The paper describes a professor's use of student "research journals" as a means to encourage students to follow proper research methodology in developing a term paper. Students were required to make a dated entry whenever research work was done including topic selection and narrowing, preliminary background reading, aids consulted, online searches, and use of interlibrary loans. Instructor feedback on journal entries provided for individualized advice and guidance. Since implementation of the research journals, the average level of research has greatly improved with students putting in more time on research, pursuing it more systematically, and enjoying more satisfying results. Students overwhelmingly agreed with the statement, "Overall, keeping the journal was worth the time I put into it." Appended is a list of 13 steps in a thorough research project, a summary of the project requirements, and the final evaluation form which assessed student reaction to the research journal requirement. (DB)
Whether to assign a term paper or not is a perennial problem for the classroom teacher. Arguments range for and against citing class size, wealth or poverty of library holdings and alternative strategies for accomplishing the same objectives as the term paper, which include learning how to access material in a library as well as synthesize it.

In twelve years of liberal arts college teaching, I have attempted to teach basic research skills to undergraduate students in a number of ways, but the end results were always very uneven. Some students carried out systematically researched projects with little help from me. Others seemed unable to complete even a marginally comprehensive search despite extensive encouragement and help.

I tried various strategies to combat these failures. Over the years, my explanations of how to do research became progressively more systematic and detailed, until ultimately, I had broken down research into a series of steps to be followed more or less in order. Still, many students seemed unwilling or unable to do so. Then, in desperation (and exasperation), I borrowed an idea from experiential-based classes taught at the
college and began to require that my students keep research journals. This technique has greatly improved my success in teaching research methodology.

There are several advantages to using student journals to document research projects. The journal allows the instructor to follow the path taken by the student in conceptualizing the topic and pursuing research and to give more accurate feedback and direction as the project progresses. In addition to getting better feedback, the student benefits by having an accurate record of work already accomplished, allowing for better use of research time and the elimination of repetitive and redundant research.

II

Through twelve years of teaching beginning and advanced undergraduate students in history, I have become increasingly convinced that learning how to access information is a skill that can and must be taught to all undergraduates. In the future, the continuing information explosion will make it imperative for all educated persons to know how to locate material on a wide and ever-changing variety of subjects. Teaching students the methodology of historical research can prepare them for this lifelong task. With this end in mind, over the years I have become much more systematic in my presentations to classes on research.

My change in approach evolved out of my classroom experiences. Fresh out of graduate school, I began by simply
assigning a term paper, giving length and style sheet and assuming students knew what was expected of them. I soon discovered that even advanced students at a selective private liberal arts college frequently had no idea how to begin choosing a topic, no less pursuing research. Reacting to this knowledge, I moved to presenting a list of topics I knew could be researched with a reasonable amount of effort in our library, only to discover that this was of marginal help to many students. Many simply did not know where to begin finding information on any topic, historical or otherwise, in a library. I broke down the research process into a series of steps, and began teaching students how to go about choosing a topic and how to complete a thorough research project, identifying major finding aids to be used in historical research and demonstrating how to use them (illustration 1). I was fortunate in being able to enlist enthusiastic assistance in bibliographic instruction from the professional staff of our library.

This eliminated some of my problems with student research results, but not all of them. My library colleagues and I discovered that it is one thing to explain to students how to do a research project, and it is another thing to make sure they do it properly.

My attempts to ensure that students carried out a proper search also evolved over time. I began by assuming that once an appropriate search strategy was mapped out for them, they would see the wisdom of following it, especially since these presentations were in classes with term papers assigned. Not so. Next, I began requiring periodic individual conferences to review
research in course. This was a time consuming process, but it allowed me to question the student on steps already taken in research and results gleaned, and to discuss possible directions for his/her research. I supplemented this practice by requiring that students turn in preliminary bibliographies, paper outlines with thesis statements, and all bibliography and note cards with the finished paper. Still, I was not satisfied with the process.

I had several concerns as a teacher that were not addressed by this system. The first was my need to ascertain if individual students had actually followed the required research strategy, in order to give a fair grade for the project. More importantly, there was my desire to give accurate feedback in the interests of teaching them to do effective library research. Even with individual meetings and requiring students to turn in all the above-mentioned materials, it was still difficult to diagnose what went wrong in a poorly executed paper. Was the topic poorly conceived? Was it properly conceived but ineptly or indifferently researched? Was it simply sloppy analysis and writing?

In order to help students overcome deficiencies, it was necessary to pinpoint what these were. I frequently suspected that a poorly organized and written term paper was the result of a bad research job (i.e. failure to follow the mapped out plan of action), but could not confirm it. The students themselves were often unable/unwilling to help in this. It is an almost universal circumstance that any student when questioned will claim to have done a thorough research job, and probably thinks he/she has.
whether it is one by the instructor's standards or not. The challenge was, how could this information be obtained?

My solution was to institute the use of "research journals" by the students, as a means of encouraging students to follow the proper research methodology they had been taught. I had been familiar with the use of student journals in a variety of experiential courses taught at Austin College. Various kinds of internships, work experiences, and traveling courses had required that students keep a journal of their experiences and their reflections on them. Journals had also been used in English and Foreign Language courses stressing writing to document improvement over time. I reasoned that the experiential nature of research lent itself to the use of a journal to document the project. It was also a good research strategy which most historians practiced in some form when pursuing complex research projects.

For this project, students were required to make a dated entry, in complete grammatical sentences, whenever research work was done. Specifically, they were required to include descriptions of all work on topic selection and narrowing, preliminary background reading (if any), finding aids consulted and the results of these searches, on-line searches and the use of inter-library loan. If other libraries were visited, either for bibliographic searches or to obtain materials, this would be noted as well. Entries were to be as specific as possible, identifying the finding aid, subject headings used, and the results. Bibliographic citations gleaned from the search were to be recorded in the journal (see illustration 2).
Students were required to purchase a separate notebook which would be dedicated to keeping a record of the research project. Students were given credit for keeping the journal properly, as well as for properly carrying out the research project. Journals were collected at frequent intervals (bi-weekly in a 14-week freshman course; weekly in a 4-week mini-semester, tri-weekly in a 14-week seminar course), read, and commented upon. I had the opportunity to assess the current status of the research and to give the student feedback on its progress. The purpose of this feedback was 1) to advise students whether they were following proper procedures, 2) to suggest whether sufficient time was being devoted to the research project, 3) to outline further research strategies — ranging from either narrowing or broadening the topic to suggesting specialized sources and finding aids — if too much or too little material were being turned up.

Since the introduction of research journals into my classes, the average level of research has greatly improved. Students are putting in more time on research (perhaps because they know their progress is being monitored on a frequent basis), are pursuing it more systematically, and are enjoying more satisfying results, both in terms of grades and personal satisfaction in a job well done. They are using their library time more effectively by avoiding redundant research, are doing more comprehensive research by keeping a clear record of what has been done and therefore of what remains to be done, and are experiencing less frustration with information retrieval.

As an instructor, I have been able to give much more
detailed advice to students as their investigations progressed, and feel that my assessment of their research work has a much more complete informational foundation. I am now in a much better position to judge the worth of their work on term papers, especially in terms of improvement and hard work.

The introduction of journals was not without problems, of course. It took several run-throughs to ascertain how much information I needed the students to include in the journal, and just how specific my instructions to them needed to be (I was constantly reminded that with undergraduates, you cannot be too specific). There was some resistance to keeping the journals, since it was conceived of as additional work. Explaining the benefits of the journal to the students (aside from including the journal as a part of the course grade) helped to quiet most objections. There were, however, some students who continued to resist all efforts to instill organization into their research patterns.

III

I developed a closed ended evaluation instrument (illustration 3) to test student response to the journals. Nine statements covering the explication of the journal assignment, its pertinence to the course, and the usefulness of journals and the instructor feedback in them were included. Students could choose from five responses: strongly disagree, disagree, no opinion, agree and strongly agree. The results of the evaluations of the use of journals shows that reaction by
students to the journals was generally favorable.

A significant number of students agreed that making journal entries could be tedious and time consuming, but these same students agreed overwhelmingly that keeping a research journal "helped me save time by organizing my research," and "helped me to do a thorough job of bibliographic searching." Virtually all students agreed or strongly agreed with the statement "Overall, keeping the journal was worth the time I put into it."

There are some practical limitations to the applicability of the use of journals. I am fortunate to teach at a small, selective, liberal arts college which maintains a low student-teacher ratio and stresses a high level of teach-student interaction. I have been using these journals in classes of less than twenty-five students, and have found them to work best in classes of less than twenty. Journals need to be collected frequently for commenting and this requires a significant time commitment on the part of the instructor. On the other hand, I believe the results have been worth the time commitment. I have been able to lead not only advanced students, but freshmen and sophomores as well, to do comprehensive searches of primary and secondary source materials on a variety of historical topics. The research journal has been an important part of this learning process.
Illustration 1  
(handout to students)

13 STEPS TO A THOROUGH RESEARCH PROJECT

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Choose a topic. If you lack the information to define your topic, consult general references for background</td>
</tr>
<tr>
<td>2</td>
<td>Check Library of Congress Subject Headings for key words</td>
</tr>
<tr>
<td>3</td>
<td>Search Card Catalog (this includes searching for specialized bibliographies and reference works)</td>
</tr>
<tr>
<td>4</td>
<td>Consult appropriate periodicals indexes</td>
</tr>
<tr>
<td>5</td>
<td>Consult specialized bibliographies, indexes and guides</td>
</tr>
<tr>
<td>6</td>
<td>Online Search (if appropriate)</td>
</tr>
<tr>
<td>7</td>
<td>Compile preliminary bibliography and narrow topic</td>
</tr>
<tr>
<td>8</td>
<td>Select sources and begin note taking. Develop preliminary thesis</td>
</tr>
<tr>
<td>9</td>
<td>Complete research</td>
</tr>
<tr>
<td>10</td>
<td>Refine thesis statement and write outline</td>
</tr>
<tr>
<td>11</td>
<td>Write text of first draft, including full footnote citations</td>
</tr>
<tr>
<td>12</td>
<td>Edit and revise first draft</td>
</tr>
<tr>
<td>13</td>
<td>From revised first draft, prepare properly formatted research paper</td>
</tr>
</tbody>
</table>

*IF AT ANY POINT YOU DECIDE TO CHANGE YOUR TOPIC, RETURN TO STEP ONE AND PROCEED*
THE RESEARCH JOURNAL

Each student will be required to keep a journal throughout the semester detailing the progress of his or her research project. The purpose of keeping this journal is to document that the individual has taken the appropriate steps to complete a thorough library research project and has followed the proper procedures for preparing a research paper. It also makes it possible to retrace the steps already taken in a research project, in order for you to avoid redundant research. Dated journal entries should be made (in complete, grammatical sentences) each time research is conducted.

The journal should cover all aspects of the research project, including topic selection, the preliminary search of the literature, initial reading, topic narrowing, finding aids consulted and the results of these searches. Full citations for references found should be included, as well as an indication of the location of the work (i.e., is it available in our library or not?). If you choose to employ them, any online searches, Inter-library loans, or trips to other library collections should also be noted. Include all consultations with the instructor or librarians regarding any aspect of the project (research, topic narrowing, etc).

Your journal should be kept in a separate notebook at least 50 pages in length. This will be collected frequently for review and comment by the instructor. Please bring your research journal to class daily.
Illustration 3
(evaluation form for the research journal)
EVALUATION
BIBLIOGRAPHIC INSTRUCTION AND RESEARCH JOURNALS

COURSE

# CLASS SESSIONS DEVOTED TO BIBLIOGRAPHIC INSTRUCTION

HOW OFTEN WERE RESEARCH JOURNALS COLLECTED?

Strongly Disagree 1
Disagree 2
No Opinion 3
Agree 4
Strongly Agree 5

PART ONE: BIBLIOGRAPHIC INSTRUCTION.

1. The amount of time devoted to bibliographic instruction was appropriate for the project assigned in this course.

2. Through Bibliographic Instruction, I learned about sources in the Abell Library Center with which I was otherwise unfamiliar.

3. Having another bibliographic instruction session as a follow-up would have been useful.

4. Instruction was clear and to the point.

5. I prefer having a librarian give all of the bibliographic instruction.

6. I think the course instructor should give all of the bibliographic instruction.

7. The best approach is to have the course instructor and the librarian share the bibliographic instruction.

8. It was useful to me to learn online searching.

9. It was necessary for me to know about online searching to complete my research project.

10. Having bibliographic instruction helped me research my paper more effectively.

11. Bibliographic instruction made me aware of the various ways different types of material are organized.
12. The bibliographic instruction was clearly related to the work in the course.

13. After having bibliographic instruction, I was able to use search aids by myself without much difficulty.

14. I feel I did better research because of having had bibliographic search instruction.

15. Overall, it was useful to have bibliographic instruction for this course.

PART TWO: RESEARCH JOURNAL

1. The purpose of the research journal was clearly explained to me by the instructor.

   The instructor clearly explained what was to be included in the journal and how the entries were to be made.

3. I found making journal entries to be tedious and time consuming.

4. I found that keeping a journal helped me save time by organizing my research.

5. I felt the journals were collected frequently enough to give timely feedback on my research project.

6. Getting feedback from the instructor(s) in my journal helped my research.

7. Keeping the journal helped me to do a thorough job of bibliographic searching.

8. Overall, keeping the journal was worth the time I put into it.

9. Journals should be graded.

GENERAL COMMENTS (PRO AND/OR CON) ARE WELCOMED (for more space, use back of page)