

## Information Literacy

### Rutgers University Libraries

The mission and vision of the Rutgers University Libraries information literacy program are embedded in the Libraries overall mission and vision statements:

**Mission.** The Rutgers University Libraries support and enrich the instructional, research, and public service missions of the University through the stewardship of scholarly information and the delivery of information services.

**Vision.** The Libraries aspire to provide outstanding information resources and services that advance research and learning, support the University's goal to be among the top public AAU institutions in the country, and serve as an essential information resource for the state and beyond.

Furthermore, a key objective in the Libraries *Strategic Plan, 2005-2011*, which was developed after broad consultation with the Rutgers community, is to “Address information competency standards for students through information literacy materials, services, and programs in partnership with the teaching faculty.” This objective supports the strategic goal to “Improve the quality of scholarly resources and information services that support the advancement of academic excellence at Rutgers.”

The Libraries ascribe to the information literacy competency standards<sup>1</sup> developed by the Association of College and Research Libraries, the premier division of the American Library Association for libraries serving higher education. The standards are supported by a number of higher education organizations, including the Middle States Commission on Higher Education. The five standards are:

1. The information literate student determines the nature and extent of the information needed.
2. The information literate student accesses needed information effectively and efficiently.
3. The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.
4. The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.

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1 “Standards, Performance Indicators, and Outcomes.” *In Information Literacy Competency Standards for Higher Education*, (ALA, 2000). Pp.8-14.  
<http://www.ala.org/ala/acrl/acrlstandards/standards.pdf>. Viewed August 22, 2007.

5. The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

Librarians work with teaching faculty to provide customized face-to-face synchronous library research instruction, to help integrate information literacy into a course or curriculum, or to develop online tutorials or other materials tailored to a class or curriculum. A special emphasis has been on integrating information literacy skills through library research instruction sessions into courses that require research and writing.

Information literacy assessment activities in the Libraries include the quiz and survey available within Searchpath, test implementation of Project SAILS, participation in planning a test instrument with the Educational Testing Service, and a number of assessments conducted by individual librarians. Information literacy needs have also been touched upon in a number of general library assessment activities.

Assessment using many of the concepts in the ACRL standards includes reports and survey responses from Searchpath, an interactive online tutorial about finding and using worthwhile information sources in libraries and on the web. Each module of Searchpath includes a test of skills learned that allows results to be mailed to a student's instructor. Reports and survey functions aggregate data for analyses for tutorial improvement and for informing instruction planning discussions with teaching faculty.

A survey of library faculty that sought to understand how they set learning outcomes for their instructional activities, assess effectiveness, and make changes showed that many learning goals are oriented to practical skills. Included are searching the online catalog, navigating the Libraries' website, selecting and using a database, understanding the literature of a field, and evaluating information sources. Most library research classes are conducted during one class session, so the higher order of information literacy outcomes needs to be incorporated into the curriculum elsewhere. Library faculty also indicated that they contributed toward development or grading/review of measures for courses for which they teach through student papers more frequently (63.0%) than any other measure. In the same survey, librarians were asked to indicate the importance of various factors in making changes in class content. The most important factor is recommendation of a teaching faculty member (85.2%).

Because library services and scholarly information resources are developed in support of the academic and research programs of the university, the Rutgers University Libraries have a long history of asking students, faculty, and administrators from all disciplines and campuses what they need to be successful. The Libraries current five-year strategic plan, for example, responds to survey data and other information gathered from Rutgers students, faculty, staff, and administrators through a year-long planning process that included the LibQual+™ survey, a communications audit, numerous focus group discussions, and departmental surveys.

LibQUAL+™ also serves as one of the methods for measuring academic excellence on a balanced scorecard that the Libraries are working to develop. LibQUAL+™ measures user perception of service quality in three areas: customer service, information provided and its accessibility, and library as place. The Libraries have learned from LibQUAL+™ that the Rutgers community has the 6<sup>th</sup> highest desired and the single highest minimum expectations of service quality when compared with the 32 members of the Association of Research Libraries that also participated in the spring 2005 survey. Overall, Rutgers users' perceptions of customer service and library as place were higher than the minimum service quality level that they find acceptable, but their perception of the information provided and its accessibility was below the minimum. This low measure was especially true for faculty and graduate students, who indicated strong needs for more collections, both print and electronic, that are more easily accessible. Graduate and undergraduate students indicated some concerns for library as place. The LibQUAL+™ executive summary and full report are available at <http://www.libraries.rutgers.edu/rul/about/libqual.shtml>.

In response, the Libraries have continued to develop their resource sharing partnerships and processes, renegotiated resource licenses, coordinated collections university wide to avoid duplication, developed web-based document delivery among the Rutgers libraries, adopted a more intuitive method of remote access to electronic resources, worked to procure and expand support from the state legislature for statewide academic library resources, and developed proposals for a collection endowment and new and improved facilities for the capital campaign.

Moving forward, there is more to be done to insure that a student learning outcomes approach is fully integrated into the academic life of the university, and the current work that is being done by the faculty on the review and re-framing of the undergraduate curriculum throughout the university offers opportunities to move forward in this direction. Many of the "Performance Indicators" and "Outcomes" derived from the ACRL standards are within the province of the teaching faculty, so a collaboration of teaching and library faculty is essential. The general and departmental goals listed on the accompanying chart include just those standards, indicators, and outcomes that pertain to independent library teaching. It is, therefore, the Libraries primary recommendation that the university undertake the development of an information literacy assessment plan that is integrally linked to the new curriculum and that includes learning outcomes, assessment measures and criteria, and an assessment schedule. This planning would be a multi-phased initiative that will include the linking of learning outcomes/information literacy competencies to the general education program, to the various levels of the majors, and to the capstone courses. The information literacy assessment plan will also include some guidance on the use of online tutorials and assessment measures, serving as a framework for the development of new tutorials. It should also be helpful in forwarding the undertaking of research by our librarians on the effectiveness of components of our instructional program, including when instruction can or should be face-to-face and when it can be done through online tutorials.

**Table ?. Rutgers University Libraries Information Literacy Outcome Expectations**

<b>General Goal</b>	<b>Department Goals and Objectives</b>
<p>Students will determine the nature and extent of the information needed.</p>	<p>Define and articulate the need for information.</p> <ul style="list-style-type: none"> <li>• Identifies key concepts and terms that describe the information need.</li> </ul> <p>Identify a variety of types and formats of potential sources for information.</p> <ul style="list-style-type: none"> <li>• Know how information is formally and informally produced, organized and disseminated.</li> <li>• Recognize that knowledge can be organized into disciplines that influence the way information is accessed.</li> <li>• Identify the value and differences of potential resources in a variety of formats (e.g., multimedia, database, website, data set, audio/visual, book).</li> </ul> <p>Reevaluate the nature and extent of the information need.</p> <ul style="list-style-type: none"> <li>• Review the initial information need to clarify, revise, or refine the question.</li> </ul>
<p>Students will access needed information effectively and efficiently.</p>	<p>Select the most appropriate investigative methods or information retrieval systems for accessing the needed information.</p> <ul style="list-style-type: none"> <li>• Identify appropriate investigative methods (e.g. laboratory experiment, simulation, fieldwork)</li> </ul> <p>Construct and implement effectively-designed search strategies.</p> <ul style="list-style-type: none"> <li>• Develop a research plan appropriate to the investigative method.</li> <li>• Identify keywords, synonyms and related terms for the information needed.</li> <li>• Select controlled vocabulary specific to the discipline or information retrieval source.</li> </ul>

	<ul style="list-style-type: none"> <li>• Construct a search strategy using appropriate commands for the information retrieval system selected (e.g., Boolean operators, truncations, and proximity for search engines; internal organizers such as indexes for books).</li> </ul> <p>Retrieve information online or in person using a variety of methods.</p> <ul style="list-style-type: none"> <li>• Use specialized online or in person services available at the institution to retrieve information needed (e.g., interlibrary loan/document delivery, professional associations, institutional research offices, communication resources, experts and practitioners).</li> </ul> <p>Refine the search strategy if necessary.</p> <ul style="list-style-type: none"> <li>• Assess the quantity, quality, and relevance of the search result to determine whether alternative information retrieval systems or investigative methods should be utilized.</li> <li>• Identify gaps in the information retrieved and determine if the search strategy should be revised.</li> <li>• Repeat the search using the revised strategy as necessary.</li> </ul> <p>Extract, record, and manage the information and its sources</p> <ul style="list-style-type: none"> <li>• Differentiate between the types of sources cited and understand elements and correct syntax of a citation for a wide range of resources.</li> <li>• Record all pertinent citation information for future reference.</li> </ul>
<p>Students will evaluate information and its sources critically and incorporate selected information into their knowledge base and value system.</p>	<p>Articulate and apply initial criteria for evaluating both the information and its sources.</p> <p>Determine whether the initial query should be revised.</p> <ul style="list-style-type: none"> <li>• Determine if original information need has been satisfied or if additional information is needed.</li> <li>• Review search strategy and incorporate additional concepts as necessary.</li> </ul>

	<ul style="list-style-type: none"> <li>• Review information retrieval sources used and expand to include others as needed.</li> </ul>
Students will, individually or as members of a group, use information effectively to accomplish a specific purpose.	[This standard is primarily the province of the teaching faculty. Librarians can assist with this effort, but not address it independently with our existing programs.]
Students will understand many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.	<p>Understand many of the ethical, legal and socio-economic issues surrounding information and information technology.</p> <ul style="list-style-type: none"> <li>• Demonstrate an understanding of intellectual property, copyright, and fair use of copyrighted material.</li> </ul> <p>Acknowledge the use of information sources in communicating the product or performance.</p> <ul style="list-style-type: none"> <li>• Selects an appropriate documentation style and uses it consistently to cite sources.</li> </ul>