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Introduction

Congratulations! You are embarking on an exciting experience in your graduate degree – the culminating project. Over the next year you will be investigating a topic of your choice. During this process, there are several important steps that you must take in order to be successful. This document is designed to familiarize you with these steps.

The EIS culminating project is intended to provide you the opportunity to apply the knowledge and skills that you have accumulated in your graduate program. There are two types of culminating projects – thesis OR action research.

A thesis is original research that is intended for eventual publication while an action research is intended to inform one’s practices in his/her career. The following table helps illustrate the differences between a thesis and action research for an empirical study.

<table>
<thead>
<tr>
<th></th>
<th>Thesis</th>
<th>Action Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>To learn something, develop understanding and/or draw conclusions. The focus is on advancing knowledge in the field. Insights may be generalized to other settings.</td>
<td>To make decisions. The focus is on the improvement of educational practice and advancing your own personal knowledge. Insights will be localized and generalizability is limited.</td>
</tr>
<tr>
<td><strong>Context</strong></td>
<td>Theory: Hypotheses/research questions are derived from more general theoretical propositions. (Exceptions apply for some qualitative approaches)</td>
<td>Practice: Research questions are derived from practice. Theory plays a secondary role.</td>
</tr>
<tr>
<td><strong>Data Analysis</strong></td>
<td>Rigorous statistical or qualitative analysis (if an empirical study).</td>
<td>Focus on practical, rather than technical analysis.</td>
</tr>
<tr>
<td><strong>Sampling</strong></td>
<td>Random or representative sample. Or purposeful or convenient sample (qualitative)</td>
<td>People or students with whom you work.</td>
</tr>
</tbody>
</table>


Both options can take on three forms – empirical, non-empirical/conceptual, or a review of literature. An empirical study is an investigation that includes the systematic collection and analysis of original data, typically involving human subjects. Empirical studies involve the quantitative and/or qualitative measuring of factors to describe behaviors and context or to estimate how factors are related to and have an effect on each other. A non-empirical/conceptual study is a collection and analysis of non-original data and includes such research as a historical analysis, policy study, or curriculum review. As adapted from Ling Pan (2013), the following are examples of purposes you might have for a literature review.
1. trace the history of social, political, philosophical, or scientific developments in education, including relevant theories, that resulted in the development of policies, curriculum, financing, pedagogy, to name a few;
2. summarize and evaluate the legal and ethical issues involving the implementation of the educational policies and/or reforms;
3. estimate the overall degree of effectiveness of curriculums, instructional methods, school policies, etc. by evaluating the studies in which the outcomes of these are examined; and
4. describe possible fruitful areas for future research based on the research conducted to date.

For both the thesis and action research, you will choose a topic of interest and a problem of study related to that topic. Based upon that problem, you will create a final product that includes five chapters: (1) an introduction to, and the background of, the research problem with a list of research questions; (2) a review of the relevant literature that informs your work; (3) a description of the data collection and analysis methods; (4) a description of the results/findings; and (5) a discussion of the results/findings. The only exception is the review of literature, which will not include a literature review as Chapter 2. Throughout the process of writing the thesis proposal and final paper, you will demonstrate your ability to work independently and professionally, to pay attention to detail, and to think critically.

Both options require the same process of writing a proposal for the research and orally defending it in front of your culminating project committee, and the writing and defense of the final project. You should expect a minimum of two semesters to reach completion. One semester will be for the proposal stage of the project. The second semester will be for completing data collection and writing the final paper.

You should expect MANY revisions of your work based upon comments from your Culminating Project Chair (from now on referred to as “Chair”) and your committee members. In the long-run, paying attention to format and writing details will shorten the process for everyone. You need to adhere to a schedule of events in submitting, revising, and defending your project. Development of a culminating project also entails adequate and regular contact, as appropriate, with your Chair and committee members. It is recommended that you create a timeline with due dates for turning in drafts of the project. You will NOT be allowed to enroll in the second semester of the project until the proposal has been defended and approved.

The outlines provided in this document are appropriate for most students. Your Chair will help you adapt the outlines to less traditional research approaches.
Culminating Project Completion Checklist

**Date completed**

__________ Prior to enrolling in EIS 601 or 584, you must meet with your Chair to discuss your project, including project options, projected timeline, and additional committee members.

__________ With approval from your Chair, you will enroll in the first one to three hours of EIS 601 or 584 to complete the writing of the proposal. You must contact EIS Office Staff to enroll.

__________ If you plan to do any empirical research/inquiry involving human subjects, you must complete the training and paperwork required by the Institutional Review Board (IRB). See page 18 for additional information.

__________ When the proposal has met the satisfaction of your Chair, you will arrange to orally defend the proposal with your committee.

__________ After the oral defense you will submit any required corrections to your Chair who will submit the signature page in paper form and the final approved proposal electronically to EIS Office Staff.

__________ With approval from your Chair, you will enroll in the remaining one to three hours of EIS 601 or 584 to complete data collection and the final paper. You must contact EIS Office Staff to enroll.

__________ When the final paper has met the satisfaction of your Chair, you will arrange to orally defend the project with your committee. All members of the department will be invited to attend the final defense. You many also invite individuals to attend.

__________ After the oral defense you will submit any required corrections to your Chair who will submit the signature sheets in paper form and the final paper electronically to EIS Office Staff.

**Note:** Students completing a thesis must also submit work electronically to the School of Graduate Studies along with the original signature sheet (see page 8 for more detail. Please note there are costs involved with this process).
Semester 1: Proposal Stage

The culminating project proposal is a three chapter document that introduces the plan for your project (see pages 9 to 16 for a complete list of the chapters and their content). You will work closely with your Chair to create this document. Academic writing is different from writing the typical term paper. As a result, you should plan to submit at least five drafts of the proposal before it will be ready for the entire committee. A typical proposal could be up to 50 pages.

If you are conducting an empirical study involving human subjects, you will need to complete Human Subjects training (if not already completed as part of coursework) during this stage and go through the IRB approval process after your paper has been approved by your committee (see page 18 for more information).

You should plan on completing the proposal no later than four weeks before the end of the semester. This is to allow time for your committee members to read the proposal prior to the defense and to allow you time to make revisions after the defense.

You cannot enroll in the remaining hours until the proposal is defended and approved.

Culminating project proposals must demonstrate:
- competency in the core knowledge base of EIS
- ability to apply knowledge and skills developed in the program to a specific educationally relevant problem or issue
- in-depth mastery of at least one specific educationally relevant problem or issue
- ability to read, interpret, and evaluate scholarly literature
- ability to write and present information in a professional manner

Proposal Oral Defense

When your Chair feels the proposal is ready for the entire committee, you will arrange an oral defense. Typically this is an informal presentation that takes place in the EIS conference room. You should send your proposal to your committee members at least two weeks prior to the defense date. At the defense, you will present your project to the committee by first introducing the topic, providing some background information, describing the problem you are going to investigate, as well as explaining the purpose and justification of your study. You will briefly highlight the most significant literature associated with your topic and how this has informed the development of your research questions. Finally, you will describe the research methods and data analysis procedures you intend to use. Your presentation should be around 15 minutes in length.

After your presentation, the committee members will question you about your study which might include asking for clarification or elaboration. You will then be asked to leave the room while the members deliberate and determine if you have passed the oral defense. The committee will then invite you back into the room and you will be notified of their decision. It is very common for committee members to recommend additional corrections and changes to the proposal. Your Chair will go through these with you and ask you to resubmit a final electronic draft of the proposal to him/her within two weeks of the oral defense.
Semester 2: Data Collection and Final Paper Stage

The final culminating project is the addition of two chapters to the work you completed during the proposal stage. The actual content of the chapters will depend on your topic but generally will include a description of the results/findings and a discussion of the results (to include your conclusions, interpretations, and recommendations). See pages 9 to 16 for a list of the chapters and minimum required content. You will continue to work closely with your Chair during data collection, analysis, and the writing of the final paper. You should expect many revisions.

Data collection and analysis must be completed with sufficient time for you to write and defend the final paper. We recommend that you do not spend more than half of the semester collecting data to allow you at least four weeks for data analysis and writing. As with the proposal, you should send your final paper to committee members no later than four weeks before the end of the semester to allow them time to read the project before the defense and for you to make revisions after the defense.

Culminating Project final papers must demonstrate:
- Evidence of student mastery of the conceptual and/or theoretical focus of the project
- Mastery of the relevant literature upon which the culminating project is grounded
- Evidence of mastery of the methodological and analytical tools employed in addressing the problem that was the focus of the culminating project
- Use of appropriate form and organization (guidelines are provided)
- Adherence to all university, college, and department requirements related to the master’s culminating project

Final Oral Defense

The oral defense for the final project will be similar to the defense of the proposal. When your Chair feels the final project is ready for the entire committee, you will arrange an oral defense. For the defense, you will present your project to the committee members and all others in attendance. In this defense, you should plan to introduce the topic by providing some background information and explaining the purpose of your study, your research questions, and methodology. The description of these should be briefer than that of the proposal defense as the focus of your presentation is on the results or findings of your study and your discussion and recommendations. Your presentation should be around 20-25 minutes in length.

After your presentation, the committee members will question you about your study which might include asking for clarification or elaboration. You will then be asked to leave the room while the members deliberate and determine if you have passed the oral defense. The committee will then invite you back into the room and you will be notified of their decision. It is very common for committee members to recommend additional corrections or changes to the final project.
Final Submission of the Project

If completing the **action research** option, you will submit the final approved project electronically to your Chair. This will go on file in the EIS department along with the final approval signature page. Formatting should strictly follow APA style.

If completing the **thesis** option, you will submit the final approved thesis electronically to the School of Graduate Studies along with the original paper approval signature page.

- For further instructions on submitting the thesis electronically, submission fees, and responsibilities for preparation, go to the following website from the School of Graduate Studies: [http://www.wiu.edu/graduate_studies/thesis_and_dissertation/](http://www.wiu.edu/graduate_studies/thesis_and_dissertation/)
- Formatting must follow the Graduate School Guidelines, which reflect the formatting recommendations of ProQuest. There are some deviations from APA style, for example your paper will not have running heads.
- You may have to go through several revisions on formatting before your project is accepted by the Graduate School.
- The last possible date to submit your thesis is the Friday before finals week.
- For a checklist of basic formatting requirements and a link to examples see the following link: [http://www.wiu.edu/graduate_studies/thesis_and_dissertation/ThesisChecklist.pdf](http://www.wiu.edu/graduate_studies/thesis_and_dissertation/ThesisChecklist.pdf)
Format of Culminating Projects

Empirical Study

I. Prefatory Material
   - Title Page
   - Abstract (final paper only)
   - Table of Contents, table of contents for tables and figures, if needed

II. Chapter I – Introduction

This chapter will be in future tense for the proposal and past tense for the final paper.

This chapter provides an introduction to the study. Its length will vary from topic to topic. For the sake of brevity, the EIS faculty would like this chapter to be approximately 10 pages.

A. Introduction
   - Briefly, introduce the topic.
   - Provide an overview of the chapter.

B. Background and Statement of the Problem
   - Describe the basic difficulty, area of concern, or need being addressed

C. Purpose
   - Provide a brief description of the purpose of your study. This should explicitly state its importance.

D. Justification for the Study
   - Describe how the study will add to the field or inform practice. This may overlap with the purpose.

E. Research Questions and/or Hypotheses
   - Summarize how the background, purpose, and justification for the study lead to your research questions and/or hypotheses
   - State one to four research objectives or questions to be investigated.
   - State hypotheses for quantitative studies that will examine a relationship among variables.

F. Definition of Terms
   - Provide constitutive definitions of concepts that will be used throughout the document. All variables noted in the purpose, research objectives, questions, and hypotheses should be defined.

G. Context of the Study
   - Describe any basic assumptions you have about the topic. These are statements about the topic that are understood to be true even though evidence is absent or limited. Provide reasons for making the assumptions and reasons for believe tem to be true. Your assumptions may be wrong, but they provide a starting point for the study.
   - Place the study into a context by narrowing its scope. Delimitations help the researcher establish boundaries for the study to make sure the study is conducted efficiently. Delimitations are the aspects of the study you plan to control, (e.g. the participants, the data collection method, and the generalizability of the study).
- Describe the study’s limitations. These are factors that will affect the outcomes of your work that are not under your control. These are weaknesses that can limit the validity and generalizability of the results/findings.
- Provide a Perspective/Positionality Statement. “Perspective refers to the context which influences what a person can see and how they interpret it. It may indicate ideology or value systems (e.g. feminist, socialist, anti-racist, post-colonial and queer research), and it may indicate positionality which refers, more narrowly, to the social and political landscape inhabited by a researcher (e.g. gender, nationality, race, religion, sexuality, (dis)abilities, social class and social status).” www.strath.ac.uk.aer/materials/1educationalresearchandenquiry/unit4/perspectivepositionalitybiasandreflexivity/

III. Chapter II – Literature Review

This chapter provides a description, summary, synthesis, and critical evaluation of the most significant literature associated with the study. This will come from scholarly articles, books, and other sources relevant to your topic area. Its length will vary from topic to topic. For the sake of brevity, the EIS faculty would like this chapter to be approximately 25 pages.

A. Introduction
   - Briefly, provide background and context of the study.
   - Provide an overview of the chapter

B. Discussion of Theory/Research specific to the study
   - Provide a summary and critique of the relevant theory and research studies associated with the research problem.
   - Use the literature to provide a context for your current study.
   - Present the results of similar studies and help the reader understand how the current study fits within a core body of research or theory.
   - Describe trends in the literature.
   - When appropriate point out inconsistencies in the research studies and gaps in the literature.
   - To conclude the literature review, show how your current study differs from past research and how it will help fill in gaps in the literature.

IV. Chapter III – Methods

This chapter will be in future tense for the proposal and past tense for the final paper.

This chapter provides a discussion of the study’s methodology and intended data analysis. Its length will vary from topic to topic. For the sake of brevity, the EIS faculty would like this chapter to be approximately 15 pages.

A. Introduction
   - Briefly, provide background and context of the study.
   - Provide an overview of the chapter.

B. Research Questions (Restated here from Chapter 1)
C. Research Methodology
   - Provide a discussion of the methodological approach that will be used in the study (e.g. survey, experiment, correlational, ethnography, case study, etc.).

D. Research Design
   - Population and Sample
     i. Describe the target population and the accessible population actually under study.
     ii. Describe the method for selecting the participants of the study.
   - Data Collection Methods
     i. For a quantitative study, describe and operationally define all variables to be measured, as well as how data will be collected.
     ii. For a qualitative study, describe the methods of collecting your data.
   - Instrumentation
     i. Describe the instrument(s) you will use to collect data, (e.g. tests, measures, scales, questionnaires, field notes, interviews, etc.).
     ii. Reliability and Validity:
        1. For quantitative research, describe how you plan to establish the reliability and validity of the instrument used to collect data.
        2. For qualitative research, describe how you plan to check the trustworthiness (accuracy and credibility) of your findings.
   - Procedures
     i. Describe the procedure/protocol you plan to use for data collection. This should include any instructions to subjects, the distribution of materials, and the data collection and recording process.

E. Data Analysis
   - Describe the statistical and/or qualitative methods that will be used to analyze your data.
   - Representation of findings *(optional)*: for some qualitative models)
     i. Describe how you initially plan to represent and discuss your learning, insights or findings, a tentative plan for completing Chapters 4 and 5. This should complement your chosen research methodology and theoretical perspective.

Chapters 1 – 3 complete the proposal stage of the project. Any changes to the culminating project proposal must be approved by the committee and the Institutional Review Board before going forward with the final project.
V. Chapter IV – Results

NOTE: This chapter will only be part of the final paper.

This chapter is the basic presentation of the results. You will not provide interpretations in Chapter 4.

A. Participants
   • Describe the demographics of the individuals who participated in your study.

B. Instrumentation and Data Collection
   • Describe the actual process of how data was collected.

C. Analysis
   • Describe the methods used to analyze your data.
   • This is used sparingly in quantitative research, particularly in studies using widely recognized methods of statistical analysis; however it is usually included in detail for qualitative studies.

D. Results
   • Organize the presentation of your results around your research questions and/or hypotheses.
   • For quantitative studies, descriptive statistics should be presented before inferential statistics.
   • Follow APA guidelines for the inclusion of tables and figures.

VI. Chapter V – Discussion

NOTE: This chapter will only be part of the final paper.

Chapter 5 is your opportunity to provide descriptive details on the results and to offer your own interpretations and explanations for them. The contents of this chapter will vary widely depending on your topic and the organization of your study. Ten pages is recommended. Some basic points to address are below.

   • Start the discussion with a brief summary of the proceeding material.
   • Refer to research questions and/or hypotheses as you describe the results.
   • Point out whether results are consistent with the literature you reviewed in Chapter 2.
   • Mention important strengths of your study and limitations including generalizability.
   • If applicable, describe specific implications of your results on the original context and population you sought to study; and/or implications on your practice in your field.
   • Make specific recommendations for future research.

VII. References (must be in APA format)

VIII. Appendices (e.g. solicitation for participants, informed consent, instrument, etc.)
I. Prefatory Material

- See guidelines for empirical studies

II. Chapter I – Introduction

- See guidelines for empirical studies

III. Chapter II – Literature Review

- See guidelines for empirical studies

IV. Chapter III - Proposed Methods

A. Introduction

- Briefly, provide background and context of the study.
- Provide an overview of the chapter.

B. Research Questions (Restated here from Chapter 1)

C. Research Methodology

- Provide a discussion of the methodological approach that will be used in the study (e.g. Critical Literature Review, Historical Research, Policy Analysis)

D. Research Design

- Describe the sources (e.g. research literature, policies, court cases, curriculum, media) you plan to use and the criteria for selection.
- Describe the procedure you will use to analyze the sources.
- Describe how you initially plan to organize the paper.
- Describe how you plan to check the trustworthiness (accuracy and credibility) of your findings.
- Provide a Perspective/Positionality Statement. “Perspective refers to the context which influences what a person can see and how they interpret it. It may indicate ideology or value systems (e.g. feminist, socialist, anti-racist, post-colonial and queer research), and it may indicate positionality which refers, more narrowly, to the social and political landscape inhabited by a researcher (e.g. gender, nationality, race, religion, sexuality, (dis)abilities, social class and social status).” www.strath.ac.uk.aer/materials/1educationalresearchandenquiry/unit4/perspectivepositionalitybiasandreflexivity/

Chapters 1 – 3 complete the proposal stage of the project. Any changes to the culminating project proposal must be approved by the committee before going forward with the final project.
V. Chapter IV – Results

NOTE: This chapter will only be part of the final paper.

A. Sample
   • Describe the materials actually included in the final paper (e.g. literature, policies, historical documents).

B. Results/Findings
   • Organize the presentation of your results around your research questions and/or hypotheses.

VI. Chapter V – Discussion

• See guidelines for empirical studies

VII. References (must be in APA format)

VIII. Appendices (if necessary)
Review of Literature

I. Prefatory Material

- See guidelines for empirical studies

II. Chapter I – Introduction

- See guidelines for empirical studies

III. Chapter II - Proposed Methods

E. Introduction
- Briefly, provide background and context of the study.
- Provide an overview of the chapter.

F. Research Questions (Restated here from Chapter 1)

G. Research Methodology
- Provide a discussion of the methodological approach that will be used in the study (e.g. Critical Literature Review, Historical Research, Policy Analysis)

H. Research Design
- Describe the sources (e.g. research literature, policies, court cases, curriculum, media) you plan to use and the criteria for selection.
- Describe the procedure you will use to analyze the sources.
- Describe how you initially plan to organize the paper.
- Describe how you plan to check the trustworthiness (accuracy and credibility) of your findings.
- Provide a Perspective/Positionality Statement. “Perspective refers to the context which influences what a person can see and how they interpret it. It may indicate ideology or value systems (e.g. feminist, socialist, anti-racist, post-colonial and queer research), and it may indicate positionality which refers, more narrowly, to the social and political landscape inhabited by a researcher (e.g. gender, nationality, race, religion, sexuality, (dis)abilities, social class and social status).” [www.strath.ac.uk.aer/materials/1eductionalresearchandenquiry/unit4/perspectivepositionalitybiasandrelexivity/]

Chapters 1 – 2 complete the proposal stage of the project. Any changes to the culminating project proposal must be approved by the committee before going forward with the final project.
IV. Chapter III – Literature Review

NOTE: This chapter will only be part of the final paper. A comprehensive review of literature will be approximately 40 pages.

A. Introduction
   - Briefly, provide background and context of the study.
   - Provide an overview of the chapter

B. Discussion of Theory/Research
   - Organize the literature review around your research questions, typically starting from broad issue(s), such as the theoretical framework, to more specific.
     i. Each section of the literature review should summarize a context that helps readers understand a certain aspect of the research problem being studied.
        1. Review the works that add to this understanding within each section
        2. Synthesize the works by describing how they relate to each other and, together, bring about an understanding of the context and research problem
        3. Describe inconsistencies and/or conflicts in the research within this context
     ii. Identify new ways to interpret the research
     iii. Critique any relevant theories associated with the research
     iv. Summarize the current state of knowledge from the works you reviewed regarding the research problem under investigation

V. Chapter IV – Discussion
   - See guidelines for empirical studies

VI. References (must be in APA format)

VII. Appendices (if necessary)
Resources


From the WIU Graduate Studies catalog, 2011-2012, page 40
Research on Human Subjects

Any research that involves human subjects, whether funded or not, that is undertaken by WIU faculty, academic staff or students, or supported by Western Illinois University, must be reviewed by the WIU Institutional Review Board (IRB).

A research protocol **MUST** be reviewed by the IRB under these guidelines if it meets the following criteria:

1) it involves human beings as subjects;

2) it is research as defined by University guidelines; and

3) the intention to publish or disseminate results **OR** the **POSSIBILITY** of publishing or disseminating results exists. If a project meets these criteria, the protocol must be reviewed and must receive an exemption or approval through the expedited or full board review process.

Additional information can be found at

The Policy and Procedure for Human Subjects Research manual can be found at

Human Subjects Training

In order to submit a project for review by the IRB, researchers must complete the Human Subjects in Research Training. Please navigate to the following link for training:

This should be completed as one of the first steps in your first semester, proposal stage.