Bonnie Gratch-Lindauer

Information literacy student behaviors

Potential items for the National Survey of Student Engagement

The Institute for Information Literacy's College Student Surveys Project Group is nearing completion of its charge to identify potential items to recommend for consideration to the National Survey of Student Engagement (NSSE).[1] The project grew out of interest from some ACRL members in studying the national college student engagement surveys for items related to information literacy.[2] The charge evolved to include an analysis of seven national standardized college student surveys (primarily first-year surveys) for content relating to information literacy, then focused on NSSE, since it is used by more colleges and universities. George Kuh and Robert Gonyea (Center for Postsecondary Research, Indiana University) have served as resources to the project and have provided much useful information throughout the process.

The process

After initial investigation of the seven surveys, a chart was compiled that compared items related to information literacy. After the 2004 ALA Annual Conference, the project group decided to concentrate on one survey, examining it in-depth, and studying the research methodology and other documentation about how the subscores of NSSE are calculated. Several conference calls moved the work ahead, with a revised focus on developing survey items related to how academic libraries contribute to student learning—a broader approach that would include aspects of information literacy, but would not be limited to them.

We then looked at some locally developed surveys and reviewed two articles relating information technology use and library use behaviors with student engagement areas. The article by Laird and Kuh looked at a set of information technology items piloted on the 2003 NSSE to analyze their relationship to aspects of student engagement.

The second article was an exploratory study by Kuh and Gonyea, which used findings from the 1984-2002 College Student Experiences Questionnaires (CSEQ) relating student experiences with the academic library to their engagement with effective educational practices. Among other findings, are these two:

"the relative strength of the positive relationships between academic uses of information technology and engagement, particularly academic challenge, student-faculty interaction, and active and collaborative learning, suggest that, at the very least, there is overlap between these constructs."[3]

"….library experiences of undergraduates positively relate to select educationally purposeful activities, such as using computing and information technology and interacting with faculty members. Those students who more frequently use the library reflect a studious work ethic and engage in academically challenging tasks that require higher-order thinking…."[4]

Bonnie Gratch-Lindauer is coordinator of instructional services at City College of San Francisco, e-mail: bgratch@ccsf.org

Category	Top three behaviors/activities
Preparing for research	25 Articulates one's information need
	20 Matches the appropriate periodical index/database to the information need or research question.
	18 Visits the physical or online library and understands the wealth of resources available
Engaging with faculty/ librarian	26 Recognizes when it is time to consult a reference librarian for ideas or sources in completing papers/projects
	20 Seeks feedback from a librarian or course instructor following initial identification and/or retrieval of information resources to support specific course work.
	16 Networks effectively with peers, librarians, professors, colleagues, etc.
Doing Research	26 Is persistent and tries different strategies in looking for the best sources, rather than giving up.
	18 Reads the screen; taking a few minutes to actually look at what one is doing instead of automatically typing some words in the search box.
	14 Uses citations to find additional sources on a topic.
Obtaining & managing/ using information	24 Uses information, facts, data and/or evidence to support an argument, solve a problem or suggest a solution
	20 Synthesizes information from various disciplines that reflect different perspectives.
	17 Considers all sides of an argument/issue
Evaluating & interpreting	25 Questions the credibility of sources before using them.

At the 2005 ALA Midwinter Meeting, the project group's discussion centered on Kuh's suggestion to focus our item development work on student behaviors that contribute to what we define as information literacy, "in addition to student interactions with librarians or their library experiences."[5] Since there was plenty of time to prepare these items, we decided to seek broader input from academic librarians and library school educators about what they think some of these behaviors might be.

This broader input was obtained from a six-month, adapted Delphi process to gather evidence and support from a polling of library and information science educators and practitioners. A request for participation in two QuickTopic forums was made to six different electronic lists between February and May 2005. The first invited participation in describing behaviors or activities that college students might engage in that would support development of information literacy competencies. From the first round, 56 postings were reviewed by project group members, who deleted the clearly redundant ones and organized the remaining behaviors and activities into nine broad categories. These student behaviors/activities became the content for the second QuickTopic theme. A posting to the same lists requested a review and ranking of the behaviors and activities. The 37 unique postings were compiled

Category	Top three behaviors/activities
	20 Evaluates the usefulness or relevancy of information sources.
	17 Evaluates a number of information resources to select the most appropriate for a paper or topic.
Learning about information & research	24 Discusses the ethical, legal, or moral issues related to information use.
	23 Studies and discusses how information can be used within different disciplines, different ethical concerns to gain an understanding of a wider context of the information found.
	20 Participates in guided instruction from faculty in partnership with librarians.
Activities	27 Doing assignments that require reflection on information research.
	25 Doing assignments that connect the research assignment to real world outcomes
	22 Doing assignments that require active use of library-based resources
Questioning behaviors	30 Asking "Is there anything more I can find out?"
	26 Questioning assumptions—ones own and those of others.
	18 Asking "Does this make sense?"
Other behaviors	20 Reading books, newspapers, listening to NPR, etc.
	19 Ability to stay focused, to stay on task
	19 Working collaboratively

and the results are depicted in the table on these pages. The number before the behavior is the number of respondents selecting the behavior/activity among their top three to five.

Review and endorsement
At its summer ALA Annual Conference meeting, the project group reviewed these findings from the field along with the items currently on the 2005 NSSE to determine the final items for submission. The resulting items were reviewed and endorsed by the Executive Committee of the Institute for Information Literacy and the ACRL Executive Board. In mid-August, six new items were submitted to the NSSE staff for consideration. The project group also identified 22 items currently on the 2005 NSSE Web survey that support or relate to infor-

mation literacy behaviors. If the new items are accepted as experimental items on the 2006 NSSE, they could be analyzed along with the 22 current items as part of a set of information literacy related behaviors. As an example, the chart on the following page illustrates one current item that asks students how frequently they have done specific things. The left column lists three student behaviors the project group have submitted for consideration as experimental items. The right column identifies current items that we believe should be considered as part of the set of information literacy contributing/related items.

Of course, we are aware that this type of survey research does not provide evidence of causality, but it can help to identify the strength of relationships among specific information literacy-related

New items decided at the ALA June 26, 2005 meeting	Current IL-related Items (2005 NSSE online version)
1. In your experience at your institution during the current school year, about how often have you done each of the following: • asked a librarian for help (in person, e-mail, chat, etc.)? • participated in a library instruction session or online tutorial? • used library resources or the Web for research?	1. In your experience at your institution during the current school year, about how often have you done each of the following: • worked on a paper or project that required integrating ideas or information from various sources? • included diverse perspectives (different races, religions, genders, political beliefs, etc) in class discussion or writing assignments? • used an electronic medium (lists, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment? • used e-mail to communicate with an instructor?

behaviors and a set of behaviors strongly associated with engaging in effective educational practices.

Project group members want to thank all our colleagues who took the time to respond to one or both of the QuickTopic postings.

Notes

1. Project Group members are: Bonnie Gratch-Lindauer, chair; Elizabeth Dupuis; Colleen Boff; Polly D. Boruff-Jones; Lisa Hinchliffe; Ilene Rockman; Kwasi Sarkodie-Mensah; Scottie Cochrane; and Margit Watts.

2. As sometimes happens, a couple of serendipitous events occurred along the way. The project group learned of two related activities: a Council on Library and Information Resources' Academic Libraries Advisory Committee project to submit some items to NSSE and interest in a similar task among members of the Oberlin Libraries Group, facilitated by Tom Kirk.

3. Thomas F. Nelson Laird and George D. Kuh, "Student experiences with information technology and their relationship to other aspects of student engagement," Paper present-
ed at the Annual Meeting of the Association for Institutional Research, June 2004: 18.

4. George D. Kuh and Robert M. Gonyea. "The role of the academic library in promoting student engagement in leaning," College & Research Libraries 64, no. 4 (2003): 269-270.

Updated information literacy resources for ACRL members

The most recent addition to ACRL's updated, members-only internet resources columns on the Web is "Information literacy sites: Background and ideas for program planning and development—an update," by Esther Grassian and Michael Oppenheim. This expansive listing covers guidelines and reports, tutorials, new technology, assessment, and more, in addition to providing links to journals, articles, and discussion forums. Visit www. ala.org/ala/acrl/acrlpubs/crlnews/updatedresources.htm to access the article. To access this content, you will need to log in using your ALA Member login and password. Internet Resources articles as published in *C&RL News* continue to be openly available.