

Regional Accreditation Organizations' Treatment of Information Literacy: Definitions, Collaboration, and Assessment

by Laura Saunders

Available online 27 February 2007

Content analysis of regional accrediting organizations Web-based resources reveals support for information literacy as an important student learning outcome and encouragement of partnerships between librarians and faculty in instruction and assessment. This study offers librarians, faculty, and administrators insight into how the library can support institutional missions and accreditation standards.

Laura Saunders is a Faculty member, Simmons College Graduate School of Library and Information Science, 300 The Fenway, Boston, MA 02115-1598, USA <laura.saunders@simmons.edu>.

any regional and some program accrediting organizations embrace both student outcomes (e.g., graduation and retention rates) and student learning outcomes (e.g., how well students learn throughout their program of study). While stressing the need for the assessment of student learning in colleges and universities, higher education consultant Peggy Maki maintains that institutions must look beyond the completion of courses and the number of credits received, or even achievements in individual classes, to a more holistic view of learning as a "process of constructing meaning, framing issues, drawing upon strategies and abilities honed over time, reconceptualizing understanding, repositioning oneself in relation to a problem or issue, and connecting thinking and knowing to action" which should "transfer and build upon previous knowledge as [students] advance through courses." Information literacy as a student learning outcome matches her characterization and provides an opportunity to improve student knowledge, abilities, habits of mind, and skills throughout their program of study.

As more information in different formats becomes accessible, many higher education institutions and accrediting organizations view information literacy, with its emphasis on the location, application and evaluation of information, as a vital component of critical thinking and analytical skills. To assist in reaching a consensus about the definition of information literacy, the Association of College and Research Libraries (ACRL) defined an information literate person as one who understands when information is needed and has the ability to locate, evaluate, and use that information efficiently and effectively.² So defined, information literacy should, as Patricia Breivik maintains, act as an essential enabler for lifelong or continuous learning because those students who graduate with the ability to locate, evaluate, and effectively use information can learn independently and address their own needs and questions in any area of their life.3 The Middle States Commission on Higher Education (hereafter the Middle States Commission) used the ACRL definition as the basis for their accreditation standards relating to information literacy.4

"As more information in different formats becomes accessible, many higher education institutions and accrediting organizations view information literacy, with its emphasis on the location, application and evaluation of information, as a vital component of critical thinking and analytical skills."

The expectation is that information literacy will not be relegated to the library as a supplement to the general education curriculum, but that librarians and teaching faculty will work together in the planning, teaching, and assessing of these skills. The Middle States Commission explicitly lists "collaboration among professional library staff, faculty and administrators in fostering information literacy" among its "Fundamental Elements of Educational Offerings" within its standards for accreditation. ⁵ To encourage and promote such collaboration, it developed a framework which sets up guidelines for the implementation of an integrated information literacy program. This framework outlines the key competencies of information literacy based on the ACRL definition, offers general examples of learning activities for each, and assigns primary instructional responsibility for each competency to either a librarian or teaching faculty member.⁶

In 2005, the author tested the Middle States Commission framework to see how well it reflected actual information literacy practices in a selected group of libraries in one state. She reviewed information literacy practices and program descriptions that are publicly accessible on the library Web sites for similarities to the framework in terms of which skills were being taught, who was teaching them, and what methods for instruction and/or assessment were used. Consequently, the Middle States Commission's framework was revised to include the professional development opportunities librarians and faculty can offer one another to develop information literacy skills (see Fig. 1), and that revised framework was reviewed and validated by two higher education and accreditation experts.8,9

PROBLEM STATEMENT

Although the revised Middle States Commission framework is the most explicit and detailed set of expectations for collaboration between librarians and teaching faculty in the instruction and assessment of information literacy skills, no study has reviewed the standards and publications of accrediting organizations across regions to determine how well this framework reflects perspectives on information literacy for the entire set of these organizations. Specifically, do all accrediting organizations use the term "information literacy" in their standards? If so, does use of the term reflect the same set of knowledge and skills as depicted in Fig. 1 and the ACRL definition? Does all coverage of information literacy reflect the type of collaboration between librarians and faculty shown in

The fact that the framework is based on the ACRL guidelines for information literacy makes this research pertinent to librarians within and outside of the accrediting authority of the Middle States Commission. By calling attention to accreditation standards, this study assists librarians and teaching faculty across the regions in articulating how their instructional activities meet the accreditation criteria and align with the overall strategic plan of their respective universities. thereby increasing the perceived value of the library to their parent institutions. Indeed, Sheila Young maintains that "evidence of the contribution of the library to student learning outcomes is ... an important aspect of demonstrating the value of the library to academic programs and the institution."10 Finally, by detailing the expectations for collaboration by accrediting agencies, the results of this study may encourage more partnerships between teaching faculty and librarians.

LITERATURE REVIEW

Critical Thinking and Information Literacy

The emphasis on critical thinking skills as an important part of student learning outcomes is reflected throughout higher education literature. In Reinventing Undergraduate Education, the Boyer Commission laments the fact that too often students lack "a coherent body of knowledge or any inkling as to how one sort of information might relate to another," and calls on universities to improve educational outcomes by offering an integrated learning experience based inquiry and problemsolving, such that "the skills of analysis, evaluation and synthesis will become the hallmarks of a good education." ¹¹ In other words, students should not be expected to simply absorb and regurgitate information, but they should acquire the skills to apply their knowledge across diverse situations and experiences. The National Center for Education Statistics named critical thinking skills, including the ability to find and evaluate information, as among the most important skills for college graduates to possess. 12 Indeed, researchers and writers are increasingly emphasizing the ability to locate, evaluate, and use information, often defined as information literacy, as a important subset of critical thinking skills. The American Association of Colleges and Universities also identified "strong analytical communication, quantitative and information skills" [my emphasis] as the first of their five key educational outcomes for higher education. 13 The importance of these skills has been reinforced by external stakeholders such as the business community, which highlights the need for critical thinking and analytical skills to be successful in the workplace. 14

Collaboration

In order to integrate information literacy skills appropriately and effectively into the general education curriculum, writers and accreditation organizations point to the importance of collaboration between librarians and teaching faculty. Kenneth Smith stresses the need for librarians to work with faculty across the curriculum in developing student learning outcomes and offering instruction in information literacy skills, claiming that faculty will most likely be receptive to including library offerings that complement their own teaching areas and expertise. 15 He encourages librarians to "engage in dialogue with departmental faculty," acknowledging that librarians may have to take the initiative in approaching faculty and identifying the areas in which the library can offer help in achieving learning outcomes. 16 Ilene Rockman presents a compendium of best practices for building such a partnership between librarians and faculty by examining practical examples

Figure 1
Revised Middle States Commission Information Literacy Framework

Potential Objectives for an Assessment Plan	Lead Instructional Responsibility	Critical Loci of Instruction (Potential Sources for Data)	Professional Development Possibilities	ACRL Information Literacy Standards for Higher Education
Determining nature and extent of an information need	Faculty lead; librarians support	Classroom discussions; individual consultations; online tutorials; peer-group discussions; other mentors		Determine the extent of the information needed
Accessing information effectively and efficiently	Librarians lead; faculty support	Classroom discussions; individual consultations; online tutorials; peer-group discussions; other mentors	Workshops; research consultations; online guides/ tutorials	Access the needed information effectively and efficiently
Evaluating critically sources and content of information	Librarians lead on critique of sources; faculty lead on critique of content	Classroom discussions; individual consultations; online tutorials; peer-group discussions; other mentors		Evaluate information and its sources critically
Incorporating information in learner's knowledge base and value system	Faculty lead; librarian may be asked to support	Classroom discussions; individual consultations; online tutorials; peer-group discussions; other mentors	Research Consultations	Incorporate selected information into one's knowledge base
Using information to effectively accomplish a specific purpose	Faculty lead; librarians may be asked to support	Artistic performance; project demonstration; classroom discussions; individual consultations; online tutorials; peer-group discussions; other mentors	Assignment guides/ assistance	Use information effectively to accomplish a specific purpose
Understanding economic, legal, and social issues in the use of information & technology	Faculty and librarians (individually, jointly, and continuously)	Plans or rehearsals for projects/ performances; classroom discussions; individual consultations; online tutorials; peer-group discussions; other mentors	Online guides/ tutorials; workshops	Understand the economic, legal and social issues surrounding the use of information, and access and use information ethically and legally

of current practices in *Integrating Information Literacy into the Higher Education Curriculum*. ¹⁷ Likewise, although the Boyer Commission does not mention librarians specifically, it does stress that "there needs to be a symbiotic relationship between all participants in university learning that will provide a new kind of undergraduate experience." ¹⁸

In outlining the revised standards for information literacy of the Middle States Commission, Oswald Ratteray acknowledges the importance of collaboration between librarians and faculty. He indicates that all personnel with any curricular responsibility must be involved in confronting information literacy, stating that responsibility for teaching information literacy, "ideally would be shared by faculty members and librarians as the primary loci of instruction, with administrative support." In supplement to their standards, the Middle States Commission warns that those institutions that relegate information literacy to a single traditional library instruction session are "placing [themselves] at the lower end of information literacy delivery," implying that a deeper level of collaboration is expected.²⁰

Outcomes Assessment

Beyond the responsibility for simply instructing students in certain skills, however, many accrediting organizations

call for assessment of student learning outcomes, defined as a change in knowledge or attitude as a result of an interaction with the library, a call which is again echoed throughout higher education literature. The Middle States Commission which has been particularly explicit in their demand for information literacy skills as part of accreditation standards, expects "assessment of information literacy outcomes, including assessment of related learner abilities." Likewise, ACRL includes assessment and evaluation of both program performance and student learning outcomes as critical in their *Characteristics of Programs of Information Literacy That Illustrate Best Practices: A Guideline*. Literacy That Illustrate Best Practices: A Guideline.

Writing in support of assessment practices in libraries as far back as 1998, Bonnie Lindauer stresses the importance of ongoing assessment to demonstrate the value of the library, and insists that "assessment of library performance should be defined and shaped by its connections and contributions to institutional goals and the desired educational outcomes." She studied numerous documents, including regional accreditation standards and professional association documents, in order to develop a framework of assessment categories, key institutional outcomes, and corresponding performance indicators. Notable in the results of her literature survey was the

widespread inclusion of information literacy or some sort of library instruction among all accreditation standards she reviewed.²⁴ In 2001, Lindauer reviewed updated versions of the accreditation documents with similar results. Specifically, she found that ever-increasing attention was given to information literacy as an educational goal, and outcomes assessment is a critical component for "improvement of student learning as institutional effectiveness." Moreover, all of the organizations "emphasize a goal-based assessment model using mission-driven standards," and all but one of the documents stresses the teaching role of librarians.²⁶

Despite advice and examples for implementing an assessment plan for information literacy from authors such as Theresa Y. Neely, 27 in a study specifically focused on information literacy practices. ACRL found that although discussion of integrating information literacy into the curriculum is fairly widespread, many of the 664 respondents to a national survey are "just in the beginning stages of developing program, [and] had not gotten to the assessment stage yet."28 For instance, only 13 percent of the participating institutions indicated that they had implemented information literacy programs at their institutions, and only 14 percent had formal assessment methods in place for those programs. The survey included one question about the role of accreditation organizations in information literacy. Institutions were asked, if they had undergone an accreditation process recently, whether information literacy was addressed by either the accrediting organization or in the self-study; 27 percent of respondents indicated it was. The Middle States Commission, Southern Association of Colleges, and the Northern Central Association of Colleges were most frequently mentioned as addressing information literacy.²⁹

Thus, a consensus exists as to the importance and purpose of assessment among accrediting organizations and professional associations; a consensus which is just beginning to be reflected in the discussions and, to some extent, the documentation of individual institutions within the authority of these associations. Nevertheless, the research thus far has focused either on the expectations of assessment from the accrediting organizations, or the answers of individual institutions to these expectations, without drawing comparisons across regions.

PROCEDURES

Each of the six regional accrediting organizations publishes standards for accreditation, which typically outline the criteria that member institutions must meet to gain or maintain accreditation, and which contain clarifying text and general information on accreditation procedures. Other documentation may include supplements to the standards for accreditation which expand on individual criteria or update criteria between full revisions of the standards, policy and procedural guides, and self-study guides that aid institutions which are preparing for re-accreditation.

In their framework, the Middle States Commission outlines six competencies for information literacy, along with possible performance indicators, and suggests primary and secondary assignations for instruction of each skill. Using the revised framework as a guide, this study analyzes any references to information literacy and/or library instruction from any of the other five accrediting organizations to see if there is any consistency in how they describe either the skills and competencies for information literacy, or the suggested methods of instruction or assessment.

"...this study analyzes any references to information literacy and/or library instruction from any of the other five accrediting organizations to see if there is any consistency in how they describe either the skills and competencies for information literacy, or the suggested methods of instruction or assessment."

This study relies on a content analysis of the documentation freely accessible on the Web sites of all six of the accreditation organizations. The most recent versions of standards and criteria are thoroughly reviewed, with special attention to language dealing with information literacy, library instruction, or library skills. If information literacy is not used as a term, other mentions of library instruction or student learning outcomes generally related to information literacy are reviewed to see if they imply the same skills generally identified as information literacy skills.

A content analysis of accreditation publications reveals if other organizations assign instructional and/or assessment responsibility of information literacy skills, and to whom they are assigned, thus addressing expected levels of collaboration. Finally, the documents were reviewed to see if the accrediting organizations call for any data or performance indicators relating to student learning outcomes specifically from the library. All relevant passages from each of the accreditation documents were compared to each other and to Fig. 1 to determine if the framework is representative of accreditation standards from other regions.

LIMITATIONS

This study relies solely on the publicly accessible documentation of the accrediting organizations, which will not reflect the discussions or thought processes that went into the decision-making behind the standards and that in some cases might be more revealing than the actual documents. Nor does it review self or team reports. Accrediting organizations tend to provide teams with thorough training in standards and expectations, but the teams carry a lot of clout in determining how standards will be applied, and the reports they generate can provide much impetus for changes to criteria.³⁰ Second, this study examines only documentation from the regional accrediting organizations, and does not consider disciplinary accrediting associations. As such, the focus is likely to be on information literacy and assessment requirements at the institutional level, not the program or course level, which is also relevant. Finally, this study only reviews documents from the six regional accrediting organizations for four-year post-secondary schools, and does not include those organizations that accredit community and junior colleges.

FINDINGS

For the six regional accrediting organizations studied, use of the actual term "information literacy" is divided evenly. Three of them (the Middle States Commission of Higher Education, The New England Association of Schools and Colleges, and the Western Association of Schools and Colleges) include the term in their standards, while the other three (Southern Association of Colleges and Schools, the North Central Association of Colleges and Schools, and the North Western Commission of Colleges and Universities) do not. However, the three that do not use the phrase information literacy do refer to library instruction in some capacity (see Fig. 2).

The Middle States Commission is the most detailed and explicit in dealing with information literacy, using the phrase 13 times throughout its standards, and addressing the topic further in accompanying documents. The Middle States Commission is the only accrediting organization to offer a comprehensive definition of information literacy, offering the framework that forms the basis of Fig. 1, with the six competencies in the grid based on the ACRL definition. Information literacy is relevant to "all disciplines in an institution's curricula," and an "essential component of any educational program at the graduate or undergraduate levels." Within its standards, the

Middle States Commission stresses the need for collaboration between faculty and librarians in the instruction and assessment of information literacy skills, and further encourages and promotes this partnership in *Developing Research and Communication Skills: Guidelines for Information Literacy in the Curriculum.*³²

New England Association of Schools and Colleges

The New England Association of Schools and Colleges (NEASC) uses the phrase information literacy twice in its standards.³³ In regard to the instructional role of librarians, NEASC maintains that the use of information resources should be integrated into the curriculum, with libraries providing "appropriate orientation and training for the use of these resources, as well as instruction and support in information literacy." Further, it includes information literacy among the expected outcomes for a general education program. Although NEASC does not provide a specific definition along with either of its references to information literacy, it weaves relevant skills into other parts of its standards. For instance, students are expected to identify, analyze, and evaluate information resources, the first two of which skills are very similar to accessing information and integrating it into the knowledge base, while evaluating information is the same as objective three in the Fig. 1.

Figure 2
Regional Accrediting Organizations and Information Literacy Standards

Name	Regional Authority	URL	Information Literacy in
			Standards
Middle States	Washington D.C.; New York;	http://www.	Extensive,
Commission on	Pennsylvania; Florida;	msche.org/	includes the
Higher Education	Delaware; Maryland; New		phrase
	Jersey; Puerto Rico; U.S. Virgin		"information
	Islands		literacy"
New England	Connecticut, Maine,	http://www.	Significant,
Association of	Massachusetts, New Hampshire,	neasc.org/	includes the
Schools and	Rhode Island, Vermont, Canada		phrase
Colleges			"information
			literacy"
Southern	Alabama, Florida, Georgia,	http://www.	Significant,
Association of	Kentucky, Louisiana,	sacscoc.org/	does not use
Colleges and	Mississippi, North Carolina,		"information
Schools	South Carolina, Tennessee,		literacy"
	Texas, Virginia		
North Central	Arizona, Arkansas, Colorado,	http://www.	Minimal, does
Association of	Illinois, Indiana, Iowa, Kansas,	ncahigherle	not use
Colleges and	Michigan, Minnesota, Missouri,	arningcomm	"information
Schools	Nebraska, New Mexico, North	ission.org/	literacy"
	Dakota, Ohio, Oklahoma, South		
	Dakota, West Virginia,		
North West	Wisconsin, Wyoming	1-44	C: amifiaant
North West Commission on	Alaska, Washington, Oregon,	http://www.	Significant,
	Idaho, Montana, Nevada, Utah	nwccu.org/i ndex.htm	does not use "information
Colleges and Universities		ndex.nun	literacy"
Western Association	California, Hawaii, Guam,	http://www.	Significant,
of Schools and	Pacific Basin	wascsenior.	includes the
Colleges	1 active basiii	org/wasc/	phrase
Coneges		org/ wasc/	"information
			literacy"
			inclacy

Although much of it is implied through its language, NEASC demonstrates strong support for collaboration of faculty and librarians for the instruction and assessment of information literacy learning outcomes. Standard 7.8 states that students should use information resources as "an integral part of their education," and that they should be "appropriately directed to sources of information appropriate to support and enrich their academic work." These statements suggest that faculty and librarians need to work together, with each emphasizing their unique skills and knowledge. NEASC takes a similar stance in regard to assessment, indicating that the institution must evaluate what students are learning both in their classes and "through experiences outside the classroom." with specific attention paid to the "impact of its library, information resources and services."

Somewhat less text is devoted to the professional development opportunities for and among faculty and librarians. NEASC stresses the importance of professional development opportunities for faculty, as do each of the other regional accrediting bodies, but they do not make a specific reference to professional development for librarians. In support of the idea that librarians can aid in the professional development of faculty by assisting them in developing information literacy skills, NEASC indicates that library staff should instruct faculty in the effective use of resources as well as students.

Western Association of Colleges and Schools

The Western Association of Colleges and Schools (WACS) uses the term information literacy twice in its standards.³⁴ First, it lists information literacy as one of the core learning abilities to be acquired in baccalaureate degree programs, stating that graduating students should demonstrate certain skills and knowledge, including "college-level quantitative skills; information literacy ... and the habit of critical analysis of data and argument." The second mention of information literacy, which comes in the form of a question meant to guide member institutions in applying the standards, asks how the institution ensures that its community develops "the critical information literacy skills needed to locate, evaluate and responsibly use information."35 By enumerating the skills of location, evaluation, and responsible use of information, the Western Association of Colleges and Schools demonstrates support for the second, third, and sixth competencies listed in Fig. 1, and goes a step beyond the New England Association of Schools and Colleges, which indicates an expectation that their institutions promote the acquisition of information literacy skills, without specifically identifying those skills.

Despite this relatively strong relation to the first column of the figure, the standards demonstrate no clear evidence of support for or expectations of collaboration or partnering between librarians and faculty for either instruction or assessment. To begin with, although WACS values information literacy, its documents do not clearly assign a role for teaching those competencies. Several sections of the standards emphasize that the library plays a role in supporting teaching and learning, but this role is never directly linked to user instruction. At one point, the standards state that evaluations should include "other teaching staff" in addition to faculty. Although the standards do not expand further, this phrase could include instructional librarians.

Similarly, standard 2.3 emphasizes the importance of library resources to the curriculum, further clarifying the standard with a guideline that states "the use of information and learning resources beyond textbooks is evidenced in the syllabi." While this statement shows further support for integrating information literacy into the curriculum, it seems to place the responsibility fully with the faculty, since they would be responsible for developing the syllabi. Moreover, although WACS does indicate the importance of professional development for faculty, it neither mentions professional development for librarians, nor indicates that the library staff have a responsibility to educate faculty to use information resources as well as students.

Northwest Commission on Colleges and Universities

Although the North West Commission on Colleges and Universities (NWCCU) does not use the words "information literacy" anywhere within its standards, it devotes a comparatively large amount of text to libraries, and evinces support for the library's instructional role.³⁶ The NWCCU insists that the library should provide services that "contribute to developing the ability of students, faculty and staff to use the resources independently and effectively." Although this statement does not use the word "instruction," it implies that librarians contribute to this development of skills through some sort of instructional activity. This particular statement also suggests some of the competencies listed in the first column of the figure. In order to use information sources independently, users must know how to access them, which is the second skill listed in the Fig. 1. In addition, the effective use of information implies competencies, three, the critical evaluation of sources. and four, incorporation of information into the knowledge base, while it directly references the fifth objective, using information to accomplish a specific purpose.

The NWCCU demonstrates strong support for collaboration between librarians and faculty in the instruction and assessment of information literacy skills. In a pointed statement, the NWCCU indicates that institutions should involve library staff, faculty, and administrators in program planning, and that library staff should be consulted in curriculum development. No other departmental staff is singled out in this way, emphasizing that library staff have unique knowledge and skills valuable to the institution in planning its curriculum. Earlier in the standards, the NWCCU states that faculty have a major role in developing and implementing curriculum. By indicating that library staff should be consulted during this planning process, the NWCCU expects collaboration between these two groups. According to standard 2A8, "faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process." This statement is particularly important because it calls for a partnership, implying that librarians and faculty have an equal responsibility, rather than designating a supporting role for the library.

Support for professional development of faculty and librarians in the NWCCU documents is also evident. For instance, faculty are pointedly included as a part of the library's user community who needs instruction to develop their skills in using information resources effectively, thus supporting the idea that librarians can provide professional development opportunities for faculty. The NWCCU standards also state that both library staff and the teaching faculty should be given opportunities for professional growth, although the types of possible activities are not specified.

North Central Association of Colleges and Schools

The North Central Association of Colleges and Schools (NCACS) uses the word library nine times throughout its standards, but only refers to the libraries' instructional role once, noting that institutions must employ sufficient library staff to maintain the resources and to "train students in their use."³⁷ To further diminish its importance, this statement is not listed among the standards of accreditation proper, but is found in the middle of an explanatory paragraph which comments on the library's role in the institution. The use of the word "train" is also significant in that it has a somewhat technical connotation, quite different from the word "instruct" which implies more of a cognitive process. All other mentions of the library focus on its role to support learning and teaching, mostly through collecting and providing access to information resources. This supportive role might mean that librarians have a responsibility for user instruction, but that responsibility is never directly stated, and the supportive role could just as easily be simply to acquire and provide appropriate collections to support the curriculum.

Although the vast majority of relevant text in NCACS's documents give faculty lead or sole responsibility for curricular development, instruction, and assessment, a few statements indicate some support for collaboration with librarians. In explaining how learning resources should support faculty and students, NCACS clearly states that institutions should "enable partnerships and innovations that enhance students learning and strengthen teaching effectiveness." Similarly, this organization encourages librarians to find "creative ways of linking faculty and students to [learning] resources," which could include working cooperatively with faculty to develop assignments or teach the competencies related to information literacy. In terms of assessment, the standards maintain that assessment of student learning outcomes should extend to all educational offerings, curricular and cocurricular. Moreover, the library has responsibility for "collecting evidence that something worthwhile is happening to students because learning resources exist." Although the wording of this statement seems to give the librarians the passive role of simply providing resources, rather than actively instructing in their use, it is still a direct statement of an expectation for assessment by the library.

The fourth column of Fig. 1 deals with professional development of faculty and librarians in the area of information literacy. According to the NCACS accreditation standards, institutions should support professional development, especially in the area of teaching, and should extend professional development opportunities to staff as well as faculty. Beyond this general statement, however, the text does not offer examples of specific types of professional development. Moreover, in discussing the librarian's role in supporting the use of information resources, the NCACS standards only mention training students, but do not identify any role librarians might play in assisting faculty or staff in developing the skills of information literacy.

Southern Association of Colleges and Schools

The Southern Association of Colleges and Schools (SACS) uses the word library only five times, but emphasizes the library's instructional responsibilities.³⁸ Specifically, the standards call on institutions to ensure "users have access to regular

and timely instruction in the use of library and other learning/information resources." The word "regular" implies that library instruction should be ongoing, or at least delivered in more than a single-shot session at the beginning of a students' academic career. What is meant specifically by library instruction, however, is not defined.

The standards make it clear that the library should assess its activities and that institutions seeking accreditation should provide documentation of the types of library instruction offered, and how it assessed, thereby supporting column three of Fig. 1, offering guidelines to instructional activities. Broadly, SACS indicates that efforts at determining institutional effectiveness must include all programs and services. Furthermore, the standards maintain that evidence of a qualified staff does not depend on numbers or educational qualifications, but should be determined by "the effectiveness of the delivery of services to students, faculty and staff." Despite standards related to both the instruction of information literacy skills and its assessment, SACS shows little evidence that it encourages collaboration between librarians and faculty for either activity. In only one statement, and this in supplemental documentation and not the standards themselves, SACS asks the library for evidence that it participates broadly in the instructional activities "by all segments of the institution at all teaching locations." In order to participate effectively in programs and courses, librarians should collaborate with teaching faculty to achieve a common goal, but this expectation is not clarified.

In relation to the fourth column of Fig. 1, SACS encourages institutions to support professional development activities for both faculty and "learning/information resources staff," or librarians. The provision of professional development opportunities for faculty is written directly into the standards, while that of librarians is mentioned only in supplemental literature, but at least SACS recognizes the importance and need for library staff to improve their skills. Furthermore, SACS's standards indicate that librarians can help faculty to develop or improve critical information literacy skills by extending professional development to faculty as part of the library's community; the library must enable "students, faculty and staff to take full advantage of the learning resources provided by the institution."

DISCUSSION

Although none of the other regional accrediting bodies are quite as explicit or detailed in their expectations for information literacy as is the Middle States Commission, they all seem to place a high value on the skills associated with information literacy, and in so doing demonstrate support for the competencies and responsibilities put forth in Fig. 1. Several of the commissions specifically discuss the importance of skills such as the ability to find, interpret, and evaluate information. Interestingly, although WACS is the only commission to mention the responsible use of information within a library context, all of the accrediting organizations include statements concerning the importance of academic integrity, namely the ethical issues of copyright or intellectual property and avoidance of plagiarism. In most cases, these statements do not mention the library specifically, but they do indicate support for the ethical use of information. In a broad sense, some consensus seems to exist among the accrediting organizations about the

skills associated with information literacy, and those skills tend to align with the competencies listed in Fig. 1.

"In a broad sense, some consensus seems to exist among the accrediting organizations about the skills associated with information literacy, and those skills tend to align with the competencies listed in Figure 1."

The need for collaboration between faculty and librarians is less well defined. Indeed, both NEASC and NWCCU indicate that information literacy should be integrated into the curriculum, with NWCCU calling for a "partnership" between faculty and librarians, and even suggest that institutions should include library staff in curricular design. Other accrediting organizations are not quite as forceful in their language. In general, librarians are assigned a role in instructing users in the effective use of information resources, but how and where that learning takes place is left to the discretion of individual institutions.

Despite variances in wording and the amount of text devoted to information literacy instruction and its assessment, it is clear that all of the regional accrediting organizations expect their constituents to develop these skills in their students, and to determine and demonstrate their effectiveness in such instruction. The fact that every accrediting organization has at least some mention of library instruction or the library's responsibility for educating the user, and that three of six organizations use the term information literacy specifically, indicates that these organizations give some priority to information literacy skills as a critical outcome for both undergraduate and graduate students. Furthermore, although no other organization breaks down information literacy into the specific skills and components listed in Fig. 1, the ubiquitous use of terms such as acquisition of knowledge, evaluation of information, and ethical or responsible use of information shows that most of the accreditors have similar skills in mind, and that by and large these skills align with the ACRL definition, and Fig. 1.

Perhaps more telling than the fact that terms related to information literacy skills are being employed by accrediting agencies is that these terms are scattered throughout the accreditation documents, and are not concentrated solely in the sections dealing with libraries. A number of the accreditors integrate information literacy into statements on general education outcomes, and in so doing aligning it with other analytical skills addressed in the same statements such as critical thinking, and the ability to acquire and synthesize knowledge. This placement of information literacy is significant for two reasons. First, it confirms the impressions of Peggy Maki and Patricia Breivik that there is more emphasis on critical thinking skills, which lead to the possibility of continuous learning after the completion of the degree, and that information literacy is recognized as part of critical thinking. Indeed, with its emphasis on integrating information into a knowledge base, and using information responsibly and effectively, information literacy aligns with higher-order thinking skills as outlined in Bloom's taxonomy of categories of learning. The analysis, synthesis, and evaluation of information are higher-order because they involve comprehension and application of knowledge, rather than just recall. 41 Perhaps even more importantly, however, the placement of information literacy expectations in general education standards suggests that accrediting organizations view information literacy as having much broader application than just to the libraries.

"Perhaps more telling than the fact that terms related to information literacy skills are being employed by accrediting agencies is that these terms are scattered throughout the accreditation documents, and are not concentrated solely in the sections dealing with libraries."

That accrediting organizations give a higher priority to information literacy skills, along with an emphasis on the importance of other critical thinking skills, is evident throughout the documentation from all regions. The NCACS, which has the least amount of text overall devoted to libraries, actually spends a good deal of supplementary text on the importance of skills that are commonly associated with information literacy. The NCACS notes that today's students must be prepared to be "knowledge workers" in the sense that they must not just master certain information, but must comprehend, synthesize, and apply that information. More than just technologically literate, these workers will be valued for their "capacity to sift and winnow massive amounts of information in order to discover or create new or better understandings" Although these statements may sound similar to the common definition of information literacy, the NCACS never uses that term, and in fact couches these passages in a general statement on education, not library standards, reinforcing the applicability of information literacy skills throughout the curriculum. Likewise, NEASC lists a number of expected outcomes for undergraduates, including "critical analysis and logical thinking; and the capability for continuing learning, including the skills of information literacy."⁴³ Once again, the placement of this passage, along with the ordering of the words, is revealing. Like the NCACS, NEASC includes information literacy as a general education outcome, with the implication that these skills are not the sole responsibility of librarians. In addition, information literacy is not only aligned with critical thinking, but is included as a skill requisite for continuing or lifelong learning, reinforcing its overall importance.

While the placement of these statements seems to demonstrate that accrediting organizations outside of the Middle States Commission recognize that information literacy is not the sole responsibility of librarians, but should be integrated into and across the general curriculum, they do not mandate such integration. One of the concerns identified by Oswald Ratteray is that, because the term information literacy is so closely associated with the library profession, faculty are likely to assume that its instruction can be relegated to the library, or attended to by single-shot in-class sessions. As a result, librarians often find it difficult to initiate a collaborative partnership with these faculty, and look to the accreditors to mandate collaboration. Although Ratteray points out that it is beyond the scope of the organizations to issue such a mandate, he does emphasize the importance of integrating information literacy into the curriculum through collaborative partnerships,

a feeling that is echoed throughout the standards of the Middle States Commission. Ratteray suggests that using a term other than information literacy might assist in gaining the acceptance and cooperation of faculty. Indeed, the fact that three of the accreditors do not use the term information literacy specifically could stem from a discomfort with its roots, because those organizations do incorporate at least some of the skills of information literacy into their standards. Nevertheless, no other phrase or term is put forth to encompass these same skills. Beyond recognizing the importance of information literacy skills, and laying out expectations for their instruction, the accrediting organizations demonstrate a widespread commitment to assessment and evaluation to document learning outcomes in these areas.

All of the accrediting organizations devote large portions of text to expectations for outcomes assessment, in the library and beyond. In fact, most of the organizations include statements emphasizing that assessment should be institution-wide and include all programs, services, and offerings, like that of the SACS which states that each "institution engages in ongoing, integrated and institution-wise research-based planning and evaluation processes that incorporate a systematic review of programs and services."

The trend toward assessment and evaluation has a two-fold purpose of propelling universities to gather evidence that demonstrates how effective they are in accomplishing stated goals, and to encourage them to use that data to engage in a process of continuous improvement. WACS notes this shift of "performance indicators beyond inputs and resources as the basis for defining and evaluating quality" and maintains that the emphasis on the need for outcomes assessment is driven by higher expectations for graduates. 46 Even when the documentation dealing with assessment does not specifically address libraries, it has implications for the library in that accrediting organizations are looking beyond inputs and outputs to proof of performance from all areas of an institution, a point which is duly noted by the NCACS which clearly states that the quality of the library is no longer measured by numbers of books, but by how well the library supports the teaching and learning efforts of its parent institution.⁴

CONCLUSION

Regardless of the widespread support in accreditation standards for integrated information literacy programs, the literature suggests that in practice instruction is often still compartmentalized, with librarians relying on faculty invitations or student initiative to conduct what in many cases is still stand-alone rather than class-integrated instruction. In the case of information literacy, the accreditors have demonstrated that it 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. Librarians might use accreditation standards to garner faculty buy-in for weaving information literacy into the curriculum, but rather than relying on the standards to work for them, but should actively gather data that can demonstrate the impact the library has on student learning outcomes and the value of information literacy both in the classroom and as an important component of lifelong learning. By getting involved in curriculum development and assessment, the library can raise its profile on campus and increase its perceived value to the institution, which will be invaluable at a time when libraries nationwide are facing increased competition and tight budgets in the face of continued questions about the importance of a physical library to campus life. Indeed, Patricia Breivik and Gordon Gee, who emphasize these opportunities for librarians, lament that campus administrators do not take advantage of the expertise and contributions of their librarians. ⁴⁸ In order to accomplish these important tasks, librarians must first be aware of accreditation standards, and how the library can partner with faculty and administrators in support of the goals of its parent institution. Fig. 1 will help frame the partnership and might become a discussion document for fostering that partnership.

"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."

NOTES AND REFERENCES

- Peggy Maki, Assessing for Learning: Building a Sustainable Commitment Across the Institution (Sterling, VA: Stylus, 2004), p. 32.
- 2. Association of College and Research Libraries, *Information Literacy Competencies for Higher Education* (Chicago: American Library Association, 2000). Available at http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm (accessed June 29, 2006).
- 3. Patricia Breivik, *Information Literacy and Lifelong Learning: The Magical Partnership.* A paper presented at the International Lifelong Learning Conference, Central Queensland University, Queensland, Australia, 2000. Available at lifelonglearning.cqu. edu.au/2000/keynote/Breivik.doc (accessed June 29, 2007).
- 4. Middle States Commission on Higher Education, *Developing Research and Communication Skills: Guidelines for Information Literacy in the Curriculum* (Philadelphia, PA: Middle States Commission on Higher Education, 2003).
- 5. Middle States Commission on Higher Education, *Characteristics of Excellence in Higher Education: Eligibility Requirements and Standards for Accreditation* (Philadelphia, PA; Middle States Commission on Higher Education, 2002), pp. 43–44. Available at http://www.msche.org/publications/Characteristicsbook050215112128. pdf (accessed June 29, 2006).
- Middle States Commission on Higher Education, *Developing Research and Communication Skills*, (Philadelphia, PA: Middle States Commission on Higher Education, 2003).
- 7. Laura Saunders, *The Roles of Librarians and Faculty in Providing Information Literacy Programs*, unpublished paper (Boston, Simmons College, Graduate School of Library and Information Science, December 15, 2005). For a doctoral course in evaluation of information services taught by Dr. Peter Hernon, the author reviewed the library Web sites of selected institutions in Pennsylvania, including any publicly accessible publications or documentation having to do with information literacy practices and programs. The content of the sites was compared to the Middle States Commission's framework, and individual practices were aligned with each of the six competency categories to see how well the framework reflected actual practices in the institutions studied.
- 8. Oswald M.T. Ratteray, email message to Dr. Peter Hernon, April 11, 2006.

- 9. Terrence Mech, email message to Dr. Peter Hernon, April 20,
- 10. Sheila Young and Julia Blixrud, "Research Library Involvement in Learning Outcomes Assessment Programs," AR 230/ 231 (October/December 2003): 15. Available at http://o-vnweb. hwwilsonweb.com (accessed June 29, 2006).
- 11. Boyer Commission on Educating Undergraduates in the Research University, Reinventing Undergraduate Education: A Blueprint for America's Research Universities (Stonybrook, NY: State University of New York, p. 6. Available at http://naples.cc. sunysb.edu/Pres/boyer.nsf/673918d46fbf653e852565ec0056ff3e/ d955b61ffddd590a852565ec005717ae/\$FILE/boyer.pdf (accessed June 29, 2006).
- 12. Elizabeth Jones, National Assessment of College Student Learning: Identifying College Graduates' Essential Skills in Writing, Speech and Listening, and Critical Thinking (Washington, DC: National Center for Education Statistics, 1995).
- 13. Association of American Colleges and Universities, Board of Directors, Our Students' Best Work: A Framework for Accountability Worthy of Our Mission, (Washington, DC: Association of American Colleges and Universities, 2004), p. 5.
- 14. Ilene Rockman, "Strengthening Connections between Information Literacy, General Education And Assessment Efforts,' Library Trends 51 (Fall 2002): 186. Available at http://0-vnweb. hwwilsonweb.com (accessed June 29, 2006).
- 15. Kenneth Smith, "New Roles And Responsibilities for the University Library: Advancing Student Learning Through Outcomes Assessment," Journal of Library Administration 35 (2001): 29-36. Available at http://0-vnweb.hwwilsonweb.com (accessed June 29, 2006).
- 16. Ibid.
- 17. Ilene Rockman, ed., Integrating Information Literacy into the Higher Education Curriculum (San Francisco: Jossey-Bass, 2005).
- 18. Boyer Commission, Reinventing Undergraduate Education, p. 6.
- 19. Oswald Ratteray, "Information Literacy in Self-Study and Accreditation," The Journal of Academic Librarianship 28 (2002): 370. Available at http://0-vnweb.hwwilsonweb.com (accessed June 29, 2006).
- 20. Middle States Commission on Higher Education, Developing Research and Communication Skills, p. 21.
- 21. Middle States Commission on Higher Education, Characteristics of Excellence in Higher Education, (Philadelphia, PA: Middle States Commission on Higher Education, 2002), p. 46. Available at http://www.msche.org/publications/ Characteristicsbook050215112128.pdf (accessed June 29, 2006).
- 22. Association of College and Research Libraries, Characteristics of Programs of Information Literacy that Illustrate Best Practices (Chicago: American Library Association, March 17, 2006). Available at http://www.ala.org/ala/acrl/acrlstandards/ characteristics.htm (accessed June 29, 2006).
- 23. Lindauer, "Defining and Measuring the Library's Impact on Campuswide Outcomes," College and Research Libraries 59, (1998): 547. Available at http://0-vnweb.hwwilsonweb.com (accessed June 29, 2006).
- 24. Ibid.
- 25. Bonnie Lindauer, "Comparing the Regional Accreditation Standards: Outcomes Assessment and Other Trends," The Journal of Academic Librarianship 28 (January/March 2002): 14. Available at http://0-vnweb.hwwilsonweb.com (accessed June 29, 2006).
- 26. Ibid.
- 27. Theresa Y. Neely, Information Literacy Assessment: Standards-Based Tools and Assignments (Chicago: American Library Association, 2006).
- 28. Association of College and Research Libraries, National Information Literacy Survey (Chicago: American Library Association, 2003). Available at http://www.ala.org/ala/acrl/acrlissues/ acrlinfolit/professactivity/infolitsurvey/surveyintro.htm (accessed June 29, 2006).

- 30. Ratteray, email message (see note 8).
- 31. Middle States Commission on Higher Education, Characteristics of Excellence in Higher Education p. 42.
- 32. Middle States Commission on Higher Education, Developing Research and Communication Skills: Guidelines for Information Literacy in the Curriculum (Philadelphia, PA: Middle States Commission on Higher Education, 2003).
- 33. New England Association of Schools and Colleges Institutes of Higher Education, Standards for Accreditation, (Bedford, MA: Commission on Institutes of Higher Education, 2005), p. 7. Available at http://www.neasc.org/cihe/standards_for_accreditation_ 2005.pdf (accessed June 29, 2006).
- 34. Western Association of Schools and Colleges Accrediting Commission for Senior Colleges and Universities, Handbook of Accreditation (Alameda, CA: Western Association of Schools and Colleges, 2001), p. 20. Available at http://www.wascsenior.org/ wasc/Doc_Lib/2001%20Handbook.pdf (accessed June 29, 2006).
- 36. Northwest Commission on Colleges and Universities, Accreditation Handbook, (Redmond: WA: Northwest Commission on Colleges and Universities, 2003), p. 28. Available at http://www. nwccu.org/Pubs%20Forms%20and%20Updates/Publications/ Accreditation%20Handbook%202003%20Edition%20Updated %20September%201%202005.pdf (accessed June 29, 2006).
- 37. North Central Association Higher Learning Commission, Handbook of Accreditation (Chicago, IL: The Higher Learning Commission, p. 3.2-11. Available at http://www.ncahigher learningcommission.org/download/Handbook03.pdf (accessed June 29, 2006).
- 38. Southern Association of Colleges and Schools Commission on Colleges, Principles of Accreditation: Foundations for Quality Enhancement (Decatur: GA, Commission on Colleges, 2001), p. 26. Available at http://www.sacscoc.org/pdf/PrinciplesOfAccreditation. PDF (accessed June 29, 2006).
- 39. Southern Association of Colleges and Schools Commission on Colleges, Resource Manual for the Principles of Accreditation: Foundations for Quality Enhancement (Decatur, GA: Commission on Colleges, 2001), p. 59. Available at http://www.sacscoc. org/pdf/PrinciplesOfAccreditation.PDF (accessed June 29, 2006).
- 40. Northwest Commission on Colleges and Universities, Accreditation handbook (Redmond: WA, Northwest Commission on Colleges and Universities 2003), p. 28. Available at http://www. nwccu.org/Pubs%20Forms%20and%20Updates/Publications/ Accreditation%20Handbook%202003%20Edition%20Updated %20September%201%202005.pdf (accessed June 29, 2006).
- 41. Donald Clark, Learning Domains or Bloom's Taxonomy (July 5, 2001). Available at http://www.nwlink.com/~donclark/hrd/ bloom.html (accessed June 29, 2006).
- 42. North Central Association Higher Learning Commission, Handbook of Accreditation (Chicago: IL The Higher Learning Commission, 2003), p. 3.2-12. Available at http://www. ncahigherlearningcommission.org/download/Handbook03.pdf (accessed June 29, 2006).
- 43. New England Association of Schools and Colleges Institutes of Higher Education, Standards for Accreditation, p. 9.
- 44. Ratteray, "Information Literacy in Self-Study and Accreditation."
- 45. Southern Association of Colleges and Schools Commission on Colleges, Principles of Accreditation: Foundations for Quality Enhancement, p. 15.
- 46. Western Association of Schools and Colleges Accrediting Commission for Senior Colleges and Universities, Handbook of Accreditation, p. 2.
- 47. North Central Association Higher Learning Commission, Handbook of Accreditation, p. 3.2-11.
- 48. Patricia Senn Breivik and E. Gordon Gee, Higher Education in the Internet Age (Westport, CT: Praeger, 2006).