

## **EDU 738 Research Across the Curriculum**

### **Assignment #4: Research Plan: Review of Research & Methods Sections (Group)**

**Due: November 23<sup>rd</sup>**

The purpose of this assignment is to have you ‘back up’ a bit so you can design a coherent and defensible research plan based on a review of the research literature and a description of the methods you will be using. You have already provided a summary of your methods in your IRB application but that needs to be expanded.

#### **Review of Research Literature Section:**

Typically scientific research, both qualitative and quantitative, builds on the work of others. So the review of research is the place where you tell the reader what has already been done in relation to the problem statement and what still needs to be done that will be addressed, at least in part, by your research study. The phrase “what has been done” does not just refer to research findings and conclusions but also, **and in most cases, to the methods and procedures that have and have not been used.**

Thus, a well constructed review of research paints a clear picture for the reader of where your proposed study fits into prior research while also convincing the reader that your study and its methods is a logical next step based on current knowledge.

If you were doing a dissertation, the expectation for the review of the research literature is that it be extensive and semi-exhaustive. The good news is that this is NOT the expectation for our course! I do expect you to prepare a coherent review of the literature that makes the most of the research studies you have read so far. (In a

few cases, you may have to do some more reading in order to put something coherent together.)

At its core, the review of the research literature should contain the following components:

1. An opening paragraph that clearly lays out the structure and themes to be covered in the literature review
2. An organized series of paragraphs that are not merely abstracts of individual articles but an interrelated series of statements that elaborate the themes identified in the opening paragraph..
3. One or more closing paragraphs that sum up the literature review and make an explicit connection between the prior research and the proposed research study.

Here is a link to a very good guide about how to prepare a review of the literature. This guide was developed at the University of North Carolina.

[http://www.unc.edu/depts/wcweb/handouts/literature\\_review.html](http://www.unc.edu/depts/wcweb/handouts/literature_review.html)

Below, after the rubric, are some examples from students who have taken EDU738 in previous semesters. Finally, here is a link to a student's research review done at San Diego State University. (This is more extensive than I am expecting from you but it should give you an idea about how the parts of a review fits together:

<http://edweb.sdsu.edu/courses/ED690DR/Examples/LitRev/Levy.htm>

### **Methods Section:**

You have identified a problem that is calling out to be solved or at least addressed in some way. You have read what some other researchers have done in the past in relation to this topic. Based

on your reading and experience, you have generated either a research question(s) or hypothesis(es). So now your task is to develop a set of procedures that will enable you to gather the data you need to answer your questions or test your hypotheses. The section of the research plan that contains this set of procedures is called the Methods section.

Thus, your task in this section is to describe the methods you would use for your proposed study. As you prepare your methods section keep in mind the fact that the reader will be asking her/himself if the methods will be adequate to address the research question(s)/hypothesis(es). Thus, for example, if you are interested in determining the impact of a new math series on achievement, your methods section has to very clearly lay out the data you will be collecting and how the data will help you determine if the new math series was useful. Some examples of methods sections are shown below this assignment.

In a quantitative research study, the methods section contains the following elements:

- 1) Method
  - a) Participants
    - i) Sample size and relevant background characteristics;
    - ii) Explain how you would 'recruit' or identify participants;
    - iii) Include the informed consent letter in the appendix.)
    - iv) Indicate that limitations may result from the particular sample you would probably use for your study.
  - b) Instruments
    - i) If you use a survey, interview, or test, indicate the content, # of items by item format, any reliability or

validity information, and where the items themselves or ideas for the items came from;

- ii) If you are using an observation instrument describe the format and the ‘things’ you will be looking for;
- iii) Include samples of your instruments in the appendix and, if on the web, e.g., a SurveyMonkey survey, include a viewable link. (Note if you are using SurveyMonkey or some other online survey tool, you will have to actually set it up to ‘collect data’ in order to create a viewable link.)
- c) Design (e.g., causal comparative, experimental, or descriptive study, etc. If relevant, identify the independent and dependent variables)
- d) Procedure (This will vary depending on the nature of your study)
  - i) Describe the procedure from the participant’s perspective, e.g. how long will it take, what will the participant be doing, etc.
  - ii) If it is an intervention study and/or an observational study, indicate what the researcher will be doing; over what time frame will the observations take place; if there is any equipment needed for the observation describe it.
- e) Data Analysis (Since this is not a statistics course, I am only looking for a general statement, please contact me for guidance on this component of your plan.)
- f) Time Schedule (and budget if relevant, but probably not for your study)

**Please keep in mind that preparation of the research plan is in reality an iterative process.** As you work on your review of the research literature and methods sections, hopefully your understanding of the methodological issues and the generalizability of results will become deeper. Thus you may find

that you want or need to change your draft problem statement, research question(s) and/or hypothesis(es). And this could mean that your data collection instrument would change too. That's OK but by the time you turn in this assignment you need to be very clear about where your research plan is headed.

Submit your group's Review of Research and Methods as a GoogleDoc and send me a note to clearly indicate that you have shared a version that you want me to review and grade.

#### Grading Procedures:

- (1) This 4<sup>th</sup> assignment will be worth 20% of your final grade for this course. The review and methods sections will be evaluated on the basis of the attached rubric.
- (2) You may be wondering about the expected length of the review of research. Given the limited scope of reading you have probably done on your particular topic, a 2 to 4 page review is probably adequate. However, I don't look at length but rather I focus on the elements that are described in the attached rubric!
- (3) You may be wondering about the expected length of the methods section. Each element should take no more than one or two paragraphs.
- (4) If you have any questions, please contact me.

