



Proposal, Research and Graduation Checklist

Write research proposal-

- I. Determine an area of research interest**
 - A. Formulate a question that will guide your review of literature**
 - B. Locate research articles and other relevant, scholarly materials related to your research question (find current research within last 5 years)**
 - C. Arrange your research articles in a logical manner and write your literature review for example:**
 - 1. Arrange by topic (focus of research article found) to create categories of findings**
 - a. Arrange by instructional method used in research**
 - b. Arrange by instructional outcomes (findings of research)**
 - 2. Arrange by event in time (historical timeline to establish a trend)**
- II. Write a summary of what the literature that was reviewed indicates as it related to your initial research interest**
 - A. What does the literature indicate needs further research?**
 - B. What does the literature indicate has never been researched?**
- III. Write the purpose and objectives**
 - A. Based on what you found in the literature review (refer to summary), write the purpose statement for your intended project. Potential MED research projects may include:**
 - 1. Replication of a study based on recommendations of the initial researchers for further study**
 - 2. A unique research question based on an area identified in the literature review**

B. Based on the purpose of your intended project, write research objectives.

Research objectives are specific questions derived from your research purpose question that you wish to answer through research. Limit the number of research objectives so that each may be thoroughly investigated in the time range allowed for your research (a trimester, a semester, a term)

C. Determine your research methods (don't write your methodology yet)

- 1. Quantitative methods are used when you are trying to generalize your findings to a larger population. You must be able to manipulate your population through random sampling and you should have a population to study who is representative of the type of student population to which you wish to generalize the findings . This generally requires statistical analysis such as measures of central tendency (mean, mode, median) and t-tests or analysis of variance (ANOVA)**

For example, if you are trying to find out if your research methods (such as an innovative way to teach reading or math) will create statistically significant increases in retention and application for a 4th grade level student, you will need to study a 4th grade class.

- 2. Qualitative research methods are used to understand an area that has little or now research. The purpose is to understand or describe what is occurring so that further research may be conducted to generalize to a larger population. It does not involve statistical analysis. Qualitative research methods are based on observation of phenomenon in a natural environment without manipulation of variables. The goal of qualitative research is to determine why something occurs, when something occurs, what factors are interacting with each other to create a learning event, etc.**

- 3. Mixed method research includes a mixture of qualitative and quantitative research methods. This type of study generally will use quantitative methods to analyze data and qualitative methods to understand what the data indicates. This type of research may be helpful when studying a population that does not allow true randomization of the population to be studied and when the population is small. Finding statistically significant results in a very small population is often difficult; however, qualitative data may help to guide understanding of marginal results and help to guide further research. The mixed method approach to research is considered to be an inappropriate research approach by many professional researchers.**

- 4. **Single subject research is a research methodology involving direct observation and single-subject designs to identify evidence-based practices in special education. It is a natural science approach to designing, conducting, and critically evaluating research involving applications of the experimental analysis of behavior to problems and needs of individuals with disabilities in educational, clinical, and community settings.**
- D. Identify an appropriate population to study**
 - 1. **Thoroughly describe the population to be studied (contextual factors such as race, gender, socioeconomic status, learning styles, IEP targeted areas to be studied, etc.)**
 - 2. **Frequently, the population to be studied is your students. This immediately creates questions of bias. Identify potential conflicts of interest.**
- E. Write your methods section to describe exactly how you are going to conduct your research**
 - 1. **State what kind of methods you are going to use**
 - 2. **Create a time line of research events**
 - 3. **Describe each data gathering method you will be using and when you will use it. If using a mixed method research approach, justify the methods you are using and how they interact with each other**
- IV. Present your proposal to your committee chairman for suggestions and approval**

You should talk to your committee chairman frequently through the process of reviewing the literature, determining your research purpose and objectives, and identifying your methodology. You may be directed to talk to other members of your committee for questions about research content or research methods.

Make sure you have completed a *Program of Study* form and that the chair has signed this. It is placed in your file in the MED Office

 - A. Complete all requested changes in your proposal that were suggested by your committee chair (and members of your committee if you have requested their assistance in writing your proposal)**
 - B. Obtain permission to give your formal proposal to your committee from your committee chairman**

You should not give your committee the formal proposal until your chair has authorized you to do this. Your chair is

responsible for making sure your proposal is in proper order and ready to be reviewed and accepted for your research. This is a contract between you, your committee, and the MED program.

- C. **Schedule a date when all of the members of your committee can meet with you to discuss your proposal. Give at least one week lead time before the meeting, more if possible, to allow all members to read your proposal and come prepared to discuss it with you.**
- D. **Enroll in MEDUC 6091**
Complete Portfolio and present during this class.
Practice presenting to groups of students during this class.
Make a time line from this point until completion. Have chair sign. Hand in to instructor.
- E. **Apply for graduation at the Graduation Office and pay fees.**
- V. **Complete IRB approval**
 - A. **IRB approval is necessary and includes both obtaining the NIH approval from the National online web site and also completing the IRB approval form found on the MED web site (<http://departments.weber.edu/meduc/irb/default.htm>) BOTH must be completed before you submit your IRB approval request to Dr. Linda Gowans.**
 - B. **Write any letters to obtain permission for doing research in a District or other site where you will be conducting research. Permission must be obtained from the IRB application given to Dr. Gowans and from the District research supervisor before you may proceed with your research. If you are uncertain who to contact at the District office, ask your Principal or call the District office and inquire as to who you need to contract to get research permission.**
The District may request a copy of the IRB approval letter you will receive from Dr. Gowans that states you have permission from Weber State University to proceed with your research. If so, let Dr. Gowans know so that you can get your letter as speedily as possible.
- VI. **After you have received written permission from Weber State University and any other sources where you are conducting research, you may proceed with your research. Do not begin your research until this step is completed because any data gathered before this point is not usable for your research data collection.**

Conducting Research

I. After receiving approval to conduct research from your committee and IRB approval from WSU and any site where you are conducting research (District, business, etc), begin your research. Enroll in MEDUC 6091

A. Proceed with your research according to what you have proposed to do in your methodology (timeline).

If you encounter problems with your research design or issues arise related to conducting your research that may derail your research efforts or seriously deviate from your proposed , contact your committee chairman to discuss potential solutions.

B. Gather your data and analyze it

II. Write your research defense document

A. Rewrite the methodology section to change it to past tense (i.e., "I will ..." should be reworded to "I did ...")

B. Write your Findings section

1. Format your findings to clearly answer the proposed research objectives.

a. Use tables to show your data findings if you did statistical analysis

b. Use text tables or other formatting techniques to show what you discovered. If you use text to show your findings, organize your findings by research objective and specific questions you are investigating for each research objective

C. Write your Discussion section

Do not restate your findings, discuss your findings

1. Discuss your findings by research objective

2. Discuss weaknesses of your research

D. Write your recommendations for future research

- III. Submit your research defense document to your committee chairman. MEET THE DEADLINE YOU SET FOR COMPLETING YOUR RESEARCH. DON'T ASSUME YOU CAN WAIT UNTIL THE LAST MINUTE TO DEFEND YOUR PROJECT.**
 - A. Revise your defense document based on recommended changes from your committee chairman. Do not schedule your research defense until you have received permission from your committee chair**

Revisions may consume considerable time. Don't assume you can present your research with an incomplete defense document.
- IV. Schedule your defense**

Allow at least one week between when you give your defense document to your committee and the actual defense date

 - A. Contact the members of your committee to schedule a time for the defense**
 - 1. After you find a time, contact the secretary for the graduate office to schedule a room and any equipment you may require for your defense**
 - B. Prepare a PowerPoint presentation or demonstration to show your research results**
- V. Defend your research**
 - A. After your defense, make any needed changes to your defense document and resubmit it to your chairman for final signatures**
- VI. Submit your completed defense document to the MED office for binding**
 - A. Pay for binding your copies**

Make copies (3 required plus committee members and personal copies) of the final document. You will need to make copies of the entire defense document onto acid free paper. Each bound copy will need to have a signature page that is signed by each member of your committee.
 - B. Pay for binding at the Main Library Circulation desk. Take copies and receipt to MED secretary. She will clear you for graduation.**
 - C. If you don't want/need to give a bound copy of your defense document to your committee members or others, make copies on regular paper and use spiral binding to hold them together**

- VII. Notify MED office that you will/will not attend graduation ceremonies (November 1st for December graduation; April 1st for May graduation)**