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& Human Development

Graduate Studies in Education

Master's Capstone Handbook

## Table of Contents

Capstone Projects Options .....	3
What to Expect.....	4
What Happens in EDUC 6650.....	5
What Happens in EDUC 6933 .....	6
What Happens in EDUC 6931 .....	8
Other Requirements (IRB, Submission, APA Style).....	9
Title Page Template .....	10
Table of Content Format Directions .....	11
APA Suggestions/Directions for Tables and Figures .....	12
Table of Content Template .....	13 (i)
Table of Tables Template .....	14 (ii)
List of Figures Template.....	15 (iii)
Chapter 1 .....	16
Chapter 2.....	18
Chapter 3.....	19
Chapter 4.....	22
Chapter 5.....	24
Chapter 6.....	25
References.....	26
Appendix A.....	27
Thesis/Creative Project Rubric .....	28

# Capstone Project Options

Southern Utah University College of Education graduate students have a choice of four options to meet Master's Capstone project and degree requirements. Each option has challenges that strengthen and develop knowledge, skills and dispositions. The written requirements for each option will demonstrate descriptive, analytic and reflective writing.

For all options, graduate students must be in contact with committee chair (early and often) throughout the process. Thesis and Creative Project options culminate with a defense with a graduate committee. Following is a brief description of each option.

## Thesis

The thesis is a research study conducted by the graduate student. It may be qualitative, quantitative or a mixed study. Research is a process of steps used to collect and analyze information in order to increase our understanding of a topic or issue. **Research investigates an area of research that fills a void in existing information, extends research to new ideas or practices, or informs practice by developing new ideas.** The thesis paper consists of five chapters, in APA style. Graduate students must receive permission from their Chair and must submit an application to SUU's Institutional Review Board (IRB) prior to beginning any research. See p. 9 for more information.

## Creative Project

The creative project may be a curriculum development and implementation (math literacy center), development of a school-wide resource (balanced literacy library, etc), or any **project that enhances student achievement. Creative projects include development, implementation and program evaluation.** All creative projects must have written and/or visual documentation of completion. Creative projects do not release individuals from collecting data, documenting results, validating implementation, and/or being accountable as unique to the project; they are generally done as action research. Graduate students must receive permission from their Chair and must submit an application to SUU's Institutional Review Board (IRB) prior to beginning any project. See p. 9 of this document for more information.

## National Board Certification Process

Graduate student will complete requirements for National Board Certification. Earning the M.Ed. is not subject to receiving National Board Certification. Graduate students must complete all portfolio entries and take assessment center tests. Verification of completion will be the National Board Professional Teaching Standards (NBPTS) score, and a reflective paper concerning the process and certification.

## Professional Portfolio Modified per NBPTS Guidelines – Cohort Groups only

This option is available chiefly to students organized in cohort groups where the SUU College of Education has established a formal partnership with one of the region's school districts. Students in this option follow separate guidelines for completing the M.Ed. Capstone project than those printed in this document.

# What to Expect

for the

## *Southern Utah University*

### Master's Capstone Project

Semester I		Semester II	Semester III	Semester IV
<b>EDUC 6650</b> M. Ed. Capstone Thesis/Project Writing		<b>*EDUC 6933</b> M. Ed. Capstone Thesis/Project	<b>*EDUC 6931</b> Capstone Seminar	<b>*EDUC 6931</b> Capstone Seminar
<b>Important Note:</b> Unless otherwise requested by the student, students will be enrolled in EDUC 6933 after one Spring or Fall semester break following completion of EDUC 6650. Example: A student who takes EDUC 6650 in the Spring of 2007 will be registered for EDUC 6933 in the Spring of 2008. The reason for this break is to provide sufficient time between the two courses for work with the Faculty Chair to make it possible to complete the Project during EDUC 6933.		Prerequisite: EDUC 6650  1. Not offered in summer 2. If Master's project is not completed this semester, student must be continuously enrolled (except summers) in EDUC 6931 until the defense	Prerequisite: EDUC 6933  1. Not offered in summer 2. This one hour course may be taken only twice to complete the Master's project	Prerequisite: EDUC 6933  1. Not offered in summer 2. This one hour course may be taken only twice to complete the Master's project

**\*Important Note:** These courses are not available during the summer. Plan accordingly!

# What Happens in EDUC 6650 Standards for Proposal Writing in Education

The Graduate Capstone Handbook provides the details for the development of the Proposal in EDUC 6650. In addition to other activities, this course includes the following:

First 3 - 4 weeks	Develop and submit concept for review by graduate faculty	The Professor of EDUC 6650 will work with students in the initial concept development for the project, and within the first month of class will present student proposal concepts to the graduate faculty for feedback and suggestions.
Throughout the semester	Chapters 1 – 3 of the Proposal are developed	The Proposal developed in EDUC 6650 will serve as the basic outline for the Capstone Project in EDUC 6933.
Early in the semester	Earn Completion Certificate for the Human Participant Protection Education	Complete and earn certificate for the Human Participant Protection Education for Research Teams online course sponsored by the National Institutes of Health through the National Cancer Institute website.
Near the end of the semester	<b>Student</b> submits required items to the <b>Office of Graduate Studies</b>	Required items include: 1. Electronic Draft of Proposal Chapters 1, 2, 3 & <b>References</b> 2. Completion Certificate from National Cancer Institute training
End of the semester	Department Chairperson Assigns Project Chair	The Graduate Capstone Project will be assigned to a faculty member with expertise/interest in the area of the project, depending on faculty load.
End of the semester or shortly thereafter	Project Faculty Chair Makes Initial Contact	The Project Faculty Chair will contact the student to begin the process of developing the Capstone Project from the Proposal.

# What Happens

in

## EDUC 6933

### Capstone M.Ed. Project

*The chart below is a general guide of what to expect in EDUC 6933. Some of the Steps listed may occur simultaneously and occasionally in a slightly different order.*

Step 1	Project Review by Graduate Faculty	Several Graduate Faculty will review your draft and provide feedback on APA format, accuracy of references, spelling, grammar, and type of IRB application needed.
Step 2	Notification of Institutional Review Board (IRB) requirements	You will be sent information on the required IRB forms to submit to your chair.
Step 3	Submit IRB Application	The required IRB forms should be submitted to your Chair, who will sign off and forward them to the College of Education IRB.
Step 4	IRB Approval Received	This will be sent to your Chair, who will notify you when received.
Step 5	Project review with Chair	Your Chair and Committee will provide you with feedback from the Graduate Faculty and will discuss needed modifications to your project and/or paper. Hiring an editor may be advisable. Please consult with your Chair.
Step 6	Corrections/modifications made if needed	Following the review with your Chair, you may need to make needed changes to your project and/or paper. This process can take some time and require several revisions.
Step 7	Approval from Chair	At the appropriate point in the revision process, your Chair will notify you that your project is accepted and approved to begin.
Step 8	Begin Project	<b>Important Note:</b> You may only begin work on your project <i>after</i> your Chair <i>and</i> the IRB approve your project.
Step 9	Conduct Project and Compile Data	
Step 10	Submit Draft of Chapters 4, 5 and/or 6.	Once data collection is complete, write and submit to your Chair your first draft of Chapters 4, 5 and/or 6.
Step 11	Corrections/modifications made if needed	A revision process for the final chapters of your paper will occur as needed, which will include meetings and/or discussions with your Chair. As with the first three chapters, this process can take several revisions.

Step 12 <i>This step used only if needed</i>	Register for EDUC 6931 if needed	In most cases, it will be difficult to complete a rigorous Master's project within the 15 weeks of a Fall or Spring semester in EDUC 6933. It may be necessary to enroll for one or two semesters of EDUC 6931, Capstone Seminar.  <b><i>Important Note: In the event that the project is not ready for defense within the semester, in Incomplete Grade Contract will be required. This contract allows for additional time to complete the project, which is done in EDUC 6931. The grade for EDUC 6650 will be changed when the project is complete.</i></b>
Step 13	Schedule defense with Chair	Set a date and time with your Chair for your defense. Your Chair will make the necessary arrangements on campus.
Step 14	Submit paper for final review at least 2 weeks before defense	A final review of your paper by your chair, committee and/or other graduate faculty will be done.
Step 15	Make revisions	Using feedback from the final review, make revisions to your paper.
Step 16	Project declared ready for defense by Chair	At the appropriate time in the revision process, your Chair will notify you that you are ready to defend your project.
Step 17	Extend invitations	Master's Candidates are encouraged to invite interested people to the defense. These might include your Principal or supervisor, colleagues who participated or provided support for your project, etc.
Step 18	Defend	...and our expectation is that you will do this successfully!!!
Step 19	Make final revisions	Following the defense, make any final revisions to your paper.
Step 20	Submit electronic file to your chair	... and you are done!

# What Happens

in  
**EDUC 6931**  
Capstone Seminar

*EDUC 6931 will begin at the point in the project that EDUC 6933 ended, but very likely will include the Steps repeated below. This course may be taken twice. It is not offered during the summer.*

Step 11	Corrections/modifications made if needed	A revision process for the final chapters of your paper will occur as needed, which will include meetings and/or discussions with your Chair. As with the first three chapters, this process can take several revisions.
Step 12 <i>This step used only if needed</i>	Register for EDUC 6931 a second time if needed	In some cases, it may be necessary to take EDUC 6933 a second time, if needed to allow for satisfactory completion of the Capstone Project.
Step 13	Schedule defense with Chair	Set a date and time with your Chair for your defense. Your Chair will make the necessary arrangements on campus.
Step 14	Submit paper for final review at least 2 weeks before defense	A final review of your paper by your Chair and Committee will be done.
Step 15	Make revisions	Using feedback from the final review, make revisions to your paper.
Step 16	Project declared ready for defense by Chair	At the appropriate time in the revision process, your Chair will notify you that you are ready or not yet ready to defend your project. If your project is not ready at this point, you will receive an F or an I for 6933, and will be required to repeat 6933 or enroll in 6931, respectively. (Your work must be 75% complete and you must be passing to qualify for an Incomplete grade.)
Step 17	Extend invitations	Master's Candidates are encouraged to invite interested people to the defense. These might include your Principal or supervisor, colleagues who participated or provided support for your project, etc.
Step 18	Defend	...and our expectation is that you will do this successfully!!!
Step 19	Make final revisions	Following the defense, make any final revisions to your paper.
Step 20	Submit electronic file to your chair	... and you are done!

# Other Requirements For Thesis and Creative Project

## IRB Application

Please be aware that you must have SUU Institutional Review Board (IRB) approval as well as the approval of your committee chair. This must occur before you proceed with research data collection or other interventions!!

SUU Forms needed for the IRB application process are available online.

1. From the SUU Homepage ask for IRB:  
<http://www.suu.edu/academics/provost/grants/irb/IRBguides.html>
2. You will need the following:
  - IRB Submission Instructions
  - IRB Assessment of Risk and Vulnerability Form and turn it in to your Chair.
  - IRB Submission or Exemption Form (as advised AFTER completing the Assessment of Risk and Vulnerability Form)

Please check with your Chair for guidance after having read the Submission Instructions and completing the Assessment of Risk and Vulnerability Form.

Each graduate student needs to have completed the Responsible Conduct of Research (RCR) online tutorial and training. As of August 1, 2010, the RCR Social and Behavioral Sciences training replaces the National Institutes of Health (NIH) training and certificate. Please go to:

<http://suu.edu/academics/provost/grants/RCR-training.html>

Complete the Social & Behavioral Research - Basic/Refresher course.

This training and certificate of completion is accomplished as part of EDUC 6650 and PE 6080. Please keep that certificate and return with your IRB forms to your Capstone Chair.

## Final Submission for Defense

The **thesis or creative project** should be submitted with one vinyl, spiral-bound copy for the Graduate Program. You will need, at least, two other copies clipped or stapled for the committee during the defense. You will need three title pages unstapled with no holes for signatures.

Please check with your Capstone Chair for any changes and the latest procedures for your Capstone Defense!!

## APA Style

Graduate students must follow APA style format. The APA Style Manual, 6<sup>th</sup> Edition, or latest version is required for EDUC 6650 and PE 6080. The pages following provide a model to follow based on the APA Style Manual.

<Title of Project>

By

<Student's Name>

Submitted in partial fulfillment of the requirements for the degree

Master of Education

Approved by

---

Committee Chair

Date

---

Committee Member

Date

---

Committee Member

Date

---

Chair, Graduate Studies in Education

Date

Southern Utah University  
Beverly Taylor Sorenson College of Education and Human Development  
Graduate Studies in Education  
Cedar City, Utah

*Note: Do not number or hole punch the title page.*

## Table of Contents

Refer to the following templates to guide you in your final presentation.

**Before you begin** typing in the information you will need to set the “tabs”. If you are using Microsoft Word, 2003:

1. Tool Bar <Format>, <Tab>
2. The default tab is 0.5. Leave that. In the “tab stop position” type in *6.0*. The alignment is *right*, and the Leader is #2 (.....). Select <Set> and then <OK>.
3. What this does is set up your tabs so that the page numbers are justified on the right side of the page.

If you are using Microsoft Word 2007:

### Table of Contents Tabs

1. Home Tab
  - a. Paragraph (group on tool bar) – click on the little square on the bottom right-hand side. A new window will open.
    - i. Bottom Right ‘Tab’ . A new window will open.
      1. Stop position – type in 6.0
        - a. Right alignment
          - i. Option 2 (.....)
            1. Click ‘OK’

Set your margins the same as the project templates (left at 1.5 and the rest at 1.0)

**Page numbers for this section are: i, ii, iii, etc.** Pagination for the Table of Contents is in the bottom center of each page.

Keep this section separate from the main document – as well as from the Title page. Microsoft Word does not readily allow a switch/change of numbering styles within a document.

If you have tables or figures in your narrative, they should be listed in your Table of Contents (see APA, p. 127 for an explanation of textual narrative versus a table format for data presentation).

## Tables and Figures

### Tables

Tables usually present numerical data, but can also consist of words to present qualitative comparisons. Data is arranged in an orderly display of columns and rows (see Table 1). Find more on pp. 127-150 in your APA manual.

Table 1

#### *Science Background Knowledge Pre and Post Mean Scores and Gain Scores*

Classes	Pretest Mean	Posttest Mean	Gain
Class A	73	85	+12
Class B	69	94	+25
Class C	72	75	+ 3
Class D	71	96	+25

*Note.* If you have notes or a key, it would go here. The font is 9 in Times New Roman. The word note is in italics.

### Figures

Figures are “any type of illustration other than a table. A figure may be a chart, graph, photograph, drawing, or other depiction” (p. 150). For more information, see pp. 150-167 in your APA manual. Even though an author would avoid having more than one table or figure on a page, the following is an example of a figure. Please note the differences in formatting.

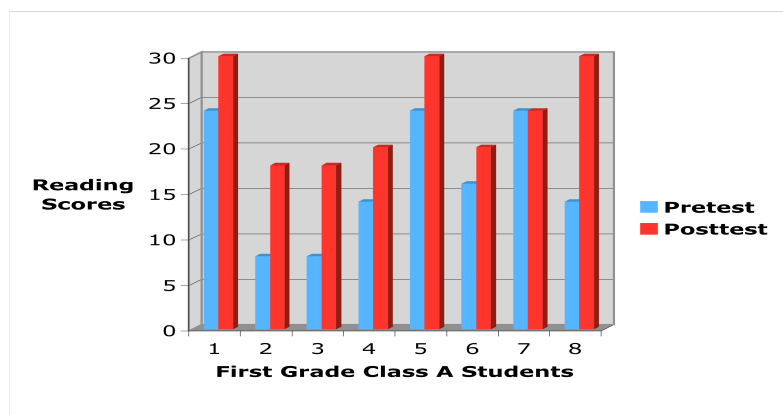


Figure 1. Comparing first grade, Class A, pre and post DRA scores.

## Table of Contents

Chapter 1: Introduction .....	1
Chapter 2: Literature Review .....	#
Subheading .....	#
Subheading .....	#
Subheading .....	#
Conclusion .....	#
Chapter 3: Methodology .....	#
Chapter 4: Results .....	#
Chapter 5: Discussion .....	#
Chapter 6: Reflection .....	#
Only for Creative Projects	
References .....	#
Appendix .....	#
Appendix A .....	#
Appendix B .....	#

## Table of Tables

Table 1: Title (if wraps put the page # on the wrapped line).....#

Table 2: Title (if wraps put the page # on the wrapped line).....#

## List of Figures

Figure1: Title (if wraps put the page # on the wrapped line.....#

Figure 2: Title (if wraps put the page # on the wrapped line.....#

## Chapter 1

### Introduction – Nature of the Problem

You begin a research study or creative project by identifying the topic and the purpose of the study. The importance of your topic should be explicitly stated in the introduction. And, the research issue or purpose should be as specific as possible, yet stated concisely. Follow the prompts or guidelines noted toward the end of this handbook in the boxed portion labeled “Chapter 1, Introduction – Nature of the Problem”. The purpose of the Introduction is to convince the reader of the importance of your study. In the opening paragraphs of this chapter, you provide sufficient background information (based on your literature review) that justifies why the study should be conducted.

The Introduction Chapter should be between three and six pages. As in all scholarly writing, your narrative should be in 3<sup>rd</sup> person and should typically be in an active voice.

#### ***Thesis***

The introductory narrative sets the stage for your statement of purpose. Your narrative might introduce a problem or an issue that needs to be addressed. In any event, it leads to a clear and precise statement of purpose. Again, you should refer to the specific prompts/guidelines for writing Chapter 1 at the end of this handbook. You conclude the introduction with your statement of purpose. Remember, this is to be clear and precise. *The purpose of this thesis is . . .*

Following the paragraph wherein you offer your statement of purpose, you should have a new sub-heading entitled “Delimitations.” This section describes or states what will not be undertaken in your particular study. In other words, the delimitations section states what it is that you will not do in your proposed study.

After the Delimitations section, you should establish yet another sub-heading entitled “Definition of Terms.” In this section, a glossary of terms is provided for the reader. Such a glossary (definition of terms) will give the reader a frame of reference for your study prior to the start of Chapter 2 which is your literature review.

### ***Creative Project***

As in writing a thesis, the introductory paragraphs for a creative project give the reader background information on a problem that needs to be addressed. This background information justifies why a study needs to be conducted or why a creative project needs to be undertaken. The background paragraphs lead directly to the statement of purpose. *The purpose of this project is . . .*

Following the paragraph where you present your statement of purpose, you should have a new sub-heading entitled “Delimitations.” This section describes or states what will not be undertaken in your particular study or project. In other words, the delimitations section states what it is that you will not do in your proposed creative project.

After the Delimitations section, you should establish another sub-heading entitled “Definition of Terms.” In this section, a glossary of terms is provided for the reader. Such a glossary (definition of terms) will give the reader a frame of reference for your study prior to the start of Chapter 2 which is your literature review.

The closing paragraph for a creative project should be a new sub-heading entitled “Researcher Qualifications.” This closing paragraph of Chapter 1 describes your qualifications for conducting and completing the proposed project. This is written in 3<sup>rd</sup> person.

## Chapter 2

### Literature Review

A vital component of each Master's Capstone project is a high quality review of the literature. A solid, comprehensive Literature Review establishes you as an expert on the subject you have chosen to study. As you go through the process of immersing yourself in what others have written about your topic of interest, you broaden your knowledge and understanding..

If you are writing a thesis, your review of the literature gives you a solid foundation for determining study purposes and how you might proceed in the conduct of a study. For students who are doing a creative project, the review of literature provides background information for formulating project goals and objectives. A thorough review of the literature helps you frame the Methodology that restates the proposal by which the study/project will be conducted. The Statement of Purpose is articulated in Chapter 1. The study/project Methodology is outlined in Chapter 3.

As inferred by its title, the Literature Review is exactly that – a review, conducted and written by you, of what scholars and experts have published about your chosen subject. Follow the prompts or guidelines noted toward the end of this handbook in the boxed portion labeled “Chapter 2, Literature Review” of this Graduate Handbook. The suggestions presented there were prepared by the SUU Graduate Faculty and are intended to guide you in the preparation and writing of your Literature Review. You should closely follow those guidelines.

At the end of your review, you should write a summary. This summary highlights your main conclusions, including reference to the most relevant aspects of your study of the literature.

<p>For the Proposal, written in EDUC 6650/PE 6080, the Literature Review requires a minimum of 15 pages. For EDUC 6933 when you complete your entire Master's Capstone project, the Literature Review should be at least 20 pages. In addition, the final review should include a minimum of 20 separate references.</p>
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## Chapter 3

### Methodology

**Thesis** [Note: When writing Chapter 3 of the proposal, follow the prompts/guidelines noted toward the end of this handbook in the boxed portion labeled “Chapter 3, Methodology for Thesis or Methodology for Creative Project.” The guidelines noted were prepared by the SUU graduate faculty.]

The Thesis begins with a statement of purpose (restated from Chapter 1) and clear research questions, etc. (Refer to pages 62 -63 of the APA manual for heading Level 3 and Level 4)

#### *Participants and Setting*

Participants should be described in enough detail for the reader to visualize them. When a sample is very small, consider providing a description of individual participant. A population should be named, and if only a sample within the population was studied, the method of sampling should be described. If there was attrition, state the number who dropped out and information on the drop-outs. Describe your informed consent procedures, if any, as well as steps taken to maintain confidentiality.

#### *Instrumentation*

Unpublished instruments should be described in detail. Published instruments should be described briefly – describe the traits that it was designed to measure, format, and the possible range of score values. For unpublished instruments (survey you designed) and published instruments (standardized tests, textbook test), information on the validity and reliability should be reported. Examples of instrumentation should be provided in the appendix. If you use a variety of instruments they should be explained using subheading 4 (see example of survey, test, etc).

*Survey.* Surveys are a useful design to use when seeking to collect data quickly and economically, study attitudes and opinions, and survey geographically dispersed individuals.

Surveys are also useful for assessing information at one point in time (cross-sectional study), or over time (a longitudinal study).

*Tests (standardized, criterion, etc.).* National standardized tests (SAT, ACT, GRE, GDE), state tests (End-of-year), teacher made, curriculum based, etc.

*Interview.* The process where researchers ask one or more participants in a study mostly, general, open-ended questions and record their answers. This information is then transcribed or typed into a data file for analysis

*Observation.* The process of gathering first –hand information by observing people and places at a research site. Advantages include the opportunity to record information as it occurs in a setting. Disadvantages include being limited to those sites and situations where researchers can gain access.

### *Procedures*

Experimental procedures, equipment, and other mechanical matters should be described in sufficient detail so that the study can be replicated. Timeline of events should be given. To assure triangulation a “crosswalk” can be helpful.

### *Analysis*

Describe how the data was analyzed. What type of statistical analysis was used, or word patterns. What was the rationale behind the type of analysis selected?

***Creative project*** [Note: When writing Chapter 3 of the proposal, follow the prompts/guidelines noted toward the end of this handbook in the boxed portion labeled “Chapter 3, Methodology for Thesis or Methodology for Creative Project.” The guidelines noted were prepared by the SUU graduate faculty.]

The Creative Project begins with a clear statement of purpose and clear questions or specific objectives to be addressed, etc.

### *Participants*

Participants should be described in enough detail for the reader to visualize them. When a sample is very small, consider providing a description of individual participant. A population should be named, and if only a sample within the population was studied, the method of sampling should be described. If there was attrition, state the number who dropped out and information on the drop-outs. Describe your informed consent procedures, if any, as well as steps taken to maintain confidentiality.

### *Resources*

What did you use to develop the project?

### *Procedure or Timeline*

How did this creative project develop, and how was it implemented?

### *Project evaluation*

How did you determine if your creative project “made a difference” in student achievement? This section must be clear, consistent to goals, and coherent for the reader to follow.

Remember that for the proposal, you are writing in present and/or future tense. However, for the final writing of your project, you will write in past tense.
---

## Chapter 4

### Results

The results section summarizes the data collected and the statistical or data analytic treatment. Data is presented in sufficient detail to justify the conclusions (Chapter 5).

Discussing the implications of the results is not appropriate in this chapter. All relevant results are mentioned, including those that counter the hypothesis. **Do not include individual scores or raw data** (except in single-case designs).

Begin with a lead-in paragraph or two that restates the purpose (questions or needed accomplishments). Provide an outline or overview so the reader knows the organization and what to expect in the chapter.

#### *Thesis*

Organize the analysis and results around the research hypothesis, purposes, or questions stated at the conclusion of Chapter 2. Standard statistical procedures need only be named; you do not need to show formulas or calculations. Present descriptive statistics first followed by inferential statistics. Use tables and figures as supplements to the narrative to support complex information. Supportive data that is valuable but not essential is placed in the appendices.

#### *Creative Project*

Results are organized by project goals. The results focus on the degree to which project goals were met. Were all elements of the project met? Present the program evaluation data clearly and concisely. Use tables and figures to organize and simplify your results. Supportive artifacts are placed in the appendices.

*Tables.* Tables allow complex data to be expressed in a tidy format. Tables should not be used when results can easily be expressed in text (e.g. if the table is unusually short with only a

few columns or rows). Tables usually show exact numerical values with the data arranged in an orderly display of columns and rows (see p. 12 of this document). Reserve tables for crucial data that simplifies the text that otherwise would be crowded with numbers. Organize large amounts of data in tables and give each table a number and descriptive title (see APA Chapter 5, 6th ed., p. 125). Choose the medium that presents the data most clearly and economically. An important rule is that a good table should stand alone. The reader should not have to refer to the text for basic information needed to understand the table. Abbreviations and acronyms must be spelled out or explained. Use the APA Table Checklist (p. 150).

*Figures.* Figures are any type of illustration other than a table (see p. 12 of this document). A figure may be a chart, graph, photograph, drawing, or other depiction. Figures can be extremely helpful to a reader. They can be used to simplify complex information that would be difficult or lengthy to express in words (e.g. structural equation models, apparatus). Carefully consider the use of figures; tables are often preferred due to the exact information they present. Figures do convey, at a glance, an overall pattern of results. Refer to APA 6<sup>th</sup> ed. Figures 5.20, p. 150. Use the APA Figure Checklist (p. 167).

Be certain that the text mentions all tables and figures. Number all tables and figures with Arabic numerals in the order in which the tables or figures are first mentioned in text (Table 1, Table 2, etc and Figure 1, Figures 2 etc.). Every table and figure has a brief but clear and explanatory title. Follow all APA rules for tables and figures. End the chapter with a summary, conclusion or transition to the interpretations in Chapter 5. If more information is desired on for creative projects, please ask your capstone advisor for Creative Project Suggestions document.

## Chapter 5

### Discussion

Having presented the results in Chapter 4, you are ready to evaluate and interpret their implications. As the researcher you are free to examine, interpret, and qualify the results. You may also draw inferences from them, emphasizing any theoretical consequences and the validity of your conclusions.

Open the Discussion section by clearly stating how the chapter is organized. Most commonly the alignment of the chapter is as follows:

- Why is this problem important? What are the issues? (Refer to Chapter 2)
- What are the similarities and differences between your results and the work of others?

Do not simply reformulate and repeat points already made. You are contributing to the reader's understanding of the problem. Point out results, findings, and/or accomplishments.

- Provide possible explanations supportive of results, i.e. speculation, inference and reflection.
- Address limitations of the study or project.
- What are the practical or theoretical significance of the study/ creative project? What real-life phenomena might be explained or modeled by the results? What has been done with the study or project? Were results or project shared?

### *Thesis*

The conclusion synthesizes answers and findings and the importance of the findings. Researcher can pose new questions that the data may have elicited. Conclusion may refer to what would/could/should happen next and provide closure for the reader.

## Chapter 6

### Reflection

Written in first person, this chapter is a reflection on the creative project experience. What worked well? What changes would be made next time? What was learned from this experience? Where do you go from here with this project? How will you change your professional practice as a result of your findings?

(Note: Chapter 6 is used for the Creative Project Only, not used for the Thesis.)

## References

Mark pp. 169-224 in the APA manual and use carefully!

HINT: Formatting your references using the "hanging" function will help you considerably. In most Microsoft Word documents, you select *format* (from the menu), select *paragraph*, select *special*, select *hanging* and .5. In this way, you do NOT have to use tabs to have the correct format.

Also note that it is currently suggested that the references are single-spaced with a double space between items.

Your References require exact alignment with APA. The placement of every comma, period, parenthesis, italics, ampersand (&), colon, and abbreviation counts. See the five examples for the most common reference points.

1. Note the periods, spaces, commas, italics, title capitals and lower case words, and volume indication for single author and journal reference.

Beichner, R. J. (1993). Technology competencies for new teachers: Issues and suggestions. *Journal of Computing in Teacher Education*, 9, 17-20.

2. Note the periods, spaces, commas, colons, italics, title capitals and lower case words, city, state, and publisher.

Bogdan, R., C., & Biklen, S. K. (1998). *Qualitative research for education: An introduction to theory and methods* (3<sup>rd</sup> ed.). Boston, MA: Allyn and Bacon.

3. Find the periods (or lack of them), spaces, commas, colons, italics, title capitals and lower case words, location, n.d. (for no date), and http address.

Feistritzer, C. E. (n.d.). *Teacher preparation and classroom size reduction*. Testimony before the House Committee on Education and the Workforce. Retrieved October 13, 2000, from [http://www37.pair.com/ncei/Testimony\\_022498.htm](http://www37.pair.com/ncei/Testimony_022498.htm)

4. Because some of our Internet sources do not have authors, please see the following as a way to handle that information.

National Center for Educational Statistics [NCES]. (2003). *National Assessment of Educational Progress: The nation's report card*. Washington, DC: U.S. Department of Education.

5. At the end, for every item cited in the context of the paper, there must be an exact one-to-one relationship between references and citations (except for personal citations that are in the context but are not represented in the Reference page).

## Appendix A

## Title

Refer to APA manual pages 38-39. Begin document on the same page (consent letter form, example of instrument used, and supporting evidence for research). If it is student work, remove the name of the student and either photocopy or scan.

## EDUC 6933 Thesis/Project Rubric

<p><b>Title Page</b></p> <p>*See Template in Graduate Handbook or EDUC 6933 WebCT.</p> <p>*Also note that the title should have the following characteristics:</p> <ol style="list-style-type: none"> <li>1. Is descriptive of study with key words useful for searches.</li> <li>2. Is within 10-12 words.</li> </ol> <p style="text-align: center;"> <b>Table of Contents</b>  <b>Table of Tables</b>  <b>Lists of Figures</b>  <b>Appendix/Appendices</b> </p> <p>*There will always be a Table of Contents and usually a page for each of the following: Tables, Figures, and Appendix or Appendices.          *Each page will be numbered in bottom center footer as i, ii, iii, iv, and so on.          *Further description of format, such as font, margins, etc. is found in the Graduate Handbook or EDUC 6933 WebCT.</p>	<p>√ when acceptable</p> <p><b>Highlight as needed.</b></p>
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<p style="text-align: center;"><b>Chapter 1</b> <b>Introduction - Nature of the Problem</b></p> <p>**The order and creativity of the author is encouraged keeping the following key elements in mind.</p> <ol style="list-style-type: none"> <li>1. Introduces the problem—the area of concern--possibly starting with scenario or otherwise setting the stage in which the problem occurs. (This can be the <i>hook</i> that draws the reader in.)</li> <li>2. Clearly establishes the problem.       <ol style="list-style-type: none"> <li>a. Problem is in the range of student’s influence.</li> <li>b. Problem statement is concise and focused.</li> </ol> </li> <li>3. Clearly states or distinguishes whether it is a project or study (thesis).</li> </ol> <p style="text-align: center;"><b>Background, Significance, and Purpose Setting</b></p> <ol style="list-style-type: none"> <li>4. Contains essential elements of documentation and evidence of a problem such as historical background and/or theoretical grounding with citations as needed (to be fleshed out and analyzed in the literature review)</li> <li>5. Contains sufficient background information to allow the reader an understanding of the context and significance of the question/problem you are trying to address.</li> <li>6. Provides proper acknowledgement of the previous work on which the author is building.</li> <li>7. Delineates major issues related to the problem or need (also to be fleshed out and analyzed in the literature review).</li> <li>8. Makes it obvious where the old contribution ends and the new contribution or investigation begins.</li> <li>9. Clearly states purpose of the study, as in a declarative sentence.</li> <li>10. (For creative project) Clearly delineates how it will enhance student achievement.</li> <li>11. Guides the reader. (Stating questions is optional as per advisor). Qualitative questions will be sufficiently open-ended to facilitate exploration of emerging themes.</li> <li>12. Foreshadows or provides a kind of <i>road map</i> for setting, context, organization, scope of work, and author’s role.</li> <li>13. (For creative project) Concludes with supportive commentary (still in 3<sup>rd</sup> person) as to the personal qualifications that allow the candidate to do the project.</li> </ol>	<p style="text-align: center;">√ when acceptable</p> <p style="text-align: center;"><b>Highlight as needed.</b></p>
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<b>Chapter 2</b> <b>Literature Review</b>	✓ when <b>acceptable</b>
<p>**The form, content, or style of a literature review will vary by topics and project types. The review can be organized by (a) chronology, e.g. historical to present, (b) by themes, (c) by related issues, or (d) by topics. The following elements, however, are appropriate to most reviews.</p> <ol style="list-style-type: none"> <li>1. <b>Begins</b> with an outline or preface as to what will be considered in the review.             <ol style="list-style-type: none"> <li>a. Reveals related time line, issues, themes, or topics with a suggestion of why that organization was selected.</li> <li>b. Justifies criteria for <i>inclusion</i> and <i>exclusion</i> from the review.</li> </ol> </li> <li>2. <b>Body</b> is organized with appropriate headings and subheadings (as shown in APA-V, p. 113).             <ol style="list-style-type: none"> <li>a. Provides the reader with strong <i>umbrella</i> sentences at beginnings of paragraphs, includes <i>signposts</i> throughout and brief <i>so what</i> summary sentences at intermediate points in the review to aid the reader.</li> <li>b. Provides practical and scholarly significance to the problem.</li> <li>c. Reviews similar problems to the one being studied as closely as possible.</li> <li>d. Includes major, seminal, historical research articles pertaining to the project or study, including background and/or theoretical grounding as well as more current research.</li> <li>e. Includes quotations that are particularly relevant to key issues, your purpose, and/or need of your study.</li> <li>f. <i>Elaborates</i> on important reviews or key elements--yet <i>synthesizes</i> less important related elements.</li> <li>g. Is <i>thorough</i> (but the review need not be comprehensive). This review is considered a major part of learning in a capstone project/thesis so anticipate a length around 15-20 pages or length as approved by your capstone chair.</li> <li>g. Represents a minimum of 20 separate references, i.e. has a broad literature base.</li> </ol> </li> <li>3. <b>Ends</b> with a summary that validates the problem and approach to the study/project.</li> <li>4. Clearly distinguishes what has been done from what <i>needs</i> to be done and can end with questions for thesis or project fleshed out from the review.</li> </ol>	<b>Highlight as needed.</b>

<p><b>Chapter 3 Methodology (for Thesis)</b></p> <p>**Note that this chapter will be written in past tense.</p> <ol style="list-style-type: none"> <li>1. <b>Begins</b> with a statement of purpose and clear questions.</li> </ol> <p style="text-align: center;"><b>Participants &amp; Setting</b></p> <ol style="list-style-type: none"> <li>2. Defines individuals <i>who</i> were studied and includes co-researchers or collaborators.</li> <li>3. Indicates the participants' setting or the study context.</li> </ol> <p style="text-align: center;"><b>Instrumentation</b></p> <ol style="list-style-type: none"> <li>4. Explains techniques or tools used to measure, observe, examine, describe, or document results.</li> <li>5. Briefly defends instruments used or developed, including validation procedures as appropriate.</li> <li>6. Includes full name and citations for published instruments or resources as appropriate.</li> <li>7. Refers the reader to appendices for copies of instruments as appropriate, such as surveys, interviews, tests, etc.</li> </ol> <p style="text-align: center;"><b>Procedures</b></p> <ol style="list-style-type: none"> <li>8. Describes the methods or process used to accomplish the given tasks.</li> <li>9. Provides timeline or log of major events as appropriate for understanding.</li> <li>10. Includes informed consent and IRB approval process as appropriate.</li> <li>11. Is explicit enough for someone else to <i>replicate</i> the study.</li> </ol> <p style="text-align: center;"><b>Analysis</b></p> <ol style="list-style-type: none"> <li>12. Describes research design and methods used for examining quantitative and/or qualitative data.</li> <li>13. Justifies the selection of methods used to evaluate results.</li> </ol>	<p style="text-align: right;">√</p> <p><b>Chapter 3 Methodology (for Creative Project)</b></p> <p>**Note that this chapter will be written in past tense.</p> <ol style="list-style-type: none"> <li>1. <b>Begins</b> with a statement of purpose and specific accomplishments such as benefit to student achievement or achieving worthwhile goals.</li> </ol> <p style="text-align: center;"><b>Participants &amp; Setting</b></p> <ol style="list-style-type: none"> <li>2. Identifies participants (for whom the project was developed) and other collaborators as appropriate.</li> <li>3. Indicates the participants' setting or the context.</li> </ol> <p style="text-align: center;"><b>Procedures</b></p> <ol style="list-style-type: none"> <li>4. Describes what was developed and/or how the creative project was accomplished.</li> <li>5. Refers the reader to appendices to view developed curricula, etc. as appropriate.</li> <li>6. Includes a log of events as needed for understanding.</li> <li>7. Includes IRB approval process as appropriate.</li> </ol> <p style="text-align: center;"><b>Resources</b></p> <ol style="list-style-type: none"> <li>8. Indicates what was used to develop the project.</li> </ol> <p style="text-align: center;"><b>Evaluation</b></p> <ol style="list-style-type: none"> <li>9. Explains how accomplishment(s) were evaluated, i.e. what was used to examine value or quality.</li> <li>10. Matches accomplishments with goals and purpose.</li> <li>11. Validates student achievement or implementation results.</li> <li>12. Documents how relevance will be determined.</li> <li>13. Describes and defends measures used or developed as appropriate.</li> </ol> <p style="text-align: right;">√</p>
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<p><b>Chapter 4</b> <b>Results (for Thesis)</b></p> <p>** The results and findings are closely aligned to statement of purpose in Ch. 1, 2, and 3. Please revise each chapter for consistency of purpose throughout.</p> <ol style="list-style-type: none"> <li>1. <b><u>Begins</u></b> with a lead-in paragraph or two with elements of the following. <ol style="list-style-type: none"> <li>a. Restates the purpose and/or questions.</li> <li>b. Outlines or leads the reader to anticipate the findings that will be addressed in the chapter.</li> </ol> </li> <li>2. <b><u>Body</u></b> reports results based on the outline using narrative that is explanatory (but not interpretive.)</li> <li>3. Utilizes tables as described in APA 6 manual on p. 125 and as checked per p. 150 (if needed).</li> <li>4. Utilizes figures (charts, graphs, photographs, drawings, or other depictions) according to APA 6 manual (if needed). See pp. 150-167. <ol style="list-style-type: none"> <li>a. Tells the reader what to look for in tables and figures, and provides sufficient explanation to make them readily intelligible.</li> <li>b. Uses tables or figures as <i>supplements</i> to the narrative especially to support complex information.</li> <li>c. Utilizes appropriate headings as needed to guide the reader.</li> <li>d. Places supportive data that is <i>valuable</i> but not <i>essential</i> to the results section in appendices such as baseline or raw scores that are not pertinent to specific analysis.</li> </ol> </li> <li>5. <b><u>Ends</u></b> with a summary, conclusion, or transition to the interpretations in Chapter 5.</li> </ol>	<p style="text-align: right;">√</p> <p style="text-align: center;"><b>Chapter 4</b> <b>Results and/or Accomplishments</b> <b>(for Creative Project)</b></p> <p>** The results and/or accomplishments are closely aligned to statement of purpose in Ch. 1, 2, and 3. Please revise each chapter as needed for consistency of purpose.</p> <ol style="list-style-type: none"> <li>1. <b><u>Begins</u></b> with a lead-in paragraph or two with elements of the following. <ol style="list-style-type: none"> <li>a. Restates the purpose and/or needed accomplishments.</li> <li>b. Outlines or leads the reader to anticipate elements to be addressed in this chapter.</li> </ol> </li> <li>2. <b><u>Body</u></b> reports results or accomplishments using narrative that is explanatory, but not interpretive.</li> <li>3. Headings guide the reader.</li> <li>4. May use tables (pp. 125-150 in APA 6) or figures (pp. 150-167) as needed to elaborate on validation accomplishments (as in surveys, interviews, observations, achievement scores, and so on.)</li> <li>5. Spells out the degree of accomplishments based on purpose. <ul style="list-style-type: none"> <li>• Were all elements of the project met?</li> <li>• Was implementation accomplished?</li> <li>• Was achievement enhanced?</li> <li>• What feedback was received as part of the validation process?</li> </ul> </li> <li>6. References artifacts in appendices as needed.</li> <li>7. <b><u>Ends</u></b> with a summary, conclusion, or transition to the interpretations in Chapter 5. *See additional Creative Project Suggestions.</li> </ol>	<p style="text-align: right;">√</p>
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<p style="text-align: center;"><b>Chapter 5 Discussion</b></p> <ol style="list-style-type: none"> <li>1. <b>Begins</b> with a lead-in paragraph or two that previews the discussion to follow.</li> <li>2. <b>Body</b> aligns itself to topics, questions, issues, data, findings, implementations, and/or accomplishments in Chapter 4 but details the <i>importance</i> of the information previously provided. <ol style="list-style-type: none"> <li>a. Focuses on <i>so what?</i></li> <li>b. Is <i>interpretive</i>.</li> <li>c. Points out results, findings, and/or accomplishments that were consistent or inconsistent with literature review.</li> <li>d. Provides hypothesis or possible explanations supportive of results, i.e. speculation, inference, and reflection are warranted.</li> <li>e. Addresses <i>limitations</i> of the study or problems with project as appropriate.</li> <li>f. Addresses <i>practical</i> or <i>theoretical</i> significance.</li> <li>g. Considers questions such as the following (as appropriate to specific research or project). <ul style="list-style-type: none"> <li>• What has been done with the study or project?</li> <li>• Were results or accomplishments shared? How were they received?</li> </ul> </li> </ol> </li> <li>3. <b>Ends</b>--if a thesis or study option--with a conclusion or summary having two or more paragraphs that recaps or <i>synthesizes</i> answers and findings and the importance of those findings. Author can pose new questions because findings often elicit more questions. Conclusion often refers to what would/could/should happen next and provides closure for the reader.</li> </ol> <p>**For projects, see Chapter 6.</p>	<p style="text-align: center;">√ when acceptable</p> <p style="text-align: center;"><b>Highlight as needed.</b></p>
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<p style="text-align: center;"><b>Chapter 6 (if project) Reflective Critique</b></p> <ol style="list-style-type: none"> <li>1. Uses first person.</li> <li>2. Addresses questions such as the following. <ul style="list-style-type: none"> <li>• What worked well?</li> <li>• What changes would be made next time?</li> <li>• What was learned?</li> <li>• In what direction does this lead?</li> <li>• What happens now? Where does one go from here?</li> </ul> </li> </ol>	<p style="text-align: center;">√ when acceptable</p> <p style="text-align: center;"><b>Highlight as needed.</b></p>
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<b>References</b>	√ <b>when acceptable</b>
<p>1. Has a <i>one-to-one</i> agreement for citations in text and the reference page. Use the following suggestions and questions.</p> <ul style="list-style-type: none"> <li>• Go through the text; for EVERY citation, check the reference page for names, spellings, and dates consistency.</li> <li>• Also make note if there are any items in the reference page without citations in the text?</li> </ul> <p style="padding-left: 40px;">“The author must make certain that each source referenced appears in both places and that the text citation and reference list entry are identical” (APA-5, p. 215).</p> <p>2. Uses references correctly according to pp. 169-224 in APA 6.</p> <ul style="list-style-type: none"> <li>• Double check uses of commas, periods, spaces, upper and lower case letters, abbreviations, volume for journals, editors, italics, and pages numbers.</li> <li>• See especially pp. 187-192 for electronic sources.</li> </ul> <p>** It all counts!</p>	<p><b>Highlight as needed.</b></p>