

GUIDELINES FOR MS PLAN A THESIS AND DOCTORAL DISSERTATION RESEARCH PROPOSALS

(Adopted by the CEHS 1-24-84
and the EdD Advisory Comm. 4-20-84)

The purpose of a proposal for master's thesis or doctoral dissertation research is to provide the student's supervisory committee with sufficient information to decide on the significance of the proposed research and whether the project is likely to be fruitful. To accomplish that goal, the proposal should: (a) present the logical need for the proposed piece of research; (b) provide an analysis of the most important past research as a context for the proposed study; (c) specify the objectives and/or the hypotheses or research questions; and, (d) outline the basic procedures to be followed. The approved proposal is a statement of agreement between the student and the committee as to the minimum expected for the thesis or dissertation research. If you are planning to do a qualitative study, there may be additional considerations. (See Procedures, p. 6.)

Preparation of a research proposal is an important writing experience. In order to realistically approximate common funding agency requirements and to expedite review, the narrative portion of the proposal (exclusive of references and appendices) is not to exceed 30 pages. The proposal should not be the first three chapters of the dissertation or thesis. The purpose of the proposal is to present a rationale for a proposed study and establish its basic outline, not to serve as a definitive scholarly report, as is the thesis or dissertation. The explanation of the problem, the review of past research, and the proposed plans need not, therefore, be as comprehensive as in the thesis or dissertation. Sufficient detail should be provided in the proposal so that the committee can (a) determine that the student is aware of the relevant prior research, (b) judge the adequacy of the conceptualization of the research area, and (c) identify any potential difficulties in the proposed study. The student will, of course--in consultation with his/her advisor--fill in details, often expanding on the anticipated procedures, as he or she conducts the research. Major changes or accumulations of changes should be approved by the student's supervisory committee.

Sections in the Proposal

The following sequence of suggested sections for Plan A thesis and doctoral dissertation proposals reflects a basic logic of investigation, from intellectual uncertainty to plan of action. The sections are those essential to an adequate proposal, although some advisors may prefer a different order (e.g., placing the Objectives prior to the Review of Literature). Also, the general structure may be modified depending upon the particular type of research problem being addressed. For example, the Procedures section may be quite different from the one suggested here if the student's dissertation is to be philosophical and will not involve the gathering of data in the conventional sense. Even for students who will gather data, the subsections may be treated

somewhat differently depending upon whether the problem calls, for example, for single participant, experimental, correlational, survey, historical, ethnographic, or content analysis research.

For all thesis and dissertation proposals, however, there should be Statement of the Problem, Review of Related Literature, and Purpose and Objectives sections, as well as a Procedures section appropriate to the type of research to be conducted. Without these, it is difficult for the committee to determine what the student plans to do, to point out potential errors or inappropriate approaches, and to judge when the student has completed the agreed-upon project.

The Problem (suggested length: 1-3 pages)

The statement of the problem (that is, the intellectual quandary, dissonance, or perplexity) that underlies the proposed research is typically the introduction to a research proposal. That is, the introduction logically culminates in a problem statement. The problem statement provides the logical foundation upon which the rest of the proposal is built.

In applied research, the problem statement usually begins with a statement of need, which may be based on a public policy to be fulfilled or examined and/or on data indicating some shortcoming in educational or psychological services. The need is not, however, the problem. Any one need may be the basis for a number of different research problems, depending upon the research evidence that is available and judgments about how to best address the need. For example, the need to avoid the erroneous placement of bilingual minority students in special education classes might lead to research on the sensitivity of school personnel to cultural influences on their decisions about students, on the evidence for the validity of the instruments used to classify bilingual students, or on the extent and nature of parental involvement in classification decisions. In basic research, the assumed need is for adequate knowledge, and reference to public policy or needs data is usually not necessary. It is sufficient to note the intellectual quandary, which may be a theoretical formulation that merits testing, the lack of research on an important phenomenon, conflicting past findings, and/or the lack of evidence for the reliability or generalizability of past findings.

Toward the end of the Problem section, it is often helpful to include a one-sentence synopsis of the research problem. The problem should not be confused with the purpose of the study. For example, the following are statements of **problem** and **purpose**:

- a. **Problem Statement** -- "There have been no reports of studies investigating whether English- or Spanish-language tests yield more valid test scores for bilingual Hispanic students"; or "Research about whether English- or Spanish-language tests yield more valid test scores for bilingual Hispanic students has not been methodologically sound."

- b. **Purpose Statement** -- "To determine the extent to which the use of English- or Spanish-language tests affects the test performance of bilingual Hispanic students."

Review of Literature (suggested length: 5-15 pages)

The Review of Literature should place the proposed study in context through a critical analysis of selected research reports. This section of the proposal should:

1. Provide a synthesis of findings in a "state-of-knowledge" summary in regard to the problem area, including additional evidence as to the nature and/or the importance of the problem;
2. Make clear how further research should extend, differ from, or replicate past studies, including the identification of the critical variables in the problem area and important hypotheses to be tested;
3. Indicate shortcomings in the design of prior research that should be avoided, as well as strengths to be repeated, in conducting another study;
4. Provide a critique of the literature as a basis for any controversial methodological decisions to be presented in the proposal.

The Review of Literature in the proposal is not intended to be a complete presentation of the comprehensive review of related research that should have preceded writing the proposal. Only those studies that are directly pertinent to structuring the proposed research should be discussed briefly, in order that the student's committee can determine that major studies and/or issues have not been overlooked. A comprehensive, detailed review of related literature is presented in the dissertation as a "published" demonstration of knowledge about the field.

Purpose and Objectives (suggested length: 2-3 pages)

A one- or two-sentence statement of the general purpose of the research often is the opening for this section, followed by a list of specific objectives to be accomplished. The objectives should be stated as outcomes, not as procedures. For example, "To determine whether bilingual Hispanic students will obtain different mathematics readiness scores depending upon whether the test is in English or Spanish," is an objective. "To administer Spanish and English math readiness tests to bilingual Hispanic fourth graders," is a procedure.

Following the objectives, the hypotheses or research questions that are to guide the study are listed. Typically, the hypotheses state the researcher's expectations based on theory or past research, as discussed in the Review of Literature section. Directional or null hypotheses may be stated, depending on expectations.

Hypotheses should be stated in testable form, avoiding value terms that are not empirically measurable, and including operational statements of independent and dependent variables. For example, "Fourth-grade bilingual Hispanic students who take a Spanish-language mathematics readiness test will do better than similar students who take an English version of the test," is not directly testable. In contrast, "Fourth-grade bilingual Hispanic students who take a Spanish-language, experimenter-developed mathematics readiness test will have a higher mean score than fourth grade bilingual Hispanic students who take the English version of the test," is testable.

Research questions may be used rather than hypotheses. They are especially appropriate in studies not aimed at knowledge-building, such as R&D projects or descriptive surveys, or when a theoretical base for deducing expectations is not available.

Sometimes the objective of a study is taken to be the testing of one or more hypotheses or the seeking of answers to one or more questions. In such cases, objectives need not be stated prior to the hypotheses or questions.

Procedures (suggested length: 5-10 pages)

The Procedures section of the proposal is an explanation of the specific steps to be followed in meeting the objectives, testing the hypotheses, and/or answering the questions posed in the prior section. The presentation of procedures should take into account the appraisal of prior research in the Review of Literature. A chronological listing of major procedural steps in the proposed study is often useful. The following subsections will usually be included in the Procedures section. (Procedures may be different for proposals concerning some qualitative research -- see Proposal Procedures for Qualitative Research).

Population and sample. The target population for the research--the group to which it is hoped the findings will be applicable--should be defined, consistent with the Statement of Problem and the Purpose and Objectives. In addition, the accessible population--the population from which the sample will actually be drawn--should be specified, and evidence, available or to be gathered, as to population validity should be discussed briefly. Procedures for selecting the sample should be outlined, including justification for the sampling method. The implications for the generalizability of findings from the sample to the accessible population and then to the target population should be addressed. If an entire population is to be studied, it should be carefully identified in this section.

Design. The approach to conducting the research--whether, e.g., experimental, quasi-experimental, survey, historical, or ethnographic--should be specified in this subsection, along with the procedures to be followed. For example, for an experimental or quasi-experimental study, the proposal should indicate how participants will be assigned to treatments and how the research will be conducted to ensure internal and external validity. If an evaluation or R&D project is proposed, the model to be followed should be specified. If test development is the primary purpose of the project, the specific steps should be indicated. If test development is a minor part of the study, it should be treated in the Data and Instrumentation section.

Data and instrumentation. Specific information should be provided on the assessment of each variable. For experimental and quasi-experimental studies, the assessment of both dependent and independent variables should be addressed. The reliability and validity of scores and other data should be discussed, including evidence from past studies and information to be collected in the proposed study. How and when data will be gathered should be indicated and the procedures justified.

Analysis. Procedures, whether statistical or conceptual, for analyzing the data should be discussed specifically for each hypothesis or question. General statements such as, "Analysis of variance will be used to analyze the data", are not acceptable. Careful identification of analyses prior to conducting the research is crucial; otherwise the student may use analyses that are inappropriate for the hypotheses, or may find himself/herself with data for which the adequate analytic tools are not available. Analyses other than those needed to test the stated hypotheses or answer the research questions may also be indicated here. In conducting the research, the student may conduct analyses other than those stated in the proposal.

In group design studies, whether the analysis of data should involve testing null hypotheses to arrive at statements of statistical significance should be considered carefully, especially in light of the sampling process for the study. It is important to consider measures of the magnitude of results (effect sizes) that are not relative to sample size for use in evaluating the educational, practical, or theoretical importance of the results.

Style

Unless an alternative has been approved by the student's department and supervisory committee, the accepted style guide for research proposals, as well as for theses and dissertations, is the most recent published version of the *Publication Manual of the American Psychological Association (APA)*. Students must also abide by the format guidelines in the most recent edition of the *Publication Guide for Graduate Students at Utah State University*. Both publications are available from the USU Bookstore. The *Publication Guide for Graduate Students* is also available at www.usu.edu/gradsch/Publicationguide.pdf.

Qualitative Procedures

Although the exact design of a qualitative study cannot be given in advance, it is recommended that proposals be as definitive as possible. Even though specific details will always emerge, develop, and unfold as the investigation is taking place, preciseness at the proposal stage will greatly enhance the research process. Remember that change, according to a qualitative perspective, is seen as constructive. Change signals movement toward a more sophisticated and insightful level of inquiry.

The literature review is similar to those described in the proposal guidelines. Because qualitative research focuses upon "people and processes" rather than observed problems, as in quantitative research, the problem statement section will include more "general" questions which would encourage descriptive findings (e.g., What is happening? How does this occur? etc.)

When developing the purpose and procedures sections of the proposal, you may want to consider the following elements. The following outline of the elements is NOT linear, but rather identifies components that should be included in a qualitative proposal. It is also recommended that these elements be integrated with specific design guidelines made available in references which focus on that specific methodology paradigm. (See attached reference guide)

General Guidelines

1. Focusing the investigation (realizing that the focus may change through the course of the investigation)
 - Establish the boundaries for the study --define the terrain, proper territory for the investigation.
 - Determine inclusion/exclusion criteria for new information that comes to light -- relevance of new data (retain or discard).
2. Determining the "fit" of the qualitative research paradigm to the focus of the research
 - Identify the relationship between the assumptions of qualitative research designs and the focus of the research.
 - Indicate and describe the characteristics of the specific qualitative design to be used.
3. Determining the investigator's role
 - Because "self" becomes the instrument, articulate past experiences of the investigator related to research focus, the setting, or the informants
 - ▶ If investigation teams are to be used, the information stated above is needed for each team member. In addition, describe the team composition, details for coordination, and specifics of training
 - Specify procedures for securing approval from the Institutional Review Board.

- Detail specific ethical issues (e.g., confidentiality of data, anonymity of informants, ethical standards used, potential ethical dilemmas, and strategies for dealing with such).
- Describe how personal biases of researchers or research team members will be "controlled" or "accounted for" in the analysis of information.
 - ▶ Discuss preplanned safeguards by considering:
 - ◆ Distortions arising from the investigator's presence
 - ◆ Distortions arising from the investigator's involvement with informants
 - ◆ Distortions arising from the manner in which data-gathering techniques are employed.

4. Describing the data-collection procedures

- Purposive sampling--selecting information-rich cases (e.g., extreme/deviant sampling; intensity sampling; maximum variation sampling; homogeneous sampling; typical case sampling; stratified purposeful sampling; critical case sampling; snowball or chain sampling; criterion sampling; theory-based or operational construct sampling; confirming or disconfirming sampling; purposeful random sampling; politically important sampling; convenience sampling).
- Plan data collection and recording modes
 - ▶ Identify techniques projected to be used (e.g., interview, observation, unobtrusive measures, document and record analysis, and nonverbal cues).
 - ▶ Provide rationale for data-collection procedures to be used.
 - ▶ Design protocols for collecting information (form for recording information -- separating descriptive, methodological, reflective, and demographic field notes).
- Explain the maintenance of a field journal
 - ▶ Log day-to-day activities;
 - ▶ Include a Personal Log -- reflective and introspective;
 - ▶ Include a Methodological Log -- all methodological decisions with the emergent design.

5. Planning data-analysis procedures -- nonspecific design
 - Indicate that analysis occurs concurrently with data collection, data interpretation, and narrative report writing. Sometimes it occurs even before the "formal" study begins.
 - Describe how data will be **reduced** and **interpreted**.
 - Explain how data will be presented or displayed.
 - Discuss coding procedures that will be used to develop categories, patterns, and themes.

6. Determining successive phases of the investigation
 - Phase I -- orientation and overview
 - ▶ Plan the logistics of fieldwork **prior** to entering, **while in** the field, and activities **following** fieldwork; as well as logistics of **closure and termination**.
 - Phase II -- focused exploration
 - ▶ Shift from an open-ended "I don't know what I don't know" posture to a relatively more focused approach that can be characterized as persistent observation of salient elements.
 - ▶ Phase III -- closure and termination
 - ▶ Draft a report and submit to review committee at the site for member-check credibility; decide on modifications based on informant member-check feedback; complete the final report; carry out strategies to assure confidentiality/anonymity of informants; prepare data properly for external audit; store data properly; execute activities to reduce harm and/or enhance benefit of project to participants, etc.

7. Planning for and building quality/credibility/trustworthiness of investigation
 - Consider answering the following questions:
 1. How extensive will field contacts be in order to satisfy the requirement of prolonged engagement?
 2. How will triangulation be incorporated? By sources? My methods? By multiple investigators?
 3. How will arrangements be made for peer debriefing? Who will serve as debriefers?

4. What provisions will be made to carry out negative case analysis, to subject emerging hypothesis to continuous test and to refine them until they are fully explanatory to observed phenomena?
5. How will member checks be conducted during a given field excursion? From one excursion to the next? In the final member check of the draft report?
6. How will an audit trail be laid for final dependability/confirmability audit?
7. How will referential adequacy materials be collected and analyzed?

Qualitative Research Methodology References

General

Bogdan, R. C., & Biklen, S. K. (1992). *Qualitative research for education* (2nd ed). Needham Heights, MA: Allyn and Bacon.

Creswell, J. W. (1994). *Research Design: Qualitative and Quantitative Approaches*. Newbury Park, CA: Sage Publications, Inc.

Lancy, D. F. (1993). *Qualitative research in education: An introduction to the major traditions*. New York: Longman.

Lincoln, Y. S., & A, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications, Inc.

Marshall, C., & Rossman, G. B. (1989). *Designing qualitative research*. Newbury Park, CA: Sage.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

Case Study

Merriam, S. G. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass.

Stake, R. E. (1978). *The case study method of social inquiry*. *Educational Researcher* 7(2), 5-8.

Yin, R. K. (1989). *Case study research: Design and methods*. Newbury Park, CA: Sage.

Educational Criticism

Eisner, E. W. (1985). *Educational imagination* (2nd ed). New York: Macmillan.

Ethnography

Agar, M. H. (1980). *The professional stranger: An informal introduction to ethnography*. New York: Academic Press, Inc.

Fetterman, D. M. (1989). *Ethnography: Step by step*. Newbury Park, CA: Sage.

Goetz, J. P., & LeCompte, M.D. (1984). *Ethnography and qualitative design in educational research*. New York: Academic Press.

Thomas, J. (1993). *Doing critical ethnography*. Newbury Park, CA: Sage.

Werner, O., & Schoepfle, G. (1987). *Systematic fieldwork: Vol 1, Foundations of ethnography and interviewing*. Newbury Park, CA: Sage.

Grounded Theory

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Phenomenology

Oiler, C. J. (1986). Phenomenology: The method. In P. L. Munhall & C. J. Oiler (Eds.), *Nursing Research: A qualitative perspective* (pp. 69-83). New York: Appleton-Century-Crofts.

Silverman, D. (1985). *Qualitative methodology and sociology*. Aldershot: Gower.

Thesis and Dissertation Proposal Approval

Students should prepare their proposal using the format guidelines specified in the *USU Publication Guide for Graduate Students* and in the most recent version of the *Publication Manual of the American Psychological Association* (style manual approved for the College of Education and Human Services). In preparing the proposal, students should use the *Guidelines for M. S. Plan A Thesis and Doctoral Dissertation Research Proposals*. (Copies are also available through the Office of Research Services, Education Building, Room 453).

Data collection is not to be started prior to formal committee approval of the proposal. Once the proposal has been approved by all members of the student's committee, a copy of the proposal and an original cover sheet with committee signatures must be submitted to the School of Graduate Studies. (<http://www.usu.edu/gradsch/forms/THesis-Diss-styleform.pdf>)

For studies involving research with humans or animals, after the proposal has been successfully defended and required revisions made, one copy of the proposal must be delivered to the Office of the Vice President for Research, Old Main, Room 163, for the review by the University's Institutional Review Board (IRB) or the Institutional Animal Care and Use Committee (IACUC). Attach one completed copy of the Human Subjects Approval Form (IRB) or the Institutional Animal Care and Use Committee (IACUC) Protocol Application for Live Animal Use in Research, Teaching, or Training at Utah State University.