Teaching and Learning Alternatives
A Global Overview

Esther Grassian

Correspondence concerning this column should be addressed to Esther Grassian and Sarah LeMire; email: esthergrassian@gmail.com and slemire@umich.edu.

Your communities need your help more than ever, in so many ways—job, healthcare, and college and occupational study applications, workplace research and problem solving, research paper and homework help, and many other community-related issues, like accessing laws and regulations. How do you address these needs when there are so many people needing your help, at any time of the day or night, almost anywhere in the world, but also right in front of you at a physical reference desk? Face-to-face personal help is still invaluable, but reference work has expanded in many ways. It includes, but goes beyond, fact finding. Reference librarians help people learn how to learn so they can participate fully in their societies as informed and knowledgeable citizens. This column takes a look at how librarians and others around the world are identifying what people need to learn for this purpose, and how to help them learn it. This column and the sites listed at the end of it provide ideas and approaches that could be used or adapted to help the people in your communities achieve this goal. Note: I gratefully acknowledge Susan Gardner Archambault (Loyola Marymount University), Dr. Jane Secker (London School of Economics), and Sarah LeMire (Texas A& M University), co-editor of this column, for their very helpful comments and suggestions.—*Editor, Esther Grassian*

Do you offer online or in-person classes, workshops, or credit courses on topics such as how to use the Internet, how to find credible information, and how to document and present findings? Do you go beyond fact finding in reference interactions by working with users to empower them with information-seeking skills of their own? If you answered "yes" to any of these questions, you are going beyond providing facts and answers to queries by teaching and helping others learn how to learn.

Labels for these kinds of help have varied and evolved over time, dating back many decades. These labels include both basic and more complex terms, such as "library orientation," "library instruction," "library skills," "bibliographic instruction" (BI), "digital literacy," "information literacy" (IL), "media and information literacy" (MIL), "metaliteracy," "critical information literacy," "health information literacy," "workplace information literacy," and "lifelong learning." Regardless of their level of complexity, these labels represent starting points and similar goals.

What are these goals, and why should any of this matter to you? In the current technology-focused environment, helping people learn how to learn at any age or educational level is more important than ever. Information literacy

empowers people to make knowledgeable decisions for a lifetime, including personal and political decisions, and equips them to address educational needs. This includes instruction in public libraries, many of which have been focused more on efforts to address "information poverty" by offering access to information, and by helping people learn how to use technologies effectively, an essential prerequisite for informed participation in democratic societies.[1] IL/MIL, even when labeled with other terms such as those listed above, extends these essential skills by helping people learn how to pose critical thinking questions about information and the tools they use to find that information, including social media.[2] These questions include, What is the source of the information? What is its point of view and purpose? Is it designed to educate/inform, sell, or persuade? How accurate, up to date, and complete is the information? How does it compare to other sources on the same or similar topics?

This column outlines a selection of alternative teaching and learning approaches, concepts, and models related to information researching, developed in a number of countries and by national and international organizations. Some were designed for specific groups, such as schoolchildren, while others address teaching and learning for a lifetime. As a whole, they represent a welcome rise in consciousness worldwide of the value of an empowered citizenry who have learned how to learn, how to identify and locate useful information, how to manage and synthesize information, and how to communicate the results effectively and ethically with others.

How can this help you? Librarians, theoreticians, and researchers have developed a variety of frameworks for programs and individual efforts to help people learn how to learn.[3] In order to address societal change, including technological advancement, it is important for organizations and institutions to periodically review and revise their guidelines, and even the labels used to describe their efforts. Some of these updating exercises have been lengthy and contentious, such as ACRL's replacement of its "Information Literacy Competency Standards for Higher Education" with its "Framework for Information Literacy for Higher Education."[4]

It is not surprising that this process was contentious, especially given the lengthy history of the ACRL Standards and their highly significant and far-reaching impact on teaching, learning, and research worldwide. ACRL is currently developing support for the Framework in the form of teaching and learning materials, and research is likely to follow. A 2015 alignment chart is useful in illustrating that there are ways to examine, relabel, and reorganize what librarians are already doing to meet or enhance efforts related to the six concepts that compose the ACRL Framework.[5] At this point, it is too soon to say whether or not the Framework will have the immense worldwide impact that the ACRL Standards have had on programs and research, including doctoral studies. Currently, the ACRL Standards continue to serve an important purpose for those who require detailed and assessable national standards, similar to other national organizations' educational standards often used in accreditation, to support funding and staffing of instruction programs.[6] This is a highly compelling reason for reinstating them alongside the ACRL Framework, as both approaches offer great value in meeting differing needs.[7] However, it is also important for those interested in teaching and learning in libraries and information centers to be aware of and open to new developments, as well as historical efforts related to IL/MIL. Their support is crucial as we keep up with and anticipate continuous change worldwide, revising, adding to, and replacing even widely accepted documents, guidelines, and approaches.

With this in mind, we should be aware that many alternative IL/MIL models, conceptual approaches, frameworks, and standards have been developed for different educational and age levels. Some have been rescinded, suspended, or replaced to address evolving pedagogical, technological, and societal developments, as well as lack of needed funding. Nevertheless, they are listed here for their importance as models for current standards, as well as inspiration for future iterations. We should also keep in mind that much of the content of this column relates to approaches published originally in English, though some have been translated into other languages, indicating their worldwide impact. Exploration of these general examples may broaden our knowledge and reveal ways of thinking that may be new to many of us.

As you look over the brief descriptions below, keep in mind that each model may be best suited to a different context. Some may work well in certain circumstances and for certain audiences, such as undergraduate students. Others may be applied more generally to a wider audience, including those of all ages and educational levels served by public libraries. Public libraries "have been effective at helping people learn how to use new technologies," but a recent Pew study indicates "just 7% say they have taken a library class on how to use the Internet or computers."[8] In many cases, whichever approach seems most appealing may still require discussion and adaptation to your own environment. This may include developing, testing, and assessing the effectiveness of pilot programs.

To get this started, you may need to make a major effort to focus attention on "information illiteracy" in your community and the benefits of an informed citizenry who have learned how to learn. This kind of discussion can take time, but I would urge you to think of it as an opportunity to reach out to and collaborate with others in your community, your institution, and beyond. You can work together to answer questions like these:

- What does "library instruction" mean to you and your community, however you label it?
- What do members of your community already know about information researching?
- What do you expect the learners in your community to know and be able to do on their own related to information researching, and at which age and educational levels?

The answers you develop together will help guide you and your communities as you consider, adapt, or create definitions and guidelines for supportive instruction, and as you plan to assess its effectiveness.

ASSESSMENT

In competing for scarce dollars and attention, individuals, institutions, and organizations need to assess their teaching and learning efforts to provide data regarding their impact and value. Each of the approaches described below requires staffing and funding of one sort or another, and funders at all levels, including participants, governments, and in a number of cases, families who pay fees, want to know what they are getting for their funding—that is, Return On Investment (ROI). For this reason, research and reporting require detailed measurements of qualitative, as well as quantitative, impact.

On a practical level, how do you assess the value of these efforts, some of which may have long-term impact? Qualitative data (user satisfaction) has gained in importance worldwide. It can be cited in addition to quantitative data (for instance, numbers on student success and equity). User satisfaction assessment can be useful for affective assessment, that is, whether or not individuals liked the program, materials, and instructor, as well as what they think they have learned. Angelo and Cross wrote the book, literally, on classroom assessment techniques that do just that,[9] and Bowles-Terry and Kvenild published a recent book on this topic devoted to librarians.[10] But what have participants really learned? Other, more formal means of assessment can help you find out. Examples include pre- and post-tests based on pre-established learning objectives and outcomes, standardized IL tests, and authentic assessment of real-world projects or assignments. In fact, assessment based on predetermined learning outcomes can provide meaningful data regarding the value of instruction.

The models below offer a variety of broad areas to target in order to help people learn how to learn. It will be much easier to design and develop assessment of instruction if you begin by selecting some broad target areas, writing learning outcomes for each, and then developing teaching methodologies to help people achieve those learning outcomes. A number of books, articles, and websites provide more information about standardized assessment tools, and assessment in the context of planning ahead.[11]

EXAMPLES OF IL/MIL MODELS, STANDARDS, FRAMEWORKS, CONCEPTS

Below you will find descriptions of overall issues in three categories: Lifelong Learning, Schools/K–12, and Higher Education. Each category contains selected examples with brief information regarding each, focused on the basic concepts, approaches, and key words used to describe them. Many similar concepts and wording appear here, some utilizing the same or very similar language. For instance, you will see frequent use of the following words and phrases, or others closely related to them:

- Identify Need
- Plan
- Access
- Search and Locate
- Evaluate
- Reflect, Manage, and Synthesize
- Apply/Use Effectively and Ethically

Yet these examples offer different approaches, including qualitative as well as quantitative aspects of IL/MIL, developed independently or adapted from other models. Some examples focus on particular educational or age levels, while others cover IL for a lifetime (also called "lifelong learning"), which could apply to almost any type of library or information center. As you review them, consider their primary audiences and how you might want to use or adapt one or another or some combination of them for your own user populations. They may work best in one-on-one reference or in group instruction in the form of in-person or online classes, workshops, credit courses, usage guides for library resources, subject guides, and social media.

Lifelong Learning: Issues and Examples

All types of libraries participate to some degree and at some level in learning, including public libraries, special libraries, and archives, as well as academic and school libraries. Some of the examples in this category provide detailed goals and expected learning outcomes for entire populations of many different age and educational levels, and can provide helpful examples when used in part or as a whole. In some examples, the word "national" or the name of a country appears in the title. This indicates an awareness of the need to look beyond institutions and specific levels of education to support and encourage information literacy among entire populations. Major challenges here include raising consciousness about the need for an information literate populace and seeking funding, and collaboration to help achieve that worthy goal.

CILIP (Chartered Institute of Libraries and Information Professionals), 2011, United Kingdom[12]
(Under review as of 2016, for possible revision.)

The UK professional organization for librarians lists "eight competencies / understandings that a person requires to be information literate.

- a need for information
- the resources available
- how to find information
- need to evaluate results
- how to work with or exploit results

- ethics and responsibility of use
- how to communicate or share your finding
- how to manage your findings."[13]

Information Literacy Framework for Wales, 2009[14]

Based on SCONUL 7 Pillars of Information Literacy—Welsh Information Literacy Project (initiated in 2009) Lifelong learning curriculum for ages 3–19 and beyond, including the workplace, with details available on their website:

- Plan
- Develop
- Reflect
- Oracy
- Reading
- Writing
- ICT Skills Framework [including Finding and developing information and ideas, and Creating and presenting information and ideas]
- Interpret and present findings

International Federation of Library Associations and Institutions (IFLA), "Guidelines on Information Literacy for Lifelong Learning," 2015[15]

"The IFLA standards are grouped under the three basic IL components.

a. ACCESS. The user accesses information effectively and efficiently
b. EVALUATION. The user evaluates information critically and competently
c. USE. The user applies/uses information accurately and creatively"

National Information Literacy Framework Scotland[16]
(Suspended as of 2013 due to lack of funding.)

Includes sequential information literacy levels for ages 8–12, Secondary Schools/Further Education Colleges, Further/Higher Education, Higher Education, Lifelong Learning, including Community and Workplace Learning.

Information Literacy "involves several skills and competences. These are an understanding of:

- a need for information
- the resources available
- how to find information
- the need to evaluate results
- how to work with or exploit results
- ethics and responsibility of use
- how to communicate or share your findings
- how to manage your findings

Attainment levels range from:

- learning and using individual information skills with assistance to
- using some information skills to perform a simple information task with assistance if required to
- efficiently and effectively undertaking a significant piece of research.

These levels are a graduation / progression in the development of Information Literacy skills from early learner/novice to expert."[17]

UNESCO Information for All Programme (IFAP), 2000[18]

"IFAP exists to be an advocate for all people on the wrong side of the information divide, whether they be in developed or developing countries. Of special concern are the needs of women, youth and the elderly, as well as persons with disabilities."

IFAP priorities include "Information Ethics" and "Information Accessibility," as well as "Information Literacy," with the latter defined as follows: "Information Literacy empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goal."

Schools/K-12: Issues and Examples

Tackling information literacy for an entire population can seem daunting, especially in large geographic regions. Starting at the kindergarten through high school (twelfth grade) level can have an enormous impact, given the fact that in many areas of the world, the lower the educational level, the greater the numbers of students and schools. Challenges in this arena include educating school administrators regarding the value of information literacy instruction, as well as educating teachers on how to help their students become information literate.

American Association of School Librarians (AASL), "Standards for the 21st-Century Learner," 2007[19]
(Learning Standards and Program Guidelines under review and revision as of 2016, but 2007 version will remain available on the site.)

1. Inquire, think critically, and gain knowledge
2. Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge
3. Share knowledge and participate ethically and productively as members of our democratic society
4. Pursue personal and aesthetic growth.

Big6: An Information Problem-solving Process, 1990, United States[20]

Primarily utilized in schools, described as "a process model of how people of all ages solve an information problem. . . . It encompasses six stages with two sub-stages under each:

1. Task Definition
2. Information Seeking Strategies
3. Location and Access

4. Use of Information
5. Synthesis
6. Evaluation"

iLearn, 2011, United States[21]

A combined information science and instructional design model with six iterative stages, designed for school library media specialists, and others, including higher education, with a focus on learning as the purpose behind information seeking.

> "**I**dentify a problem or question that can be addressed through information.
> **L**ocate information that can be used to address the problem or question at hand.
> **E**valuate the information.
> **A**pply the selected information to the learning task.
> **R**eflect on both the product and the process of the preceding stages.
> k**N**ow what has been learned so that it resolves the problem or question and so that it can be used to spur future knowledge generation."[22]

Higher Education: Issues and Examples

Academic libraries support research, teaching and learning among their potentially captive audiences of students, staff, and faculty. Some of the examples below state that they apply to specific sub-categories, such as undergraduates. However, many are generic enough to be applied to other higher education populations, such as graduate students. A major challenge here is sequential information literacy instruction—building on what may have come before (K–12 information literacy instruction), and supporting what comes after graduation at all educational and age levels. One example (ANCIL) mentions the school-to-higher-education transition, while another (SCONUL) offers expected learning outcomes for graduate employability.

American Association of Colleges and Universities (AACU), "Information Literacy VALUE (Valid Assessment of Learning in Undergraduate Education) Rubric," 2009, United States[23]

Offers sixteen VALUE rubrics, including an "Information Literacy" rubric with the following concepts:

- Determine the Extent of Information Needed
- Access the Needed Information
- Evaluate Information and Its Sources Critically
- Use Information Effectively to Accomplish a Specific Purpose
- Access and Use Information Ethically and Legally

A New Curriculum for Information Literacy (ANCIL), 2011, United Kingdom[24]

A model aligned with UNESCO's, with "three key attributes:

- Transitional
- Transferable
- Transformational

In terms of the content, the curriculum is divided into ten strands:

1. Transition from school to higher education
2. Becoming an independent learner
3. Developing academic literacies
4. Mapping and evaluating the information landscape
5. Resource discovery in your discipline
6. Managing information
7. Ethical dimension of information
8. Presenting and communicating knowledge
9. Synthesising information and creating new knowledge
10. Social dimension of information literacy"[25]

Association of College and Research Libraries (ACRL), "Framework for Information Literacy for Higher Education," United States[26]

This model, published in 2016, replaces the ACRL Information Literacy Competency Standards (2000) and offers the following six "threshold" concepts, published in alphabetical order, with much more detail available on each:

- Authority Is Constructed and Contextual
- Information Creation as a Process
- Information Has Value
- Research as Inquiry
- Scholarship as Conversation
- Searching as Strategic Exploration

Association of College and Research Libraries (ACRL), "Information Literacy Competency Standards for Higher Education," United States[27]

(Published in 2000, rescinded in 2016, and replaced by the "Framework for Information Literacy for Higher Education.")

The five Standards listed below all begin with "The information literate student . . . ," with much more detail available on each:

1. . . . determines the nature and extent of the information needed.
2. . . . accesses needed information effectively and efficiently.
3. . . . evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.
4. . . . individually or as a member of a group, uses information effectively to accomplish a specific purpose.
5. . . . understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

"Australia and New Zealand Information Literacy (ANZIL) Framework: Principles, Standards and Practice," 2001 (2d ed. 2004)[28]

The six Standards listed below are based on the ACRL Information Literacy Competency Standards (2000). All begin with "The information literate person . . . ," with much more detail available on each.

1. . . . recognises the need for information and determines the nature and extent of the information needed
2. . . . finds needed information effectively and efficiently
3. . . . critically evaluates information and the information seeking process
4. . . . manages information collected or generated
5. . . . applies prior and new information to construct new concepts or create new understandings
6. . . . uses information with understanding and acknowledges cultural, ethical, economic, legal, and social issues surrounding the use of information"

Society of College, National, and University Libraries (SCONUL), "7 Pillars of Information Literacy: Core Model for Higher Education," 1999 (rev. 2011), United Kingdom[29]

"SCONUL represents all university libraries in the UK and Ireland, irrespective of mission group, as well as national libraries and many of the UK's colleges of higher education." Also utilized as a basis for the 2009 Information Literacy Framework for Wales.

1. Identify
2. Scope
3. Plan
4. Gather
5. Evaluate
6. Manage
7. Present

In addition to the core model, SCONUL has created the following:

- Research lens
- Digital Literacy lens
- Open Educational Resources lens
- Evidence-based practice healthcare lens
- Graduate Employability lens

CONCLUSION

This column offers a big-picture view of IL/MIL models and standards developed and utilized worldwide, along with issues and challenges, through a selection of models and approaches developed in a number of countries. Each may be adopted or adapted for different environments, educational, and age levels, for one-on-one or group programs. Pilot projects can be a useful means for developing learning outcomes, and then testing and assessing various methods for helping people achieve those learning outcomes. Many academic and school librarians are experienced in teaching and learning, and could serve as mentors or advisors in this effort for those seeking to develop pilot programs. Many are already generously sharing their useful materials, tools, and teaching techniques through listservs, repositories, and online communities.[30] Considering these options, lesson plans, and a multitude of sample materials, as well as the models and standards described above and elsewhere, much more extensively,[31] opens the mind to the variety of approaches we can take in helping people learn how to learn. All of this becomes increasingly important as we grapple with inevitable change worldwide. This offers opportunities for creative thinking and the application of technological tools to support pedagogy, which, in turn, will empower us to participate in our societies knowledgeably and with respect for all.

References

1. Anthony McKeown, *Overcoming Information Poverty: Investigating the Role of Public Libraries in the Twenty-First Century* (Cambridge, MA: Chandos, 2016), http://www.sciencedirect.com/science/book/9780081011102.
2. James K. Elmborg, "Teaching at the Desk: Toward a Reference Pedagogy," *portal: Libraries and the Academy* 2, no. 3 (July 2002), http://muse.jhu.edu/article/27238; Claire McGuinness, "Bursting the Filter Bubble: Pro-Truth Librarians in a Post-Truth World," *libfocus* (blog), November 25, 2016, http://www.libfocus.com/2016/11/bursting-filter-bubble-pro-truth.html?m=1; Stéphane Goldstein, "The EU Referendum Campaign: A Case of Fateful Information Illiteracy?," *Information Literacy* (blog), CILIP Information Literacy Group, June 17, 2016, http://www.informationliteracy.org.uk/2016/06/the-eu-referendum-campaign-a-case-of-fateful-information-illiteracy/; Geoff Walton, Stéphane Goldstein, and Emma Coonan, "'Post-Truth'—A New Disruptive Phenomenon?," *Information Literacy* (blog), CILIP Information Literacy Group, December 6, 2016, http://www.informationliteracy.org.uk/2016/12/post-truth-a-new-disruptive-phenomenon/; Ann Grandmaison and Susan Leonardi, "Fake News vs. Real News: How to Determine the Reliability of Sources," Northern Essex Community College, accessed December 11, 2016, http://necc.mass.libguides.com/fakenewsvsrealnews/; Esther Grassian, "Thinking Critically about World Wide Web Resources," *Teach Information Literacy & Critical Thinking!*, accessed December 11, 2016, https://sites.google.com/site/teachinfolit/find-evaluate-web-sites-blogs-wikis-more/thinking-critically-about-world-wide-web-resources.
3. Cerise Oberman and Katina Strauch, eds., *Theories of Bibliographic Education: Designs for Teaching* (New York: Bowker, 1982); Mary Reichel and Mary Ann Ramey, eds., *Conceptual Frameworks for Bibliographic Education: Theory into Practice*, (Littleton, CO: Libraries Unlimited, 1987); Deborah Fink, *Process and Politics in Library Research: A Model for Course Design*,(Chicago: ALA, 1989); Christine Susan Bruce, *The Seven Faces of Information Literacy* (Adelaide, Australia: AusLib, 1997); Sirje Virkus, "Information Literacy in Europe: A Literature Review," *Information Research* 8, no. 4 (July 2003), http://www.informationr.net/ir/8-4/paper159.html; Eamon Tewell, "A Decade of Critical Information Literacy: A Review of the Literature," *Communications in Information Literacy* 9, no. 1 (2015), http://www.com

minfolit.org/index.php?journal=cil&page=article&op=view&path%5B%5D=v9i1p24.
4. Association of College and Research Libraries, "Information Literacy Competency Standards for Higher Education," approved by ACRL Board of Directors in 2000 and rescinded in 2016, http://www.ala.org/acrl/standards/informationliteracycompetency; Association of College and Research Libraries, "Framework for Information Literacy for Higher Education," adopted by the ACRL Board January 2016, http://www.ala.org/acrl/standards/ilframework.
5. Amanda Hovius, "ACRL Standards: Aligning the Current with the Proposed," *Designer Librarian* (blog), January 21, 2015, https://designerlibrarian.wordpress.com/2015/01/21/acrl-standards-aligning-the-current-with-the-proposed/.
6. American Psychological Association, "APA Guidelines for the Undergraduate Psychology Major," August 2013, http://www.apa.org/ed/precollege/about/psymajor-guidelines.pdf; National Association of Schools of Art and Design, "NASAD Competencies Summary: Degree: The BFA in Film/Video Production, a professional undergraduate degree," accessed January 24, 2017, https://nasad.arts-accredit.org/wp-content/uploads/sites/3/2015/11/BFA-FilmVideoProduction.pdf; US Department of Education, Office of Postsecondary Education, "The Database of Accredited Postsecondary Institutions and Programs," accessed January 24, 2017, https://ope.ed.gov/accreditation/.
7. Christine Bombaro, Pamela Harris, and Keri Odess-Harnish, "A Constellation to Guide Us: Interview with Lisa Hinchliffe," *Reference Services Review* 44, no. 4 (2016): 544–51, https://doi.org/10.1108/rsr-06-2016-0041; Lana W. Jackman and Sharon A. Weiner, "The Rescinding of the ACRL 2000 Information Literacy Competency Standards for Higher Education—Really??," *College & Undergraduate Libraries* 24, no. 1 (October 2017): 117–19, https://doi.org/10.1080/10691316.2016.1217811; Heather Craven, "ACRL and Community College Libraries: We've Been Framed!," *Community & Junior College Libraries* 22, no. 1–2 (December 2016), 3–5, https://doi.org/10.1080/02763915.201.1259933.
8. John B. Horrigan, "Libraries at the Crossroads," Pew Research Center, September 15, 2015, http://www.pewinternet.org/2015/09/15/libraries-at-the-crossroads/.
9. Thomas A. Angelo and K. Patricia Cross, *Classroom Assessment Techniques*, 2d ed. (San Francisco: Jossey-Bass, 1993).
10. Melissa Bowles-Terry and Cassandra Kvenild, *Classroom Assessment Techniques for Librarians* (Chicago: ACRL, 2015).
11. Loyola Marymount University Library, "CORA (Community of Online Research Assignments): Teaching Resources," accessed December 7, 2016, http://www.projectcora.org/resources?field_discipline_term_target_id=All&field_resource_type_term_tid=15974&keys=; University of Alberta Libraries, "ILAAP: Information Literacy Assessment & Advocacy Project," accessed December 7, 2016, http://ilaap.ca/; Megan Oakleaf, "Information Literacy Instruction Assessment Cycle," *Journal of Documentation* 65, no. 4 (2009): 539–60, https://doi.org/10.1108/00220410910970249; Megan Oakleaf, "A Roadmap for Assessing Student Learning Using the New Framework for Information Literacy for Higher Education," *Journal of Academic Librarianship* 40, no. 5 (September 2014): 510–14, https://doi.org/10.1016/j.acalib.2014.08.001; Esther Grassian and Joan Kaplowitz, *Information Literacy Instruction: Theory and Practice*, 2d ed. (New York: Neal-Schuman, 2009), 111–27.
12. CILIP (Chartered Institute of Libraries and Information Professionals), "Information Literacy," accessed December 8, 2016, http://www.cilip.org.uk/cilip/information-literacy.
13. CILIP (Chartered Institute of Libraries and Information Professionals), "Information Literacy Definition," accessed December 8, 2016, http://www.cilip.org.uk/cilip/advocacy-campaigns-awards/advocacy-campaigns/information-literacy/information-literacy.
14. Welsh Libraries, "Project: Welsh Information Literacy Project," accessed December 8, 2016, https://libraries.wales/project; Welsh Libraries, "Information Literacy Framework for Wales: Finding and Using Information in 21st Century Wales," 2011, https://libraries.wales/wp-content/uploads/2016/06/Information_Literacy_Framework_Wales.pdf.
15. Jesús Lau, "Guidelines on Information Literacy for Lifelong Learning: Final Draft," International Federation of Library Associations and Institutions (IFLA), July 17, 2015, http://www.ifla.org/publications/guidelines-on-information-literacy-for-lifelong-learning.
16. "National Information Literacy Framework Scotland," The Right Information, accessed December 8, 2016, http://www.therightinformation.org/framework-home/; Christine Irving, "National Information Literacy Framework (Scotland): Pioneering Work to Influence Policy Making or Tinkering at the Edges?" *Library Trends* 60, no. 2 (Fall 2011): 419–40, https://doi.org/10.1353/lib.2011.0036.
17. Christine Irving and John Crawford, "A National Information Literacy Framework Scotland: Skills for Everyone," June 18, 2008, 7, http://www.therightinformation.org/storage/documents/DRAFT-INFORMATIONLITERACYFRAMEWORK1h.pdf.
18. "Information for All Programme (IFAP)," UNESCO, accessed January 14, 2017, http://www.unesco.org/new/en/communication-and-information/intergovernmental-programmes/information-for-all-programme-ifap/about-ifap/history/.
19. "Standards for the 21st-Century Learner," American Association of School Librarians (AASL), 2007, http://www.ala.org/aasl/standards/learning.
20. "Big6 Skills Overview," The Big6: Information & Technology Skills for Student Success, accessed December 8, 2016, http://big6.com/pages/about/big6-skills-overview.php.
21. Delia Neuman, "Constructing Knowledge in the Twenty-First Century: I-LEARN and Using Information as a Tool for Learning," *School Library Research* 14 (2011), http://www.ala.org/aasl/sites/ala.org.aasl/files/content/aaslpubsandjournals/slr/vol14/SLR_ConstructingKnowledge_V14.pdf.
22. Ibid., 2.
23. "Information Literacy VALUE (Valid Assessment of Learning in Undergraduate Education) Rubric," American Association of Colleges and Universities (AACU), accessed December 8, 2016, https://www.aacu.org/sites/default/files/files/VALUE/InformationLiteracy.pdf.
24. Jane Secker, "A New Curriculum for Information Literacy," ANCIL, May–July 2011, https://newcurriculum.wordpress.com/project-reports-and-outputs/.
25. Jane Secker, "Executive Summary," ANCIL, July 2011, https://www.repository.cam.ac.uk/bitstream/handle/1810/244639/Executive_summary.pdf?sequence=1&isAllowed=y.
26. "Framework for Information Literacy for Higher Education," ACRL, accessed May 23, 2017, http://www.ala.org/acrl/standards/ilframework.
27. "Information Literacy Competency Standards for Higher Education," ACRL, accessed May 23, 2017, http://www.ala.org/acrl/standards/informationliteracycompetency.
28. Alan Bundy, ed., "Australia and New Zealand Information Literacy (ANZIL) Framework: Principles, Standards and Practice," ANZIL, 2004, http://archive.caul.edu.au/info-literacy/InfoLiteracyFramework.pdf.
29. Society of College, National, and University Libraries (SCONUL), "7 Pillars of Information Literacy: Core Model for Higher Education," April 2011, http://www.sconul.ac.uk/sites/default/files/documents/coremodel.pdf.
30. "CORA (Community of Online Research Assignments): Teaching Resources," Loyola Marymount University Library, accessed May 25, 2017, http://www.projectcora.org/resources; "MERLOT II (Multimedia Educational Resource for Learning and Online

Teaching)," California State University System, accessed December 8, 2016, https://www.merlot.org/merlot/index.htm; S.O.S. for Information Literacy homepage, accessed December 8, 2016, http://www.informationliteracy.org/; "ILI-L Discussion List," ACRL, accessed January 24, 2017, http://lists.ala.org/sympa/info/ili-l; "InfoLit-L Discussion List," AASL, accessed December 8, 2016, http://www.ala.org/aasl/about/community/lists/infolit; "Digital Literacy," Public Library Association, accessed December 8, 2016, http://www.ala.org/pla/initiatives/digitalliteracy.

31. ACRL, Student Learning and Information Literacy Committee (SLILC), "Global Perspectives on Information Literacy: Fostering a Dialogue for International Understanding," 2017, http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/GlobalPerspectives_InfoLit.pdf.