

QEP- Information literacy Literature Review, Notes, and Conclusions

What is Information Literacy?

Definitions for information literacy date back to 1914 and have evolved over the decades; but, all definitions contain some common elements. Each definition mentions possession of an integrated set of skills, knowledge of resources from which to retrieve information and the ability to analyze and use information (Association of College and Research Libraries, 2000; Burkhardt, MacDonald & Rathemacher, 2005; Gibson, 2008; Rockman, 2004). Currently, the Association of College and Research Libraries (ACRL) (2000) defines information literacy as the ability to “recognize when information is needed and ... locate evaluate and use effectively the needed information.” Grassian & Kaplowitz (2001) encourage the addition of the individual in contemporary definitions; they advocate for the inclusion of dispositions like persistence, attention to detail and caution in accepting information. However, according to all definitions whether academic or personal, information literacy includes the skills, dispositions, and abilities necessary to be a productive individual in a “technologically sophisticated global society” (Rockman, 2004, p. 25).

Why is Information Literacy important for FGCU Students?

The 21st century has been proclaimed the Information Age characterized by a constant barrage of information from a plethora of sources. This explosion of information makes it nearly impossible for students to learn everything needed for a lifetime of success during one’s years of formal schooling. Therefore, teaching students to be information seekers and managers is a practical twenty-first century educational goal and necessary personal disposition. The ability to find, analyze, and use information is essential in a democratic society and global culture as information literacy skills equip one for a lifetime of independent learning and personal empowerment. The findings in Education Testing Service’s 2006 Information and Computer Technology Literacy Assessment indicate most of the 6,300 high school and college students tested did not demonstrate basic information literacy skills. The results of this and other national assessments challenge universities to create opportunities for their students to learn, reinforce and use information literacy skills.

Information literacy skills are often talked about in proximity to discussions of lifelong learning and the ability to perform well in the modern workplace. ACRL (2000) explains that, “Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning.” Information Literacy was recognized at a national level in 2009 when President Obama proclaimed October National Information Literacy Awareness month, saying, “An informed and educated citizenry is essential to the functioning of our modern democratic society, and I encourage educational and community institutions across the country to help Americans find and evaluate the information they seek, in all its forms.”

Theoretical Framework and Best Practices

There are many learning theories which attempt to explain how people learn and no single theory or theorist can be singled out as having the complete answer to this question. However, the all-inclusive learning theory of constructivism describes the process of creating meaning from a variety of sources and experiences which is integral to information literacy pedagogy. Constructivism embraces elements from a number of learning theorist from Dewey (1916), Vygotsky (1938) to Pau

and Elder (2006). The Boyer Commission Report (2008), *Reinventing Undergraduate Education*, recommends learning strategies that require students to “engage across curricula in actively framing significant questions, to research or creatively explore to find answers, and to hone the communications skills necessary to convey the results” (p.). As the foundation for life-long learning and personal empowerment, information literacy pedagogy is deeply supported by the constructivist learning theory and its conceptual framework that knowledge is actively constructed out of the learner’s experiences in the world. Constructivism also embraces the role of affect in its principles as learners are more likely to become cognitively engaged when they are researching something which has personal meaning. This tenant of constructivism supports the inclusion of the individual in contemporary definitions of information literacy embraced by Grassian & Kaplowitz (2001). The ACRL Information Literacy Standards for Higher Education integrate self-directed learning, active engagement on the part of the learner and the construction of new knowledge from a variety of resources and experiences into each of its five standards. The ACRL Standards for information literacy are widely accepted and used in institutions of higher learning throughout the United States as the basis for information literacy instruction and evaluation.

Linking theory and practice enables educators to improve curricular content and develop new and effective instructional approaches. The Boyer Commission Report (2008) challenges universities to structure courses to create student-centered learning environments based on inquiry where problem solving becomes the focus and where information literacy competencies are required for success. The Boyer Commission (2008), ACRL (2008), Grassian & Kaplowitz (2001) advocate for an integrated curriculum where information literacy strategies are taught and standards are woven into “curricular content, structure and sequence.” This integrative approach offers multiple possibilities for students to use critical thinking skills, to become skilled users of information sources and increases personal responsibility for learning. An integrated approach provides multiple and consistent opportunities for students to seek, evaluate and manage information gathered from multiple sources and to practice discipline-specific research methods.

ACRL has written best practices for information literacy programs (ALA/ACRL’s *Characteristics of Programs of Information Literacy that Illustrate Best Practices: A Guideline* (<http://www.ala.org/acrl/standards/characteristics>), 2012) that include recommendations that information literacy be fully articulated within the curriculum, building from entry level skills up through more complex concepts through a student’s career, while being embedded in regular coursework within each academic program, discipline and course. These best practices also recommend that assessment of student learning be carried out in multiple ways, including pre/post tests, portfolio assessments, quizzes, and observation.

The Middle States Commission on Higher Education, the accrediting body similar to SACS for the mid-Atlantic states region, has put in definitions and expectations for information literacy competency into their accreditation standards document (*Characteristics of Excellence in Higher Education: Eligibility Requirements and Standards for Accreditation*, 2011), saying that “information literacy is an essential component of any education program at the graduate or undergraduate levels.” Middle States has also published extensive guidelines specifically for integrating information literacy in the curriculum (*Developing Research & Communication Skills: Guidelines for Information Literacy in the Curriculum*, 2003) that encourages member institutions to incorporate information literacy instruction into their existing courses using an “Integrated or Distributed” model, as opposed to a “Separate or Compartmentalized” curriculum model, meaning that information literacy education should be “blended seamlessly into upper-level courses” instead of being put solely in a general education program that would not offer an opportunity to let students develop higher-order info lit skills. Many faculty already teach concepts of info lit in their courses, even if they don’t label them as such, so it makes sense to build upon the structures that are already in place. Examination of the curriculum should be done to see where instruction happens already and whether additional

instructional content is necessary. Middle States also acknowledges the need for professional development and training for faculty to get them prepared with the right tools and information to teach and assess information literacy.

Notes from Jarson, J. (2010). Information Literacy and Higher Education: A Toolkit for Curricular Integration. *College & Research Libraries News*, 71(10), 534-528.

- Highlights different delivery methods of instruction: comprehensive information literacy plans, course-integrated library instruction, discipline specific information literacy, embedded librarianship, and first-year experience programs
- College of DuPage's Information Literacy Across the Curriculum (ILAC) program cites these as characteristics of a successful ILAC program: Linked to the goals and educational philosophy of the College; receives library and college administrative support and financing, engages discipline and library faculty in a common goal of information literate students, relies on a set of information literacy standards to establish curriculum and assess learning, like the Association of College and Research Libraries Information Literacy Competency Standards for Higher Education (2000), consists of a sequential progression of learning opportunities that are linked to the core curriculum across academic programs or disciplines, assesses learning at all levels: pre- and post at the institutional, program/discipline, and course levels, enjoys a sustained infrastructure of staffing and technical support.
- Carleton College got a grant to integrate IL into the curriculum. Their reports are helpful to see how faculty in the disciplines can create their own rubrics, learning outcomes, and assignments to teach IL
<http://apps.carleton.edu/campus/library/about/infolit/projects/mellon/mellonoverview/>

Assessment Options and Models

Notes on: Oakleaf, Megan. (2008). "Dangers and Opportunities: A Conceptual Map of Information Literacy Assessment Approaches," *portal: Libraries and the Academy* , 8(3), pp. 233-253.

- Fixed-choice tests are easy because they gather lots of data quickly, compare students, compare pretests to posttests, can be made highly reliable, cheap and easy to administer and score, widely accepted. Limitations are that they measure recognition rather than recall, do not measure higher-order skills, do not measure behavior or performance, do not facilitate learning
- Performance assessments, such as citation/bibliography analysis, portfolio assessment, and iSkills test, capture higher order thinking, align with learning goals, integrate learning and assessment, facilitate transfer of knowledge, and supply valid data. They can also be costly to create, administer and score and have limited generalizability.
- Rubrics (like the AACU VALUE rubrics) articulate and communicate learning goals, focus on higher-order thinking and skills, make scores and grades meaningful, provide direct feedback to students, facilitate consistent scores, deliver data that is easy to understand, defend, and convey, can be used over time across multiple programs. They can be difficult to construct well and require time for development and training.

Standardized Tests for Information Literacy

"Standardized Assessment of Information Literacy Skills (SAILS)." Carrick Enterprises, Inc.
<https://www.projectsails.org/>

“iSkills” assessment from ETS <http://www.ets.org/iskills/about>

This is a performance assessment, which would provide more authentic results than a fixed-choice test like SAILS, but is more expensive.

ILT from James Madison University

<http://www.madisonassessment.com/assessment-testing/information-literacy-test/>

This one has been discussed in Gen Ed Council, and is rumored to be more affordable than the others.

Rubrics for Information Literacy Assessment

“Information Literacy VALUE Rubric.” Association of American Colleges & Universities.

<http://www.aacu.org/value/rubrics/pdf/InformationLiteracy.pdf>

Rubric Assessment of Information Literacy Skills (RAILS)

<http://railsontrack.info/>

“helps librarians assess student information literacy skills exhibited in “artifacts of student learning” like research papers, presentations, worksheets, portfolios, or reflective journals. Using the AAC&U VALUE rubrics and the Information Literacy Competency Standards for Higher Education as starting points, RAILS assists librarians who seek to create campus-specific rubrics, “norm” them for use with multiple rates, and gather results data that inform instructional improvements.”

Conclusions

Based on the literature, we think that an integrated model of teaching and assessing information literacy throughout the curriculum and within student’s regular coursework will be the most successful and effective for FGCU students. Contextualizing information literacy skills and concepts within a student’s major field of study or chosen coursework will add meaning and value to those skills and also give students an opportunity to use and apply information literacy skills in ways that are authentic. Our vision of an integrated information literacy program includes

- Information literacy competencies based on the ACRL Information Literacy Competency Standards for Higher Education with tiered expectations for freshman, sophomore and junior/senior levels
- Introduction and practice of IL concepts and skills through librarian-led sessions, classroom lecture and activities, online modules, and research and writing assignments, most often as part of regular coursework
- Assessment of IL competency through varied means including authentic performance assessments of research papers or portfolios using rubrics and standardized tests.
- Shared responsibility of IL teaching and assessment between library faculty and faculty members outside of the library.

Sources

Burkhardt, J. M., MacDonald, M. C., & Rathemacher, A. J. (2003). *Teaching information literacy: 35 practical, standards-based exercises for college students*. Chicago: American Library Association.

Cox, C. N., & Lindsay, E. B. (2008). *Information literacy instruction handbook*. Chicago: Association of College and Research Libraries.

Grassian, E. S., & Kaplowitz, J. R. (2001). *Information literacy instruction: Theory and practice*. New York: Neal-Schuman.

Jarson, J. (2010). Information Literacy and Higher Education: A Toolkit for Curricular Integration. *College & Research Libraries News*, 71(10), 534-528.

Oakleaf, M. (2008). "Dangers and Opportunities: A Conceptual Map of Information Literacy Assessment Approaches," *portal: Libraries and the Academy*, 8(3), 233-253.

Rockman, I. F. (2004). *Integrating information literacy into the higher education curriculum: Practical models for transformation*. San Francisco: Jossey-Bass.