

# Classroom Research

## Project Guide

ECE 471

University of Alaska Fairbanks

Child Development and  
Family Studies

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# Classroom Research Project Guide

## Child Development and Family Studies

### *Organization of the Project*

Advisors have specific preferences for organizing the project you should work with your advisor to complete a format that is acceptable.

Here is how the *Classroom Research Project* is usually organized (Note these are not chapters, they are sections of the Project:

- I. **Introduction/Statement of Focus or Problem/Research Question(s)**
- II. **Rationale**
- III. **Theoretical Framework/Literature Review (minimum of five resources)**
- IV. **Statement of Bias**
- V. **Methods (Research Design, Data Collection, Data Analysis)**
- VI. **Findings/Results**
- VII. **Conclusions/Discussion (may come back to statement of bias)**
- VIII. **References**

### *Description of Sections of the Project*

#### **Introduction/Statement of Focus or Problem/Research Question(s)**

Begin your project with a clear description of the issue you plan to research either *framed as a question* or stating, *"The purpose of the study is...."* This section should include a brief description of the setting of the research, e.g., school, age-group, type of community, etc. *(Anyone reading your project should be able to know immediately the intention of your inquiry.*

The starting point of inquiry is a sense of curiosity -- an enigma, dilemma, or problem that is professionally and often personally important to you. Thus, your own interest or wonderment (perhaps even anxiety) helps you select a research focus. Your readings, class experiences, teaching experiences, and life experiences then will combine to allow a research focus to surface. Give yourself time to imagine questions, concerns, and possibilities -- and to resist settling on an idea before you are truly interested in it.

This focus does not have to be complex, nor must it be limited to what seems to be an easily controlled experiment or situation. This should be a question, topic or issue that compels your interest as a researcher ought to be one of sufficient depth but also manageable in the time frame that meets the requirements of your program. *Be sure to include in the focus the question(s) that drives your research.* Your project essentially is a systematic search for answers to your question or insight/resolution of a problem.

Here are some examples of focus/problem statements:

*In this project, I will be investigating the use of open ended questions and discussions surrounding shared reading experiences in combination with teacher support for dramatic play as strategies to build vocabulary, and expressive language skills.*

*The purpose of this inquiry is to understand why girls in the classroom environment are not playing in the block area and to alter teachers' practices and classroom environment so block play interest is developed and enhanced for all children in the classroom.*

## **Rationale**

The rationale is a discussion of the *need* for this research and the *personal and the educational* significance of your research project.

Need: Here you want to argue that your thesis or project is needed and is important. You could argue, for example, that it solves a problem, fills a gap in the research literature, provides a fresh angle, looks at a new context, or builds a new theory.

Personal significance: The rationale portion of your research project speaks to the reason why you want to explore this topic in the context of your teaching environment. It offers a brief history of the circumstances and understandings that brought you to this point of interest. You may want to place your ideas into a personal narration of yourself as a person and as a teacher, in the history and circumstances of your classroom, school, and place of employment or community. You could begin with a short story illustrating why this topic is important to you.

Educational significance: Another approach to the rationale is to emphasize the educational dimensions of the importance of your study. If you address the educational significance, you will draw upon ideas from your preliminary literature review (see below) to explain the educational issues, the discussion around them, and what you hope to contribute to this professional conversation. In writing a beginning of your rationale emphasizing the educational significance, a "funnel" approach could be used. The funnel approach means that you could begin broadly -- by explaining the context surrounding your research issues imbedded in society at large. Then you would narrow your discussion to the field of education, and then to the specific topic area of your project.

## **Theoretical Perspective**

Often, in educational research, the topic or focus of the study is also grounded in theory (e.g., pedagogical theory, learning theory, development theory, change theory, critical theory, feminist theory, post-colonial theory, language acquisition theory, etc.) and those theories may also need to be explained, in terms of how your inquiry connects or is shaped by the existing theory. In your explanation of the theoretical perspective of your study, it is important that you draw from the literature that supports your position. *In doing this, your review of literature and the theoretical perspective that you are working within may overlap and/or be integrated together in the literature review.*

## **Literature Review**

The literature review thoroughly explores the discussion and research related to your topic. In the literature review, you discover and describe the background in which your topic is embedded. This is also the place in which you identify why this issue may also be important to others, perhaps because the topic raises controversy. You can deepen the analysis of key concepts and consider the historical pendulum swings in e.g., school reform or learning theory.

The literature review is a description of the scholarly print or electronic books, articles, and other resources such as Internet sites, videotapes, and compact discs that have provided and heightened your ideas about the research focus and methodology, and the outcomes of the research

presented in these resources. If you have attended presentations or workshops, or have interviewed people who have expertise in your area of study, you may want to include these resources as well (with IRB approval).

The review should be organized on the basis of issues, purposes, concepts, perspectives, and/or research findings. The different parts of the literature review represent points that are returned to later, usually in the “Discussion” section of the inquiry report.

Some inquiry projects draw from a great body of literature, e.g., on constructivism, or may have somewhat limited numbers of resources, e.g., substitute teachers. You will have to figure out a way to read with breadth and depth but also make your literature review manageable. Typically, the final inquiry report will draw upon about 5-10 different resources, about half or more of which will be research-based as opposed to conceptual in nature. However, some topics may be so new that the body of research is limited. In such a case, you may not have as much to draw upon, and should note this in your review. In addition, you may come back to certain citations in your final discussion, project dissemination plans and other relevant places throughout the final report. In some theses or projects the theoretical perspective and review of literature is integrated throughout the paper.

### **Statement of Bias**

Exploring and defining the theoretical perspective that underlies your research design should help you to understand your own perspective or lens in which you view your project, revealing the biases and assumptions that influence, or accompany your choices. You thus begin to analyze your expertise, values, and position for viewing the world (your ontological position), and what you believe about the kind of evidence that counts as knowledge (your epistemological position) and you are better able to acknowledge and account for the subjectivity that you bring to your research. *This section is likely to be returned to and discussed more thoroughly in the Discussion/Reflection section of the Thesis/Project Report.*

### **Methods for Research Projects**

This section is an explanation of theory that forms the basis of the particular type of study you chose, and the kinds of research methods that fit thoughtfully within that type of study. For example, an important aspect of the theory that underlies ethnographic research is that things (phenomena) occur in a social or cultural context. Therefore, if you chose to do an ethnographic study, it would be important for you to choose data collection methods that allow you to gather data on the social or cultural context of your topic (e.g., the classroom culture, the school system, the community, etc.).

This section explicitly should provide information about:

- Population that you will be studying
- Setting
- Criteria for choosing the participants

- Description of the research methods you will use
- Reasons for the methods chose
- Specific plans for collecting data (e.g. protocols, triangulation; interviews, video analysis, participant observation field notes, etc.)
  
- Strategies for data analysis/interpretation (coding, descriptive statistics, soft-ware programs for qualitative date analysis or statistical analysis, survey data, etc.)
- Time frame in which you will do your research (allow time, also, for the literature review—this generally is done over two semesters).
- Limitations of your study

Specific types of data collection may include: observation of the lived experience of a classroom and/or teaching practice; journals from both you and research participants, e.g. students or clients and colleagues; a collection of your students' work -- in writing, art, photographs; focused or structured interviews with students, parents, etc.; focus group discussions in which you take notes or record the perceptions of your research partners; questionnaires, e.g. attitudinal inventories or written responses; data from evaluations or assessments.

You should portray a sense of the lived experience of the classroom, counseling or educational setting (its physical setting, illustrations of student and teacher interactions, a vivid rendering of the activities). It's very hard if not impossible to depict lived experience if you refer to students as "the class" without any perception of individuals.

Correspondingly, examine "teacher reality." Avoid describing a situation in which "we discussed" something, when actually it was the educator who did the discussing. Your observations may be more dynamic if you carefully observe a few students rather than depicting an amorphous sense of the whole. By using tape recorders or videotapes, allowing your colleagues to help you observe, and asking students to give you their perceptions of events, you can better focus on individual participants.

Before you write the final draft of your project, you will want to "test the waters" and pilot in a brief way your research methodology, e.g. observe students as they attempt to learn something, practice interviewing a colleague, try a new teaching.

When you write about the limitations of your study, consider what your research cannot find out, e.g., by interviewing but not also observing an educator's practice, what are some possible problems? Or by choosing a particular population of research participants, what might you not learn? Certainly, most qualitative researchers will be careful to note that their studies are not generalizable to all educational situations, but they may be representative of similar contexts and situations. Quantitative studies may be generalizable to similar educational situations and numbers of participants.

## **References**

The last section of your project should have the list of sources that you utilized for writing the project. Besides the sources you include in your literature review, there also may be sources that you mention in your methodology section, your rationale, and theoretical perspective. All

references and citations should be documented using the form of the American Psychological Association Fifth Edition (see Appendix A). Whenever possible, cite the original author and primary text rather than a secondary source.



## **Institutional Review Board (IRB)**

Project researchers must familiarize themselves with the UAF IRB (see <http://www.uaf.edu/irb/>) requirements, including the forms that accompany a project and the self-administered CITI Training (see Appendix B) before they can begin their research.

### **THE RESEARCHER'S ETHICAL RESPONSIBILITIES**

Throughout the process of conducting research, you will confront ethical responsibilities and issues. We will present these ethical areas in the order in which you may encounter them.

#### ***Gaining Access/Permission***

When conducting research, it's ethical and humane to give information about your project to all the people touched by your research, e.g. administrators, children, parents, and colleagues, in order for them to participate more fully and to feel comfortable with your research activities. When working with adults, e.g. colleagues, you need to disclose the nature of your research and the methodologies you will be using. People obviously will give more information and reveal more about themselves and their worlds when they feel comfortable with the researcher and his or her purposes. However, in some naturalistic studies you may not wish to divulge the finer points of the study because participants may change their “normal” behavior. In such cases, it is acceptable to be more general about the goals of the research.

Often, when doing research in schools, e.g., observations, the permission of the principal of the school and teacher in the class is adequate. This is often the case when inquiry projects involve observation rather than testing or extensive questionnaires. However, in some situations, you will need permission from school districts or other educational arenas to do your research. When permission is required, you need to allow extra time for approval and thus you are encouraged to learn what is necessary and fill out forms well in advance of conducting your inquiry.

In classroom settings, teachers should inform parents about their inquiry project or if an observer will be conducting research and visiting fairly often. Usually, when interviewing other educators on their own time and away from their schools, permission from districts are not necessary; however, the UAF IRB requires that you provide letters or formal consent forms that provide all the necessary information for informed consent and for Human Subjects requirements as noted in the IRB.

#### ***Reporting Your Findings***

It is your obligation as a researcher to report your findings as accurately as possible; that almost goes without saying. However, a researcher can easily lose sight of the goal of deepening understanding of practice. Your research is very successful if you learn something and understand a problem or issue more thoroughly; it is not necessary to prove anything. In practice-centered research, e.g. observing a new method or evaluating curriculum, lack of success in working with the new strategy provides the teacher-researcher with many questions and dilemmas for reflection -- with many opportunities for growth.

But accuracy is not your only aim; confidentiality is an important ethical component in your research as well. You owe to the people who participated in your research anonymity from the "outside world." When reporting, avoid using last names of children, use pseudonyms for adults, and refer to your school or place of employment in "generic" terms, e.g. "middle school in a northwest rural area." Also, refrain from descriptions that would reveal a person or an environment, e.g. writing about identifiable physical or geographical characteristics. (Note: This may be more challenging to do in both urban and rural environments of Alaska; be sure that your participants are fully informed of how you intend to provide confidentiality.)

Educational research accentuates work with people. The ethical principles adopted by the Council of the American Anthropological Association established guidelines that have great application to researchers in education:

In research, anthropologists' paramount responsibility is to those they study. When there is a conflict of interest, these individuals must come first. Anthropologists must do everything in their power to protect the physical, social, and psychological welfare and to honor the dignity and privacy of those studied.

- (a) Where research involves the acquisition of material and information transferred on the assumption of trust between persons, it is axiomatic that the rights, interests, and sensitivities of those studied must be safeguarded.
- (b) The aims of the investigation should be communicated as well as possible to the informant.
- (c) Informants have a right to remain anonymous. This right should be respected both where it has been promised explicitly and where no clear understanding to the contrary has been reached.
- (d) There should be no exploitation of individual informants for personal gain. Fair return should be given them for all services.
- (e) There is an obligation to reflect on the foreseeable repercussions of research and publication on the general population being studied

### ***IRB Forms***

There are several forms required for you to complete depending on the circumstances of your research. All of the forms are available so you can customize them for your project. ***It is your responsibility to learn about the IRB and the CITI Training requirements. You are also encouraged to talk with your research advisor for additional guidance on this process.***

After you complete the necessary forms, you should send them electronically to your research advisor. Your advisor first will read the form(s) and send it the other committee members. Either

your advisor or the committee members may request changes before this form is submitted to the IRB committee. After you make any necessary changes and your advisor approves it, he/she will pass it along to the IRB Committee. That committee may also request that you make modifications.

As noted above, some school districts require that teachers inform them about classroom research projects, either informally by explaining the research project to the principal or having teacher researchers fill out district forms. **It is the student's responsibility** to learn about the school or district requirements when the research project is developed, leaving time for permissions or modifications before data collection.

***If you are dealing directly with human participants (research subjects), you must receive approval from your advisor/committee, the SOE, and the IRB Committee BEFORE you begin your data collection. If you are unsure if your project needs to go through the IRB, consult your advisor and/or contact the UAF IRB directly at 907-474-7800.***

## **THE PROJECT REPORT**

Although the appropriate format to use for your inquiry report is dependent upon the type of study/project you do and the requirements of your advisor, the following elements should be considered and included.

### ***Chapters and/or Sections of the Project Report***

These are the sections needed for your project report:

Title Page

Acknowledgements (optional)  
Abstract  
Introduction/Statement of Focus or Problem/Research Question(s)  
Rationale  
Theoretical Perspective /Literature Review  
Statement of Bias  
Methods (Data Collection and Data Analysis if conducted)  
Product (Power Point Presentation, Brochure, Handbook, Curriculum, Program,  
Photographic Essay, Children's or Young Adult book, Video, Play, etc.)  
Plans for Dissemination/Results of Dissemination  
Reflections on the Process/Product and Application/Dissemination

## **Title Page**

Below is the format you should use for the title page; center the text on the page when you create the title page:

**The Title of Your Inquiry Project**

**Your Name (need APA format included here)  
Running head, page numbers, page headers**

**Project Submitted to the ECE  
Program**

**The School of .....**  
**University of Alaska, Fairbanks**

**Month, Year**

**Acknowledgements**

This brief statement is used to extend gratitude and appreciation to those people or institutions that have given support, advice, or assistance that has been helpful to the researcher, to participants in the research, to family, friends, fellow students, faculty and staff. The section is *optional*, but many students will choose to make this expression of thanks and indebtedness. (The typical page length is one-half to three-quarters page.)

**Abstract**

The abstract is intended to be a brief statement of about 125-150 words or less, that summarizes the purpose, action initiative (where applicable), participants, setting, methods and results of the study, plus the researcher's primary conclusions, recommendations, and reflections where given in the body of the report. The abstract is intended to be a very succinct statement that is comprehensive enough, but certainly very precise. (One-half a page is a typical length for the abstract.)

**FIRST CHAPTER OR MAJOR SECTION:**

**Introduction/Statement of Focus or Problem/Research Question(s)**

The focus/problem statement for your research report is the same as the focus statement for the project. Be sure to change your wording from future to past tense, e.g. "I want to find out" to "I wanted to find out." You may need to make very few changes from the writing in your project for the focus, rationale, and theoretical perspective and methodology sections — except to change verbs to the past tense. If your research led you into unforeseen emphases or directions, you need to make whatever changes will explain the precise nature of your project. (Typical page length: one-half pages.)

**Rationale**

The description of the rationale in the project serves you well here. However, if there were other purposes or perspectives that influenced your research, include them as well. Again, check to see that your verb tense makes sense.

(Typical length: 1-2 pages)

## **SECOND CHAPTER OR MAJOR SECTION:**

### **Theoretical Perspective/Literature Review**

The literature review from the project is the basis for this section. However, as you refine the design of your inquiry, begin to collect and analyze data, and discuss your findings, you might well discover additional topics of importance to your study and therefore, the need to review and include supplementary literature. This section thoroughly explores the discussion and research related to your topic, enhancing the analysis that has begun in your preliminary work. In the literature review, you discover and describe the background in which your topic is embedded. This is also the place in which you identify why this issue may also be important to others, perhaps because the topic raises controversy. You can deepen the analysis of key concepts and consider the historical pendulum swings in e.g., school reform or learning theory.

*The literature review is a description of the scholarly print or electronic books, articles, and other resources such as Internet sites, videotapes, and compact discs that have provided and heightened your ideas about the research focus and methodology, and your action initiative. If you have attended presentations or workshops, or have interviewed people who have expertise in your area of study, you may want to include these resources as well.*

The review should be organized on the basis of issues, purposes, concepts, perspectives, and/or research findings. The different parts of the literature review represent points that are returned to later, usually in the “Discussion” section of the inquiry report.

Some inquiry projects draw from a great body of literature, e.g., on constructivism, or may have somewhat limited numbers of resources, e.g., substitute teachers. You will have to figure out a way to read with breath and depth but also make your literature review manageable. Typically, an inquiry report will draw upon about 5-10 different resources, about half or more of which will be research-based as opposed to conceptual in nature.

All books, articles, etc., that are mentioned in the literature review should appear in the report’s “References” section in APA style, sixth edition. However, you do not have to synthesize or discuss all your references in detail. Often, several authors who have done research in an area that is of interest to your literature review might be “cited” rather than discussed. Or, you might cite authors who have written on research methodologies in your “methodology.”

Keep these suggestions in mind as you write up your literature review:

Organize this section around topics, concepts, and perspectives rather than producing an annotated bibliography. The literature should be organized and synthesized around subthemes and subtopics. You want to avoid a “laundry list” of disconnected and disorganized literature.

The literature review does not have to be a stifling account of "this famous researcher states that...." In the process of representing historical grounding of your topic and up-to-date thinking and research, you can also take the opportunity to respond critically to the sources, noting how they help you to understand your inquiry.

It might help to think of a literature review as a writer facilitating a respectful dialogue with a group of scholars, who were chosen for their expertise regarding a specific topic. Throughout the dialogue, the writer/facilitator tries to ask probing questions of the scholars, calls attention to points of similarity, contestation, and confusion, adds clarification or paraphrase where needed, keeps the dialogue on track, and provides a summation.

Be aware of jumping to conclusions, e.g. even though Johnson, Johnson, and What's-his-name tell you that their strategies are very helpful, unless you speak from experience, avoid writing that "Cooperative learning will help my students." Rather, try "Research (Johnson, et al.) suggests that ....", or "I question or am eager to find out if cooperative learning will be helpful to my students."

Most importantly, frame the review of literature in a way that introduces questions to you as a researcher and as a teacher and return to these questions as you write your interpretation. Also, consider sources of which you are critical; you may have opportunities to critique or take issue with their conclusions in your discussion of your findings.

Be sure you do not overquote directly from the literature, thus obscuring your own voice. Quote only what is truly quotable (something particularly well said, memorable, or lyrical); otherwise summarize and paraphrase.

(Typical page length: 2 – 3 pages)

### **THIRD CHAPTER OR MAJOR SECTION:**

#### **Methods/Description of the Application Project**

The methods part of the project can be duplicated here, but as you refine your ideas and gain more knowledge about particular research methods, you may need to increase this section considerably. *You should do more reading particularly on the research approach that you are using, e.g., reading more on narrative research or on interviewing. Examples of research studies that use methodologies similar to yours.* Be sure to scrutinize this section so that you have completely conveyed your research design, data collection methods, data analysis methods and reasons for choosing your research methods. Revise your writing if you need greater clarity or precision; this section also makes sense written in past tense.

For a project, describe any data collection or analysis you have undertaken. Explain the purpose of the project, how you developed it and whether or not you have had a chance to pilot it or present it to an appropriate audience. Describe the strengths of the project and the

challenges encountered while developing or administering it. Tell how you will use this project in the future and how you will adapt or modify it based on the responses and outcomes of the participants who you present it to.

(Typical length: 1-2 pages)

#### **FOURTH CHAPTER OR MAJOR SECTION:**

##### **Findings & Analyses**

This section contains the dynamic elements of the research experience—what the researcher (and others) did and observed. In short, it portrays the project as a story unfolding. Although concentration is placed on what the data show and what this signifies in terms of patterns and themes and change over time, it is important that a sufficient description of the action component or initiative is given. With this description, the data findings and their analysis will be comprehensible and make sense. The research should be vivid to the reader, with many details highlighted and the human side emphasized. Often this section is presented chronologically and organized in terms of time periods that are demarked by culminating events or activity milestones.

In addition to the paragraph above, describe the development of the product, the strengths and challenges of the product, how you applied it (audience, context, time, etc.), and the participants' responses/engagement in the presentation.

If you have not presented this, provide your plans for doing so and for using feedback to adapt and revise this version.

In this section, many examples and direct excerpts from the original data are offered to help lend vividness and to provide substantiation for the later discussion of interpretations. It is important to set out excerpts from interviews, journals, field



observations, documents, photographs, tapes, and examples of products, as well as tables with quantitative results. In many cases, up to one-half or more of the total text of words is made up of excerpts from the original data.

In this part of your project, interweave specific examples so that when you write interpretations you have provided enough description for substantiation. Have you provided excerpts from interview transcripts that capture the meaning of points of view? Have you given explicit descriptions of behaviors or dialogue that you observed so you can later justify your interpretations?

This description is important not only to validate your interpretations but also to give you understanding. Become sensitive to the insights that come during this process. A brief glance at the information that you collected may yield some interesting perceptions, but with the totality of the information before you, you may reach more conceptual understandings of yourself and your teaching, your classroom, learning environment, or community. Moreover, sharing the findings section with colleagues may reveal additional meaning.

And as you narrate the process of your research, it makes little sense to try to hide your presence as an observer. If you observed an event or participated in a conversation or interview, tell the reader "I observed...." or "I asked...." Research in education involves human beings engaged in their work and learning. You don't need to refer to yourself as an inanimate object in order to give your writing scholarly authority. Judith Beth Cohen (1989) writes that college students who "have moved beyond a purely subjectivist orientation...tend to be highly suspicious of the personal voice" (p. 6).

They often defer to reason so exclusively, they mistrust their own voices . . . . While they may be able to produce competent papers praised by teachers, there is something mechanical and perfunctory in what they write. They aren't connected with what they're saying (Cohen, 1989, p. 6).

There is a price to be paid for loss of your presence: your lack of connection to your work and dull writing. Personal voice continues throughout the documentation of your research, including your discussion of findings.

(Typical page length 5 – 7 pages)

### **Statement of Bias**

All research design and outcomes are affected by the prior knowledge, beliefs, values, worldviews, philosophical perspectives, and professional responsibilities and obligations of researchers (e.g., in almost all teacher action research, teachers are doing the study on a project that has goals in whose accomplishment they are very invested personally, professionally, and as members of a school staff). In qualitative research, the researcher's biases are acknowledged up front and shared in the research report, so they become known factors in the researcher's decision-making and interpretation of data. Providing this important information is critical to establishing the validity of the research results.

(Typical page length 1/2 – 1 page)

## **FINAL CHAPTER OR MAJOR SECTION:**

### **Discussion/Conclusions/Reflections**

This section allows the writer to clearly articulate what was discovered in doing the project: research component, and action component where applicable. Often the section begins by summarizing what the researcher now thinks about the question(s) or points of interest/goals that have guided the project from the beginning. It is important to comment on the most compelling patterns and themes that emerged, and changes in them for individuals, groups, or settings over the course of the study. As this discussion proceeds the researcher can share what she has learned about the improvement or best potentials for educational practice.

This section allows you to clearly ascertain what you discovered by doing your research project. You may want to begin this section by summarizing what you now think you know about the question or questions that guided your study. Also, comment on the compelling patterns and issues that you recognized. Did change occur for individuals or in the social setting or culture of the school or workplace? Share with your audience what you learned about the improvement of educational practice.

*The discussion does not have to explore everything you discovered in the findings section.* Rather, you should consider issues that you find particularly interesting. For some researchers, the discussion is a time to consider the structures of educational settings and what changes would be necessary to foster, e.g., teacher empowerment or curricular reform.

*You should not “surprise” your reading by raising issues in the discussion that were not introduced in the findings.* Your findings should have already provided evidence that will be the basis of your discussion. However, it is perfectly appropriate to discuss *what you did not find*. For example, if you were interviewing teachers about their practice and they all told you that they believe in a certain approach, but you did not find evidence of this approach each time you observed their teaching, that certainly would be an interesting point for your discussion – one that might lead you to pose more questions.

An important aspect of the interpretation section is your understanding of your findings in the context of the information obtained in the literature review. What questions stemming from the literature review can you now answer for yourself? What questions remain unanswered or would need further research to help answer them? How has your study contributed to the discussion of other researchers and educators? Does your study confirm any ideas or challenge existing beliefs? You may also want to comment on the learning and occurrences that took place beyond the scope of the original project and what research questions your study might stimulate.

Also, in your discussion, you may want to include a reflection on what was personally learned from doing the inquiry project. What did you learn about being a researcher? What did you learn about your involvement in research (and taking an action initiative) that might profoundly affect

your practice as an educator? What would be done the same or

differently in future research - and action - projects? What was learned about the process of creating change, and about educator-conducted research as an instrument of change?

This is how Harry Wolcott (1990), an ethnographer, answers the question, "how do you conclude a qualitative study?" He says..."You don't" (p. 55):

Give serious thought to dropping the idea that your final chapter must lead to a conclusion or that the account must build toward a dramatic climax. In the dichotomous thinking said to be typical of Americans, research is sometimes portrayed as being either decision-oriented or conclusion-oriented. Clearly some research is decision-oriented but I am not sure that "conclusion-oriented" is adequate to describe the rest of it. (Wolcott, 1990, p. 55)

Certainly, try to bring closure to your inquiry. Nonetheless, by doing research in education, you may not be in a position to prove a hypothesis or to obtain an enduring answer to a question that will pertain to all educators for all times. (Typical page length: 2-3 pages)

## **References**

This section is a bibliographic listing of *all resources and references* contained in the inquiry report, not limited to those cited in the literature review. References may be print, electronic, media, or from personal interaction, and include published (copyrighted) and unpublished sources. It is important that all references and citations be documented using the form of the APA (American Psychological Association Fifth Edition) guidelines. Typically, inquiry reports have *approximately 5-10 total citations of references and resources* in the References section, at least *half of these being research-based*. *Do not place sources in the references unless you cite them within your inquiry report.*

## **Appendix**

You can create an appendix or appendices as needed. The appendices contain materials supplemental to the main text, including copies of research instruments and protocols, examples of data (such as student work, e.g., children's drawings) and documents, photographs and media.

## ***Final Comments***

We hope that you think about your research as a beginning, not an end. Working as an educator means that you will perpetually be a researcher. You will continue to systematically make sense of your experiences and those of your students or clients in order to help them become better learners and to help you become a better educator. Research is part of the process of life-long learning and for that reason we encourage you not only to use this project as a springboard for your future work but as a process for engaging your colleagues and students in thinking about the purposes, experiences, and effects of educational practice.

## REFERENCES & USEFUL SOURCES

- Bogdan, R. C., & Biklen, S. K. (1998). *Qualitative research for education: An introduction to theory and methods*, third edition. Needham Heights, MA: Allyn & Bacon.
- Burnaford, G. E., Fischer, J. & Hobson, D. (Eds.) (2001) *Teachers doing research: The power of action through inquiry, 2nd Ed.* Mahwah, NJ: Lawrence Erlbaum.
- Carr, W. & Kemmis, S. (1986). *Becoming critical*. Philadelphia: Falmer Press.
- Cohen, J. B. (1989). The personal voice and the research paper. *The Journal of Professional Studies*, 12 (3), pp. 4-14.
- Eisner, E. W. (1991). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. New York: MacMillan.
- Frank, C. (1999). *Ethnographic eyes*. Portsmouth, NH: Heinemann.
- Jaeger, R. M. (Ed.). (1997). *Complementary methods for research in education, 2nd Ed.* Washington, D.C.: American Educational Research Association.
- McCutcheon, G. & Jung, B. (1990). Alternative perspectives on action research. *Theory into Practice* 29 (3), 144-151.
- Merriam, S. B. (1998). *Qualitative research and case study applications in Education, 2nd Ed.* San Francisco: Jossey-Bass.
- Merriam, S. B. & Simpson, E. L. (1995). *A guide to research for educators and trainers of adults (2nd Ed.)*. Malabar, FL: Kreiger Publishing Company.
- Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis (second ed.)*. Thousand Oaks, CA: Sage Publications.
- Patten, M. Q. (1990). *Qualitative evaluation and research methods*. Newbury Park, Sage Publications.
- Rossman, G. B. and S. F. Rallis (1998). *Learning in the field: An introduction to qualitative research*. Thousand Oaks, CA: Sage Publications.
- Spradley, J.P. (1979). *The ethnographic interview*. Fort Worth, TX: Harcourt Brace Javanovich College Publishers.
- Wolcott, H.F. (2001). *Writing up qualitative research (second ed.)*. Thousands Oaks, CA: Sage Publications.

## APPENDICES

- A. IRB Information
- B. CITI Information

<http://www.uaf.edu/irb/>

## **The Institutional Review Board (IRB): Ensuring the Rights and Welfare of Human Research Participants**

### **Applied Research Ethics**

Protecting human participants in research involves, first and foremost, adherence to the basic ethical principles for the conduct of research. Everyone engaged in research involving human subjects is expected to read and understand the Belmont Report (click on the Web Links button) and apply these principles to every aspect of their work. This is the basis for the federal regulations and provides the framework for IRB protocol review.

- \* Respect for persons (autonomy)
- \* Beneficence
- \* Justice

### **Knowledge**

All individuals working on a UAF IRB Protocol must have a demonstrated knowledge of human subject protections. To learn about human subject protections and to document that you have completed a formal educational program please enroll and complete the recommended modules in the CITI Educational Program (click on the Training button). Beginning January 2006 NO protocols will be accepted for review until, at the minimum, the Principal Investigator has successfully completed the core components of the CITI training. Prior to final approval of any protocol requiring expedited or full IRB Review, the entire research team must successfully complete the required CITI training.

### **Protocol Review**

The UAF Institutional Review Board is an independent body comprised of scientists, non-scientists, and members who are not affiliated with the university in any way. This body reviews all UAF research projects involving human subjects by applying the three ethical principles mentioned above. This review process is quite different from peer review; therefore, to assist you in your application the IRB has developed a form that you must complete and submit (click on Forms and Instructions). Although this is different from a peer review process the IRB requires that you clearly state your research objectives and methodology because it is an integral component of evaluating risk versus benefit. If the research is funded by the U.S. Public Health Service it is required that a copy of the grant be included with the IRB Protocol application.

### **Understanding the Program**

This web site provides the basic information and guidance for UAF faculty, staff and students that propose research involving human participants. If you have specific questions whether the work proposed is "research" or "program assessment, quality assurance or quality improvement, review the guidance document.

If you have any questions, concerns or suggestions be sure to contact the staff in the Office of Research Integrity at 907-474-7800.

<http://www.uaf.edu/irb/training.htm>

## **UAF-IRB Approved Human Subjects Protection Training Program**

The Office of Research Integrity, University of Alaska Fairbanks has arranged access for all researchers, staff, and students to the Collaborative IRB Training Initiative (CITI) Human Subjects Research Educational Program. This program provides the opportunity for UAF personnel engaged in research activities involving human participants to properly document their knowledge and understanding of the basic ethical principles and regulations governing our activities.

### **Program Registration**

#### **Instructions:**

- \* Select University of Alaska Fairbanks as "your institution".
- \* Register for the "Basic" CITI course for social and behavioral research or biomedical research as appropriate.
- \* Retain your username and password so that you may re-enter the CITI site to complete or update your training.

Contact the Office of Research Integrity (x7800) or e-mail the Research Integrity Administrator if you have any questions or problems registering.

Note: CITI has recently (January '07) launched two new training programs, so it is sometimes difficult to access their server (limited to 450 people at a time). The busiest time is during the morning here in Fairbanks, when users from across the country may be logged in.

### **General Information**

All members of the research team, (anyone collecting or analyzing data), working on expedited or full review protocols must complete the basic core course of the CITI training. Training requirements for exempt protocols are different in that only the PI, and student for student projects, must complete the CITI course.

There are 9 required (8 with quizzes) and 8-9 optional modules. One or more optional modules may be required depending on the type of research to be conducted (i.e. research involving children or prisoners).

Each module has 3-5 quiz questions associated with the readings. The first module on the history leading to the development of the current human research protection regulations is the lengthiest. However, you do not have to finish all modules at one time, rather CITI saves your scores each time you log-out so you can restart where you left off. You must complete and submit a quiz

in order for the score to be saved. The time required is dependent upon your reading speed and familiarity with the material. Most people take 2-6 hours to complete the required modules.

You must receive a cumulative score of 75% or greater to be certified. You may retake any quiz to improve your score.

Confused about training requirements? Check out the FAQ page (Personnel Training) or contact the Office of Research Integrity.

Training Records

Completion of the CITI training program is automatically recorded and can be documented through the UAF Office of Research Integrity. The CITI program automatically sends a verification record to the individual and the Office of Research Integrity. Please save a hard copy or electronic copy of your verification letter.

Other Training Sites

These training programs are very informative, but may not be substituted for the CITI training program to fulfill your UAF human subject protections education requirement.

### **Human Subjects Assurance Training**

- \* A three module tutorial, offered by the Office of Human Research Protections (OHRP), providing the basics (no quizzes). Easy to review and fairly informative. A good starting point!

- \* Will issue a training certificate.

### **Human Participant Protections Education for Research Teams**

- \* This is a nice tutorial made available by the National Cancer Institute, NIH. Brief quiz at the end of each section.

- \* Will issue a training certificate.