Candidates in the M.S. program may enroll in Culminating Research Project (EDUC-E 590) or after successfully completing 15 credits of the Master of Science in Education degree. Master’s candidates must continue to meet all retention standards while completing the culminating research project. Generally, the culminating research component will be the final component of the student’s master’s program.

Culminating Research Project Template:
A pre-formatted culminating research project template is provided for all master’s candidates. This template meets the APA guidelines in formatting and style. It is highly advisable for master’s candidates to download this free template and use it from the beginning when working on the culminating research project.

Research Paper Components (Applies to all options and is included in the template provided)

1. Research Approval Page:
   Title
   Author
   School of Education
   Indiana University East, Richmond, IN
   Month/Year of submission
   “An independent research paper submitted to Indiana University East in partial fulfillment of the requirements of the degree of Master of Science in Education”
   Signatures: Research Committee and Director of Graduate Studies in Education

2. Title Page:
   Title
   Author
   School of Education
   Indiana University East, Richmond, IN
   Month/Year of submission
   “An independent research paper submitted to Indiana University East in partial fulfillment of the requirements of the degree of Master of Science in Education”

3. Copyright page – If copyrighting

4. Abstract: 2 page summary of the study with results from beginning to conclusion of study.

4. Dedication Page – (Optional) This is the area where the candidate states dedications that he/she wishes to make for their paper.
5. **Acknowledgements Page**- This area is generally academic or professional in nature. The candidate addresses particular individuals that have contributed academically or guided them in the development/writing of their paper.

6. **Table of Contents**

7. **Main Body of Paper**

8. **Appendices**

9. **Document of Future Intents (if applicable)**

**Required Components and Order of the Research Paper:**
Culminating research project topics must be approved in advance by the Director of Graduate Programs in Education, or the designated Research Chair. There are three options for the culminating research component of the Master’s Degree. These options require the following order and format: research approval page, title page, copyright page (if applicable), abstract, dedication page, acknowledgements, and table of contents. Each of the options listed below details the necessary components for the remainder of the research paper and is listed in the culminating research project template provided by the School of Education.

**The following three options for culminating research projects are acceptable for an M.S. Degree at Indiana University East.**

A. **Option #1 (Requires IRB proposal and approval)**

**Postulate Investigation Project**
Candidates conducting **research with human subjects** will complete a formal research report according to the five chapter format described here. If the student intends to disseminate the results of their research beyond the completion of their degree, then individual research with human subjects must be approved by the Institutional Review Board (IRB). Examples of further dissemination include publishing in any venue or presenting the results of their research at professional conferences or for professional development purposes. Graduate students will file the appropriate forms in consultation with their Research Chair. The **documentation of review and approval form must be included in the appendices at the end of the paper.** If the student has no intention to disseminate the results of their research beyond the completion of their culminating research project, a form entitled “Document of Future Intents” must be signed by the student and their research chair and included at the end of the paper.
Chapter 1: Stated Question & Rationale – Candidates will pose a question pertinent to prior action/other research or emerging expertise as a teacher or professional development leader. A rationale and objective for the study must be clearly articulated. Chapter 1 will also introduce a theoretical framework that grounds the research. Each candidate will present her/his own original conceptual framework as part of Chapter 1. Key areas to consider:

- Is the research question clearly stated?
- Is the research question meaningful?
- Does the theoretical framework complement the research question?
- Does the conceptual framework clearly show the relationships among the components of the research being conducted?

Chapter 2: Literature Review – Candidates will thoroughly discuss literature pertinent to the research question posed. The literature discussed should be taken from scholarly primary sources (academic journal articles, original research presented in book format) and, to a lesser extent, secondary sources (textbooks, non-scholarly journals). The literature review is NOT an annotated bibliography but instead it should be an organized summary and synthesis of the existing academic work that relates to the research topic, methods of data collection being used, and theoretical framework. The Literature Review is organized by IDEAS, not by resources. Generally, the number of sources for an academic paper of this sort should be around 25, though the content/topic of the paper may dictate more. Key areas to consider:

- Is the Literature Review designed around clear organizing principles?
- Are the key terms and concepts that guide the research thoroughly researched and described?
- Have you triangulated sources?
- Are sources reliable and scholarly?
- Is the research up-to-date?
- What sort of historical trends are there that are associated with this topic?

Chapter 3: Method and Procedures – Candidates will explain all aspects of the methodology and procedures utilized to collect information or data for the purpose of answering their research question. The candidate may choose qualitative, quantitative or a mixed methods approach. The main goal should be to select methodologies that are useful and reliable for collecting evidence. If surveys or questionnaires are used, the candidate will discuss those here and include them as appendices. Key areas to consider:

- Will the methods being used yield data that will answer the research question?
- How much time is needed to collect data using these methods?
- What are the strengths/limitations related to using this method?
- It is cognitively/developmentally appropriate for the study participants?
- Will this method disrupt the day-to-day workings of my classroom?
Chapter 4: Presentation of Data – Candidates will describe the findings in both narrative and graphic (if appropriate) formats. Chapter 4 is only the presentation of the data collected. Key areas to consider:

- Have all findings been thoroughly described in both narrative and graphic (tables, charts) formats?
- Are findings easy to understand as presented?
- Do the findings presented help to answer the research question posed?
- Do the findings presented represent the methodologies discussed in Chapter 3?

Chapter 5: Discussion, Conclusions and Implications – Candidates will synthesize and analyze the data presented in Chapter 4 and articulate conclusions they have drawn from the research study and the future educational implications of those conclusions. In Chapter 5, key concepts from the literature review should be revisited in light of the new data collected. Areas for future research based on findings may also be considered in this chapter. Key areas to consider:

- Has the research question been answered? If yes, do the conclusions align with the conceptual framework? If no, what were the reasons for the question going unanswered? Were answers to other questions revealed?
- Have future implications for the research been considered at both local levels (the individual classroom) and global levels (implications for other classroom teachers)?
- Have the findings been discussed and analyzed in terms of the study participants, the theoretical framework, and the existing scholarly research?
- How do the findings complement the current ideological trends in this research area?

Appendices
Bibliography
Supporting Documentation
Institutional Review Board (IRB) Approval (if applicable)
Document of Future Intents required (if meeting certain conditions)

B. Option #2

Comprehensive Literature Review papers will utilize the following four-chapter format.

Chapter 1: Stated Question and Rationale - Candidates will pose a research question and rationale with clearly articulated objectives for the study. This should include an introduction to the chosen topic that identifies and articulates a theoretical framework around which the remainder of the culminating research will be focused. Developing
this conceptual base will serve as the starting point from which the remainder of the culminating research is focused. Key areas to consider:

- What area(s) is the candidate addressing?
- What is the candidate’s theoretical perspective?
- How has this area of education evolved over time?
- Why is this topic important in the current educational climate?
- What is the candidate’s research question?

Chapter 2: Literature Review – Candidates will develop a framework whereby the concepts or relevant areas of their research are clearly articulated. They will thoroughly discuss literature pertinent to these concepts and the question posed. Generally, the number of sources for an academic paper of this sort should be around 25, though the content/topic of the paper may dictate more. A bibliography will be included in the Appendices. Key areas to consider:

- What are some of the constituent components of the topic the candidate has chosen?
- In what ways do these relate to the process of teaching/learning/development?
- Has the literature review addressed the appropriate range/body of scholarly research on the topic?
- Is the research up-to-date?
- What sort of historical trends are there that are associated with this topic?

Chapter 3: Original Product - It is highly recommended that the candidate include an original product or example that is applicable to instruction or professional development related to their chosen topic. Key areas to consider:

- How is the topic being researched currently represented in schools?
- What are the current trends of this practice/policy?
- How does this differ from one school or corporation to another?

Chapter 4: Synthesis, Conclusions and Implications – Candidates will articulate a synthesis and subsequent conclusions drawn from their extensive review of the literature and the educational implications of these conclusions. This section will be broken down into the three sections listed above. Key areas to consider:

- What has this review of the literature revealed that was not known or understood before?
- What are some logical changes/modifications that should be incorporated?
- How would students/educators/policy makers benefit from this?
- How would this benefit the field of education in both general and specific terms?

Appendices

Bibliography

Supporting Documentation

Document of Future Intents required (if meeting certain conditions)
Note: Studies for which an original product is not submitted must be approved by the research advisor and will have 3 chapters, including Chapters 1, 2 and 4 as described above.

C. Option #3 (Does not require IRB proposal and approval)

Advanced Pedagogy Project- This project will utilize the following four chapter format:

**Chapter 1: Introduction, Rationale, and Stated Question** - Identifying the subject and grade level, candidates will pose a research question and rationale related to pedagogy and/or assessment with clearly articulated objectives for the study. This should include an introduction to the context and setting of instruction that articulates a framework around which the remainder of the culminating research will be focused. For this research option, the candidate must collect all relevant data for the study. The specific focus of the data collection will be developed between the student and research chair. Developing the conceptual base of this study will serve as the starting point from which the remainder of the culminating research is focused. Key areas to consider:

- What area(s) of pedagogy is the candidate addressing?
- What is the candidate’s theoretical perspective?
- What are the reasons for addressing this particular context of instruction?
- In what ways is the candidate seeking to improve and/or refine existing methods of instruction and/or assessment?
- What is the candidate’s research question?

**Relevant demographic and other data to be collected:**
- Subject and grade level
- Existing instructional practices
- Student demographic data to include assessment data
- School demographic data
- Relevant Instructional Standards

**Filming the teaching:** There will be two parts associated with this component of the project.

**Part I:** The first session of teaching will be filmed prior to the review of the literature review and the second will be filmed afterwards. During the first filming, candidate will utilize the method of instruction that is the focus of the study. The rationale for filming this first is so they will have a way to examine their own form of instruction as it exists at that particular point in time. Following the initial filming, the candidate will reflect on relevant themes and/or issues that they observe through this recorded footage and which are addressed in their chapter 1 introduction.
**Part II:** Following the review of the literature and after incorporating appropriate modifications to their pedagogy, candidate will again film themselves and analyze and reflect on their performance. The filming, analysis, and reflection for Part II will comprise the substance of Chapter 3 in their paper.

**This filming must be of acceptable professional quality to include quality of the footage and sound.**

**Chapter 2: Literature Review**- Following the initial filming, candidate will research highly effective practices in teaching and/or assessment (depending on the nature of the research question) as presented in educational research. They will thoroughly discuss literature pertinent to these concepts and the question posed. Generally, the number of sources for an academic paper of this sort should be around 15, though the content/topic of the paper may dictate more. A bibliography must be included in the appendices. Sources to be included in this paper will be discussed between the candidate and the research chair. Key areas to consider:

- What are the constituent components of the topic the candidate has chosen?
- In what ways do these relate to the process of teaching/learning/development?
- What areas of teaching or assessment is the candidate focusing on?
- In what ways is the research similar to or different from their existing pedagogy?
- How would the pedagogical approach being researched differ from their existing strategy?
- In what ways would it be an improvement?

**Chapter 3: Analysis and Impact Reflection**- Following the completion of their review of the literature, candidate will film themselves a second time in the same setting as the first. This chapter will contain an analysis of the impact that the research had on their teaching. Key areas to consider:

- Identify particular pedagogical modifications that occurred as a result of this research?
- Identify particular insights the candidate has gleaned from the review of the literature.
- Identify and analyze the changes that have occurred?
- In what ways have these changes or modifications improved the effectiveness of their instructional approach?
- How is this effectiveness being measured through evidence and analysis?
- Reflection on the process of change and learning that has taken place with the candidate.
- What are the current trends of this particular practice/policy as it relates to being a highly effective teacher?
Chapter 4: Synthesis and Conclusions—Candidates will articulate a synthesis and subsequent conclusions drawn from their literature review and the educational implications of these conclusions. Key areas to consider:

- What has this investigation and review of the educational research revealed that was not known or understood before?
- What is the candidate’s plan in going forward in their practice with this improved proficiency/understanding?
- How would students/educators/policy makers benefit from this?
- How would this benefit the field of education in both general and specific terms?

Appendices
- Bibliography
- Supporting Documentation
- Document of Future Intents required

Administration:

The Director of Graduate Studies in Education will work in consultation with the master’s candidate to identify the research chair and research committee, as necessary. The chair will be appointed on the basis of professional expertise in the proposed area of study.

Committee size: 2 faculty for 6 credits, 1-2 faculty for 3 credits

The 3 credit Research may be completed in one semester. Work not completed in the semester of enrollment must be completed within 12 months of the date the “R” is submitted for the semester of enrollment.

Adequate progress toward completion:
For students enrolled in their culminating research project, it is required that continuous enrollment be maintained for each semester they are working on their project. For every additional semester that a student is engaged in culminating research beyond the initial enrollment in E590, they must enroll in a one-hour independent study section (EDUC-F 500) entitled “Culminating Research Inquiry”. This does not apply to the original semester of enrollment in E590. Should a student not meet these enrollment and retention requirements on a semester-by-semester basis, they must re-enroll in an additional 3-hour section of the culminating research project.

General Requirements:

APA manuscript style required.

Electronic and hard copy submissions are required. Students will utilize the template provided by the School of Education as the document on which they write their papers. The following
requirements are all formatted into the template, but must be included as a part of the final paper, should a student not elect to use this template.

Final copies (2) must be: word processed, 8.5x11 inch paper, resume grade paper, conventional 12 point font, 1.5 or double spacing, left margin 1.5, right margin justified to 1 inch, top and bottom margin 1 inch, figures must be in black ink and printable on 8.5 x 11 inch paper.

A research paper will not be less than 35 pages and typically not exceed 100 pages in length.

The research must be defended in an oral exam. The oral exam will be attended by the Research Committee and the Director of Graduate Studies in Education. The defense may be attended by Indiana University faculty and administration and invited members of the public.

The IRB approved research will be electronically stored, for public inspection, in the Indiana University East library. Comprehensive literature projects and original products will be stored in the Graduate Office of the School of Education.

Plagiarism will result in the dismissal of the offending student from the Master of Science in Education program. It may further result in dismissal from Indiana University. It is the responsibility of the student to fully comprehend the parameters of plagiarism.