Information literacy: Models for the curriculum

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Creating a fundamental understanding of the nature and principles of library-based research.

nformation literacy has been defined as the ability to find, evaluate and use information effectively in personal and professional lives.1 The ACRL/BIS Section's "Model Statement of Bibliographic Objectives" advocates the role of bibliographic instruction "not only to provide students with the specific skills needed to complete assignments, but to prepare individuals to make effective life-long use of information, information sources,

and information systems."2

The challenge for academic librarians is to develop programs and services that foster in students the independent analytical thinking and information skills demanded by an increasingly technological and information-dependent environment. If librarians are to provide user instruction that successfully helps students become information literate, they need a broad understanding of how to design instruction and teach effectively with this objective in mind. Outlined below are recent courses developed at the University of Michigan which may suggest curriculum models incorporating information literacy as an instructional objective. One is an undergraduate course on information gathering for students majoring in communication, and the other a graduate course on bibliographic instruction in the School of Information and Library Studies (SILS).

Teaching undergraduates: Communication 250

Developed in 1985 based on a course begun at the University of Minnesota,³ Communication 250, "Information Gathering for Mass Media," teaches the strategies used in finding information, evaluating its validity and reporting the results in a number of mass media applications, including journalism, public relations, marketing and advertising.4 Preliminary consultation with Communication faculty and media professionals indicated that it was critical for students entering an information-dependent profession to be able to identify, retrieve and analyze information effectively in an increasingly electronic environment. Established as a prerequisite for all writing classes in communication, the

¹Proposed statement revision to ALA Policy 52.6 approved by the ALA User Instruction for Information Literacy Committee, January 8, 1990.

²ACRL/BIS Task Force on Model Statement of Objectives, "Model statement of objectives for academic bibliographic instruction: Draft revision," C&RL News 48 (May 1987): 256-60.

³Kathy Hansen and Jean Ward, Search Strategies in Mass Communication (N.Y.: Longman, 1987).

⁴The course at Michigan was envisioned and designed by Marion Marzolf, Professor of Communication at the University of Michigan, in collaboration with staff of the Undergraduate Library.

course content also was designed on the assumption that effective writing in mass media proceeds from the ability to analyze and synthesize information effectively. One of the course goals was to make students capable of using a wide variety of information resources both within and outside of libraries and able to think critically about the information retrieved.

One of the interesting challenges in teaching information gathering to communication concentrators is that much of the information they will ultimately identify and use comes from sources not necessarily found in libraries: personal source networks, interviews, observation, surveys, public record "paper trails." At the same time, the course was *not* intended to provide mere pre-professional training but a broad understanding of how human knowledge aggregates both within and outside scholarly disciplines. This very challenge, however, is what makes such a course so helpful as a general curriculum model for information literacy, since people throughout their lives will also find that while libraries provide a cornerstone for information resources, information is hardly the territory solely of libraries. Bibliographic instruction with information literacy in mind, even in academic libraries where the resources are very extensive, must help students extend their research strategy to sources outside the library environment and help them recognize where libraries can provide a key or link to an ultimate source.

Combining the research methods used by journalists and by librarians and using the problemsolving model applied to the information industry, the course emphasizes information gathering in a technological era along with critical thinking in the "rich to excess" environment of the information age. A series of weekly building-block assignments provides students with the opportunity to apply learned principles to information-gathering situations, and help the instructors gauge students' mastery of the concepts presented. With question analysis⁵ selected as the underlying conceptual framework, one technique used was to introduce specific models which would help students under-

⁵Anne Beaubien, Sharon Hogan, and Mary George, Learning the Library: Concepts and Methods for Effective Bibliographic Instruction (N.Y.: Bowker, 1982), 74.

Search Strategy and Sources for Biographical Information

In addition to the eight steps in question analysis for any research topic, when beginning a biographic search, consider the following two questions:

1. How "well known" is the individual?

2. Is the person of current or retrospective interest?

"Giants"	"Mickey Mantles"	"Who?"
Martin Luther Greta Garbo John F. Kennedy Babe Ruth Shakespeare	King George Alice Walker Steffi Graf Stephen W. Hawking Eddie Murphy	Bush Hashim Khan Elvis Grbac Lana Pollack Clara Hale
	"Warhols"	
	Bernard Goetz Marla Maples Jessica McClure	

Like characters in a novel, we get information about people by:

- what they say
- what they do
- what others say about them

(*Note*: The above is included as a handout, with the reverse side containing a "Probability Chart" listing sources ranging from the online/card catalog, general encyclopedias, etc., through various tools, to public records and personal interviews with a check mark indicating appropriateness for each category of individual.)

Fig. 1. Biographical Information Search Model

stand the particular elements inherent in a specific information gathering problem, particularly those problems outside the construct of academic disciplines. One such model is described here.

A model for biographical information

A common research problem involves gathering and analyzing information about people. In the following model, students are encouraged to see that both the amount and format of available material depends to a large extent on the degree and nature of the individual's fame (see Figure 1).

• Giants: individuals (often deceased) in whom a culture has had sustained interest over time so that there is a length and breadth to the material

available on them.

• Mickey Mantles: individuals of exceptional fame (either at one time in the past or currently) based on their accomplishments or place in a culture or history.

• Whos?: individuals the "average" person may never have heard of but who may have "fame" within certain limited domains (e.g., local politics,

squash, contemporary poetry).

• Warhols: "ordinary people" who vault to notoriety for some circumstances (e.g., victims of crimes, perpetrators of crimes, people committing acts of heroism, people involved in some kind of scandal).

The model is presented in class with guided discussion designed to get students to predict logically through question analysis where information on each "category" of person might be found. (One of the model's advantages is its flexibility. It allows the instructor to alter the list of names under each heading to suit any circumstance: class level or interest, names in the news, etc., and actually began as a model for finding literary criticism.)

Ideally, students come to understand:

 fame (i.e., sustained interest and recognition over time within a culture) is different from transient notoriety (i.e., a quick thrust into the news spotlight);

 the limits imposed by each of our cultural experiences, learned value systems, our age, interests, etc., may bias our search for information;

- conversely, cultural bias in scholarly study as well as mass communication influences society's "information record";
- for each category there are correlating information sources and strategies;
- the model is only meant as a way to help map out a logical search strategy, not serve as a formula.

The model conforms to several basic principles of user instruction in that it:

- builds upon the common sense and/or "everyday" understanding of students;
 - presents a unifying conceptual framework

that helps them categorize an information gathering problem or situation;

 provokes the mental inventory and emulates the actual search strategy appropriate to the specific problem;

 encourages creative and critical thinking about how "information" is generated, transmitted

and retained in our civilization.

A series of such models are used throughout the course to illustrate specific problem-solving paradigms within the basic framework of question analysis. The goal in this class was to establish conceptual frameworks students could extend to information gathering in their academic, professional and personal lives, by building on their existing repertory of common understanding. It is this blend of the ability to apply a general model of information gathering to each specific new situation with the skill to go about it that is the true hallmark of information literacy.

Teaching librarians to teach

SILS 755, "Instruction in the Use of Information," is designed to teach librarians how to educate users in the effective use of libraries and information for professional and personal needs. While the basic elements of the course syllabus have changed little since the first time the current course was taught in 1988, this spring the term "information literacy" surfaced as a theme for the first time per se. In the context of this course, the model described operates equally effectively, but differently in that it helps SILS graduate students

conceptualize an information gathering situ-

ation for themselves;

 explore a model they can employ to instruct students dealing with similar research problems;

 understand the concept of "models" as a teaching device and as a way of making a particular

conceptual framework "real" to students.

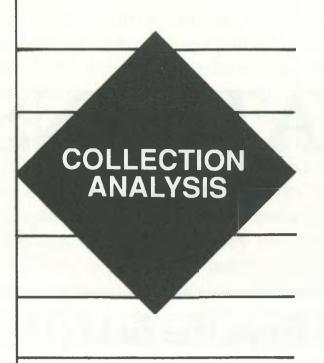
Within the larger course context, the graduate students better understand both the why's and how's of creating information literacy in students, in particular that it is not something done in 50 minutes, but through a host of strategies from handouts to signs, from classroom instruction to collaboration with other faculty on incorporating information literacy objectives within the curriculum. SILS 755 students are presented with the Mickey Mantle model for biographical information and then given an assignment to develop a teaching model for one of the following situations:

finding speeches and quotes;

 finding information on the quality of life in a community;

finding information on current events.

The quality of the models depends on how well each one helps potential students form the appro-



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priate search strategy to find information in each area. The future teachers understand that a good model should be as general as possible (i.e., the model is applicable in the widest possible number of related situations), a good model should facilitate understanding and not confuse the situation, a good model is simple and straightforward. Successful creation of a good model in each of the three situations requires recognition of the essential element or key to understanding pertinent to each one:

Speeches and quotes. Establish access point (subject, speaker, time period).

Quality of life. Judged differently by different people; first establish the quality of life measures and then the appropriate strategy for each.

Current events. Recorded information is dependent upon the distance from the time of the event and the importance of the event.

The future

Are there any general principles for academic librarians in creating users who are information literate? The bibliographic instruction literature of two decades is rich with suggestions to help librarians engaged in instruction move beyond source explication to creating fundamental understanding of the nature and principles of library-based research. Our experience enforces much of this lit-

erature in looking at what is required to articulate these principles in such a way that they move students to overall information literacy, i.e., the ability to find, evaluate and use information effectively in their personal and professional lives. The challenge to academic librarians faced with the immediate task of teaching all levels of users to deal with the wealth of library resources at hand is to:

• present instruction within the framework of technology, including conceptual frameworks that foster both the intellectual understanding and the practical methods requisite for information gathering in an increasingly electronic environment;

• develop facilitating models that build upon students' general understanding of the way things work in life, and help them to fit new information gathering problems within known frameworks;

• recognize and help students understand where the library serves as an end resource and where it can serve as a bridge to the wider universe of information;

• continue and expand their collaboration with non-librarian faculty in building instruction within curriculum;

• identify and pursue opportunities for collaboration and sharing with high-school librarians, public librarians and campus administrators to establish model information literacy programs.