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Students and Information Literacy: High School and Postsecondary Perspectives

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By Debe Averill and Nancy M. Lewis

"Information literacy" is a phrase heard in many settings today. It is defined by the Association of College and Research Librarians (ACRL 2000: 2) as a set of competencies achieved when people can "recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information." In recent years there have been a number of studies to determine the information literacy skills of undergraduate students in the United States. Anecdotal reports from secondary and academic educators indicate that today's "digital natives" lack the ability to effectively use the vast array of information sources now available to them and rely heavily on search engines and questionable tertiary sources such as Wikipedia. In short, the digital native has been demonstrated to be digitally illiterate.

In the spring of 2012, we facilitated a session at the Maine Library Association annual conference and brought together professors, academic librarians, and newly matriculated students from a variety of colleges and universities. Professors and librarians report a situation "on the ground" similar to the research results. These investigations also indicate faculty frustration with the quality of research assignments turned in by students. Students on our panel report that they wished they had received additional instruction in the research process at the secondary level or that they had paid more attention to the instruction they were given. It would seem that in a world replete with information sources and where student access is at an all-time high, the ability to find, evaluate, and apply information is at an all-time low.

Two major studies in the past three years have documented this issue. Head and Eisenberg (2010) reported survey results from 8,353 students. Eisenberg is well-known for his collaboration with Robert Berkowitz on a research process rubric for the elementary and secondary levels known as the "Big Six." At approximately the same time, the Ethnographic Research in Illinois Academic Libraries (ERIAL) Project used in-depth interviews by anthropologists of students, faculty, and academic librarians and published preliminary results (Asher and Duke 2010).

A variety of professional organizations have also developed standards and rubrics which offer structure to those involved in teaching information skills. These include ACRL and the American Association of School Librarians (AASL), which uses "Standards for the 21st Century Learner" (AASL 2007). All of these standards underscore the need for teaching the research process at all levels. This process is usually broken down into a series of tasks, the first of which is the ability to "recognize when information is needed" (ACRL 2000: 1). The researcher then chooses appropriate sources, evaluates information *vis-à-vis* the question at hand, organizes the information for the intended audience, and evaluates the process and the product.

Results of the these studies and others indicate that students at both the secondary and undergraduate levels do not use this research process and rely heavily on Google and sources such as Wikipedia. Use of monographs and databases listing peer-reviewed journal articles is uncommon. Even when using the Internet via search engines, students do not use search strategies or mechanisms available to them to assist in the location of reliable sources. Often, students are unable to distinguish between monographic and serial publications, and they often use unsubstantiated "blog" sources interchangeably with other vetted research (Kolowich 2011). Students are unable to determine how to find cited sources and equally unable to appropriately cite the sources they use. Plagiarism, intentional or otherwise,

is rampant. Moreover, all of this occurs despite the fact that students often report that they received information skills instruction in high school. Secondary librarians are certainly aware of the need for information skills instruction, but also report that secondary teachers are less and less likely to either assign research or, as reported in Project Literacy at the undergraduate level, use the expertise of the librarian to instruct students in the process (Head and Eisenberg 2010).

From this, it is clear why those in education are concerned that students learn the skills necessary for information literacy. Indeed, at the postsecondary level, we see information literacy included in the requirements of accrediting bodies, such as the American Association of Colleges and Universities and the New England Association of Schools and Colleges (Saunders 2007). The AASL standards underscore the responsibility of the school librarian to "provide instruction, learning strategies, and practice using the essential learning skills needed in the 21st century" (AASL 2007: 3).

It is important to understand that information literacy is best addressed at multiple levels in the education process. Think of reading-comprehension skills that begin pre-K and continue through college literature courses. The skills are built upon with appropriate instruction at each stage of learning. This is also the ideal approach to information literacy skills, introducing the skills in the early years, building on them as the student advances through elementary school, and introducing new concepts of knowledge-seeking and analysis through middle school, high school, and postsecondary education. When this plan is followed, information professionals work with classroom teachers to design appropriate assignments, provide library instruction for classes along with one-on-one assistance to students. And here we begin to see further problems. As Gross and Latham (2012: 574) note, "many students come to college without proficient information literacy skills." And since the development of the Educational Testing Service's test to measure information and computer literacy skills in 2004, results continue to show low information literacy achievement (Foster 2006).

The importance of information literacy in an "information age" seems to need little defense. While previous generations relied on encyclopedias, local library collections, and print indexes, today's learners have no lack of resources. It is precisely this overwhelming collection of resources that would seem to make an understanding of all of the steps in the research process critical. "As reliance on information becomes more pronounced in our society and information easier to produce and disseminate on the Internet, it is increasingly important for students to know how to access, evaluate and use information effectively and ethically" (Asher and Duke 2010: 8).

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It is sometimes assumed that the increased access to information has essentially solved the problem of academic research. Students believe they have it all at their fingertips. But, it is important to remember that the intent as well as the quality of information available through general search engines differ from the resources available through libraries. A conversation recently with an information-astute student made this clear. The Internet may have started as an effort to bring scholars and their research together in a worldwide web, but that is certainly no longer its prime purpose. This student talked about the "personalization" of the Internet as a major barrier to his research. "As I am trying to locate a variety of perspectives on any given topic, Google and its algorithms are working even harder to give me what IT thinks I want" (Evan Matthews personal communication). Therefore, it is precisely because of this increased availability that knowledge of the research process becomes even more important. The learner's ability to not only find but evaluate and eventually apply information in an analytical way becomes paramount. "Thus far the 'Digital Divide' has been primarily expressed as a gap between those who have access to technology and those who do not….we must begin focusing public attention on a whole range of other digital disparity gaps, including:

effective use of information, the ability for an information user to be more than a passive consumer, and the availability of relevant, useful, appropriate, and affordable content" (Besser 2001: 1). The availability of one-to-one computing in the K–12 schools and 24/7 access to the Internet does not guarantee good research.

Furthermore, while the Internet may identify the existence of resources, many are only cited and not available full-text. Studies show that students tend to use only those sources immediately in full-text format and do not seek out others that are available through databases or library collections, whether or not these sources would be useful for their research (Asher and Duke 2010). Good research is the foundation of both learning and the ability to posit new ideas, concepts and solutions. Unfortunately, 21st century students are not necessarily wired to work through a process of research requiring both time and analysis. As Head and Eisenberg (2010: 4) point out, "unsurprisingly, what mattered most to students while they were working on course-related research assignments was passing the course (99 percent), finishing the assignment (97 percent) and getting a good grade (97 percent)." Moreover, they report, "students reported difficulties getting started with research assignments and determining the nature and scope of what was required of them" (Head and Eisenberg 2010: 1). Other barriers to the completion of the research process at both the secondary and undergraduate levels include increased class sizes and content scope at both levels. Also, it would appear that new teachers, particularly at the secondary level, are themselves members of the digital generation and lack the skills they should be teaching (Emmons et al. 2009).

POLICY IMPLICATIONS

In terms of policy, it would seem obvious to recommend that all teacher-preparation programs require at least one course in teaching the research process and that pre-service teachers have experience in preparing the kinds of assignments that will develop research skills in their students. Furthermore, if good research skills are paramount in an information age, we need to ensure that the teaching of those skills is required K–12 and require that students demonstrate a level of proficiency by the end of high school. Students who develop good skills early on will develop the good habits associated with those skills.

With reflection, we can see ways that improvements can be made. Included in the *Blueprint for Collaboration*, written by the AASL/ACRL Joint Task Force on the Educational Role of Libraries (2000), are recommendations that academic librarians and library school faculty collaborate with college of education faculty to improve information literacy instruction. This translates into possibilities such as working with pre-service teachers to improve skills finding evidence-based practice (Emmons et al. 2009); building upon existing high school/academic learning partnerships to include librarians to address information literacy skills (Burhanna and Jensen 2006); and having secondary and academic educators/librarians work together to ensure smooth transitions in curriculum between the two levels (Bruch and Frank 2011).

REFERENCES

American Association of School Librarians (AASL). 2007. Standards for the 21st-Century Learner. AASL, Chicago.

AASL/ACRL Task Force on the Educational Role of Libraries. 2000. Blueprint for Collaboration. www.ala.org/acrl/publications/whitepapers/acrlaaslblueprint [Accessed January 15, 2013]

Association for College and Research Libraries (ACRL). 2000. Information Literacy Competency Standards for Higher Education. ACRL, Chicago.

Asher, Andrew and Lynda Duke. 2010. Information Literacy and First Year Students: Evaluating Knowledge, Needs, and Instruction. Paper presented to the National Resource Center Annual Conference on the First-Year Experience, Feb. 16, 2010, Denver, CO. www.erialproject.org/wp-content/uploads/2010/03/FYE_Paper_Final.pdf [Accessed January 21, 2013]

Besser, Howard. 2001. "The Next Digital Divides." Teaching to Change LA 1(2). http://tcla.gseis.ucla.edu/divide/politics/besser.html [Accessed April 1, 2013]

Bruch, Courtney and Katherine Frank. 2011. "Sustainable Collaboration: Libraries Link Dual-credit Programs to P-20 Initiatives." Collaborative Librarianship 3(2): 90–97.

Burhanna, Kenneth and Mary Lee Jensen. 2006. "Collaborations for Success: High School to College." Reference Services Review 34(4): 509–519.

Emmons, Mark, Elizabeth Keefe, Veronica Moore, Rebecca Sanchez, Michele Mals and Teresa Neely. 2009. "Teaching Information Literacy Skills to Prepare Teachers Who Can Bridge the Research-to-Practice Gap." Reference & User Services Review 49(2): 140–150.

Foster, Andrea. 2006. "Students Fall Short on 'Information Literacy' Educational Testing Service's Study Finds." Chronicle of Higher Education 53(10): A36.

Gross, Melissa and Don Latham. 2012. "What's Skill Got to Do with It?: Information Literacy Skills and Self-Views of Ability among First-year College Students." Journal of the American Society for Information Science and Technology 63(3): 574–583.

Head, Alison and Michael Eisenberg. 2010. "Truth Be Told: How College Students Evaluate and Use Information in the Digital Age." Progress Information Literacy Progress Report. The Information School, University of Washington, Seattle.

Kolowich, Steve. 2011. "What Students Don't Know." Inside Higher Education (August 22). http://tinyurl.com/3wwfh7j [Accessed April 1, 2013]

Saunders, Laura. 2007. "Regional Accreditation Organizations' Treatment of Information Literacy: Definitions, Collaboration, and Assessment." Journal of Academic Librarianship 33(3): 317–326.

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