

# The Role and Image of the Library and Librarians in Discipline-Specific Pedagogical Journals

by Julie Still

A search of 29 disciplinespecific pedagogical journals in the ERIC database, and a pageby-page review of 13 such journals, for library-related material shows that librarians, library instruction, and libraries, in general, are seldom mentioned or discussed.

Julie Still is Multimedia Instruction Librarian, Paul Robeson Library, Rutgers University, Camden, New Jersey 08181 <still@crab.rutgers.edu> A little over a decade ago Ernest Boyer, in a study of undergraduate education prepared for the Carnegie Foundation for the Advancement of Teaching, recommended that every undergraduate be taught to use and encouraged to spend time in the library.<sup>1</sup> Although there is some debate on the best way to do this, the integration of the library into the curriculum, seems to be accepted as a good starting point.

In keeping with this philosophy, some accrediting agencies look specifically at how well the use of information resources is integrated into the higher education curriculum. The Middle States Association of Colleges and Schools includes the following in their guidelines:

The quality and amount of library use is one of the clearest indices of the kind of teaching students receive. If statistics or observation suggest that the library may not be serving as fully as it might, it is often the sign of a lecture-and-textbook approach or other unimaginative teaching. A stimulating instructor creates an inquiring and resourceful student, who wants more than routine methods provide. Good teaching and good librarianship, therefore, unite to produce skilled, self-reliant, habitual library users.<sup>2</sup>

Librarians can usually point to specific assignments and specific classes at their institutions which require effective use of the library, but a broader picture of how well library resources are actually integrated into the overall curriculum is more difficult to ascertain. Teaching faculty do expect students to be able to use the library.<sup>3</sup> However, in a survey of teaching faculty in California, when asked where students should have learned library skills, the top four answers were no idea, on their own, in informal consultation with librarians, and in "another class."<sup>4</sup> In two surveys of teaching faculty attitudes towards libraries and librarians, the role of librarians in the education process was viewed as neutral or slightly significant.<sup>5</sup>

While surveys of teaching faculty by librarians are useful, further evidence of the role of librarians and library resources would be available in venues where teaching faculty are speaking primarily to each other about the education process. One of these venues would be discipline specific teaching journals; most fields of study support at least one. These journals describe teaching philosophies, assignments, curriculum, and issues of interest to instructors of that subject. If teaching faculty consider librarians to be a part of higher education, to some degree, and include library instruction into their course work, then surely this would be demonstrated by descriptions or mentions of library resources and personnel in discipline specific teaching journals. If, as some studies indicate, teaching faculty do not consider library resources and instruction relevant to their course work then very little information about libraries and librarians would appear in these journals.

#### METHODOLOGY

This study has two methodologies. The first involves a search of discipline specific pedagogical journals in the ERIC database to see how many articles in each publication concerned libraries or librarians. Maryellen Weimer has published a list of discipline specific teaching journals, which focus in part or primarily on higher education. While not comprehensive it is a thorough list of at least one journal in most fields, and titles used in this study were taken from Weimer's list.<sup>6</sup> The second is a more in-depth look at selected titles from the list, to see if library-related materials escaped notice in the original search.

The preliminary research involved a search of the ERIC database (OvidWeb search interface, 1984-October 1997). Of

the 48 titles Wiemer lists, 29 are least partially indexed in the ERIC database. The title of each journal was combined ("and") with the stem "librar\$" to retrieve library, libraries, librarian, librarians, librarianship, and compound phrases like library science and library instruction, anywhere in the title, subject headings or abstract.

Searching the ERIC database gives a cursory view of what pedagogical journals say about libraries and librarians, but it is possible that articles have been published on the subject or discuss related issues, but were not indexed under those headings or did not use those words in the title or abstract. For instance, an article could state that students received a library instruction session or that the instructor consulted with a librarian before issuing an assignment. Such a passing mention would not be retrieved in the ERIC search, but would present evidence of the library's role in the curriculum. A more detailed examination will also give some idea of what these journals are saying about research, if they are not discussing library related matters. Thirteen journals randomly selected from Weimer's list were examined issue by issue for articles that might relate to libraries or might be relevant to library issues. Seven years of each title (1990-1996) were examined page by page, reviewing abstracts, section headings, statistical data, and selectively skimming the text. The seven-year time span is long enough to give a representational view of the journals but limited enough to capture current thought.

#### **FINDINGS**

Table 1 gives the results of the ERIC search. Of the 13,016 articles in the 29 journals, only 53 citations included some form of the word library in the ERIC record. This is less than one half of one percent. Few of the titles contained more than one or two, if any, library-related articles. Nor were there any noticeable clusters of articles in a particular year, with each year producing between one and seven articles.

"Of the 13,016 articles in the 29 journals, only 53 citations included some form of the word library in the ERIC record." Looking at the citation and abstract, the articles retrieved can be divided into four categories, library research, specific assignments, libraries in general, and libraries in passing.

Library research (22 articles) refers to records which concern instruction in the use of library materials generally, or mention a librarian instructing students in the use of materials or research, or discuss librarians and teaching faculty working together or students's use of library materials for research generally.

Specific assignments (11 articles) refers to descriptions of specific assign-

ments which required the use of library materials, often named, such as acronym dictionaries or, types of assignments, such as reviewing journal articles on reserve, which would not require students to locate materials on their own, or students's relationship to the library generally but not relating to locating materials.

Libraries in general (6 articles) refers to records which primarily describe library related issues, such as accreditation, evaluation of collections, user surveys, or costs, but not library research.

Libraries in passing (14 articles) refers to records which describe specific collec-

### Table 1 Discipline-Specific Pedagogical Journals Searched in the ERIC Database

Those indexed in ERIC are followed by two numbers. The first indicates the total number of citations from that journal. The second indicates the number retrieved when the title is crossed with librar\$

American Biology Teacher	752/ 3
Anthropology and Education Quarterly	225 / 0
Business Education Forum	327/ 0
Chemical Engineering Education	250/ 0
College Composition & Communication	437/ 3
College English	466 / 0
College Mathematics Journal	145 / 0
English Education	258/ 0
History Teacher	234 / 11
Journal for Research in Mathematics Education	334/ 0
Journal of Agricultural Education	227 / 1
Journal of Biological Education	278/ 0
Journal of Chemical Education	1891/ 5
Journal of College Science Teaching	543/3
Journal of Economic Education	435 / 1
Journal of Environmental Education	277/ 1
Journal of Geography in Higher Education	166 / 2
Journal of Geological Education	298/2
Journal of Research in Music Education	234/ 0
Journal of Social Work Education	302/2
Journal of Teaching in Physical Education	139/ 0
Journal of Teaching Writing	246/ 4
Journalism Educator	507/5
Mathematics Teacher	1127/ 0
Physics Education	425 / 0
Physics Teacher	1037 / 1
Research in the Teaching of English	261/ 0
Teaching of Psychology	723/4
Teaching Sociology	472/5

## Table 2Journals Examined in Depth

American Biology Teacher	(Sciences)
American Journal of Physics	(Sciences)
College Compisition & Communication	(Humanities)
College English	(Humanities)
History Teacher	(Social Sciences)
Journal of Chemical Education	(Sciences)
Journal of Marketing Education	(Social Sciences)
Journal of Nursing Education	(Nursing & Social Work)
Journal of Social Work Education	(Nursing & Social Work)
Mathematics Teacher	(Sciences)
Journal of Geography in Higher Education	(Nursing & Social Work)
Physics Teacher	(Sciences)
Research in the Teaching of English	(Humanities)

tions, product reviews, subject bibliographies, lack of library resources, library privileges for adjuncts or distance education students, or other items related to libraries, usually in passing in a larger or different context.

The second part of this study, which involved examining a select number of journals issue by issue (See Table 2), provided some further information on how librarians and library research are viewed. Since this study focuses on library instruction, only those articles discussing or relating to instruction, research skills, or assignments, are mentioned. There were scattered references to libraries in other contexts in most of these journals.

#### Sciences

#### Library Research

A 1995 article discussed research in passing, mentioning that research skills, including literature searches, were developed through out-of-class projects. The author did not say how students were to do literature searches or how they would learn to do them.<sup>7</sup> Another discussed teaching students how to use journal indexes but did not say who had done the instruction.<sup>8</sup> There were articles discussing research projects with no mention of librarians or library instruction.<sup>9</sup> One author discusses having a writing instructor talk to the class about writing skills for a term paper, but does not mention any instruction in information retrieval.<sup>10</sup> Another article stresses the importance of information-seeking skills but states "A library instruction course is not needed, as a few salient suggestions and a library

information source will lead them to abstracting services, indices, books, interlibrary loan system and/or any on-line computer system of the library."<sup>11</sup> There were several articles which mention information retrieval as a goal, but provide no insight as to how these skills will be taught.<sup>12</sup>

On a more positive note, one article, cowritten by a librarian and a professor, describes how the two worked together to devise an effective workable assignment and the library instruction used to teach students the necessary skills to complete the assignment.<sup>13</sup> Three other articles each written by an educator, discuss the importance of information-seeking skills and the role librarians play in the acquisition of these skills.<sup>14</sup> There are also articles describing courses that specifically cover information research or computer skills.<sup>15</sup>

#### Specific Assignments

A brief article outlined an assignment wherein students read assigned books about physicists or physics and turned in one- or two-page papers about them.<sup>16</sup> Another concerns a specific assignment using an acronyms dictionary.<sup>17</sup> An article on a student project that has high school students prepare sample grant requests states that the grant requests must include a search of the literature; however, the instructor has made list of reprints available to students which they may use instead of locating articles on their own.<sup>18</sup> Some articles describe class assignments that include a mention of library orientation.<sup>19</sup> Another article does describe an assignment using library resources. However, the author mentions that two reasons he developed this assignment were that he became chairperson of the library committee and that the university began offering merit pay to instructors giving library assignments. He encourages professors to give library instruction sessions themselves, as he believes they are more effective than librarian-led sessions.<sup>20</sup>

It merits mentioning that the Journal of Chemical Education began a column in 1991, devoted to information issues, "The Chemical Information Instructor," edited by Arleen Somerville, a librarian. Interestingly, none of these columns were retrieved in the ERIC search. One column included the words all librarians would love to hear "Consultation with the librarians insures that the lecture material, homework assignment and tests matched local resources and procedures as closely as possible."<sup>21</sup> Sample column topics include descriptions of classes relating to information issues, resources, and lists of particular resources such as Chemical Abstracts online. A column devoted to online searching in an undergraduate class provided data from a course survey. Students were asked whom they consulted, the instructor, the librarian, or classmates. Librarians were consulted more often than the other two in using Dialog commands, deciding what search terms to use and how to combine them, and helping in making the computer or printer work.22

"One column included the words all librarians would love to hear 'Consultation with the librarians insures that the lecture material, homework assignment and tests matched local resources and procedures as closely as possible'."

One reason for the preponderance of library related material (there were several positive articles in addition to the column) in this journal may be given in an article by George Gorin. He quotes from a document by the American Chemical Society's Committee on Professional Training that states "students can no longer acquire skills in information retrieval without some formal instruction ... Library exercises should be included."<sup>23</sup>

#### Humanities

#### Library Research

Some articles mention researching and evaluating sources but do not discuss how students might do this or how instructors might teach it. Two articles mention improved knowledge acquisition as goals of portfolio-based instruction or writing intensive courses, but neither discusses how students will go about acquiring sources.<sup>24</sup> Another states:

They [writing courses] focus not on nouns but on verbs: planning, drafting, revising, using data, evaluating sources, reading critically, interpreting evidence, solving problems in writing, understanding and applying the rhetorical and formal conventions of texts, becoming good collaborators.<sup>25</sup>

However, there is no discussion of how students might locate the materials they are to use.

Toni-Lee Capossela presents a positive view of the library without mentioning librarians or library instruction. In fact, one of the points of her article describes her method of limiting the topics students can write on to sociolinguistics as presented in their text. Students have to research what other sociolinguistics say about their topic. The author states:

This logical, need based way of approaching the library is more reasonable and psychological realistic that the traditional prompt for research papers in which students are told to 'think of a subject they are interested in' and then 'find out what's available in the library about the subject'.<sup>26</sup>

On the other hand, one writer states, in part, "...research is not a matter of going to the library,  $\dots$ "<sup>27</sup>

In a parody of the feminist essay "I Want a Wife," one author writes "I Want a Writing Director." Among the reasons is the writing director has the part-time English comp instructors make sure new students know how to use the library.<sup>28</sup> No mention is made of librarians.

#### Specific Assignments

Another describes an intriguing class in which the instructor solicits research ideas from celebrities, community groups, and on-campus faculty and staff. Students write reports in response to these requests, almost as a professional research service. The author believes "pushing buttons on a computer in the library in inadequate for this kind of research."<sup>29</sup> In another article an assignment in which research is done on a career there is mention of students learning the use a variety of campus resources including the library, but no mention of how this was done.<sup>30</sup>

#### **Social Sciences**

#### Library Research

Two articles, one from each journal, suggest that instructors check to see how readily available information for a project is before assigning it.<sup>31</sup> One of the authors, both an instructor and a librarian wrote that cooperation between teachers and librarians would ensure the success of students in locating materials needed to complete assignments.<sup>32</sup>

These journals, unlike the others in this study, discuss the lack of knowledge among students and faculty on information resources. One article discusses a taxonomy of reference works in American history. One reason for writing this article is that "both historians and librarians have noted the degree of functional bibliographic illiteracy of students and some mature historians."<sup>33</sup> In a section of government documents, he states "one final resource that often proves indispensable is the document librarian."<sup>34</sup> In the literature review of another article, the authors cite a conference paper which suggests "both librarians and business instructors are short-changing their students by failing to train tomorrow's managers in secondary [research] methods."<sup>35</sup> The article describes a study in which students were assigned a marketing research project with differing methods of instruction. Students were then assessed as to their competence in using the library, attitudes towards library staff, attitudes towards research, etc. The authors found that many of their hypotheses were not supported. However, they do concede that:

In retrospect, perhaps the more surprising attitude-change outcome is that those measures were not shifted *downward*. To expect that 104 students competing against time and each other for a relatively small and limited set of data resources would find the experience enjoyable is probably unrealistic.<sup>36</sup>

One instructor, without mentioning bibliographic instruction or librarians, writes in-depth about the importance of students learning to use appropriate resources for research. In his appendix he includes a "bibliographical flow chart" which gives students an outline of a research strategy. It is not as detailed as those that appear in library publications, but it follows the same general pattern.<sup>37</sup>

Another article mentions taking students to the Special Collections Department in the library for an orientation. The author also outlines library assignments she has given her students. In a footnote she states "A librarian friend of mine recently pointed out that librarians should be considered as partners in the teaching process. Especially for classes heavily dependent upon library work, teaching faculty should make an effort to work more cooperatively with librarians."<sup>38</sup>

#### Specific Assignments

In a description of a marketing course, one of the course objectives is to "use the resources available at the university to become a more knowledgeable marketer." However, the only library assignment mentioned is a scavenger hunt<sup>39</sup> Another article discusses a class assignment and states "students conducted extensive library research to develop a foundation for their research,"<sup>40</sup> but no mention is made of what sources they consulted or how they were prepared for the assignment. An article on a proposed marketing course with the emphasis on "how to find, evaluate, and use information,"<sup>41</sup> including census data, the ABI/Inform database and publications such as the Wall Street Journal, never mentions the words library or librarian. The November 1994 issue of the History Teacher contained four articles on revising the undergraduate history curriculum at four different schools.<sup>42</sup> All four mentioned the importance of teaching students to locate and evaluate primary and secondary resources. None, however, mention instruction in the use of library resources. There were articles that mentioned library research or assignments with no discussion of how students were to learn where such resources were located or how they were used.43

Another suggests distributing campus library system material on information resources like literature searches and interlibrary loan to help students find use-ful information.<sup>44</sup> One article states: "The most valuable asset for students in searching for information, other than good creativity and imagination, is a patient library staff."<sup>45</sup>

As with the Journal of Chemical Education, the History Teacher discussed educational standards. In May, 1995, the journal published national standards for elementary and secondary history instruction. Standard 4 concerns historical research capabilities; 4B states that students should be able to "obtain historical data from a variety of sources, including: library and museum collections, historic sites, historical photos, journals, diaries, eyewitness accounts, newspapers, and the like; documentary films; and so on."<sup>46</sup> There is no discussion of specific library instruction.

#### Nursing and Social Work

#### Library Research

One article, written by a librarian, could serve as a model for other librarians writing in discipline specific pedagogical journals. Susan Weaver outlines the need for nurses to be life-long learners and what steps nursing professors can take to make students information literate.<sup>47</sup> She emphasizes the need for instructors to be information literate themselves and to show a positive attitude towards information-seeking. She also provides examples of the types of assignments that will be relevant to nursing students.

An article co-authored by a librarian and a nursing professor outlines eight library assignments that can be used to improve library competence.<sup>48</sup> Another article describes an assignment that included a bibliographic instruction session, and in which student papers were assessed by the librarian for the "number appropriateness variety, and of resources."49 Two others mentioned library orientation or bibliographic instruction.<sup>50</sup> One sentence in an article on research stated that student received a lecture from the librarian on using the library.<sup>51</sup> Others, however, discussed library research without mentioning bibliographic instruction.52

Those writing articles in these journal recognized that researching the literature was important. A survey of nursing faculty shows that most encouraged or required papers or projects that had research bibliographies.<sup>53</sup> In another survey, on requirements of novice nurse educators, 78.1% of those surveyed agreed that educators should assist learners in locating, interpreting, and applying research to nursing practice.<sup>54</sup>

"None of the English journals had articles discussing the best way of introducing students to library materials, although that is the primary place for basic library instruction. " There were eight articles on incorporating research into the social work curriculum. Seven of these make no reference to the library or doing literature reviews beyond the barest mention.<sup>55</sup>

#### Specific Assignments

Several articles mentioned that students do a literature review.<sup>56</sup> None of the authors described how students would learn to do this. One article mentioned that students were to request a computer search for a literature review (presumably as opposed to doing it themselves).<sup>57</sup> Two other articles describe programs or courses requiring students to use library computer searches.<sup>58</sup> One article listed searching online databases as a computer activity.<sup>59</sup> Another discussed online searching and the use of bibliometric analysis. While the author discusses the importance of exposing students to library materials, there is no mention of librarians.60

#### DISCUSSION

In all areas, faculty bemoan the research skills of their students, but few actively promote integrating an understanding of the full research process into the curriculum. Even fewer call for students to become familiar with the research tools for the discipline. None of the nursing journals surveyed had an article on the importance of teaching students to use CINAHL or of understanding the controlled vocabulary associated with it. None of the business or social science journals had articles outlining which major indexing tools allowed retrieval by SIC codes. None of the English journals had articles discussing the best way of introducing students to library materials, although that is the primary place for basic library instruction. Nor is there any evidence that teaching faculty regard these issues as relevant to their teaching.

While teaching journals do discuss teaching methods, they do not discuss research methods, either of their own research or of the research required of their students. There were no articles on teaching students how to evaluate the information they found or on steering them to reputable sources, except for a section on evaluation in an article on the World Wide Web.<sup>61</sup> Nor were there articles stating that librarians were good sources of this information. The teaching faculty themselves do not seem to be concerned with the quality of student research, as there were no articles on evaluating the types of sources cited in student

papers. Nor does this seem to be a factor in grading. In a study of 3,000 graded student papers, 56% had comments concerning supporting evidence, examples, and details, but only 6% had comments concerning source materials.<sup>62</sup> There were very few articles on an integrated curriculum, wherein basic methods or knowledge would be taught in lower level classes and built upon in upper level classes. Yet, it is these skills, research techniques, and critical thinking, and the integration of them into the curriculum that writers such as Ernest Boyer promote and evaluating agencies recommend or require.

"It is clear that while faculty may say that librarians play a role in their research and teaching, it is not reflected in their pedagogical publications."

#### CONCLUSION

It is clear that while faculty may say that librarians play a role in their research and teaching, it is not reflected in their pedagogical publications. The work of librarians is seldom implied let alone visible or acknowledged. Few articles discuss the importance of reviewing the literature, teaching the major information tools of their field, critically evaluating the published literature, or of building upon skills learned in core courses. References to bibliographic instruction and the impact librarians can have on student research are scattered and sketchy. If the library and library instruction have been integrated into the academic curriculum, there is little evidence of it in the discipline specific teaching journals studied.

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