INTRODUCTION

Undergraduate students, particularly freshmen, are part of a generation for which technology is, at times, a companion, an educator, and pure entertainment. Among these young people, there is little hesitation in embracing the medium or in exploring its possibilities. Transferring this enthusiasm and diligence to the university classroom proves to be problematic. As the Internet permeates core courses (and across all disciplines), instructors quickly recognize that current first-year students lack the critical thinking skills to successfully evaluate electronic resources, as well as to conduct thorough, traditional research (Nelson, 1994). The phenomenon of the World Wide Web, with its emphasis on graphics and its ease of publishing, has radically altered the methods scholars use in teaching, research, and validating information. Despite the fact that a large percentage of freshmen-level students cannot successfully compose a research paper that meets college standards (Nelson, 1994), universities continue to require the assignment as part of a first-year composition course. Similarly, English departments relegate these classes to graduate teaching assistants, many of whom may be new to the campus and unfamiliar with the university’s library system. Rising enrollments produce larger class sizes, and the academic demands of an English instructor often mean that discussion of research methods is ignored for the greater purpose or treated only in a brief session.

Traditional thought and consensus places bibliographic instruction in the composition course, mainly due to the research paper assignment. Within the university curriculum, English composition has lingered as one of the last required courses, enrolling most entering students. Coupled with the composition faculty are the academic librarians, forced to adapt to emerging technologies, and separated from the teaching faculty solely by work environment. Aware of the poor research capabilities of students and the daily tasks facing library personnel, many universities have adopted the self-instruction approach to user education, seen in workbooks, computer-aided instruction (CAI), computer self-instruction (CSI), and the Internet. Essentially, there is a marked trend of placing the responsibility of library orientation on the student and on technology. Active learning has replaced library intervention, and the new approaches have not solved problems or raised research skill levels. For many campuses, only a radical approach to bibliographic instruction — a major, cooperative
agreement between faculty and librarians — will reinforce the importance of critical thinking and writing. This article proposes a “radical” BI course for Iowa State University, its university library, and the Department of English.

**BIBLIOGRAPHIC INSTRUCTION: THE FRESHMEN**

Examining students should be of primary importance to both the classroom instructor (i.e., English composition teaching assistant) and the academic librarian. Evident, academic weaknesses abound in freshmen; a sizable portion of each entering class lacks intensive library training, and for many high school media specialists, the demand for bibliographic instruction is neither high nor given any true priority within the curriculum (Jiao, Onwuegbuzie, & Lichtenstein, 1996; Gavryck, 1986). The application and growth of critical thinking skills are not consistently emphasized on the high school level, such that academic librarians must provide “remedial” library orientation and training to students (Gavryck, 1986). Despite the recognition that high school students certainly possess the ability and skills to perform complex searching and research tasks, too often these attributes are not emphasized in the classroom, leading to a literal “loss” of skills.

The acclimation problems of university freshmen have typically led to the formation of two offerings, the freshman seminar and the freshman orientation class. The latter features sessions on study skills, note-taking, time management, and testing strategies (Dabbour, 1997); recent statistics show that almost 67% of higher education institutions provide such a class (p. 299). Seminars, graded courses supervised by faculty and student services personnel, usually provide a more in-depth introduction to university life, encourage discussion on a broad range of topics, and for many colleges, devote time to bibliographic instruction (Barclay & Barclay, 1994). The intervention by academic personnel does not detract from two glaring problems in new students — the dearth of research experience and the clear phenomenon of “library anxiety.”

Defined as “an uncomfortable feeling or emotional disposition . . . experienced in a library setting, which has cognitive, affective, physiological, and behavioral ramifications,” the obstacle known as library anxiety results in feelings of inadequacy, frustration, and self-defeat (Jiao, et al., 1996, p. 152). Fear and intimidation, caused by the library’s sheer size and lack of intervention by personnel, literally causes some students to become disorganized or to terminate any attempts at serious research. Studies have repeatedly shown that student anxiety translates into an inability “to approach the task [research] in a systematic manner” (p. 152). Scholars have found a direct relationship between library anxiety and such factors as “age, native language, year of study, number of library courses undertaken, employment status, frequency of library visits, and use of the online/computer index” (pp. 154-155). A composite of findings resulted in a profile of the most likely student to experience the fear: a young man who is a non-native English speaker and high academic achiever, employed (on a part-time or full-time basis), and a rare user of the college library (Jiao, et al., 1996).

The reactions that freshmen may have to the library environment and its personnel must also be considered when designing a bibliographic instruction course. Advocates of active learning within BI sessions emphasize that small groups or paired learning situations focus attention on specific topics, involve students more completely, and ultimately, show “respect for student ability, knowledge, and judgment” (Ramey, 1996, p. 247). Allowing students to select instruction topics actively engages them in their own learning process. This arrangement demands that a librarian be flexible and adept at designing sessions to meet particular class needs and learning styles, as well as prior library experience.

Ultimately, the interaction of the students and the BI moderator is crucial to the learning process. A trial program at the University of Michigan paired library and information science (LIS) graduate students as mentors to first-year, undergraduate engineering students. In the course of the semester, the LIS students aided their assigned groups with research strategies, but in all cases, the mentors’ frustration was evident when undergraduates failed to attend meetings or seemed unresponsive to the program (Holland & Powell, 1996). An assessment of the library instruction program at St. Olaf College (Northfield, Minnesota) given to graduating seniors revealed that students had high comfort levels with the library’s unique OPAC system, low comfort levels with printed journal indexes, and most respondents noted that they learned such skills on their own; evidently, no distinction existed to separate BI from self-taught skills (Geffert & Bruce, 1997). For required BI courses, librarians indicate that hands-on use of library OPACs and electronic information sources are successful in motivating students and empowering them within the research process (Dabbour, 1997). Older instruction methods, like workbooks, also garnered enthusiasm from university students when the materials were accompanied by lectures and demonstrations (Haws, 1987).
BIBLIOGRAPHIC INSTRUCTION: THE ENGLISH COMPOSITION TEACHER

The preparation for bibliographic instruction also involves a crucial party, one which, until recently, played a minor role in the actual planning and execution: the classroom instructor, quite often a member of the English department. A widespread assumption about student research skills is that such talents are simply acquired, gathered through practice, and perfected by experience (Birdsall, 1986). The extension of this premise produces the idea that students will learn proper research methods as their education progresses. A 1995 survey of the University of Wyoming’s faculty certainly indicates a nationwide pattern — 95% of responding instructors considered information skills as extremely important, with 45% noting librarians’ roles in imparting research skills, complementing the faculty teaching information literacy (Amstutz & Whitson, 1997, p. 23). However, only 27% of these same professors replied that faculty have a crucial role in helping students develop research methods (p. 24).

For faculty themselves, research techniques widely vary among disciplines and certainly vary in consistency and actual presentation to students. Criticism of the way in which faculty impart the importance of critical thinking in research and the priority given to bibliographic instruction abounds; English instructors are labeled as “mak[ing] pretty perfunctory gestures toward training students in . . . research methods” with emphasis upon the completed essay (Ford, 1982, p. 380). Articles in geography journals claim the discipline tends to have little interest in bibliographic instruction (Nelson, 1991).

An instructor’s perspective of the library will affect the way students view the library’s importance. A survey of Iowa State University graduates in 1986 showed 50% of respondents claimed “fewer than 25% of their classes required use of the Library” (Haws, 1987, p. 178). Nevertheless, the traditional methods of research greatly dictate how faculty approach library use; libraries, personal collections, and electronic tools are greatly employed for both teaching and research (Amstutz & Whitson, 1997). Most importantly, faculty acquire information in ways that are known to them and then impart this same method to their students.

Critical thinking within the classroom is recognized as of the utmost importance, particularly in a small, undergraduate liberal arts college where an across-the-curriculum approach ties radically different disciplines (Henninger & Hurlbert, 1996). Instructors seek to develop a classroom environment that fosters “the abilities to formulate questions, to reason logically, to analyze and evaluate information effectively, and to solve problems” (MacAdam & Kemp, 1989, p. 234). When dissecting the research process, a search can be subdivided into six major stages: “task initiation, topic selection, prefocus exploration, focus formulation, information collection, and search closure” (Jiao, et al., 1996, p. 153). The instructor’s methods to reinforce these skills should meet course objectives, and bibliographic instruction can accompany class material which is placed within a conceptual framework. As the structure of the research process is acquired, the students can easily learn the strategies needed to investigate a topic within the field.

By default, bibliographic instruction has often fallen within the domain of first-year composition classes for its emphasis on writing, research, and critical thinking. Instructors can design assignments so that library skills are emphasized; an extended session given to proper documentation and evaluation of possible resources is common. Surveys by the College English Association (CEA) indicate that 50% of freshman writing courses function over a two-semester continuum, and the research paper assignment is increasingly popular as a requirement (Ford, 1982). This same classroom provides, perhaps, the only opportunity for a two-stage, course-related (or course-integrated) bibliographic instruction program, and as a result, both English teachers and librarians should be knowledgeable of each other’s duties and possible contributions to the writing curriculum.

When structuring a course-integrated BI session in an English classroom, both the professor and librarian should have a strong awareness of students’ capabilities, past library experiences, and skills necessary for a given assignment. Self-programmed BI, usually consisting of workbooks, is often administered in the composition course, forcing a re-evaluation of the library skills teaching methods (Barclay & Barclay, 1994). Students complete workbook assignments over a defined period; each assignment is graded and a final test may be given (Haws, 1987). Present practice has essentially eliminated lectures by librarians in composition classrooms, and students have little contact with librarians.

Active learning methods have many viable benefits, the least of which clearly fosters “critical thinking in a developmental way to stimulate lifetime habits of thinking” (Henninger & Hurlbert, 1996, p. 31). Instructors, as part of the library skills learning process, should aid their students in locating sources outside of the classroom and in refining search strategies, particularly in the first stages when frustration and confusion are common. Using many kinds of activities stimulates
independent thinking, problem solving, and writing skills; small-group work, case studies, and demonstrations are ideal. Likewise, the librarian can build upon classroom lectures and use discussions, presentations, hands-on technology sessions, and paired learning to discuss possible research scenarios and resolutions to locating resources (Ramey, 1996). Upon completion of the BI course, both the English instructor and the librarian should evaluate the success of the teaching, perhaps through surveys or a testing instrument (Diamond & McGee, 1995).

**BIBLIOGRAPHIC INSTRUCTION: ACADEMIC LIBRARIANS**

Physically separate from the classrooms, the academic librarians are commonly viewed as both the organizers and instigators for bibliographic instruction on the university campus. Desires for tenure and career development mean that many practicing professionals possess a second graduate degree (or even a doctorate) in a subject area. Yet there remains a clear discussion on the teaching ability of this class of library personnel, particularly since many library school programs do not offer courses solely devoted to BI teaching methods. Library science literature studies indicate bibliographic instruction personnel have centered on their vision of information literacy instead of the methods being taught in the classroom, leading to clear division among teaching methods and approaches to searching (Amstutz & Whitson, 1997). Moreover, one researcher emphasized that librarians must make visible contact with composition instructors, observing classes, consulting about assignments, and maintaining contact with the English department (Barclay & Barclay, 1994). Recognizing and knowing the limitations and abilities of the instructor (as well as the librarian) would certainly prove beneficial in sculpting a BI program.

A great hindrance to long-term bibliographic instruction is the tremendous quantity of time required to design and implement a course, time which many professionals simply cannot logically make or give, because of work demands. Similarly, university administrative support, adequate staffing, recent technology and necessary equipment, and funding allocations all serve as major factors in a successful program (Gavryck, 1986; Barclay & Barclay, 1994). For librarians who provide course-related instruction, challenges and problems come in teaching about a field outside their milieu (Holland & Powell, 1996). Most of all, instruction is affected by the university's perspective of its importance. ACRL (Association of College and Research Libraries) (1997) standards on BI explicitly state that “an atmosphere conducive to innovation and high morale” (p. 266) should be present to further staff development of library instructors, implying that adequate funding and reasonable teaching demands be in place.

Campus perception of the BI program's success also depends on the ability of teaching, particularly in the area of technology. Computer stations are frequently used for self-instruction, paired learning, and small groups. Interactive, multimedia programs offer endless possibilities for creative teaching, if a library can invest the time to create and implement this software. Once students actively respond to BI sessions and teachers see improvement, measurable evaluation can occur. Assignments within a bibliographic instruction session vary widely, based on the instructor's goals. Exercises may focus upon the Library of Congress Classification system, pairing its structure with entries in the library's OPAC for studying broad organization (Nelson, 1991); in-depth studies of general reference tools, journal indexes, and government documents are common. Presenting a research problem for analysis introduces critical thinking. Students can then seek out resources to develop the particular situation (Diamond & McGee, 1995). To emphasize non-electronic resources, librarians can discuss the nature of bibliography, the literature within a given discipline, and encourage students to determine specific sources to meet a given researcher's needs (Ward, 1996). For universities who have placed BI on the Internet, content is frequently accompanied by a quiz so that the user can test his ability outside of a formal session. Psychologists have also recommended the insertion of materials on library anxiety and ways to alleviate confusion and stress when working on large research projects (Jiao, et al., 1996).

Evaluation of the BI program or individual sessions can occur in various methods. One is a survey, administered at three possible times (and in any combination thereof): 1) prior to the instruction (to achieve a sense of the students’ present library skills and perspectives on research methods); 2) after instruction (to monitor their responses to activities and for immediate feedback on presentations); and 3) both before and after teaching (to create a composite evaluation). Short-range evaluation, conducted on a per-class basis at the end of a session, tends to be the most common approach, and can be highly successful if the English instructor aids in evaluating student responses within surveys (Diamond & McGee, 1995). Likewise, instructors who attend BI sessions with their students and who emphasize the
importance of research skills will find their students also valuing the experience (Birdsall, 1986). Even for those who remotely participate in BI via their university’s website, a certificate of completion is sometimes awarded by correctly answering a given percentage of questions within the tutorial. This same document is then given to the English instructor to verify successful completion of the program (Vander Meer & Rike, 1996).

Research has shown that learning BI via a multimedia program or the Internet proves to be just as effective as the traditional method, especially when studying the comprehension and retention of basic research skills (Vander Meer & Rike, 1996). Long-range studies of BI effectiveness often appear as surveys given to a segment of a university’s graduating class, asking these students to recall the course, and respond to a set of specific questions on its effectiveness (Haws, 1987); few studies have attempted to examine the impact of BI upon an undergraduate’s total education, but a small study was conducted at the library of St. Olaf College which showed that graduates have an almost self-inflated perspective of their searching skills and abilities in using electronic tools (Geffert & Bruce, 1997).

RADICAL WRITING:
THE ISU PROPOSAL

Setting for Proposal

At Iowa State University in Ames, Iowa, the Library 160 course has existed for many years as the vehicle for library education, designed primarily for freshmen students. Undergraduate transfer students are also required to take the course but may test-out of the class, if prior library experience is judged adequate. Until the late 1980s, instruction librarians coordinated and provided lectures to classes, each averaging 30 to 40 students, with each course operated on a seven-week schedule, thereby allowing twice as many students to benefit from the program in a single semester.

Soon, a change occurred within course design. Independent workbook assignments replaced the lecture format, and students had little contact with library instructors, except in the initial class meeting when course logistics and expectations were explained. The underpinnings of the course involved a clear vision of the audience:

Iowa State University librarians and instructional designers developed instruction for freshmen who were primarily from rural backgrounds, had limited library experiences, and were unfamiliar with the facilities of a large state university library by taking

into account those characteristics and designing the program appropriately. (Miller & Bratton, 1988, p. 546)

Beginning in early 1990, ISU library instruction solely relied upon the mandatory use of workbooks by freshmen, with librarians acting as graders and having little contact with students. As expected, students often failed to attend required sessions, copied assignments completed by other classmates, and still lacked any substantial knowledge of the library (Parks Library) or its services. Course design lacked any serious consideration of motivation factors for students. Arbitrarily assigning research topics or “treasure hunt” activities for obscure facts resulted in bitterness toward workbooks and class expectations. For many freshmen, the class was described as a “waste of time,” since it forced research on oddly chosen topics and no effort was made to present activities within a conceptual framework.

General indicators of student motivation (persistence in questioning instructors, clear evidence of substantial time devoted to tasks, and real depth of inquiry) had no manifestations in any course materials or the final testing situation (Curtis & Carson, 1991). Likewise, one could seriously question whether the class was viewed as challenging for the students. Successful teaching strategies, which impart a sense of self-esteem to students, were absent within the program; the ability to successfully learn a task or perform tasks within a library setting could not be determined based on the workbook exercises. Most serious teachers would question the reliance upon workbooks, with their faults and depersonalizing nature (Curtis and Carson, 1991). No performance reinforcement was administered (graded assignments were left in an office mailbox), and confusion concerning course expectations was common.

Currently, the Library 160 course is structured around the use of a computer lab, located in the ground floor of the Parks Library. Here, instead of attending “lectures,” students complete five computer-based tutorials on their own time, revealing a clear adoption of the CAI instruction method. Following the successful completion of a computer tutorial, the student prints out a “certificate” that indicates satisfactory performance and attaches this document to a workbook sheet, part of the assigned course manual. Each assignment is determined to carry a given number of points within the class design. Out of five major assignments, students must achieve a total of 80 points in order to pass. Questions within workbook assignments are objective in nature. The CAI program tutorial sessions blend objective questions and critical thinking skills, yet there is a limited
number of instruction programs, and BI librarians’ primary duties involve design and planning concerns. Presently, there is no integration of any course materials within the electronic tutorials, and no plans have been made to place the BI class within the domain of any required freshmen-level course.

**Scope of the Proposed Class: Refining Audience**

This proposal calls for the integration of a comprehensive bibliographic instruction program within the freshmen-level, year-long required course known as English 104/105. Prior to enrollment at Iowa State University, each incoming freshman composes a writing sample, which is then studied and rated by a core group of English department faculty. The student is then placed within the entry section of the course (104), the second semester of the course (105), or an honors (advanced) section of 105. For students who enter the 104 class with high-level writing skills, a test-out option exists. For students with definite writing deficiencies, the campus Writing Center, as well as instructor intervention, frequently allows these student writers to remain in the classroom with assignments and expectations redefined for their needs.

Coupled with the freshmen enrolled in the composition course, the instruction program also targets the administration and faculty of the university’s English department, primarily faculty who supervise incoming teaching assistants, as well as coordinators of the TA (teaching assistant) orientation program held prior to the start of the fall semester. Numbering on an average between 80 to 100 each fall, the TAs comprise the largest group of their kind on the campus and, on average, direct 30 to 60 students per semester. A great number of these graduate students are also new to the university campus and its library. Essential to their campus orientation will be presentations by instructional librarians, a tour of the Parks Library, demonstrations of the computer tutorial programs, and a pairing with a BI instructor to foster course-integrated instruction, class visits by librarians, and a guided tour of the library facility for a given 104/105 class section.

Similarly, TAs and their instruction librarian mentors will combine their expertise in designing BI activities within a given section of the 104/105 course, as well as in scoring assignments by students. Approaches toward material can be based upon the “micro level” of instruction, the teaching of a single idea (concept, principle, etc.) or upon the “macro level,” focusing upon organizing a unit of material (Carson & Curtis, 1991). The dynamics of the testing are to be determined by each paired set (teacher/librarian). Efforts here urge the combining of research skills and writing exercises, thereby benefitting both instructional intentions. Likewise, exposure to technology (via a computer-based writing lab, locating information on the Internet, etc.) is crucial to the course. TAs are to be given adequate time in developing computer skills prior to bringing some topics within the classroom.

**Planning the Course: Considerations**

This proposal must address the impact upon personnel (TAs, instruction librarians, English department faculty, and administration) that will inevitably result. A common concern is the ongoing dilemma of inadequate staffing, materials, training, and funding support for university-wide library education programs. Despite such courses seen as a priority, professional library staff often lack the time, experience, and resources to reach a significant portion of a student body, much less every member of an entering freshman class. In order for these ideas to be fully adopted within a campus environment, university administration, deans, and faculty must be convinced of the need for bibliographic instruction. The author is fully aware that many campuses place little to no importance on an organized approach to BI, fully believing it is the student’s responsibility to foster research skills. However, research still indicates that writing skills and research methods are a major concern of university faculty, particularly since they see students possessing poor or weak abilities. Not only must these deficiencies be acknowledged on a campus-wide basis, there must also be a deliberate choice to act and to remedy the crisis, even as technology is touted as a major solution to many academic problems.

For the English Department at Iowa State, a full, new vision must be made of the TA orientation program. A small number of sessions devoted to writing analysis, department policy, and class procedures are inadequate for any person who is teaching for the first time. Adding bibliographic instruction forces the orientation to involve more commitment from the faculty, as well as the library itself. Instruction librarians must participate in the initiation for these new TAs, solely because this body of teachers will reach over 98% of the entering freshman class through a 104/105 course — the majority of the BI audience. The TAs must be committed to their own involvement in the library use program, maintaining constant contact (once a week, preferably) with their paired library mentor. The mentor should visit the TAs class an average of three times in a given semester, and during each visit, an organized BI activity should be
scheduled. Coordination of these classroom visits must be handled by the 104/105 instructor and the librarian. Similarly, the English department faculty member who is acting as a mentor to the new TA needs to hold a meeting with the instructor and library mentor pair to evaluate the progress of the relationship and to help evaluate class outcomes.

Overall, the dedication involved will be immense for the project to succeed, even on a limited basis. Present personnel levels at the Parks Library may not meet the demands of this program. Involving Education Department personnel (faculty and graduate students), those with an interest/emphasis in instructional design and the use of technology in the classroom, would be an ideal solution. Once BI is seen as a priority of undergraduate education, it is hoped that library personnel officials will actively recruit and hire more instruction librarians.

Within the English Department, an average of three to four TAs may be assigned to each faculty mentor, with many senior level faculty (who are not directly involved in the composition program, such as literature, linguistics, and professional communication instructors) absent from consideration. Fewer teaching assistants could be assigned to a mentor, and senior faculty with lighter teaching loads could be responsible for coordinating mentoring efforts among TAs and BI librarians. Likewise, the tenured, seasoned English faculty could also be consulted for instructional design questions.

Preparation for Teaching

Preparation for teaching involves three main parties: 1) the English department teaching assistants; 2) the bibliographic instruction librarians; and 3) the English department faculty and administration. For the graduate student TAs, the expanded orientation offers the first step to teaching, but careful considerations must be made for each student, in terms of training, mentoring, and observation. If a TA has no prior teaching experience, a semester-long orientation should be required, involving classes on instructional design, hosted by experienced TAs and composition faculty. Proficiency with technology is assumed within this proposal; students who lack strong word processing skills, experience with Internet searching, and the creation of homepages/websites must gain comfort in these areas before assigning such tasks to their students. Students would be required to demonstrate proficiency by the completion of a project and presentation featuring new technology talents.

Involved in the TAs preparation would be the faculty mentor(s). It is crucial that the new graduate student have opportunities to voice concerns about teaching and to discuss these concerns with seasoned instructors. The mentor, in turn, will assign a given number of class observations to the student, urging note-taking during visits and requiring a written analysis of the instruction methods seen in the session. Discretion in evaluation of these analyses is assumed; the mentor may also think it necessary for the TA to observe additional classes or improve on technology skills, urging enrollment in a technology workshop.

Following the computer proficiency testing, class observations, and meetings with the mentor, the student will (ideally) move immediately into an actual teaching capacity, working as an assistant to an experienced faculty member or TA. Duties here may involve designing class materials, supervising student performance in computer labs, trouble-shooting student problems in the lab, and leading class discussion. While the student acts in this position, the mentor will observe performance and have a private conference on these results, giving the student a written analysis and summary of the findings. If the mentor decides that the TA is ready to enter the classroom as a “solo” instructor, procedures begin to secure a classroom that meets with the instructor’s wishes. If the student is not capable of maintaining a classroom on his/her own, alternatives can be pursued, such as possibly enrolling the student as a research assistant (instead of a teacher), offering further instruction in deficient areas, and requiring extensive levels of training, both within and outside the English department. For situations such as the latter, a committee of faculty must consult each other before radically altering a student’s situation. It is presupposed here that those students who are given graduate teaching assistantships are recognized as such because of teaching potential, past work/educational experience, and ability to perform successfully.

For the academic librarian, the varied student body make-up of the Iowa State campus should be thoroughly analyzed in an effort to select teaching methodologies. Given the poor success rate of the traditional lecture and workbook format, librarians should adopt technology in many forms and work in networked classrooms. Considering the integration of technology within academic departments, dormitories, and most classrooms, it is vital that the librarians build sections of instruction around actual demonstrations of electronic resources with adequate hands-on time for student activities. Securing electronic facilities can be coordinated by the BI program director; the English department instructors, as well as TAs, can also aid in securing rooms.

Ideally, BI librarians would be essential to training sessions involving new TAs. Any technology skills in
which library staff are deficient must be addressed prior to allowing any staff member to be involved in the joint program with the English department. Likewise, any professional staff interested in leading BI instruction must possess teaching experience, a commitment to student learning, and a conviction to close workings with the English department, meeting with instructors to secure assignments, and visiting composition classes throughout the semester. Program coordinators must be highly selective in candidates chosen for the program and should monitor performance on a weekly or bi-weekly basis.

**Resources, Testing, Grading, and Evaluation**

The freshman composition curriculum greatly emphasizes the traditional research paper, an assignment that “provide[s] students with a foundation for the kinds of library research and writing experiences that they will need in their academic and professional lives” (Markman & Leighton, 1987, p. 126). To accompany lectures and demonstrations of information tools, librarians have frequently relied upon the workbook format, consisting of a series of activities, all relying upon student motivation and interest for completion. Recent discussions on the use of workbooks expose a long-known truth — the success of the format is highly questionable. A 1986 study of freshmen attitudes towards the use of workbooks in a BI program at George Washington University found 44% of responding students saying that workbook exercises did not help in any way with research needs (p. 132). In addition, these negative responses also reflected anger and frustration with the workbook, noting it was too simplistic for technology-savvy students, as well as too heavily built around arbitrarily selected topics that had little or nothing to do with actual class needs. Consideration must obviously be given to these possible student attitudes, and in the midst of a technology revolution, BI librarians should carefully consider the addition of workbooks to a library instruction program, since applicability is very questionable.

Similarly, consideration of learning styles leads to an analysis of possible testing and grading methods. Seasoned instructors recognize the benefits of a series of activities, each of which are monitored and graded, as opposed to a single testing instrument following the end of a course. For a BI program, daily lectures or demonstrations lend themselves to regular testing or evaluation of skills. Effort shown in a student’s responses can be considered, and in some situations, studying the process of searching may be more beneficial than the ultimate ends of the search. Regardless of the number or sophistication of testing materials, the BI librarian needs to know that “[w]hich any testing situation, there is always a danger that positive test results may not necessarily reflect that a student has internalized the learning objective” (Baker, 1986, p. 93). For this reason, collaboration with the composition instructor allows the two teachers to monitor several different student skills such as designing a search strategy, locating resources, evaluating of resources, and composing the final text.

Evaluation of a bibliographic instruction program can occur on many different levels and through several print or electronic tools. Library science literature is filled with studies analyzing the effectiveness of BI in particular university library settings. An extended discussion on evaluation is not warranted here. Instead, emphasis on the pairing of the composition instructor and the librarian in evaluating the results of the BI program is necessary. Likewise, the library’s BI coordinator and the English department administration have a vested role in guaranteeing the success of library instruction for freshmen students. A lengthy planning stage must be devoted to designing and circulating evaluation materials. All participating students, TAs, English department faculty, and library personnel must have a role in refining and changing the BI program. Results of the evaluation must also be dispersed to all involved parties. A record of the results can be maintained by the library and English department for future reference. Once evaluation has been completed, the sculpting of a new year of the BI program begins, building upon the triumphs and problems of the previous years.

For the Iowa State University campus, a wide variety of approaches are available to both the BI librarian and the English department TA in charge of composition courses. A first plan would be to employ a team-teaching approach for the BI sessions, requiring the librarian to attend the writing class and the TA to participate in lab sessions with students, whether in the library or another campus location. Course materials are selected by the teaching pair; consulting with scholars in the Education department for resources on designing materials will prove helpful. Likewise, contacting LOEX (The Clearinghouse for Library Education, Eastern Michigan University) for BI materials creates an opportunity to foster a relationship with that organization and to receive regular publications on BI. The Internet also offers a wealth of tutorials and handouts created by BI personnel. The ISU English department also features a library of previously used class materials from composition classes as a resource; consulting with other TAs and on-site librarians may also provide sample handouts.
Activities within the BI program may certainly feature, but not be limited to, the following:

1) on-site library visits, preferably in groups of 10-15;
2) in-class lectures by the BI librarian and composition instructor (whether alone or acting as a pair);
3) tutorials, demonstrations, and activities in a university computer lab;
4) tutorials and activities at workstations within the Parks Library;
5) computer-assisted instruction programs, as they presently exist on campus and within individual electronic information tools;
6) group and/or pair work activities;
7) extensive Internet training, emphasizing the personalities of major search engines and refining searches;
8) sessions devoted to creating a research strategy and evaluating information resources;
9) peer evaluation of paper drafts;
10) extensive training on the use/creation of HTML coding and HTML editing software (e.g., Claris Homepage or Adobe PageMill);
11) specific resource sites on campus for information particular to the ISU student body and its local community;
12) in-class presentations of research strategies; and
13) in-class presentations of final project findings, as the instructor sees necessary to class objectives.

Testing and grading will consist of numerous activities, designed to continuously monitor both student and group/pair performance. Students can expect to have daily writing activities, as well as library-based research and investigation assignments once a week. Each of these assignments will be evaluated on a graded scale by either the instructor or BI librarian, and in some situations, by both. In addition, the designing of all testing instruments may be done by both the composition teacher and the librarian; each teacher should focus upon his/her area of expertise in this instance. Students who have great deficiencies in library skills or writing ability will be directed toward the campus’ Writing Center or possibly to the Library’s present computer tutorials for further aid.

A great majority of the activities must reflect critical thinking skills, the writing process, and overall search methodologies, rather than objective questions that could be easily copied from a classmate. Of interest here is the use of email and other electronic mediums for assignments. Students could certainly submit their responses to an instructor’s email account or download assignments from the Internet. The integration of technology into testing is at the instructors’ discretion; student backgrounds and proficiency with the Internet is of primary importance to the use of electronic resources.

The culmination of this proposal’s BI — English Department pairing comes in the research paper project, which involves several products:

1) a documented research text, featuring an outline and a bibliography;
2) an in-class presentation of the project’s ultimate findings, involving all group members and visual aids;
3) scheduled activities and elements that are components of the text’s creation;
4) the creation and presentation of a website devoted to summarizing the project’s background, research strategies, and ultimate results; and
5) class and instructor evaluation of all presentations.

Given the complexity of the project, much planning should occur in terms of evaluation methods for the success of library instruction. A survey or questionnaire would be ideal as a primary step. The BI librarian needs to attend student presentations, and in viewing the student-created materials and websites, may gather an informed view as to the students’ attitudes and responses toward the paired teaching situation. After compiling course grades by the composition teacher and BI librarian, the English department may call for a conference with all teaching and involved personnel to evaluate student success and their reactions to the program. English department graduate students and the librarians should publish the findings of their work and maintain records of their work history for future reference.

CONCLUSION

Library science literature advocates cooperative relationships among librarians and other university personnel. Research indicates that BI friendships and
partnerships can easily develop across major academic disciplines. The demands of information and technology literacy should encourage educators to closely inspect and revise classroom goals to account for lifelong learning skills. Providing undergraduates with an intensive library orientation experience is frequently of little or no priority as professors expect students to be proactive in acquiring library skills. In addition, today’s universities perceive their students as both participants and leaders in the new technology age. This assumption certainly requires critical thinking, strong communication skills, and the ability to objectively analyze information, talents rooted firmly in composition classes and bibliographic instruction. The choice for action now rests with university administrators, faculty, and librarians: to either criticize the research methods of undergraduate freshmen and have little or no cooperation among departments, or start a paired library/departmental comprehensive education program, one that reaches all incoming students and one that will, ultimately, produce higher results than reliance on technology alone.

REFERENCES


ADDITIONAL READING


