## An information literacy curriculum: A proposal

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A progressive four-year college is establishing information literacy as an institutional goal for all its graduates.

**M** any people consider information literacy the most important skill for the 90s and for the 21st century. Alvin Toffler, in *Powershift*, emphasizes the importance of information and judges it critical to the attainment of prestige and wealth. He sees the ability to access information as fundamental to high achievement in the business world and elsewhere. "The control of knowledge is the crux of tomorrow's worldwide struggle for power in every human institution."<sup>1</sup>

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There is little reason to dispute Toffler's assessment. The belief echoes what Fortune 500 leaders have been saying for the past 15 years. It is this ultimate ingredient of success that the institution hopes to bestow on its students, through an interdisciplinary information literacy program.

*Goal:* To assure that all graduates will be information literate.

Objectives: Students will have the ability to understand what information is, when they need to

access it, how and where to obtain it, and how to use it.

*Current situation*: Information skills are briefly introduced to students in their senior year, as part of their senior project. The new program will initiate information literacy training in the freshman year, and will, to varying degrees, include it in each course offered in the institution.

#### **Program components**

1. A Library Research Skills course (3 credits) will be required in the freshman year. This course will not only teach how to use hard copy, CD-ROM, and online sources, but will also introduce students to diverse locations of documents. Meeting this objective will necessitate field trips to special library collections, such as legislative libraries; government agency libraries—state, local, and federal; business libraries; etc. Freshman Information Literacy courses will be taught by an information specialist/librarian. Objective: To assure that the student will be able to use, and will be aware of, all general research tools, sources, and collections.

2. Advanced Research Skills training will occur as part of introductory courses in each discipline. Sections will be team-taught and evaluated by the information specialist and a subject specialist. Each section will include visits to the appropriate special collections. Some examples are: • "Introduction to Business Principles"—includes how to use specialized business research tools such as *Business Periodicals Index* and ABI/ INFORM.

• "Principles of Psychology"—includes how to use *Psychological Abstracts* and other relevant sources, in hard copy and online.

• "Introduction to Political Science"—includes how to use *Public Affairs Information Service* and other appropriate sources, in hard copy and online.

• "Principles of Sociology"—includes how to use Sociological Abstracts, etc.

• Health Administration students will learn how to use MEDLINE online, and other relevant online and hard copy sources.

• History and humanities students will learn how to use traditional tools such as *Historical Abstracts* and *Academic Index*. They will be introduced to sources such as oral histories, handwritten manuscripts, etc.

As new disciplines are added to the institution's offerings, additional information literacy classes will be added to meet expanding needs.

*Objective:* Students will be aware of, and able to use, specialized resources within a given discipline. This program will be taught with a reminder that the same sources may be appropriate for several different disciplines—e.g., articles from *Sociological Abstracts* may be appropriate for political science, public administration, and philosophy, as well as sociology.

3. Students will receive one-to-one follow-up instructions and consultations in the library.

4. Free hands-on time will be provided to all students in all phases of the Information Literacy Program.

5. Professors will schedule the information specialist's time in at least one session of each appropriate class each semester.

6. The institution mandates a writing component in every course. Information literacy will also become a component of every course. Professors will assign papers that require a visit to the library, a search in hard copy sources, CD-ROM searching, and—for some papers—searching online.

#### Evaluation

As part of each course-exit questionnaire, students will be surveyed to discern whether or not they have assimilated research skills. Professors will look at the cited references used in each paper to ascertain appropriateness of research. Problems perceived by the professors will be discussed with the student and, separately, with the information specialist. The student will be referred to the library for additional hands-on time.

During the senior year, students will be surveyed

to assess the level of their individual information literacy skills. The survey will ask students what sources they would use to find information on specific topics—e.g., "Where would you find titles of articles about day care centers?" "Where could you quickly find the date of Leonard Bernstein's death (or other very current event)?" "Where could you find the name, age, and salary of the CEO of United Airlines?" etc. If deficiencies are uncovered, part of the semester will be devoted to strengthening information literacy skills.

# Information literacy will become a component of every course.

Additional training time will be offered to senior students who cannot accurately answer the survey questions. Those who have accurate answers will be introduced to more advanced research materials.

The surveys, at class and senior exit levels, will also be used to ascertain strengths and weaknesses of the program. At this time, it is not felt that graduation should be delayed if weaknesses in research skills are discovered. After completion of the first four-year cycle of the program, further evaluations, including those pertaining to graduation requirements in information literacy, can be made.

#### Measurement

The curriculum development plan outlined by Finch and Crunkilton<sup>2</sup> was used to measure the proposed Information Literacy Program. Each of Finch & Crunkilton's steps is listed below, followed immediately by how that step is, or will be, met by the Information Literacy Program.

### 1. Develop Curriculum Goals and Write Objectives

*Met*. A "goal" section and an "objectives" section are included in the proposal. "Information literacy" is clearly defined. This definition can be expanded and supported, if necessary. The position of the program within the existing and expanding curriculum is also detailed in the body of the proposal. Specific objectives are expressed within the program.

#### 2. Make Curriculum Planning Decisions

Will be met. Though the program as outlined in this document includes final decisions on many

aspects of the Information Literacy Program, additional decisions will be made as new areas of curriculum are added to the institution. Since the program is interdisciplinary, adjustments and additions to the program will be made as needed. Some decisions will be made by the information specialist alone, others may need to be part of a curriculum planning committee consensus.

#### 3. Sequence Objectives

*Met.* Objectives to be met in the freshman year are stated, as are the objectives for specialized information and research skills in the student's area of concentration.

#### 4. Obtain School-Related Data and Obtain Community-Related Data

Met. The institution has recently completed surveys of community college students, high school students, businesses in the community, and its own faculty, staff, and administrators, as well as a doorto-door survey of nearby residents. These were prepared, conducted, and compiled by a contracted survey firm using the institution's guidelines and criteria for questions, supplemented by criteria provided by mainland educators. Results, though truly valid only for the year surveyed, give the college a picture of the community's desires for education today. Financial, demographic, and business projection data for the area were obtained from outside agencies. These give a somewhat reliable estimate of the expected growth patterns, trends, and needs of the community for the next five to ten years. Nothing in the surveys suggests a lack of need for an Information Literacy Program. Since it has become apparent that information skills are essential for gaining and retaining world power, an Information Literacy Program will be necessary if the graduates of this institution are to be competitive in their immediate and extended communities.

#### 5. Determine Student Needs and Interests

*Met.* For this program specific needs will be ascertained and met in the class sessions designed for specialized areas. The freshman-level course will give students generalized information skills which will allow them to uncover basic information in any and all areas in which they have, or develop in the future, an interest.

#### 6. Determine Curriculum Content

Met. Though only briefly described in the program outline, specific research tools and methods will be taught in each segment. Included will be the online public access catalogs of many different institutions within the community and beyond, hard copy indices, CD-ROMs, and online services. The more abstract ability to decide which information tool or source to use will also be taught. The easiest tools, sources, ideas, and methods will be taught in the freshman year. The more complicated ones will be taught in subsequent specialized area courses.

#### 7. Develop Curriculum Materials

Met. Many of the materials—bibliographies, handouts about procedures, study guides, tests, surveys—have already been developed and are being used. These are updated as needed. When the currently offered information skills course is expanded into the interdisciplinary program, additions will be developed as needed.

*Will be met.* Teaching guides will be developed for the professors in the program who are not information specialists (business, psychology, political science, humanities, etc.).

#### 8. Evaluate Curriculum Materials Effectiveness

Will be met. Effectiveness of the procedures handout can be (and has been) measured through observation by the information specialist as (s)he coaches each hands-on session. Effectiveness of bibliographies will be ascertained by the information specialist and professors in each discipline as they grade the appropriateness of information each student retrieves. Classroom methods, styles, presentations, etc., will be evaluated by questionnaires and surveys distributed to the class. The information specialist and the professor will monitor each other for effectiveness.

Overall effectiveness of the program will be measured by surveys of the students during their freshman and senior years. Students will be tested or surveyed for information skills before and after each course they take. A final test will be included as part of the Senior Project. This should give a reasonably accurate portrait of how well the Information Literacy Program is working and where fine tuning or drastic overhaul may be needed.

#### 9. Make Curriculum Content Decision

Met. Professionals participating in this program should plan to meet three times each semester to discuss and revamp where necessary, especially in the first year of implementation. The suggested times for meeting are: once pre-semester, once mid-semester, and once after the semester concludes. If meetings are not feasible, due to scheduling overloads, etc., all participants should complete a simple but explicit form detailing strengths, weaknesses, and areas of need they have encountered during the semester.

Pre- and post-course testing, senior project testing, observations, and questionnaires should quickly alert instructors to what changes, additions, deletions, and adaptations are needed. An awareness of technological changes, before they occur, is built into the program. It is expected that any needed alteration can be addressed within a given semester or, at latest, by the following semester.

<sup>1</sup>Alvin Toffler, Powershift: Knowledge, Wealth, and Violence at the Edge of the 21st Century (New York: Bantam Books, 1990), 20.

<sup>2</sup>C.R. Finch and J.R. Crunkilton, *Curriculum Development in Vocational and Technical Education*, 3rd ed. (Boston: Allyn & Bacon, 1989), 3–22.

### **Update: Information literacy**

#### By Barbara J. Ford

#### ACRL's 52nd President

nowledge is of two kinds: we know a subject ourselves, or we know where we can find information upon it."Dr. Samuel Johnson (1709–1784), Boswell's *Life of Dr. Johnson*.

Johnson's words from over 200 years ago are still pertinent today. The Commission on Higher Education recently concluded that information literacy is essential to assuring quality in the undergraduate library experience. I strongly support this conclusion and am pleased that ACRL has taken a leadership role in promoting information literacy. Throughout the year we have:

• published articles on information literacy in C&RL News;

 developed posters, pamphlets, folders, and even a frisbee that can be used to spread the word about information literacy in a variety of campus environments;

• presented programs on information literacy at ACRL chapter meetings;

 identified individuals who can serve as advisers to academic librarians working on information literacy;

• joined approximately 50 educational organizations affiliated with the National Forum on Information Literacy;

• planned a program including poster sessions for the ALA Annual Conference in Atlanta.

I want to thank all of you who responded to my request for assistance in defining information literacy. I enjoyed hearing about all of your innovative ideas and have found them useful.

I encourage each of you to review your library's programs to ensure that your patrons are getting the help they need to become information literate and to work with your faculty and administrators to promote the importance of information literacy. A brief list of resources immediately follows.

Note: A special note of thanks to my program planning committee who took a leadership role in many of the activities described here. Mary Reichel, chair; Patricia Senn Breivik; Lorene Brown; John Collins; Gemma Devinney; Joan Gotwals; Randy Hensley; Marilyn Lutzker; Ellen Meltzer; Barbara Moran; Sara Penhale; Billy Pennington; Brenda Purvis; Trish Ridgeway; and Ralph Russell.

#### Information literacy resources:

Rao Aluri and Mary Reichel, Information Literacy: Critical Skills for a Changing World. Chicago, ALA, 1990.

Lori Arp, "Information Literacy or Bibliographic Instruction: Semantics or Philosophy?" *RQ* 30 (Fall 1990): 46–49.

Patricia Senn Breivik, "Literacy in an Information Society." in *The White House Conference on Library and Information Services*, July 9–13, 1991, *Discussion Papers*. Washington, D.C.: The White House Conference on Library and Information Services, 1991.

Anita Kay Lowry, "Beyond BI: Information Literacy in the Electronic Age," *Research Strategies* 8 (Winter 19991): 22–27.

Hannelore Rader, Billie Reinhart, and Gary Thompson, *Evaluating Information: A Basic Checklist.* Chicago: ALA, 1990.

Trish Ridgeway, "Information Literacy: An Introductory Reading List," College & Research Libraries News 51 (July/August 1990): 645–648. ■■

296 / C&RL News