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Expository Writing and Information Literacy: A Pilot Project

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For many years, the Rutgers University libraries have conducted an active bibliographic instruction program typical of most university libraries: orientations for new students, special programs and term paper clinics, individual library class instruction at the request of teaching faculty, and credit courses in library research strategies. A small program to instruct teaching assistants on incorporating library skills into their classes was a first effort at instructor-directed information literacy. While these approaches have been favorably received by the teaching faculty, they do not provide the opportunity to reinforce a progression of information skills throughout the duration of a course. Librarians were seeking ways to revamp the program to provide a more comprehensive and effective approach to information literacy but had not been successful in finding an appropriate entry point for a campuswide discussion with teaching faculty. Then, in early 1991, an opportunity arose.

Background

In early 1990, the provost of the New Brunswick campus of Rutgers University appointed a committee to make recommendations on ways to improve undergraduate education. When the committee's report was distributed for campus review and response, the library faculty remarked on the absence of any reference to the role played by the library in the undergraduate experience. The vice president for university libraries asked a small library committee to prepare a written response to the report, focusing on the educational role of the library and including concrete recommendations in the area of information literacy.

The library's response was brief and focused on the importance of information literacy not only for a successful undergraduate experience but for life-long learning. The library faculty listed the characteristics of an information literate person in terms of information-seeking skills in the college environment and suggested at least five ways in which the library could assist the teaching faculty in ensuring that all Rutgers students would achieve these skills before graduation. Regardless of the methodology chosen, both the teaching faculty and librarians would need to assess the impact of these recommendations on the human resources required to carry them out effectively.

The provost referred the library's response to his Faculty Council Committee on the Library in advance of a full hearing before the entire Faculty Council. This committee embraced the notion that information literacy was important for all students and suggested a pilot program within a few freshmen English classes to test a methodology. English 102 was chosen for the pilot because it is required of nearly half our undergraduates, it seeks to develop critical thinking skills, assignments include the writing of a short research essay, and it has historically included a library component. The committee's recommendations were endorsed by the entire Faculty Council and an implementation committee was formed. This group was composed of the associate university librarian for research and undergraduate services, the director of the Writing Program, and the bibliographic instruction coordinators of the four major Rutgers libraries in New Brunswick. This committee was to design the pilot program, select the participating teaching faculty and librarians, prepare an evaluation and assessment of the pilot, and make recommendations for changes and/or expansion. The pilot program began during the fall 1991 semester.

Goals of the Project

The ultimate goal is to have the faculty fully incorporate an information literacy component into the curriculum. This can be achieved only if teaching faculty substantially alter the manner in which they currently teach their courses. Until that change happens, librarians must be content with the progress made to date: campuswide discussion and acceptance of information literacy as an important component of undergraduate education and a validation of the librarian's role in enhancing the undergraduate experience. When the assessment of the current pilot project is completed, we expect to move forward toward the next stage of working closely with the teaching faculty to develop a more fully integrated program.

Implementing the Pilot Project

Six department faculty who teach sections of English 102 agreed to participate in the pilot project. Librarians were invited to give two library re-

search seminars designed to meet information needs of students at two given points in the semester and in the process establish a foundation for achieving information literacy. The following procedures acted as guidelines for the four librarians who taught these sessions. While some variations were introduced by individual librarians, all followed essentially the same procedures. The overall design included a judicious deployment of a combination of hands-on experience, lecture, discussion, and written materials, presented at the juncture when the students had very specific information needs.

Research Seminar 1: Fourth Class Meeting. The course assignment at this time requires students to find periodical articles and/or books on a subject of their choice. At this time, each of the librarians participating in the pilot conducts a seminar for the classes to which he or she is assigned. The purpose of this first seminar is to introduce students to the basic mechanics of using the library and the basic concepts of library research, with an emphasis on periodical literature and indexes.

As part of the session, students are required to do a library assignment. This assignment is completed and evaluated during class time. Approximately forty minutes are devoted to the class presentation and forty to the assignments and an evaluation of the results. Coverage includes the following tools and concepts: (1) The value of seeking assistance from reference librarians is discussed. (2) An in-depth discussion of the nature of periodicals (scholarly versus trade and popular, political biases, and other features), the variations in periodical indexes, and the use of compact disk-read only memory (CD-ROM) indexes is conducted. Also included is information on locating periodicals in the library, materials delivery (campus-to-campus delivery of books and articles), and interlibrary loan. (3) *Info Trac* is used to illustrate several important concepts and to emphasize the importance of exercising critical judgment in choosing an information source through careful examination of the information given in citations, such as the title of the periodical, the length of the articles, and the type of article (for example, book review). Librarians also stress the various access points by which one may search, including principles of Boolean logic. (4) There is a brief discussion of other periodical indexes, both in paper and in CD-ROM format, stressing the *Social Sciences Index* and *Humanities Index*. The *Public Affairs Information Service Bulletin* is introduced as a good starting point for government information. And (5) there is an in-depth discussion of Rutgers University libraries' on-line catalog and its relationship to the card catalog. This discussion includes an introduction to the *Library of Congress Subject Headings* and keyword and Boolean searching on the on-line catalog. Librarians briefly review the Library of Congress classification scheme and strategies for locating books in the library.

The assignment consists of having students search the topics that they are working on both in the on-line catalog and in *Info Trac*. For the

on-line catalog, students have to first determine the Library of Congress subject headings for their respective subjects and then do both a subject search and keyword search, noting the difference in the number of items retrieved. For *Info Trac*, the students have to print out lists of items retrieved on their subjects and analyze the articles found with regard to the nature of the periodicals (scholarly, trade, or popular), the length of the articles, and anything unusual that they noticed about the documents on their respective lists. For any one of the items found, they also have to determine if it is owned by the Rutgers library system and, if so, precisely where they can find it. To avoid undue competition for library resources, each class is divided into four teams. Each team has to do the whole assignment together; they are not allowed to divide up the work. While one team member searches, the other team members observe and add their input, advice, and coaching. The English instructors have the option of forming the teams around a common theme or themes related to the class readings. Both the faculty member and the librarian are available to give help and advice to the teams as they work through this assignment.

To fill in gaps and to address those learning styles that favor written materials, each student is given several handouts to accompany the class presentation. One of these handouts is a pathfinder, listing the most essential reference tools, including periodical indexes, appropriate to the general category of each class. These handouts are meant to instill in students the concept of using a research strategy and are designed as beginning guides for their research for a ten-page essay that begins about the eighth week of this course. The students also receive guides to the particular Rutgers libraries that they are using for the class, which describe the key locations and services at those libraries. Librarians also have the option of giving out other handouts, either on their own initiative or at the request of the faculty members. For example, some choose to give out guides on such topics as research strategy and plagiarism.

Research Seminar 2: Eighth Week of the Course. By the eighth week of the English 102 course, students have written proposals for ten-page research essays. Each librarian participating in the project has had an advance look at the specific topics that the students have chosen. In Seminar 2, the librarian, the faculty member, and the students discuss problems that students are having with their research. The librarians make specific suggestions on how to overcome these problems or to find additional information. During these sessions, the librarians strive to reinforce lessons on information literacy as they relate to the ensuing discussion. The following concepts are considered to have the highest priority: (1) range of paper and computerized periodical indexes; (2) evaluation of the quality and relevance of sources, including biases inherent to periodicals and reference sources (for example, the government-issued *Encyclopedia of South Africa*) and ways of assessing alternative points of view (for example, using

tools such as the *Alternative Press Index*); (3) access points, that is, keyword versus subject searching with controlled vocabulary; (4) importance and usefulness of bibliographies; (5) purpose and range of reference works, including finding discrete information quickly (for example, statistics and definitions), getting background on a topic, and locating sources outside the library; (6) ways of focusing on a topic (for example, by discipline or time frame); and (7) development of a research strategy.

Assessing the Pilot Project

Librarians and faculty members devised several assessment tools to determine the pilot project's effectiveness and to discover ways of improving and refining the larger program anticipated to result from this project. The assessment process included gathering feedback from the students, the English Department faculty, and the librarians directly involved with the pilot test.

Students completed questionnaires after each of the two library research seminars. The questionnaire used for the first session includes two questions asking the students to identify the most and least helpful "things" about that session, and a list of library tools or processes on which to indicate whether we should have provided more or less coverage. For the second session, we simply asked the students to write two paragraphs in completing the following sentences: "The way(s) in which this class was helpful to me . . ." and "The trouble with this class was. . ."

Of the 121 students who returned questionnaires from the first session, the clearest message came from the 61 percent who considered the hands-on experience with various library computing systems to be the most valuable part of the class. No other item came even close to being listed so many times in reply to that query. Conversely, among the relatively few responses to the question concerning the least helpful aspect of the session, the library lecture was listed more times than any other aspect. Regarding the process and tools covered in this first session, the desire for more coverage of computerized information sources and less coverage of the card catalog stood out the most prominently. Forty percent of the students expressed a desire for more coverage of the on-line catalog, while 12 percent thought we should have given it less time. Fifty percent of the students wanted more time on *Info Trac* and CD-ROM periodical indexes. Surprising to us, 41 percent of the students indicated that more attention should be given to the process of finding books, and 29 percent wanted more attention given to the Library of Congress classification scheme! These latter two percentages seemed high to us since there was much probing during the classroom presentations to ferret out problems students might be having in these areas. The responses convinced us that coverage of library basics is very much in order, given that 59 percent of these students were sophomores and 31 percent were juniors.

Two strong messages came through from the student responses to the second library research seminar. First, while many thought that the best part of this process is the attention paid to their individual topics, a number of students were "bored" listening to the discussions of other students' topics. Although the percentages of bored students varied from class to class, this sentiment was expressed frequently enough for us to reconsider our original premise that students would enthusiastically learn from discussions of their fellow students' research problems and from the various solutions provided by the librarians and course instructors. Second, many students wanted less discussion of and more hands-on experience with or demonstrations of how to use computers and reference tools. Thus, modification of the second seminar is in order. Several librarians and English 102 instructors have suggested running the second session more like a term paper clinic, with some discussion afterward, summing up valuable lessons learned that would be applicable to all students. This approach might be a more effective use of the seminar time than is joint discussion of the research needs of all students.

Several other key assessment tools are the observations of librarians and course instructors throughout the project; the responses of the course instructors to a detailed questionnaire on the quality of the sources that students used in writing their research essays; and analyses of the final papers by the librarians who instructed the students. Based on discussions between the project coordinator, the librarians, and the course instructors involved, it seems evident that students learn more from the library research seminars than they do from the single library lecture. Moreover, students are more receptive to library instruction that is given in a timely fashion and that addresses their actual information needs. One English 102 faculty member, who had previously participated in numerous library instruction sessions, commented that the first session was the best research seminar that she had ever experienced. From her perspective, the students were enthusiastic and attentive and had learned a great deal about information seeking. Nearly all of the course instructors and librarians felt that the hands-on approach makes library learning more palatable and meaningful and thus is a far more effective method of teaching in comparison to lecturing. The interaction between the course instructor, librarians, and students during the first session provided many opportunities for reinforcing the students' understanding of such things as the nature of periodicals, periodical indexes, and controlled vocabulary searching. The main problem perceived was time pressure—all participants felt rushed, and the librarians wondered if they had really adequately covered every topic. However, most of the librarians and all of the English 102 faculty felt that the quality of learning achieved is more important than the quantity of material presented.

The main deficiency of the second seminar is the lack of cogency, partly due to the absence of any direct or hands-on experience with the

reference tools being discussed. It was originally thought that by the time of the second seminar, most of the students would have completed sufficient work on their respective topics to generate many questions regarding library research. In fact, it took great effort to coax students into discussing their topics. Moreover, many seemed shy about admitting that they had problems with research. Yet, after the session, many approached the librarians with a host of questions that would have been very useful for class discussion. It should be stressed, however, that although students derived much benefit from both library research seminars, they did not learn as much as we had expected in the second semester.

Based on comments from the librarians, the key factor for success in the second session was the constructive involvement of the course instructors. Their ability to draw out students and their personal knowledge of the library and the research problems associated with students' topics were crucial in starting meaningful discussions and in sustaining those dialogues. Indeed, this pilot program, because it is so dependent on a good working relationship between librarians and English 102 instructors, serves to foster the coveted "partnership" between faculty and librarian that so many librarians allude to in library literature.

In responding to the questionnaire about the sources that students used in their research essays, the English 102 instructors' evaluations were very positive on the whole. To the lead and perhaps most important question of whether these students in the pilot project used better quality sources than did previous students in the course, four of the six instructors answered yes. The fifth instructor felt that students were not using enough scholarly materials. And the sixth maintained that there was no substantial difference between the quality of sources used in the second semester compared to previous classes. However, he qualified this assessment by stating that "what is significantly different is the use of sources by weak students." Many of these students, whom he characterized as "C+ students," became B students "in large part" because of the quality of the sources that they employed in their research essays. This evaluation was indeed gratifying to read, since it is average students who are in most need of help from librarians.

There is much variation in the responses to the other questions asked of the English 102 instructors. Many of these replies identify areas that require greater emphasis if students are to achieve information literacy. In answer to a series of questions about the level of critical judgment shown by students in selecting and utilizing information sources, the instructors revealed that in two-thirds of the classes many students were not sufficiently aware of the biases of the authors to whom they referred. Moreover, in all of the classes many students, often the majority, failed to express more than one point-of-view on their topics. But they did well in selecting appropriate and timely sources. Overall, it is evident from this

assessment that more emphasis needs to be placed on critical thinking in library instruction.

The English 102 instructors were also asked to comment on the effectiveness of the method used in this pilot project. All agreed that both library sessions were valuable. The first seminar received very high praise; however, several instructors thought that the second seminar was more valuable because it was given when students were working on library-oriented research assignments. Consistent with earlier observations, several instructors felt that the second seminar did not garner enough involvement from the students. After their individual topics were addressed, students did not show interest in drawing meaningful lessons from the research problems of other students. For example, one instructor wrote, "Some students seemed to 'tune out' when the spotlight moved on to someone else." Yet, in several cases, the second seminar was considered the best part of the pilot and students were in fact seen as very involved in the discussion. Given the students' reactions and other observations from both librarians and instructors participating in the pilot, the second seminar was modified to be more adaptable to students' different learning styles and instructors' different teaching styles.

With respect to the human resources necessary to continue an information literacy program of this kind, we have decided to continue refining the pilot until we feel that we have a program that satisfies all participants and is more "marketable" to other faculty. During this adjustment phase, we may devolve some of the teaching directly to the faculty who have participated in several sessions and, at the same time, develop a more tightly packaged instructional program for the librarians involved.

Conclusion

Much has been accomplished at Rutgers University in developing an information literacy program; much more remains to be done. We are learning from our pilot test and are prepared to make changes to strengthen the program. But the basic strategy of integrating library research seminars into a course when student information needs are strongest, combined with a mixture of discussion and hands-on teaching, is a highly effective method of providing a strong foundation for information literacy in undergraduate education.

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