

BASIC PROCEDURES IN EDUCATIONAL RESEARCH AND DESIGN FOR FIELD SETTINGS

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ABSTRACT

The purpose of this article is to provide a creative approach for implementing fundamental procedures in educational research and design for field settings. This article focuses on the development of a standardized format for applied research design that will help professors and graduate students (Kritsonis, 2002). The author discusses design and analytical procedures for each of the research categories commonly utilized in the solution of educational problems. The author further discusses critical elements of developing a research proposal and how it smoothly transcends into a project and/or field study. Commonly proven research methodology elements are also included.

A Research Proposal: The Framework for a Study

The following gives an outline of each section of a research proposal. Definitions of each section, the appropriate length of each section, as well examples are provided for each heading.

1. Title. The author should be careful to use enough descriptive words to catalog it by ERIC and Resources in Education. However, overly descriptive titles can become too lengthy and awkward.
2. Introduction to the Study. This section should be short and attention getting. It describes what the proposal will cover and makes the reader interested in the topic. A brief background of where the study will be conducted as well

as setting the stage for the study will add to the introduction. However, be sure to keep this section brief. Remember, this is a proposal, not the completed study. This section should be no more than two pages in length.

3. Review of the Literature. At the proposal stage, this section deals with relevant information and literature pertaining to the topic. Previous research and literature should be included in this section. Five to 15 citations are normally recommended for a proposal and should be relevant and recent. This section should be two to six pages in length.
4. Statement of the Problem. This sets up the underlying intellectual motives for doing research on a specific topic and problem. An example follows:

There appears to be opposing conclusions in the research concerning collective bargaining and its effect upon the plight of the teacher. Smith (2004) found that bargaining had not benefited teachers. Jones (2004) noted that bargaining had greatly enhanced teacher morale.

Using opposing conclusions is an effective way to set up the statement of the problem. This section should be short, only one to two paragraphs in length.

5. Purpose of the Study. Succinctly describe what the research intends to find. Answer the question, "Why are you doing this study?"

The purpose of this study is to determine the extent to which the collective bargaining process has influenced teacher job satisfaction levels.

This section should be no longer than one paragraph.

6. Research Questions. State the specific questions the study will attempt to answer. Here the researcher is breaking down the *purpose of the study* into several relevant research questions. Keep in mind the Statement of the Problem, Purpose of the Study, and Research Questions must all fall logically in line and should be stated in one paragraph. See the following examples:
 - a. What was the level of teacher job satisfaction before bargaining rights?
 - b. What was the level of teacher job satisfaction after bargaining rights?
 - c. Was there a significant mean change in teacher job satisfaction following the acquisition of collective bargaining rights?

7. Hypothesis. This one sentence section puts the research questions in statistical terms. See the following example:

There is no significant difference in teacher job satisfaction following the acquisition of bargaining rights.

8. Definition of Terms. Define terms specific to the study that an outside reader may not be familiar with. Include general terms that are assumed all

would know but might be different in various school systems in the region, state, or nation. The length of this section will vary depending on the number of definitions included. Examples are provided.

- a. Temecula School District – This is a mostly rural school district in southern California comprised of 1,300 square miles. The district serves 10,000 students and employs 500 teachers.
 - b. TEA – The school district is an affiliate of the National Educational Association. Sixty-nine percent of all Temecula teachers belong to this organization.
 - c. Teacher(s) – Those persons employed in the school district with the primary objective being the academic instruction of students. This does not include librarians and counselors in this specific study.
9. Assumptions. This section should include any assumed aspects the researcher asserts that should be noted and stated. This section does not have to be long, one paragraph to one page.
10. Limitations. Here is the proper section to state any boundaries or limitations of the study. This section should only be one to two paragraphs. A few examples are provided.
- a. The study will measure levels of teacher job satisfaction in only one school district.
 - b. The findings of this study may not be generalized in other settings due to unique characteristics of the school district.
 - c. Teachers surveyed may vary in years of experience.
11. Methodology. This section of the proposal should have four parts. Each of these sections should range from one to three paragraphs.
- a. Subjects. Subjects or samples should be described here (who and where). The population may also be described within this part.
 - b. Instrument(s). The instrument or test and specific materials should be described here. Also, validity and reliability may be discussed here.
 - c. Procedures. A step-by-step process of the plan of the study should be described in this section. The timeline and permission to do the study may also be mentioned.
 - d. Data Analysis. How the data will be analyzed needs to be explained in this section. Answer the following questions:
 1. What type of stat test(s) will be used?
 2. Will means be compared?
 3. Will charts or graphs be provided?
- Note: A research proposal is only the framework for the study. It should be brief but concise allowing the major professor to know what the study is intended

to undertake. A proposal is usually 12 to 20 pages in length. Remember, quality not quantity.

12. **Significance of the Study.** This section states why the study is important and worthy of the time and effort that will require to complete it. In one paragraph, validate the reasoning behind doing a specific study of this type in this region, district, or state. See the following examples.
 1. Data derived from this study will serve as a guide to school districts in similar settings that are also considering the collective bargaining process.
 2. This study will also provide information on a topic that has largely been ignored in the research and literature.
13. **References.** References should be relevant to the subject and should be recent depending on the study. Five to 15 references are adequate.

A Formula for a Creative and Smooth Transition Into Completing a Project and/or Field Study

The proposal should now act as a skeleton for use to complete a study. By simply following the proposal and expanding upon it, a completed project and/or field study can be easily created. To complete all sections of the study, the data needs to be collected and analyzed, tables and/or graphs need to be composed, and a summary or conclusion must be established which should include recommendations for further study. After following the guidelines below, a completed project and/or field study will be the final product.

1. **Title Page.** Title of the study, author's name, and any other pertinent information for identification should appear on this first page of the study.
2. **The Abstract.** Provide a summary of the completed study.
3. **Table of Contents.** List chapters, section headings, subheadings, tables, and figures with appropriate page numbers.
4. **Chapter 1: Introduction to the Study.** This chapter incorporates all the parts of the proposal minus the Review of the Literature and the Methodology. Subheadings for this chapter should include: Statement of the Problem, Purpose of the Study, Research Questions and/or Hypotheses, Definitions, Assumptions, Limitations, and Significance of the Study.
5. **Chapter 2: Review of the Literature.** The Review of the Literature from the proposal should be expanded upon to create this chapter for the completed study.
6. **Chapter 3: Methods and Procedures.** Expand upon the Methodology created in the proposal by providing more specific details on subjects, instruments, procedures, tabulations of data, treatment of data, and so forth; anything done in the study. Be prepared to modify this section.

7. Chapter 4: Analysis of Data or Results of the Study. This chapter describes in prose and in chart/graph form the numerical results of the study (data). Simply show and tell how the results turned out without elaborating on “why it turned out as it did.” No explanations, summaries, or conclusions should be given in this chapter, as final thoughts make up the next chapter.
8. Chapter 5: Summary, Conclusions, and Recommendations. The results of the study should be summarize in this chapter and an explanation of “why the results turned out as they did” should accompany. This is an opportunity to brainstorm and provide expert knowledge. All factors and variables that could have played upon and influenced the dependent variable should be consider and discussed. This chapter should conclude with erudite statements from the researcher and recommendations for further study on the topic or a similar topic.
9. References. A final list of all references cited in the completed study should be supplied here.
10. Appendices. Possibly make a list of where specific tables, charts, or graphs are located in the study.

In conclusion, this article provided an approach for implementing fundamental procedures in educational research and design for field settings. The standardized format should help investigators design analytical procedures for each of the research categories commonly utilized in the solution of educational problems.

References

Kritsonis, W.A. (2002). **Schooling.** Mansfield, OH: BookMasters, Inc.