

ESP 178 Applied Research Methods

Research Proposal Stage 1: Research Question

Due: 1/22
Length: 1 double-spaced page
Grade: 5% of total course grade

Note: Be prepared to talk about possible topics for your proposals during discussion section on 1/17 and during meetings with me on 1/18.

Purpose: Finding a topic for your research proposal, putting together a rationale for that topic, and developing a research question.

Task 1:

Coming up with a question that is both researchable and worth investigating may be the most challenging part of the research design process. Although the research question is an obvious starting point in designing a research project, the process is not always so linear, and the research question may evolve as the researchers move on to subsequent steps of the process. For this assignment, you must develop a research question that you propose to use as the basis for your final proposal. In subsequent stages, you will have a chance to revise your research question. Note that the assignments build on each other; the more thought you put into this first assignment, the easier will be the remaining assignments.

Within the bounds of the call for proposals, think about an environmental issue that interests you, something that you've pondered, something that has concerned you. If nothing comes to mind, try browsing the newspaper or looking around the web. A few potentially helpful sites:

Environmental issues from the Almanac of Policy Issues:
<http://www.policyalmanac.org/environment/index.shtml>

Resources on all kinds of environmental issues, from Envirolink.org
<http://www.envirolink.org/>

Environmental hot topics for business, from GreenBiz.com
<http://www.greenbiz.com/resources/hottopics/>

Task 2. Background Research

An important step in the development of the proposal is to do some background research on the topic you've chosen. The purpose of this background research, besides learning more about the topic yourself, is to provide concrete evidence that helps to describe the problem and its significance – and convince the funding organization that this problem deserves their attention. Compare the effectiveness of the following statements:

“Lots of people live in areas where they are forced to breathe dirty air.”

vs.

“Thirty-six metropolitan regions in the U.S. that are home to 85 million people fail to meet the national standards for ozone.”

“Transportation consumes lots of oil and contributes to global warming.”

vs.

“In 2000, the transportation sector in the U.S. contributed 513 million metric tons of CO₂ and accounted for 18% of global oil consumption.”

In your background research, you should look for data and other specific information that makes your problem description more compelling. Look for two or three reliable sources. I generally turn to government data to illustrate a problem, but for your problem you may have to dig harder. Two types of searches I find useful at this point in the process are Google searches and Lexis/Nexis searches. I would like you to try both of these. (Lexis/Nexis, if you haven't tried it, provides full text of national and regional newspaper and magazine articles and is available through the UCD library's web site, under electronic resources.) Chapter 3 (Chapter 2 in Red edition) and Appendix D in Schutt also have some tips for web searches. Be sure to assess the quality of your sources, as discussed below.

A few words about web searches. Web searches are a good way to find background information on your topic, but you have to use this tool carefully. Not all information on the web is to be trusted! Use the following questions in evaluating what you find on the web:

- Who or what is the author of the website?
- Is the site advocating a particular point of view?
- Does the web site give accurate and complete references?
- Are the data up-to-date?
- Are the data official?
- Is it a university research site? A government agency site?
- Do the data seem consistent with data from other sites?

Task 3. Question and Write-Up

Then think through what you learned in the readings and in lecture about what makes for a researchable question. Rather than “should” questions, focus on “how” and “why” kinds of questions. Write one paragraph (about ½ page) that uses your background research to describe the problem you wish to address with your research and ends with your research question. You need to clearly state your question as a one-sentence question (complete with question mark) and provide enough background on the topic to show why this might be an interesting question. At the end of your paragraph, a reader should not say, “So what?” Be sure to include citations for sources that you use (see below).

In the second paragraph of your write-up, try turning your research question into a testable hypothesis: X is positively/negatively related to Y, or X causes Y, for example (see pp. 55-57 in Schutt for help (pp. 45-46 in Red edition)). Then say a little bit about how you might define your variables and their level of measurements (see in pp. 110-116 in Schutt for help (pp. 106-112 in Red edition)). If you're not sure, present your best idea – you'll have a chance to revise as the quarter goes on. Draw a simple diagram of your hypothesis – a “conceptual model.” *You must turn in a diagram!*

A few words about citations. Citation format is getting more complicated as more materials become available on-line. The author-date format is used most widely in planning journals (i.e. (author year) in the text, with a list of references at the end of the paper) but other formats are acceptable if used correctly and consistently. My general rule of thumb is that you need to provide enough information that the reader could find the item herself. For things like government reports, this includes the agency, the report number, the date, and, if possible, a phone number or email address for the agency. I suggest using the Chicago, APA, or MLA manuals of style, available through the library (<http://www.lib.ucdavis.edu/instruc/citing/>).

Next up: Literature Review