Real-World Research for Freshman

Freshman composition teachers who are attuned to real-life writing situations can extend the scope of traditional research paper assignments and at the same time meet the writing needs of other disciplines. For example, history students could record data from old records, or fine arts students could describe their artistic observations. To lead students into real-world studies, the following basic questions are helpful: (1) What is the problem? (2) What have others done to solve it? (3) What further research needs to be done? (4) What is the student going to do and how will it be done? (5) What information did the student find? and (6) What conclusions did the student draw and what do they imply? While students are researching their problems, they can be encouraged to analyze methodology and instruments with an eye to designing their own. Classroom activities could include library introductions to specialized indexes and bibliographies, as well as guidelines for determining sample sizes to assure randomness and for conducting trial surveys. Students who lack the background for statistical studies can report their findings in terms familiar to them. For example, one student was able to trace her family history through records, letters, diaries, the family Bible, and interviews. When the final draft of a research paper is completed, the students have explored topics of real interest to them and learned new skills because they needed them. (NKA)
Real-World Research for Freshmen

Freshmen enjoy conducting real-world research to answer questions posed in other disciplines. And real-world research leads to library research and involvement with all the skills traditionally used in writing a research paper; as well as many other skills used in gathering and reporting data from the real world.

This means that writing teachers who plug into these real-world writing situations can extend the scope of traditional research-paper assignments and meet needs of writing in other disciplines. They can have history students recording data from old records; science and fine arts students describing observations; philosophy students analyzing arguments; and social science, education and psychology students composing questions for interviews and surveys. They can also have these students reporting their findings, analyses, interpretations, and conclusions.

To lead students into real-world studies, I have found eight basic questions helpful:

1. What is the problem?
2. What have others done to solve this problem?
3. What further research needs to be done?
4. What am I going to do?
5. How am I going to do it?
6. What did I find?
7. What conclusions can I draw?
8. What do my conclusions imply?

Since answering one of these questions leads to the posing of the next, working through them leads students into an inductive process: defining a problem leads to a search to solve it; finding what others have done narrows the need; deciding which areas to pursue gives focus and helps to determine procedures; choosing a sampling and methodology limits the scope even more; and looking at the results demands interpretations, conclusions, and applications.

One music student embarking on this process thought that familiarity with music might have some effect on its ability to distract. Through library research he learned that other researchers had found that popular music distracted female freshman college readers more than classical music did. While reading this study, he realized that the researchers had not considered the familiarity variable. He then decided that he would test one group of readers while familiar music was playing and another group of readers while unfamiliar music was playing. With the assistance of a music teacher and a reading teacher in the public school from which he had graduated, he designed a study to test two groups of seventh graders and two groups of twelfth graders. Each group took reading comprehension and vocabulary tests: the seventh graders took two sections of reading comprehension tests and a group of
vocabulary tests from the Iowa Tests of Basic Skills (1971). The twelfth graders took the Cooperative School and College Ability Test (1955) and a vocabulary section from The World Book Encyclopedia's Vocabulary Inventories (1977). One group from each grade was tested while unfamiliar music was being played. The other was tested while familiar music was being played. As hypothesized, students working while familiar music was being played scored lower than students who worked while unfamiliar music was being played, indicating that familiar music was more distracting than unfamiliar.

During the time that students are researching their problems, they can be encouraged to analyze methodology and instruments with an eye to designing their own. In addition, classroom activities can be planned which focus on traditional library research skills and the real-world research techniques likely to be used by most students. These activities can involve in-the-library introductions to specialized indexes, bibliographies, and guides which the students did not use in high school. They can include guidelines for determining sample sizes assuring randomness, and controlling conditions. They can involve practice in the careful wording of questions, the conducting of trial surveys, and staging of role-played interviews. They can include distinguishing between fact and opinion, selecting appropriate specifics, analyzing and interpreting data, and computing simple statistics.

Students planning to interview or survey with
questionnaires need to study the questions posed by other researchers. They need to see that open-ended questions such as "What should college writing courses teach your future employees?" stimulate spontaneity and bring out personality, attitude, and peculiarities of a business situation which the researcher might not think of. However, responses to this type of question may lack specificity and are difficult to tabulate. They need to see that multiple-choice questions yield responses which are easy to tabulate, but which limit the subjects' responses to those provided in the choices.

Students planning to interview may also want to take advantage of tips from experienced interviewers such as those offered by William Zinsser the writer, critic, and editor in his On Writing Well. Then as they begin to formulate their own questions, they can query and interview their classmates and others with trial questions to determine how well their questions will elicit the desired data. Usually a student will need to study a number of questionnaires and conduct several trial surveys or interviews before producing a questionnaire which gets the information he wants and gets it in forms which can be reported clearly.

After going through this process, one student studying impressions acquired from TV by younger children decided to ask several types of questions. To encourage spontaneity and allow for individuality she asked "What is your favorite show?" and "When two people on TV are angry with
each other, what did they do?" However, to get responses which could be easily tabulated she asked, "On television, police (a) get hurt; (b) help people; (c) hurt people; (d) do wrong things;" and "On television, criminals are (a) strong; (b) smart; (c) exciting; (d) happy." For each of these the child subjects could choose more than one response.

Although these real-world assignments open doors to opportunities for exploration not traditionally opened to freshmen, some of these opportunities are limited. Students are frequently not able to get random samples or query a large number of people because of the time allowed to gather data. They may also lack the background in statistics to report their findings in a meaningful form. However, these limitations can be dealt with.

For example, a student interested in the results of mainstreaming special education students did not have time or finances to get a cross-sectional random sample. However, this student was able to study a local situation. Instead of asking What are the benefits of mainstreaming special education students? she had to ask What are the benefits of mainstreaming special education students in the local public school? Then she was able to interview a resource program teacher, a teacher for the hearing impaired, a primary teacher, and a primary-intermediate teacher at the local school. She was also able to observe students in their special classes and in regular classes to which they had been mainstreamed and consult records of
their performances in both situations. From the data she gathered, she noted the advantages and disadvantages of mainstreaming.

A student interested in changes in the sexual activity of college students was able neither to get cross-sectional random samplings nor to wait ten or twenty years to conduct a longitudinal study. However, this student did find a master's thesis reporting a study of sexual activity among students at a comparable university twenty years earlier. He then posed the question How does the sexual activity of college students at University X in 1983 compare to and contrast with that of students at University Y in 1963? He chose a random sampling from his own university, queried them with the same questionnaire used in the master's study, and noted the similarities and differences in the results.

Students who do not have the background to do statistical studies can report their findings in terms familiar to them such as raw scores and percentages expressed in charts and graphs.

Other students find themselves less limited in gathering and reporting data to answer their questions. A student who wanted to know more about her family history was able to trace it through records, letters, diaries, grave stones, landmarks, family Bibles, and interviews with older residents of her home town. Later her findings appeared as an article in a small town paper.

By the time the final draft reporting real-world
research is completed, both the teacher and the students have a feeling of accomplishment. The students have explored topics of interest to them; have enjoyed interviewing, querying, testing or getting into old records, analyzing, and interpreting; and have learned new skills because they have needed them. The teacher has had the opportunity to teach skills which real-world tasks demand.