOK ORGANIZATION

This book is divided into two main sections—Part I: Blended and Hybrid Learning and Part II: Open and Online Learning. Each part of the book includes four chapters that explore at least one of these format types, although there is some overlap in terminology throughout the volume. All of the chapters are organized in a similar way, with a detailed literature review and discussion of institutional context and disciplinary perspectives. The authors describe their collaborations, including the challenges they overcame and the specifics of program planning. Each chapter presents an online learning model with a discussion of the impact on student learning and assessment strategies. We begin

both sections with an introduction that explores key themes and summarizes the unique contribution of each chapter.

Part I: Blended and Hybrid Learning

We start the book with a chapter coauthored by John Venecek and Katheryn Giglio from the University of Central Florida. This faculty-librarian team describes the development of an interactive open wiki environment in a hybrid course that integrates information literacy and Renaissance literature. Their goal was to engage students through an inquiry-based project to develop online research guides. Students became active producers of online information through the collaborative course wiki. In the next chapter, Matthew C. Sylvain, Kari Mofford, Elizabeth Lehr, and Jeannette E. Riley, of the University of Massachusetts Dartmouth, write about a program they developed to meet the needs of nontraditional students who are not on campus, as well as more traditional students interested in instruction at times and in places that meet their own needs. They developed reusable learning objects (RLOs) to teach information literacy in a range of contexts and describe the use of these RLOs in a course within the multidisciplinary liberal arts major.

Andrew Whitworth, Ian Fishwick, and Steve McIndoe of the University of Manchester in the United Kingdom collaborated on a postgraduate course, "Media and Information Literacy," which is part of a program that includes both full-time, on-campus students and part-time students who might be on or off campus. The course, taught both online and on campus, holistically incorporates information literacy instruction, rather than teaching information literacy as a discrete set of skills. The fourth chapter in the section describes a collaborative venture in the field of history, undertaken at Morehead State University in Kentucky. Kristina DuRocher and Lisa Nichols assigned students to use primary resources in an online research game revolving around people's fates during a particular twentieth-century period. This game was used, with necessary variations, in both face-to-face and online iterations of the course.

Part II: Open and Online Learning

The second part of the book starts with a chapter coauthored by Clarissa Gosling and Ingrid Nix from The Open University, United Kingdom. This faculty-librarian team describes a "supported open learning" model for students to work at their own pace while integrating information literacy and information, communication, and technology (ICT) skills. This chapter explores open and online learning to prepare work-based students who are seeking professional qualifications in the field of social work. The next chapter in this section is written by Jenna Kammer and Tracey Thompson from New Mexico State University (NMSU). The authors examine the virtual world of Second Life as an online environment to promote resource-based learning and service learning. Students actively explore Second Life via Aggie Island, a virtual library and information commons designed especially for this institution. This chapter illustrates the transformation of a course initially focused on technology skills to a broader interdisciplinary and virtual service learning experience through the integration of information literacy concepts.

We close the book with two chapters that address online learning in graduate courses. David Lavoie, Andrew Rosman, and Shikha Sharma from The University of Connecticut

(UConn) write about a Resource-Enriched Learning Model (RELM) developed for the Master of Science in Accounting (MSA) program. This approach is supported by an expanded team that includes faculty, librarians, a curriculum and instructional designer, media specialist, and students. The authors describe a holistic approach to information literacy that is informed by constructivism and integrated into an asynchronous online learning environment. The last chapter in the book is coauthored by Susan M. Frey and Rebecca L. Fiedler, a faculty-librarian team from the Bayh College of Education at Indiana State University (ISU). In this model, an information literacy course is designed for working professionals pursuing graduate degrees at a distance through the department of Curriculum, Instruction, and Media Technology (CIMT). The authors offer a compelling argument for faculty-librarian collaboration built on trust and the need to rethink traditional professional roles.

ONLINE LEARNING AT YOUR INSTITUTION

While the institutional contexts in this book may vary from your own setting, the techniques explored and lessons learned are portable to many different learning environments. Your college or university may be investing in different technologies from those described here or making the choice to move in the direction of open source. In addition, we continue to see rapid changes in emerging technologies, which makes it difficult for some institutions to keep pace with such revolutionary transformation. The models in this book, however, transcend any particular application or system because the focus of each chapter is on teamwork and inventive instructional design while being grounded in good teaching practices.

This is not to suggest that the technology itself is tangential to the learning experience. Technology is integral to each model and will inspire new ideas using other formats. For instance, in the first part of the book, the use of open wikis may inspire assignments at your campus that require collaborative narratives using Twitter or even text messaging. Similarly, the application of reusable learning objects (RLOs) may generate ideas about ways to incorporate portable modules using mobile apps, handheld devices, e-book readers, or iPads. In the second part of the book, the synchronous world of Second Life may inspire explorations in simultaneous web conferencing, gaming, virtual modeling, or digital animation. As we close the book, the discussion of student-centered fully online courses may encourage your faculty and librarians to explore the next generation learning environments that move beyond any particular learning management system to feature single sign-on, social networking, micro blogs, or cloud computing. We are certain that readers will appreciate all of the models presented in this book and then adapt the collaborative approaches to their own institutional contexts and technology environments.

As a significant trend in higher education, online learning is continuously moving forward, intersects all pedagogical considerations, and enhances information literacy efforts. Through the advance of technology we see the refinement of online learning formats, such as blended and hybrid, as well as open and fully online. Regardless of the particular format, the online learning models in this book demonstrate that faculty-librarian collaboration is especially beneficial in the design and implementation of

information literacy endeavors. This work will continue to move forward through faculty-librarian partnerships that effectively fuse the pedagogical, disciplinary, assessment, and information theory and practice online.

If you have questions for the authors or editors, contact information with e-mail addresses is available toward the end of the book.

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