

---

# From Lampitt to Libraries: Formulating State Standards to Embed Information Literacy across Colleges

JACQUI WEETMAN DACOSTA AND ELEONORA DUBICKI

---

## ABSTRACT

In September 2007, the Lampitt Law was passed in the state of New Jersey, formalizing the requirements for students transferring between institutions. This led to a 2008 statewide articulation agreement to facilitate the seamless transfer of students' courses and credits between county colleges and four-year public institutions of higher education. In response to this articulation agreement, three professional librarian groups combined to create information literacy standards utilizing progression as a core principle. The *Information Literacy Progression Standards* were launched in January 2010. They consist of a four-page document comprising an introduction; the standards defining competencies at a Novice/Introductory (Year 1) level and at a Gateway/Developing (Year 2) level; and some sample assignments demonstrating the Standards in Practice. This article outlines how the Standards were developed and successfully disseminated and implemented. As well as describing the creation of the Standards, the article highlights initiatives at several academic institutions where librarians have attempted to address information literacy at an organizational level, utilizing successful collaborations with faculty and administrators.

When New Jersey Assemblywoman Pamela Lampitt proposed a formal articulation agreement to standardize the transfer of students and their credits between institutions, she probably had no idea of the impact it would have for librarians attempting to further the cause of information literacy within the state. While the purpose of the law was to make life easier for students wishing to progress from one institution to another, it prompted an initiative with wider reaching implications: the empowerment of students through the acquisition of information literacy skills—

skills that could help students prepare for the next stage in their lives, whether it is continuing education or the workplace.

This article is intended to outline how the Lampitt Law, which legislated the transfer requirements of students between institutions, enabled librarians to move forward with an information literacy agenda utilizing progression as a core principle. This resulted in the production of the *Information Literacy Progression Standards*, which were developed during 2009 and successfully disseminated and implemented during 2010 and onward. As well as describing the creation of the Standards, the article will also highlight the initiatives of several academic institutions, where they have attempted to address information literacy at an organizational level utilizing successful collaborations between librarians, faculty, and administrators.

### INFORMATION LITERACY IN THE UNITED STATES

The history of information literacy in the United States is well documented but there are certain milestones that influenced the formulation of state standards within New Jersey colleges and universities.

- In 1989, the American Library Association (ALA) Presidential Committee on Information Literacy issued a *Final Report* that defined information literacy as “the ability to recognize when information is needed and to locate, evaluate, and use effectively the needed information” (ALA, 1989).
- In 2000, the ALA’s Association of College and Research Libraries (ACRL) endorsed and published *Information Literacy Competency Standards for Higher Education*.

Since 1989, many states, school districts, state university systems, and local institutions have developed information literacy competency standards. The University of Colorado at Colorado Springs and the University of Rhode Island are among institutions with information literacy standards, while Wisconsin and Oregon have defined statewide standards. Many of these standards were reviewed during the process of drafting the *Information Literacy Progression Standards*.

### HIGHER EDUCATION IN NEW JERSEY

In the state of New Jersey, there are nineteen county community colleges, also described as two-year institutions, and more than thirty four-year institutions. All the state institutions, whether two- or four-year, rely to some extent on state funding, are subject to state regulations, and are all accredited by the Middle States Commission on Higher Education (MSCHE). The Middle States Commission is a voluntary, nongovernmental association that oversees quality assurance utilizing a peer review system. MSCHE reviews institutions in Delaware, the District of Columbia, Maryland, New

Jersey, New York, and Pennsylvania. Institutions are generally reviewed on a ten-year cycle.

The governance of all the academic institutions, both two- and four-year, is overseen by the New Jersey Presidents' Council (NJPC), which covers public and independent institutions of higher education. There is also the Academic Officers' Association (AOA) of New Jersey, which is comprised of chief academic officers (vice presidents) from the nineteen community colleges in the state. The AOA sets General Education Goals under the authority of the NJPC, which strongly influence the curriculum in all institutions. These goals provide the foundation for degree programs in New Jersey's community colleges and are, therefore, essential for students wishing to transfer to four-year institutions.

In September 2007, a law was passed in the state of New Jersey concerning the transfer of credits between the community colleges and four-year institutions of higher education. This became known as the Lampitt Law after Assemblywoman Pamela Lampitt, who sponsored it in the state senate. The law required the New Jersey Presidents' Council to establish a *Comprehensive State-Wide Transfer Agreement* (New Jersey Presidents' Council, 2008) to facilitate the seamless transfer of students between colleges, and from public associate to public baccalaureate degree programs.

### INFORMATION LITERACY MILESTONES IN NEW JERSEY COLLEGES AND UNIVERSITIES

While information literacy, its definition, principles, and competency standards became formalized nationally during the latter part of the twentieth century, it remained very much at a practitioner level within New Jersey colleges. Librarians were active in its pursuit and shared a great deal of good practice, at the college level, within three professional groups:

- The VALE (Virtual Academic Library Environment) Shared Information Literacy (SIL) Committee
- The New Jersey Library Association (NJLA), College and Universities Section (CUS), User Education Committee
- The Central Jersey Regional Library Cooperative's (CJRLC) Academic Reference Librarians' Committee

In 2003, MSCHE published *Developing Research & Communication Skills: Guidelines for Information Literacy in the Curriculum* (Middle States Commission on Higher Education, 2003). This was a much welcomed document since it gave librarians a handbook from a respected source, providing suggestions for integrating information literacy throughout the curriculum. The guidelines were intended to take colleges from the preliminary stages of preparing their institutions for information literacy through to the standards proposed by the ACRL then onto assessment and how to improve the curriculum.

In 2007, the Academic Officers' Association revised the General Education Goals, listing Goal 4 as Information Technology or Information Literacy. Three out of the four identified skills related to technology with only one addressing information literacy: "Students will recognize when information is needed and be able to locate, evaluate, and use information" (New Jersey Community College Academic Officers' Association, 2007). This lesser emphasis on information literacy only served to confuse the concept further for faculty who associated information with technology—the medium rather than the message.

Another milestone was achieved in July 2008 when the New Jersey Commission on Higher Education (NJCHE) produced an amendment to its *College and University Licensure Rules* proclaiming that: "An institution shall have in place a plan that articulates how students will obtain information literacy skills as they progress through the curriculum." While this may have passed unnoticed in some colleges, it would be mandatory for any new academic institutions in order to receive approval for their programs.

Following the adoption of the *Comprehensive State-Wide Transfer Agreement* by the New Jersey Presidents' Council in September 2008, it was considered by the Executive Committee of VALE, which is a consortium of New Jersey academic libraries and the New Jersey State Library. Its mission is to further excellence in learning and research through innovative and collaborative approaches to information resources and services. They issued a charge to the VALE Shared Information Literacy Committee to produce information literacy standards that the two-year community colleges could use to measure student competencies in this area and to facilitate the seamless transfer of students, now required by law.

### FORMULATING THE PROGRESSION STANDARDS

The VALE SIL Committee quickly joined forces with the two other professional groups with an interest in information literacy, namely the NJLA/CUS User Education Committee and the CJRLC Academic Reference Librarians' Committee. A half-day meeting was held in December 2008, to which members of all three committees were invited. At this meeting, members discussed what the standards should cover, how they might be worded to appeal to faculty, and what other preexisting documents should be taken into consideration. Volunteers were called for, to work on the standards, and the response was tremendous leaving the three committee chairs with difficult choices. An eight person task force was formed consisting of four librarians representing the two-year colleges and four librarians from four-year colleges. The aim of the task force was to produce

- information literacy standards for students transferring from two- to four-year colleges;
- a blueprint for faculty/librarian collaboration on information literacy;

- a document that faculty could embrace;
- a framework for institutions to customize.

The primary objective of the task force was the creation of a document designed to assist with integrating information literacy into the curriculum so that teaching faculty and their librarian colleagues could share a common understanding of the expected student learning outcomes. In order to achieve this objective, the foremost challenge was to create a document that presents information literacy skills and competencies in a simplified format by eliminating library jargon and enabling librarians to discuss information literacy with teaching faculty in terms that they can understand and in practices that they can employ.

#### *Reviewing the “Literature”*

With such a practical application ahead of them, the task force undertook a review of the literature that focused on what documents of this nature had been created elsewhere and by whom. This resulted in a series of websites rather than journal articles. The ACRL *Information Literacy Competency Standards for Higher Education* (Association of College and Research Libraries, 2000) are the most famous and widely used set of guidelines, but there are also a number of lesser known but more practical documents that have been created by state bodies and a variety of colleges.

At the state level, three resources were considered the most informative:

- *Information Literacy Competencies and Criteria for Academic Libraries in Wisconsin* (Wisconsin Association of Academic Librarians, 1998). This document lists ten competencies that are further subdivided into a number of criteria, which help to define the information literate student. Their association’s website also links the ten competencies to Best Practice Examples from academic institutions within Wisconsin (Wisconsin Association of Academic Librarians, 2002).
- *Colorado Information Literacy Standards* (Colorado Department of Education, 2009). These nine standards are part of a set of educational standards aimed at K-12 students and provide an excellent foundation on which to build with college level students. Each standard is subdivided into indicators and is linked to a series of assessment guidelines.
- *Oregon Information Literacy Proficiencies* (Oregon Information Literacy Summit, 2008a). In the state of Oregon, an annual Information Literacy Summit held in 2007 brought together community and four-year college faculty, librarians, and information technologists who produced eight proficiencies. The document containing their Proposed Proficiencies is the most informative because it provides examples of what competent students should be able to achieve (Oregon Information Literacy Summit, 2008b).

Institutional information literacy guidelines and standards are more common in the larger college and university systems where there can be many campus locations, like in the State University of New York (SUNY), which has sixty-four. However, within the SUNY system, the task force was most closely drawn to Oswego's *Information Literacy Learning Outcomes for Undergraduates* (State University of New York, Oswego, 2006), which utilized the ACRL *Information Literacy Competency Standards for Higher Education* (Association of College and Research Libraries, 2000), but provided a succinct list of outcomes and evidence for progression.

Another institution that based its program on the ACRL Standards is the University of Colorado at Colorado Springs (2010), which lists foundational, upper division, and graduate level competencies with a reference to pre-foundational expectations. As part of a wider *Plan for Information Literacy at the University of Rhode Island* (2009), this smaller institution outlines an incremental implementation of information literacy illustrating the process with a chart to be used with faculty.

The Information Literacy Project at Philadelphia University provided the task force with a wealth of information beyond its detailed *Information Literacy Framework at Philadelphia University* (Philadelphia University, 2006). The project began in 2000 and, at the time of writing, their Framework, which contains specific goals by year and expectations for students by programs of study, was undergoing further revisions. The website includes a chronology of the project, assessment information, and resources for students, faculty, and staff.

## BUILDING A FRAMEWORK

The three professional groups were in agreement that their document would need to follow the ACRL *Information Literacy Competency Standards for Higher Education* (Association of College and Research Libraries, 2000) but would need to be much simplified if it was to be shared with faculty. The task force found SUNY Oswego's *Information Literacy Learning Outcomes for Undergraduates* (State University of New York, Oswego, 2006) to be a document worth emulating and used this as a basis for much of its work.

Task force members reviewed each of the five ACRL information literacy standards and twenty-two performance indicators. While the ACRL standards are meant to address student needs at all levels of higher education, the goal of the task force was to identify the progression of information literacy skills that could be expected of students enrolled in two-year colleges, transitioning to four-year institutions. The decision was made to map specific skills (or learning outcomes) at two levels. The first level (Introductory/Novice) defines skills and competencies that should be acquired by students upon the completion of thirty to thirty-two credits. The second level (Gateway/Developing) incorporates more discipline-specific

skills and is intended to be achieved by students upon the completion of sixty to sixty-four credits, at which point students complete a two-year associate degree program and transition to a four-year institution. To effectively display information literacy skills at the two levels, a document format similar to that used by SUNY Oswego was adopted. The information in the brochure is presented in three columns: Standards, Introductory/Novice Skills, and Gateway/Developing Skills (appendix A).

The standards column provides short, simple definitions for each of the five ACRL standards. Each standard is defined using action verbs to map to assessable outcomes. The next step was to identify specific skills that students should master for each of the standards. Again, action verbs were used to facilitate assessment. Furthermore, all skills were deliberately written at a macro level, making them relevant to a diverse group of institutions and students. Specific databases and/or books were not identified in mastering each of the skills, rather general skills are listed, easily adaptable by all institutions.

The Introductory/Novice level defines skills that should be mastered by students who have completed thirty to thirty-two college credits. The task force decided to measure skills by number of credits, rather than first-year and second-year classification for several reasons—students enter college with divergent information literacy skills, students may need to enroll in basic skills classes, and part-time versus full-time status determines when students complete the thirty-two credits.

The skills described at the Novice level are most often attained in General Education courses that are required of all students, such as English 101 and 102, History 101, and First Year Seminar courses. The resources utilized by students completing assignments for these classes are typically from broad, multidisciplinary sources, often focusing on current topics. As illustrated in table 1, for standard 1, students must identify a topic and vocabulary, and types of information sources appropriate to completing the assignment. Combinations of print and electronic sources are utilized at the Introductory level, ranging from print books and articles, to e-journals and the Internet. Students learn the differences between popular, trade, and scholarly publications. In some cases, this may be the first time that students use library databases and need to critically evaluate resources for their relevance to the topic. Citation formats are also being introduced to students, as well as discussions regarding plagiarism and academic integrity.

Once students have completed thirty-two credits they are at the point in their academic career when they begin taking classes within specific disciplines. The skills required now progress from general research to discipline-specific assignments, as illustrated in table 2. Instead of using multidisciplinary databases, students build on the skills they learned in introductory classes and are now required to identify sources that are

Table 1. Standard 1 Introductory/Novice Skills Example

Standards	Introductory/Novice Skills (to be met on completion of 30–32 credits)
1. Identifies and addresses information need	Identifies research topic or information need. Drafts research question(s) relevant to thesis or information need using unambiguous language. Uses general information sources to identify relevant concepts/vocabulary and inform basic understanding of the research topic or information need.

focused on their particular discipline. Search terms need to include a controlled vocabulary for the discipline, and the scope of the research broadens to include specialized information sources, such as government documents and professional organizations. Materials are often requested from outside organizations through interlibrary loans and students review bibliographies to find relevant sources. Evaluation and critical thinking skills are also required, as students use a combination of primary and secondary sources and scholarly, as well as popular magazines, and must be able to incorporate all the sources effectively into the assignment. The mastery of Gateway/Developing skills is expected at the completion of sixty to sixty-four credits.

The progression of students from Novice skills to mastering Gateway skills marks the point of transition from information literacy skills achieved at a two-year to a four-year school. Although the primary focus of the task force was to define the transition from a two-year to a four-year institution in terms of literacy skills, the Progression Standards are equally applicable to students who have been in four-year institutions since their first year of higher education. The two levels of information literacy skills mastery hold true for students completing their General Education requirements and beginning their initial courses in their majors at the 200 level. While students attending a four-year institution may have access to a wider variety of resources, the achievement of advanced information literacy skills makes for an easier transition to the research expected for third- and fourth-year classes.

Table 2. Standard 1 Gateway Example

Standards	Gateway/Developing Skills (to be met on completion of 60–64 credits)
1. Identifies and addresses information need	Uses subject or discipline-specific information sources to better inform an understanding of the research topic or information need and to determine the extent of available information sources before proceeding. Establishes realistic timeline to accomplish research.

### PROGRESSING THE PROGRESSION STANDARDS

The Progression Standards document was deliberately designed as a basic framework in order to act as a starting point for discussion of information literacy skills and competencies. Teaching faculty and college administrators were consulted through the task force members sharing the draft document at their own institutions. Generally, it was felt that the first draft had achieved its aim to be a document that faculty could embrace, since the language was deemed understandable and faculty expressed a willingness to incorporate it into course learning outcomes.

The term “progression” reflects an ongoing process; basic skills are introduced early on, but are mastered over time. Institutions with a high number of students entering college lacking basic skills may even choose to bifurcate the novice level to address the lower level skills of their students. The document was therefore developed to stand the test of time, so it cannot be too context-specific or linked to any particular time period. This basic framework can then be elaborated on and further customized by institutions to meet the specific needs of their own curriculum.

Furthermore, institutions granting professional degrees in subjects such as business and nursing can also adapt to the information literacy skill levels needed by their students. A set of information literacy skills required of graduate students is another area of potential expansion of the Progression Standards. Are gateway skills adequate for graduate level research? Probably not, as students delve more deeply into specific topics. No longer is a high-level review of the literature on a topic sufficient for research papers—students must rely on sources that provide more substantial detail on the topic and must expand their research strategies beyond basic materials. Graduate students are looking at topics with a very narrow focus and need to venture outside all but the most comprehensive research facilities. Specialized collections frequently need to be utilized, often from libraries holding primary materials, or interlibrary loans from other institutions.

On the other end of the spectrum, members of the task force have been approached by school librarians for assistance in developing standards for the levels of kindergarten to year 12 students. Librarians from high schools shared their own standards based on the American Association of School Librarians' *Standards for the 21st-Century Learner* (2007) with the task force. It was suggested that future work and collaboration could include information literacy standards to help students transition between secondary school and college. The ability of these school librarians to improve the information literacy skill level of students entering higher education is a win-win situation. Unfortunately, many New Jersey school librarians are currently faced with cutbacks in staffing and resources, due to poor economic conditions. Nevertheless, school librarians have clearly indicated that

they are interested in partnerships with academic librarians in preparing students for the more rigorous research they will face in colleges.

### STANDARDS IN PRACTICE

As the standards were developed, the task force consulted with librarians, faculty, and administrators to ensure a common understanding. The first draft of the Progression Standards was presented at the NJLA Annual Conference in April 2009. This session elicited a lot of constructive feedback and it was at this stage that the task force decided to incorporate a section on sample assignments. In response, the promotional brochure developed by the task force provides sample assignments (Standards in Practice), which align with the Progression Standards and can be effortlessly incorporated into existing courses. The assignments were developed by librarians at the Cheng Library at William Paterson University of New Jersey, one of whom was a member of the task force.

Specific skills addressed by each sample assignment are noted in order to assist in the assessment of the mastery of information literacy skills. The examples offer flexibility and can be adapted to virtually any discipline or subject area and will help students achieve research competencies. For example, the *Opposing Viewpoints* assignment is ideal for first-year students and is particularly adaptable to freshman English and first year seminar classes. Students select a topic, must take a specific point of view on the topic, and defend that position, supported by appropriate sources. The assignment develops essential research skills, provides structure and creativity, and incorporates additional literacies.

The *Citation Examination* and *Annotated Bibliography* examples incorporate both Introductory and Gateway skills into assignments. In the citation assignment, students review a bibliography and then must deconstruct citations in order to locate resources and then recognize the difference between different types of sources. The annotated bibliography builds strong Gateway skills, as students evaluate discipline-specific information sources and must critically evaluate the sources for content and potential incorporation into their bibliography. Citation construction is once again an integral component of the student assignment.

A wiki site was developed to provide easy access to the *Information Literacy Progression Standards* brochure and Standards in Practice (Information Literacy Progression Standards, 2009). The site includes additional sample assignments and useful tips on how to incorporate information literacy education into the curriculum. Assignments include a research process paper, understanding primary and secondary sources within a discipline, and understanding bias. The assignments touch on both levels of information literacy skills.

The task force website also provides links to state-wide information literacy standards and best practices in Wisconsin, Colorado, Oregon, and

Washington, as well as examples of institutional literacy standards and best practices at Warburg College, University of Colorado at Colorado Springs, Colgate University, Philadelphia University, University of Rhode Island, and SUNY Oswego. These samples were all reviewed by task force members in developing the Progression Standards.

### THE PROGRESSION STANDARDS TAKE OFF

After completing work on the Progression Standards, the task force sought endorsements from several library and academic groups to strengthen support. The *Information Literacy Progression Standards* document was endorsed by the VALE Executive Committee in October 2009; coincidentally in the same month that President Barack Obama proclaimed the month of October as National Information Literacy Month. This proclamation highlighted the “need for all Americans to be adept in the skills necessary to successfully navigate the Information Age” (Obama, 2009). Further endorsements were received from professional associations, including the New Jersey Library Association and the New Jersey Association of School Librarians, and administrative bodies, such as the New Jersey State College Council of Academic Vice Presidents.

The task force subsequently embarked on a plan of awareness-raising, both with librarians and faculty, including presentations at conferences, campus workshops, and select publications. The Progression Standards were officially launched at the VALE Annual Users’ Conference in January 2010, where all attendees received the standards in a color brochure format. This resulted in several requests for additional copies, which could only be satisfied by providing the PDF on the task force’s wiki.

Other conferences at which the standards were presented included the Librarians’ Information Literacy Annual Conference (LILAC) in Limerick, Ireland (March 2010) and a poster presentation at the ALA Annual Conference in Washington DC (June 2010). On each occasion, the standards were well received and were followed up with requests for more information and permission from other institutions, who wished to customize or quote from the standards.

### CASE STUDIES

To date, librarians at several institutions in New Jersey have made inroads toward meeting with their teaching faculty and promoting the importance of integrating the Progression Standards into the curriculum. Case studies have been written describing the information literacy initiatives at four New Jersey institutions, three two-year colleges, and one four-year institution. The full reports are available on the wiki site, while highlights of the case studies are included in this article.

*Faculty Development Workshop*

At Atlantic Cape Community College (ACCC), the library director was given the opportunity to develop a special three-hour information literacy training session during a mandatory faculty development day in fall 2010. Virtually all of the approximately eighty full-time faculty members, as well as about twenty-five of the adjunct faculty, participated in the program. The library director invited one of the members of the Progression Standards Task Force to introduce the concepts of information literacy, discuss the importance of information literacy in General Education courses, and set the stage for a hands-on exercise for the faculty in analyzing assignments that embody information literacy skills.

Faculty members were organized into teams by department, with each group receiving a discipline-specific sample assignment created by the ACCC librarians. As a group, each team discussed the assignment and identified what they felt were information literacy skills the students would be required to master in the completion of the research assignment and how to assess their level of achievement of those competencies. Each team then shared its findings with the entire faculty group.

As a result of the workshop, ACCC faculty gained a better understanding of information literacy and more instructional sessions were requested during fall 2010. It is still too early to tell how many research assignments were modified by the faculty to incorporate information literacy skill building requirements, but the workshop definitely stimulated discussions on developing assignments to maximize research competencies. The ACCC Library website (Atlantic Cape Community College, n.d.) provides faculty with additional information literacy support in the development and assessment of research assignments.

*Faculty/Librarian Collaboration for First-Year English Courses*

At Ocean County College (OCC), two librarians teamed up with two English faculty to integrate information literacy into first-year English courses. With the knowledge that students are at different information literacy skills levels based on their progression through college level courses, the project was created to understand student information literacy skill levels in Developmental English and College English 1 courses. The librarians met with the English faculty prior to conducting information literacy workshops for students in two sections of each of these courses. A pre-test was created to assess the students' skills before the workshops.

Based on the *Information Literacy Progression Standards*, questions in the pre-test addressed each of the five information literacy standards. For example, one question asked students to locate a book owned by the OCC Library and identify its title, author, and call number. In the Developmental English class only four of eighteen students could find a book, while sixteen of twenty-five college English 1 students found an appropriate

book. Similar results were uncovered in the other questions, clearly revealing that the classes were at different levels in terms of their knowledge of finding information—books, articles, and even Internet searches.

Insights gained from the pre-test allowed both faculty and librarians to develop appropriate assignments and presentations. The discernible differences in the students' ability to conduct research were used to tailor assignments to specific skill sets and to then to build on those skills during the workshops. There were also some similarities in student results, showing that many first-year college students have limited experience with research and accessing a variety of sources, indicating that these skills must be taught to all the students.

The findings of this pilot project will have a significant impact on future assignments and library instruction programs for both of these first-year level courses offered at OCC. The success of this collaborative project and the lessons learned also led to a joint presentation at the Two-Year College Association Northeast Regional Conference for English faculty, where the English instructors and librarians shared their project findings with instructors from other institutions.

Although the OCC project was limited to several English classes, in January 2011, a two-hour workshop, *Information Literacy Progression Standards: Putting the Standards into Practice*, was held for all interested OCC faculty and adjuncts. The workshop, presented in association with OCC's Center for Teaching and Learning, provided an overview of the standards and a discussion on ways that information literacy can supplement course curriculum. Faculty attending the workshop experimented with updating course assignments to build information literacy skills. In response to several teaching faculty who were unable to attend the January workshop, but were interested in learning more about information literacy, another OCC workshop may be planned for a future date.

#### *Information Literacy Skills and Learning Outcomes in Developmental Courses*

The *Information Literacy Progression Standards* are currently being utilized by Mercer County Community College (MCCC) to set learning outcomes for developmental writing courses. As is often the case, the infusion of information literacy into the new student learning outcomes was more serendipitous than planned.

More than 50 percent of students enrolling at MCCC are required to take one or more developmental writing courses. As a result, the writing and reading course coordinators conduct intensive academic assessment and program reviews. Each year, revisions are made to the programs in response to assessment and review findings. In fall 2010, the program coordinators met with all full-time and part-time instructors in the developmental writing program to consider modifications, and the discussion turned to information literacy. Since one of the task force members is also

a part-time instructor in the program, she was able to review the standards and respond to faculty questions. This standards discussion led to a review of the grading rubric and the selection of the relevant *Information Literacy Progression Standards* for the second level course.

The division of the standards into two levels made it easier to identify introductory level skills MCCC needed to develop. Two of the learning outcomes matched perfectly with Standard 1a (Identifies research topic or information need and uses general information sources to identify relevant concepts/vocabulary) and 1c (Inform basic understanding of the research topic or information need). Furthermore, Standard 2, which relates to different types of sources, was felt to be easily applicable to assigned readings from each of these sources, offering exposure to a variety of information resources. Evaluating search results was another area where students need additional help in making relevant choices when reviewing search results.

The mapping of the standards to the course learning outcomes continued after the initial meeting and revisions in the rubric were finalized after much discussion. The revised rubric, which will be implemented for the Writing Program beginning in spring 2011, includes an assessment of information literacy skills. A review of the effectiveness of the new rubric and an assessment of strides made in improving information literacy skills will be conducted at the end of the semester in order to make any necessary adjustments for classes in the next academic year.

#### *Making the Most of Assessment Day*

In spring 2010, Georgian Court University librarians were invited to participate in the university's annual Assessment Day to discuss how critical thinking and information literacy can be integrated across the curriculum. With the advantage of having all full-time faculty in attendance, librarians had the opportunity to speak to the faculty about the library's information literacy program, including an overview of the library's online SearchPath tutorial. Faculty were also invited to dialog on potential models for information literacy assessment.

The *Information Literacy Progression Standards* were presented, with the librarians discussing the Introductory/Novice and Gateway/Developing levels and how the skills defined could be used in conjunction with existing or potential library-based assignments given in various classes. To demonstrate the Standards in Practice, several examples of library-based assignments that could be used within any discipline were distributed to the faculty along with a copy of the Progression Standards brochure. The ensuing discussion covered techniques for designing assignments to develop information literacy skills and mapping the skills to the ACRL Standards and Progression Standards. Faculty members were encouraged to work with their liaison librarians to implement library related assignments.

To emphasize the importance of information literacy, mention was made of two external forces that drive the need for an information literacy program on campus—the MSCHE *Developing Research and Communication Skills: Guidelines* (2003) and NJCHE *Licensure Rules* (2008).

A final presentation by the Social Sciences librarian reinforced how information literacy skills were incorporated into tiered instruction in the Social Work curriculum within an introductory course required of all majors, as well as an upper level course: *Methods of Social Work Research*. Students in the introductory course are required to complete an assignment that emphasizes Novice skills, such as using the library catalog to locate a book and searching multidisciplinary databases. The *Research Methods* class has a Gateway level assignment to complete a literature review using discipline-specific databases. All faculty members were encouraged to incorporate information literacy in their own disciplines utilizing a similar tiered approach and support from librarian-delivered content or embedded assignments to promote information literacy skills.

Anecdotal reports after the meeting indicated that the information literacy presentation was well received by the faculty, with many favorable comments about the quality of the information shared in this type of forum. For the librarians, the ability to reach all faculty members simultaneously was certainly an advantage. Subsequently, librarians have been contacted by teaching faculty to assign various modules of the SearchPath tutorial into coursework, culminating in a 22 percent increase in the usage of the tutorial as a whole between the fall 2009 and 2010 semesters. More work is needed to integrate the framework of the Progression Standards into the curriculum, but the introduction to information literacy that reached the entire population of teaching faculty and key Student Life personnel was an excellent start to a collaborative relationship between librarians and faculty.

### INFUSING INFORMATION LITERACY INTO THE CURRICULUM

How can librarians initiate conversations with teaching faculty regarding information literacy infusion into coursework? Even with the Progression Standards brochure in hand, it is still a difficult task to make inroads with teaching faculty, many of whom more readily understand technology literacy than information literacy. The models used to develop information literacy skills vary greatly, including: campus-wide programs; information literacy components in first year seminar and general education courses; information literacy workshops and seminars; information literacy tutorials; standalone information literacy credit or noncredit courses; and the culmination of skills in capstone courses. Some of the approaches used successfully by other institutions are outlined in this section. They are by no means exhaustive, but help to serve as illustrative examples.

*The Accreditation "Stick"*

Thompson (2002) found that accreditation requirements can be a driver for an institutional focus on information literacy, with all six regional accreditation agencies in the United States having established mandates to implement information literacy programs and assess learning outcomes. In her evaluation of accreditation standards, Saunders (2007) also concluded that the agencies consider information literacy to be an important student learning outcome. "In the case of information literacy, the accreditors have demonstrated that information literacy is a priority, but the implication seems to be that librarians need to take the initiative to make information literacy a priority within their individual institutions" (p. 325).

Several institutions have implemented programs as part of accreditation mandates. The University of Central Florida (UCF) selected Information Fluency, which combines information literacy, technology literacy and critical thinking, as its Quality Enhancement Plan (QEP) for the Southern Association for Colleges and Schools (SACS) Commission on Colleges. After conducting a summer faculty development conference in 2005 to define information fluency, the QEP development team put in place ongoing institutional support for the program from entities such as the Faculty Center for Teaching and Learning (FCTL), Course Development & Web Services, and the University Libraries (University of Central Florida, 2006).

Professional standards also call for faculty/librarian collaboration in preparing students for information literacy skills they will need in their future careers. In an analysis of National Council for Accreditation of Teacher Education (NCATE) standards, Birch, Greenfield, Janke, Schaeffer, and Woods (2008) found that four of the six ACRL standards are similar to NCATE standards. The authors posit that academic librarians are well prepared to partner with education faculty to produce information literate teachers.

*The Top-Down Approach*

Information literacy programs can also be advanced by campus administrators. Lindstrom and Shonrock (2006) found that "the most far-reaching efforts are those where library and university administrators have recognized the importance of information literacy and have set institutional rather than library-centric objectives, and allowed for the time commitments required for collaborative projects by librarians and discipline faculty within their responsibilities" (p. 22).

Loehr and Gibson (2006) describe an action plan for information literacy at Hanover College, Indiana that was developed by the chief academic officer, library director, and an English faculty member who participated in a 2005 workshop sponsored by the Council of Independent Colleges,

*Transformation of the College Library.* The plan called for “integrating information literacy into the curricula, gateway and methods courses in the major, and the senior Independent Study through collaboration of the library, faculty, IT, and chief academic officer” (p. 34). The approach used by Hanover College was to create institution-wide faculty development programs, taking the opportunity to describe the value of information literacy and its importance to students’ acquisition of lifelong learning skills and offering assistance in reviewing and creating effective assignments to expand information literacy skills. Librarians at the Duggan Library developed a series of workshops for faculty with a description of the ACRL standards and provided a list of information literacy outcomes for lower- and upper-class students. Faculty feedback was very favorable and the workshops achieved their goal of facilitating the integration of information literacy into course assignments.

#### *Sharing Important Bandwagons*

Rockman (2002) found that “The general education reform movement on many campuses has provided academic libraries with opportunities and possibilities to weave information literacy activities into both lower- and upper-division courses, redesign services, reshape librarian roles and responsibilities, and revisit with discipline-based faculty members about course descriptions and student assignments to include information literacy principles” (p. 195). The incorporation of information literacy elements into general education courses is a particularly effective method of reaching students at an early point in their academic careers. Towson University librarians created information literacy modules that have been successfully utilized to structure multiple instructional sessions for a required general education course, *Using Information Effectively*, as well as for upper-division research courses (Black, Crest, & Volland, 2001).

Information literacy is also a general education requirement for all students at the University at Albany—State University of New York. Students complete either a one-credit course taught by librarians or a three-credit discipline specific course taught by department faculty. The infusion of information literacy into the curriculum at the institution is strengthened by the role of an Information Literacy Subcommittee of the General Education Committee. “The IL subcommittee reviews proposals for potential information literacy courses; develops assessment criteria for students taking these courses; and brainstorms ways to make sure that there are sufficient options for the students who need to meet this general education requirement” (Mackey & Jacobson, 2005, p. 143).

#### *Working with Library-Friendly Faculty*

The most common model mentioned in the literature for introducing information literacy is working with selected departments or faculty members. Eastern Washington University offered grants to encourage partic-

ipation of faculty in the biology and history departments to introduce information literacy learning outcomes at lower- and upper-level courses (Miller, 2010). Librarians and nurse educators at Ball State University collaborated in designing a tiered approach to develop students' information skills, which are vital in accessing up-to-date information to make critical decisions in their nursing careers (Dorner, Taylor, & Hudson-Carlton, 2001).

Overall, the key to successful implementation of information literacy into the curriculum is creating an atmosphere of strong collaboration with faculty members, administrators, and other entities on campus to position librarians to assist faculty in developing research assignments that truly develop students' lifelong learning skills. Instead of interfering with the faculty member's role, librarians must be considered as an asset, who can help students develop superior papers or presentations that showcase the information literacy skills they have acquired. Librarians need to be viewed as partners.

## CONCLUSION

This project serves as an example of how academic librarians can successfully forge connections and partnerships across many sectors and groups, including administrators, teaching faculty, and school librarians. The initial charge of the task force was to create information literacy standards to facilitate the seamless transfer of students from two- to four-year institutions. The collaborative efforts of the librarians involved meant that the project grew to become more than that. Librarians, faculty, and administrators at both types of institutions appreciated the value of having a framework for information literacy that could be utilized to promote, progress, and embed information literacy across the curriculum. Such important steps mean that students are not just being prepared for refining their information literacy skills as they progress through different stages of their academic studies. They are also being better prepared for the workplace and the information seeking and handling tasks that may befall them in their future careers.

As this article was nearing completion, the authors learned that the Academic Officers' Association of New Jersey had accepted a recommendation that the *Information Literacy Progression Standards* be adopted into their Guiding Principles for Affirming General Education Course Status. If approved by the New Jersey Presidents' Council, this would give information literacy the same prominence as: communication, history, technology, mathematics, science, humanities, and social sciences.

At the outset of this project no one would have guessed that a response to a state law could potentially have such wider ranging implications to support the development of students' information literacy skills. It is an achievement of which the task force, and their respective professional

groups, is proud and it is hoped that more New Jersey colleges will be able to use the Progression Standards as a framework on which to build.

## ACKNOWLEDGMENTS

The authors would like to recognize the other members of the task force: Amy Clark (Brookdale Community College), Ruth Hamann (Passaic Community College), Nancy Madasci (Centenary College), Pamela Price (Mercer County Community College), Gary Schmidt (Ocean County College), and Nancy Weiner (William Paterson University of New Jersey). We would also like to acknowledge the contributors to the case study data: Leslie Murtha and Ellen Parker (Atlantic Cape Community College); Laura Gewissler (Georgian Court University); Pamela Price (Middlesex Community College); and Heidi Sheridan, Lynn Kraemer-Siracusa, Catherine Pontoriero, Caitlyn Cook, and Gary Schmidt (Ocean County College).

## REFERENCES

- American Association of School Librarians. (2007). *Standards for the 21st-century learner*. Retrieved December 1, 2011, from <http://www.ala.org/ala/mgrps/divs/aasl/guidelinesandstandards/learningstandards/standards.cfm>
- American Library Association. (1989, January 10). *Presidential committee on information literacy: Final report*. Retrieved December 1, 2011, from <http://www.ala.org/acrl/publications/whitepapers/presidential>
- Association of College and Research Libraries. (2000). *Information literacy competency standards for higher education*. Retrieved December 1, 2011, from <http://www.ala.org/ala/mgrps/divs/acrl/standards/standards.pdf>
- Atlantic Cape Community College. (n.d.). *Information literacy initiative*. Retrieved December 1, 2011, from <http://www.atlantic.edu/library/infoLiteracy.htm>
- Birch, T., Greenfield, L., Janke, K., Schaeffer, D., & Woods, A. (2008). Partnering with librarians to meet NCATE standards in teacher education. *Education*, 128(3), 369–379.
- Black, C., Crest, S., & Volland, M. (2001). Building a successful information literacy infrastructure on the foundation of librarian-faculty collaboration. *Research Strategies*, 18, 215–225.
- Colorado Department of Education. (2009). *Colorado information literacy standards*. Retrieved December 1, 2011, from [https://eweb.pedschools.org/documentlibrary/downloads/Media\\_and\\_Instructional\\_Technology/Media\\_Centers/Information\\_Literacy\\_Standards\\_and\\_Teaching\\_Resources/CO\\_Information\\_Literacy\\_Standards.pdf](https://eweb.pedschools.org/documentlibrary/downloads/Media_and_Instructional_Technology/Media_Centers/Information_Literacy_Standards_and_Teaching_Resources/CO_Information_Literacy_Standards.pdf)
- Dorner, J., Taylor, S., & Hodson-Carlton, K. (2001). Faculty-librarian collaboration for nursing information literacy: A tiered approach. *Reference Services Review*, 29(2), 132–140.
- Information Literacy Progression Standards*. (2009). Retrieved December 1, 2011, from <http://njla.pbworks.com/Progression-Standards-for-Information-Literacy>
- Lindstrom, J., & Shonrock, D. (2006). Faculty-librarian collaboration to achieve integration of information literacy. *Reference & User Services Quarterly*, 46(1), 18–23.
- Loehr, H., & Gibson, K. (2006). Promoting librarian-faculty collaboration to advance information literacy: Hanover College's pilot program. *Indiana Libraries*, 25(4), 33–36.
- Mackey, T., & Jacobson, T. (2005). Information literacy a collaborative endeavor. *College Teaching*, 53(4), 140–144.
- Middle States Commission on Higher Education. (2003). *Developing research & communication skills: Guidelines for information literacy in the curriculum*. Retrieved December 1, 2011, from <http://www.msche.org/publications/Developing-Skills080111151714.pdf>
- Miller, I. (2010). Turning the tables: a faculty-centered approach to integrating information literacy. *Reference Services Review*, 38(4), 647–662.
- New Jersey Commission on Higher Education. (2008). *New Jersey administrative code title 9a - higher education. Chapter 1. Licensure rules*. Retrieved December 1, 2011, from [http://www.state.nj.us/highereducation/PDFs/LicensureRulesEffectiveJuly\\_28\\_2008.pdf](http://www.state.nj.us/highereducation/PDFs/LicensureRulesEffectiveJuly_28_2008.pdf)

- New Jersey Community College Academic Officers' Association. (2007, August 15). *NJAOA-sponsored general education institute team recommendations*. Retrieved December 1, 2011, from [http://www.bergen.edu/gened/Revised\\_GE\\_Foundation\\_15aug07.pdf](http://www.bergen.edu/gened/Revised_GE_Foundation_15aug07.pdf)
- New Jersey Presidents' Council. (2008, September 22). *Comprehensive state-wide transfer agreement*. Retrieved December 1, 2011, from <http://www.state.nj.us/highereducation/PDFs/XferAgreementOct08.pdf>
- Obama, Barack. (2009). *National information literacy awareness month, 2009. By the President of the United States of America: A proclamation*. Retrieved December 1, 2011, from [http://www.whitehouse.gov/assets/documents/2009literacy\\_prc\\_rel.pdf](http://www.whitehouse.gov/assets/documents/2009literacy_prc_rel.pdf)
- Oregon Information Literacy Summit. (2008a, November 21). *Revised proficiencies*. Retrieved December 1, 2011, from <http://blogs.library.oregonstate.edu/ilsummit/2007-summit/proposed-proficiencies/>
- Oregon Information Literacy Summit. (2008b, November 21). *Proposed proficiencies*. Retrieved December 1, 2011, from <http://blogs.library.oregonstate.edu/ilsummit/2007-summit/proposed-proficiencies/>
- Philadelphia University. (2006). *Information literacy framework at Philadelphia University*. Retrieved December 1, 2011, from <http://www.philau.edu/infolit/ILRevisions031906Framework.pdf>
- Rockman, I. F. (2002). Strengthening connections between information literacy, general education, and assessment efforts. *Library Trends*, 51(2), 185–198.
- Saunders, L. (2007). Regional accreditation organizations' treatment of information literacy: Definitions, collaboration, and assessment. *The Journal of Academic Librarianship*, 33(3), 317–326.
- State University of New York (SUNY), Oswego. (2006). *Information literacy learning outcomes for SUNY Oswego undergraduates*. Retrieved December 1, 2011, from <http://www.oswego.edu/library/instruction/outcomes.pdf>
- Thompson, G. (2002). Information literacy accreditation mandates: What they mean for faculty and librarians. *Library Trends*, 51(2), 218–241.
- University of Central Florida. (2006). *What if? A foundation for information fluency*. Retrieved December 1, 2011, from [http://if.ucf.edu/files/2009/09/UCF\\_QEP\\_document.pdf](http://if.ucf.edu/files/2009/09/UCF_QEP_document.pdf)
- University of Colorado at Colorado Springs. (2010). *Information literacy at UCCS*. Retrieved December 1, 2011, from <http://www.uccs.edu/~library/services/infolit/define.html>
- University of Rhode Island. (2009). *Plan for information literacy at the University of Rhode Island*. Retrieved December 1, 2011, from [http://www.uri.edu/library/instruction\\_services/infolitplan.html](http://www.uri.edu/library/instruction_services/infolitplan.html)
- Wisconsin Association of Academic Librarians. (1998, October 9). *Information literacy competencies and criteria for academic libraries in Wisconsin*. Retrieved December 1, 2011, from <http://www.wla.lib.wi.us/waal/infolit/ilcc.html>
- Wisconsin Association of Academic Librarians, Information Literacy Committee. (2002). *Best practice examples*. Retrieved December 1, 2011, from <http://www.wla.lib.wi.us/waal/infolit/bestprac/bestpracticesamples.htm>

---

Jacqui Weetman DaCosta has recently returned to England having worked as director of library services at Georgian Court University in Lakewood, New Jersey, and previously as information literacy librarian at The College of New Jersey. Prior to that, her academic library experience was acquired in higher and further education libraries in the United Kingdom. Weetman DaCosta has published articles in the *Journal of Academic Librarianship* and *College & Research Libraries*, and has presented her research at conferences in the United States and Europe. She contributed a chapter on information literacy to the book *University Libraries and Digital Learning Environments* (2011). Her professional activities include chairing the VALE Shared Information Literacy Committee as well as the task force that created the *Information Literacy Progression Standards*. She is also a member of the Information Literacy Committee of CILIP's Community Services Group and was a co-founder of the Librarians' Information Literacy Annual Conference (LILAC) in the United Kingdom.

Eleonora Dubicki is an associate librarian at the Monmouth University Library in West Long Branch, NJ. She has experience in providing reference assistance and instruction in academic and special libraries. Dubicki has edited a book, *Promoting & Marketing Electronic Resources—Creating the E-Buzz!* (2007) and has published articles in *Reference Services Review*, *College & Undergraduate Libraries*, *The Serials Librarian*, *Collection Building*, and *Technical Services Quarterly*. She has also presented her research at state, national, and international library and business conferences. Professional activities include serving as president of the ACRL NJ Chapter (2010–11), participating in user education/information literacy committees, and serving as a member of the task force responsible for creating the *Information Literacy Progression Standards*. Before coming to Monmouth, she worked as a market analyst for Telcordia and Lucent. She holds an MLS from the School of Communication and Information at Rutgers University and an MBA from Rutgers Business School, Newark.

## APPENDIX A

### PROGRESSION STANDARDS FOR INFORMATION LITERACY

#### *Introduction*

An information literate person is one who can “recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.”<sup>1</sup> This is a skill that needs to be developed in all students as it 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 learning.”<sup>2</sup>

The Middle States Commission on Higher Education, in its publication “*Developing Research and Communication Skills*”, states that many institutions include some information literacy skills in their general education programs. However, “whether or not information literacy is part of the general education requirements, instruction should occur in an integrated and coherent approach throughout the curriculum so that students experience increasingly sophisticated concepts as they progress through the institution.”<sup>3</sup> The six regional accreditation agencies have recognized information literacy as an integral educational concept.

This document has been designed to help institutions with that information literacy progression. The intention is that it be used as a framework by colleges and universities to integrate information literacy into the curriculum so that faculty and librarians can share a common understanding of the expected student learning outcomes. The document seeks to define the information literacy skills and competencies which must be mastered at the first and second year collegiate level by all students. It has deliberately been designed as a basic framework to provide a starting point for discussion, development and customization by institutions.

These Progression Standards have been produced by academic librarians working in two and four year colleges across the state of New Jersey. They are based on the Association of College and Research Libraries (ACRL) “*Information Literacy Competency Standards for Higher Education*”

and were influenced by the *Information Literacy Learning Outcomes for SUNY Oswego Undergraduates*.<sup>4</sup> The ACRL Standards themselves have been endorsed by the American Association for Higher Education and the Council of Independent Colleges.

1. American Library Association. *Presidential Committee on Information Literacy: Final Report*. (Chicago: American Library Association, 1989.) Retrieved October 13, 2009: <http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/presidential.cfm>
2. American Library Association, Association of College and Research Libraries. *Information Literacy Competency Standards for Higher Education*. (Chicago: American Library Association, 2000.) Retrieved October 13, 2009: <http://www.ala.org/ala/mgrps/divs/acrl/standards/standards.pdf>
3. Middle States Commission on Higher Education. *Developing Research and Communication Skills: Guidelines for Information Literacy in the Curriculum*. (Philadelphia: Middle States Commission on Higher Education, 2003.) Retrieved October 13, 2009: <http://www.msche.org/publications/devskill050208135642.pdf>
4. State University of New York (SUNY) Oswego, Information Literacy Learning Outcomes. (SUNY, 2006). Retrieved October 13, 2009: <http://www.oswego.edu/library/instruction/outcomes.pdf>

---

STANDARDS	Introductory/Novice Skills (to be met on completion of 30–32 credits)	Gateway/Developing Skills (to be met on completion of 60–64 credits)
1. Identifies and addresses information need	a) Identifies research topic or information need. b) Drafts research question(s) relevant to thesis or information need using unambiguous language. c) Uses general information sources to identify relevant concepts/vocabulary and inform basic understanding of the research topic or information need.	a) Uses subject or discipline-specific information sources to better inform an understanding of the research topic or information need and to determine the extent of available information sources before proceeding. b) Establishes realistic timeline to accomplish research.
2. Accesses Information effectively and efficiently	1. Selects search tools  a) Identifies similarities and differences among types of information sources – books, journals, newspapers, Internet, reference materials. b) Recognizes similarities and differences among different formats of information – print, electronic, human. c) Identifies and selects appropriate tool for information need.	a) Recognizes differences between general and discipline-specific sources. b) Utilizes appropriate specialized information sources, such as government documents and professional organizations.

- |  |   |  |
|--|---|--|
| 2. Constructs search strategies                    | <ul style="list-style-type: none"> <li>a) Identifies search terms relevant to research topic.</li> </ul>  | <ul style="list-style-type: none"> <li>a) Conducts subject searches using appropriate controlled vocabulary.</li> <li>b) Applies advanced search strategies, such as Boolean logic (and/or/not) and truncation.</li> </ul>   |
| 3. Retrieves information                           | <ul style="list-style-type: none"> <li>a) Uses library catalog and classification system to find books on shelves.</li> <li>b) Uses multi-disciplinary databases.</li> <li>c) Identifies issues related to on- and off-campus access of fee-based online sources.</li> <li>d) Uses URLs to locate Web sites.</li> <li>e) Identifies citation elements for information sources in different formats (e.g., book, article, chapter).</li> </ul> | <ul style="list-style-type: none"> <li>a) Requests/accesses information beyond local resources (e.g., Interlibrary Loan, other libraries).</li> <li>b) Uses subject or discipline-specific databases.</li> <li>c) Uses bibliographies or citations to find materials.</li> </ul> |
| 4. Refines search strategies                       | <ul style="list-style-type: none"> <li>a) Evaluates search results to determine relevance to topic.</li> <li>b) Modifies search strategies to broaden or narrow topic.</li> </ul>   | <ul style="list-style-type: none"> <li>a) Identifies gaps in information gathered.</li> <li>b) Identifies alternative search tools.</li> </ul>   |
| 5. Extracts, records & manages information sources | <ul style="list-style-type: none"> <li>a) Uses a variety of technologies to select and access resources.</li> <li>b) Organizes gathered information.</li> <li>c) Determines availability of item.</li> <li>d) Demonstrates the ability to view/download/email references and articles.</li> <li>e) Distinguishes between abstract and full text.</li> </ul>   | <ul style="list-style-type: none"> <li>a) Uses advanced technologies (e.g., folders, RSS, preferences) to exploit functionality of information resources.</li> <li>b) Uses electronic links to access information sources online.</li> </ul>                                     |

- |  |  |   |
|--|--|---|
| 3. Evaluates and thinks critically about information   | <ul style="list-style-type: none"> <li>a) Evaluates information sources for their relevance to need, appropriateness/audience, authority, reliability, currency, and point-of-view/bias.</li> <li>b) Identifies a source's main idea and major points.</li> <li>c) Distinguishes between scholarly vs. popular sources; articles vs. editorials vs. reviews.</li> <li>d) Distinguishes between free Internet sources and library databases.</li> </ul> | <ul style="list-style-type: none"> <li>a) Analyzes the logic of arguments in the information gathered.</li> <li>b) Recognizes and describes various aspects of a source that may impact its value for a <i>specific</i> research project (e.g., bias and currency may impact the value of the information).</li> <li>c) Distinguishes between primary vs. secondary sources in a subject or discipline-specific context.</li> <li>d) Distinguishes between trade publications and general sources.</li> <li>e) Determines whether additional information, source types, and/or viewpoints are necessary.</li> </ul> |
| 4. Uses information effectively for a specific purpose | <ul style="list-style-type: none"> <li>a) Completes a research product (e.g., project, paper, report, essay) that incorporates newly acquired and prior information.</li> <li>b) Presents the research product effectively using the most appropriate medium for the intended audience (e.g., text, images, audiovisual).</li> </ul>   | <ul style="list-style-type: none"> <li>a) Evaluates past and alternative strategies for integrating new and prior information into the completion of a research product.</li> <li>b) Uses a range of formats and technologies, incorporating principles of design and communication, to present a research product.</li> </ul>  |
| 5. Uses information ethically and legally              | <ul style="list-style-type: none"> <li>a) Cites sources and compiles a bibliography or reference list, according to a standard format.</li> <li>b) Demonstrates an understanding of copyright, plagiarism, intellectual property and academic integrity by completing a research product that meets institutional criteria.</li> </ul>   | <ul style="list-style-type: none"> <li>a) Makes consistent and correct use of a citation style appropriate to the discipline.</li> <li>b) Demonstrates knowledge of what constitutes plagiarism by properly representing content and ownership of original source materials.</li> </ul>   |

### STANDARDS IN PRACTICE

The following are examples of library based assignments that can be adapted and used within any discipline/subject field and require students to explore, utilize and evaluate various library resources as well as Internet resources. These assignments (courtesy of the Cheng Library, William Paterson University of New Jersey) are designed to align with the indicated

Progression Standards for Information Literacy. More examples can be found at: <http://njla.pbworks.com/Progression-Standards-for-Information-Literacy>

*Opposing Viewpoints (This assignment emphasizes Introductory Level skills.)*

Select an issue or topic that offers the opportunity to defend or reject a particular position. Divide the class into two groups (pro or con) and have students gather evidence in support of their assigned position. Have students discuss their findings during an in-class debate. Students will learn to formulate search statements specific to their needs, identify and evaluate sources of information and use that information to construct arguments.

#### INTRODUCTORY LEVEL IN STANDARDS:

- Identify a research topic or information need – Introductory Skill 1(a)
- Identify and select appropriate tool for information need - Introductory Skill 2.1(c)
- Identify search terms relevant to research topic - Introductory Skill 2.2(a)
- Use a multi-disciplinary database to locate information - Introductory Skill 2.3(b)
- Organize gathered information - Introductory Skill 2.5(b)
- Evaluate information sources for their relevance to need, appropriateness/audience, authority, reliability, currency and point of view/bias - Introductory Skill 3(a)

*Citation Examination (This assignment emphasizes Introductory & Gateway Level skills.)*

Have students review a bibliography found in their textbooks (or alternate source). Ask students to identify what type of resource is denoted by each entry. Ask students to locate and obtain a copy of one or more of the listed sources. Students will learn how to identify sources of information through citations and recognize the value and importance of utilizing a bibliography to gather additional sources of information.

#### INTRODUCTORY AND GATEWAY LEVELS IN STANDARDS:

- Use bibliographies or citations to find materials - Gateway Skill 2.3(c)
- Use a variety of technologies to select and access resources - Introductory Skill 2.5(a)
- Identify similarities and differences among types of information sources (e.g. books, journals, newspapers, Internet, reference materials) - Introductory Skill 2.1(a)

*Annotated Bibliography (This assignment emphasizes Gateway Level skills.)*

Have students find a specified number (and type) of sources on a topic and write descriptive or evaluative annotations. Students will learn how to locate and access library resources and become accustomed to developing search strategies by extracting keywords or phrases from a topic. Students will also learn the format of a particular citation style.

**GATEWAY LEVEL IN STANDARDS:**

- Use subject or discipline specific information sources to better inform an understanding of the research topic or information need and to determine the extent of available information sources before proceeding - Gateway Skill 1(a)
- Recognize differences between general and discipline specific sources - Gateway Skill 2.1(a)
- Conduct subject searches using appropriate controlled vocabulary - Gateway Skill 2.2(a)
- Make consistent and correct use of a citation style appropriate to the discipline - Gateway Skill 5(a)