INFORMATION LITERACY AND DIGITAL LITERACY

Competing or complementary?

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ABSTRACT

Digital literacy is a more recent concept than information literacy and can relate to multiple categories of library users in multiple types of libraries. Determining the relationship between information literacy and digital literacy is essential before revision of the ACRL *Standards* can proceed.

INTRODUCTION

Every public services librarian knows intuitively that there is a close relationship between information literacy and digital literacy. When a librarian helps a patron search for articles in a database, there is an interplay between information literacy (which database to search, which terms to use, which limiters to employ, how to evaluate the articles in the results, how to use the information found effectively and ethically, etc.) and digital literacy (how to navigate the library web site, how to get to a search page or find the advanced search page, how to find the help files, how to save or export the citations and full text, how to set up an account in a social media site, how to upload files to that site, how to comment on others' postings, etc.). The exact distinction between information literacy and digital literacy has not been determined, but we know they are related and suspect that they are not the same thing.

For years academic institutions required a level of computer literacy for their undergraduate students, a requirement that might be addressed by one department for the entire campus or by individual schools or colleges for their own students and in compliance with agreed-upon outcomes. These computer literacy courses might require students to create and manage files; use database, spreadsheet, and word-processing software; and enter or manipulate data in various ways. These courses generally focused on the skills needed to use particular applications for the coursework required in the students' programs of study.

Over time, educators saw value in adding social networking sites, wikis, multimedia sites and other similar resources to their curricula, and they began to incorporate

sites like Facebook, Google Docs, and YouTube into their syllabi. These educators didn't want to *teach* these resources, but they had to do so in the context of the content lessons they were creating. They wanted to create new learning environments, but students needed to be able to navigate within and contribute to those environments. The skills these educators needed their students to use were not necessarily (but they could be) skills they were using outside of academia. Students might already have the requisite skills, or they might not.

Librarians involved in research instruction (by any name) understand that students need to be able to create and store folders and files on a computer or tablet, on campus shared drives or courseware such as Blackboard, and on the web. Students need to be able to access and edit files created by other students and to comment on digital creations in ways that contribute to discussions among the students involved in a project. Librarians know that students need these areas of knowledge and skills in addition to knowing about information needs, access, evaluation, use, and social implications. The Information Literacy Competency Standards for Higher Education, hereinafter the *Standards*, that were developed in past decades are no longer adequate by themselves to describe all that students need to know in digital environments; neither can librarians be the ones responsible for teaching all of it. Some of it must go back to those computer literacy courses, which should be updated and called digital literacy courses. Maybe some already are called that, but the Association of College & Research Libraries (ACRL) needs a clear(er) understanding of the relationship between information literacy and digital literacy to review and revise the *Standards*.

In 2000, academic libraries were well into the digital revolution in information storage and retrieval, but we were not yet dealing with the integration of online databases with bibliographic software and word processing, nor were many academics using social media for educational purposes. The writers of the *Standards* document did an admirable job of not only describing the complexity of the information landscape at that time, but also anticipating what was to come. "Understanding …social issues surrounding the use of information…"clearly covers the digital bullying and privacy concerns of the years since 2000. However, the *Standards* appropriately focused on the scholarly life of undergraduate students and were not meant to include all areas of life for all citizens.

In 2013 the American Library Association Office for Information Technology Policy's Digital Literacy Task Force (Task Force) examined various efforts to provide digital literacy instruction and explored the potential for such instruction before making recommendations for public policy, ALA, and individual libraries to further digital literacy efforts. This Task Force stated that "A digitally literate person:

- possesses the variety of skills—cognitive and technical—required to find, understand, evaluate, create, and communicate digital information in a wide variety of formats;
- is able to use diverse technologies appropriately and effectively to search for and retrieve information, interpret search results, and judge the quality of the information retrieved;
- understands the relationships among technology, lifelong

learning, personal privacy, and appropriate stewardship of information;
- uses these skills and the appropriate technologies to communicate and collaborate with peers, colleagues, family, and on occasion the general public;
- uses these skills to participate actively in civic society and contribute to a vibrant, informed, and engaged community."

Clearly there is considerable overlap between these two sets of skills and knowledge, *but they are not identical.* The Task Force was well aware of the existence of the *Standards* and was deliberate in its decision to see digital literacy as distinct from information literacy. In fact, its report states that "Although academic libraries are more focused on Information Literacy than digital literacy, these two twenty-first century literacies are closely linked: Information Literacy requires digital literacy to access appropriate online research sources, and Information Literacy gives further context to the evaluation skills developed by digital literacy…" (2000, p. 14).

These two operational definitions beg two questions: What is the relationship between digital literacy and information literacy; and what should ACRL do with this understanding?

WHAT IS THE RELATIONSHIP BETWEEN DIGITAL LITERACY AND INFORMATION LITERACY?

The definition of digital literacy was written with full consciousness of the existence of the *Standards*, which had been written more

than a decade previously. Thus, it makes sense to examine the probable distinctions made by the Task Force.

The digital literacy definition was meant to apply to all types of users and in all types of libraries. It suggests a curriculum only in the broadest sense since many of the providers of digital literacy instruction and programming do not identify their programming as a "curriculum," and the lessons they provide are not part of an institution-wide curriculum that is meant to encompass clearly-defined student outcomes for an entire program of study. Although the language used in the digital literacy definition is similar to that used in the information literacy definition, that is in part because both definitions refer to general educational goals, not because the Task Force thought digital literacy initiatives were necessarily formal curricular initiatives. They might be for some libraries, and they might not be for others.

The Task Force included the ability to create information. The Task Force recognized the significant role the creation of information plays in Web 2.0 applications and social media. Academic libraries did not generally use such applications when the *Standards* were written, but it is not necessarily true that this creation would be included in information literacy standards written (or revised) today. A thorough examination of the role that the creation of information might play in a curriculum appropriately focused on scholarly pursuits is needed before this could be answered. This, in particular, is an area that ACRL might decide properly belongs to academic colleagues who are providing computer/digital literacy instruction.

Third, even almost identical skills in the two

definitions do not mean that digital literacy instruction goes into the depth necessary in academic programs. For example, the evaluation of information is required for everyone to function in an open society. We value the right of free expression and open access to unfettered expression; correspondingly, we all need the skills to distinguish satire from fact, fiction from history, and scams from honest offers. This general level of knowledge of the need for evaluating sources of information and the criteria to use in such evaluation is not enough for students in academic programs to choose among scholarly sources to identify the best sources for their projects. The criteria they must employ to gauge the centrality of a journal to its field or the relative rank of scholars within a field are not criteria an adult entirely outside of academia employs or needs.

Fourth, communication with and participation in the user's various communities are significant elements of digital literacy. One could argue that undergraduate students are taught to do the same with their academic communities, but an undergraduate student does not participate in scholarly communication as an equal to the experts in a field. Rather, they are learning how that communication takes place and what the experts are saying. These skills can prepare them for graduate study and, ultimately, to take their place in a scholarly community. They do not do so by completing a research project in an undergraduate course. However, outside of academia these same adults can participate as equals in their work, family, and friends groups and communicate with community and political leaders as fully enfranchised citizens. Digital literacy and information literacy programs have different outcomes in mind.

Fifth, The Task Force did not write standards for digital literacy. That level of detail is best provided by the organizations for the various types of libraries involved in digital literacy: ACRL, the Public Library Association, the American Association of School Libraries, and perhaps the Association for Library Service to Children, and the Young Adult Library Services Association for their distinctive user groups. The *Standards* translate each part of that definition into separate performance indicators and outcomes. The Task Force could not do this level of work for all the types of users the Report covers. It was also not appropriate for the Task Force to set such standards; such work takes the collective intelligence and experience of the librarians in the various types of libraries.

The definition of digital literacy overlaps the definition of information literacy in several places, but they do so as common areas of concern and endeavor, not as competing priorities.

WHAT SHOULD ACRL DO WITH THIS UNDERSTANDING?

The shared and separate areas of digital literacy and information literacy intended for academic librarians to teach must be defined by ACRL in the context of its revision of the *Standards*. It would be inappropriate for a single individual or an outside agency to impose a viewpoint on ACRL, but a few suggestions from the author might facilitate this work:

1. Determine the entry-level technological skills needed for meaningful participation in an Information Literacy program. Librarians cannot teach all the concepts and skills needed by students to be successful in all the steps of research. Librarians do not teach the mathematical skills needed to understand the statistical tables that students might retrieve. Librarians do not teach the literary theories needed to choose among scholarly papers. Librarians do not teach the historical facts needed to use a chronologically arranged source. Similarly, librarians should not need to teach students how to create a folder—online, on a portable memory device or computer, or on a network drive—and save files in that folder, changing the default names of files to something meaningful and moving files around among folders. What other skills and concepts should students already have before they launch into an information literacy course? What is best left for academic colleagues who teach digital literacy or introductory computing courses? The portions of the *Standards* listing outcomes in these areas should be looked at with these questions in mind.

2. Determine how far into the research process the *Standards* should address. Are librarians expected to just teach the research, or the product, as well? Librarians are already involved in assisting (and, thus, in some instances, teaching) students in reference transactions how to create a project or product to showcase and report their research. Although it is common for other specialists to be available in modern reference rooms of any arrangement, librarians put in long hours at a public desk and are often readily recognized by students as the "one to ask." Should librarians be adept at using all the multimedia software

and online applications students are expected to use for their research presentations? Should any of these skills be included in the *Standards*? Where does citation management software fit? Should librarians teach how to use it? Should its use be included in the *Standards*? Standards are not lofty and unattainable goals; they are benchmarks that Information Literacy programs are expected to reach. In determining whether to include skills for the presentation of information, ACRL must keep in mind the skills that librarians would be required to master in order to teach these areas. There is a limit to the amount of time individual librarians can devote to acquiring new (and, perhaps, tangential) technological skills in an already busy work life. Again, standards should be written in a way that facilitates the conversations with institutional colleagues called for in point 1 in order to accomplish what students need without overloading the *Standards* to the point that librarians give up trying to accomplish them.

3. Expand the *Standards* to cover higher levels for more advanced instruction. The term "literacy" connotes a basic level of competency, and standards covering this level were truly needed when the *Standards* were written. Many librarians are now teaching information literacy courses at the graduate level. Graduate students who did not have the advantage of undergraduate information literacy courses may need instruction that begins at a more basic level than graduate students who had thorough

information literacy instruction. However, all graduate students need to develop greater understanding of research and of the fields they are studying. They need to know the history and characteristics of the literature of their discipline, the types of reference and research materials available in it, and the types of information and value that other disciplines can bring to their own research. They need to know the value and limitations of citation indexes, how to determine the centrality of a journal in its field, the place of collaborative work, cross-disciplinary areas, and so much more. Expanded or separate standards that are developed, perhaps jointly with disciplinary organizations, would give guidance and direction to all levels of information literacy instruction.

4. Review the *Standards* and outcomes in light of new knowledge about learning. We know that learning is developmental, and several researchers have written about what this means for research; by reviewing the literature and aligning the *Standards* to the levels of learning that are likely to occur in undergraduate studies, and creating standards appropriate for graduate levels, we can educate librarians about learning and facilitate student success at the same time.

CONCLUSION

Information literacy and digital literacy are not competing concepts; they are complementary areas for students in higher education. Further, digital literacy concepts and skills can provide the fundamentals of

managing digital environments that students need to succeed in Information Literacy and their other areas of study. What is required of ACRL is to recognize that this relationship exists between information literacy and digital literacy, to define the relationship more clearly for its members, and to see the existence of the digital literacy concept as an opportunity to re-engage academic colleagues in a meaningful discussion of the knowledge and skills students need today. Librarians have an obligation to their institutions to inform broader discussions of curricula whenever we have significant input to offer, and this is such a time. Let's employ both digital literacy and information literacy in our efforts to provide rich educational experiences for students in higher education.

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