



**MASTER'S THESIS/PROJECT CAPSTONE
HANDBOOK**

For Candidates in the Departments of
Curriculum and Instruction (C&I) and
Language, Learning and Leadership (LLL)

Effective April 2015

PREFACE

The College of Education (COE) sets high standards and expectations for its graduate students and for successful completion of a master's degree. To that end, Education faculty from the graduate programs have collaborated to produce and regularly review this *Master's Thesis/Project Capstone Handbook*. The purpose of this *Handbook* is to guide master's candidates through the options and procedures for completing a master's capstone. For clarification purposes, this *Handbook* makes a distinction between a capstone thesis and a capstone project. All program capstones must contain the major components of educational research: the statement of a problem, a research question, a review of literature, a clear methodology, and a discussion or application of findings. A capstone thesis involves original empirical research; a capstone project involves a research synthesis that leads to a project of some type (curriculum or professional development). In both cases, Candidates will learn the finer points of research and scholarship as they work towards earning their Master's degree.

ACKNOWLEDGEMENTS

To emphasize and celebrate the collaborative effort that has produced this *Handbook* and that continues to review and update it as circumstances warrant its revision, the COE gratefully acknowledges the contributions of various individuals:

2014-15 Research Sequence Work Group Members (in alphabetical order):

Cindy Bird, Sovicheth Boun, Kate Mahoney, Jamar Pickreign,
Janeil Rey, Guangyu Tan, Anna Thibodeau.

Spring 2011 COE Graduate Task Force Members (in alphabetical order):

Clara Beier, Robert Dahlgren, Larry Maheady, Kate Mahoney,
Janeil Rey, Cynthia Smith.

Past COE Graduate Task Force Members (in alphabetical order):

Clara Beier, Cindy Bird, John Liontas, Kate Mahoney,
Barbara Mallette, Rhea Simmons.

Other contributions made by Dean Christine Givner, Jamar Pickreign,
AnaMaria Klein (Chair of C&I), Anna Thibodeau (Chair of LLL).

TABLE OF CONTENTS

Follow Links To Specific Program Information

Introductory Letter to Graduate Candidates in Literacy	1
Introductory Letter to Graduate Candidates in Curriculum & Instruction	2
Introductory Letter to Graduate Candidates in Teaching English (TESOL)	3
The Role of the <i>Research Sequence</i> of Courses	4
C&I and TESOL Graduate Programs Research Sequence of Courses	
Literacy Graduate Program Research Sequence of Courses	
Master's Capstone Options	5
Instructions for Manuscript Preparation of a Master's Capstone	6
Master's Capstone Order of Sections for All Capstone Options	7
Cover Page Template	8
Capstone Certification Page Template	9
Instructions for Submission of Capstone	10
Professional Standards for Master's Capstone	11
Intended Learning Outcomes (ILOs) for EDU 570 of Research Sequence	12
Intended Learning Outcomes (ILOs) for C&I Research Sequence	14
Intended Learning Outcomes (ILOs) for TESOL Research Sequence	15
Intended Learning Outcomes (ILOs) for Literacy Research Sequence	16
Examples of Master's Capstone Options for C&I/TESOL Programs	17
Examples of Master's Capstone Options for Literacy Graduate Programs	18
Sample Outlines of Master's Capstones in C&I/TESOL	19
Sample Outlines of Master's Capstones in Literacy	20
Candidate Checklist for Submission of Capstone	22

Introductory Letter to Graduate Candidates in Literacy

Dear Master's Capstone Writer in Literacy

Welcome to the research portion of your Literacy Program at Fredonia -- and to the opportunity for inquiry into the exciting and ever evolving literacy field. Literacy today is so much more than just the phonics, fluency and comprehension of reading. Through this *Handbook*, we the Literacy Faculty invite you to pursue topics that interest you as explore literacy practices and issues in-depth and share your newly created knowledge with colleagues, teachers, and members of the education community.

All graduate candidates enrolled in the College of Education at Fredonia take three research courses, referred to as the *research sequence*. For Literacy candidates enrolled in either of the two master's programs of Literacy Education (Birth to Grade 12 or Grades 5 to 12), these three courses are EDU 570 Using Educational Research to Inform Practice, EDU 651 Issues and Research in Literacy, and EDU 659 Master's Thesis/Project in Literacy.

In EDU 570, you learn what research is, how to read it, how to review it, and how to judge its applicability and application to education. You also start to become critical "consumers" of research in fields of education.

In EDU 651, you identify a specific literacy-related issue, problem, or topic you want to explore, then you conduct a preliminary literature review and determine the type of capstone you want to create: empirical research or professional development project. The culmination of this course is your completed research proposal wherein you propose what you will do for your Master's Capstone.

In EDU 659, you conduct the research proposed in EDU 651, and finalize the writing of your capstone. You are also given opportunities to share your new knowledge with peers, classroom teachers, and other education professionals.

All Graduate Literacy courses address the International Reading Association *Standards for Reading Professionals* (2010) and address them at the Reading Specialist levels of interventionist, literacy coach, and literacy program leader. In addition, this research sequence addresses the requirements of the State University of New York for your successful completion of a master's degree. Therefore we encourage you to read and follow this *Master's Thesis/Project Capstone Handbook*. It will guide you to your desired destination.

Your professors will serve as your supervisors and mentors -- assisting, encouraging, and sometimes nudging you along your literacy and research journey. We look forward to the contributions you will make to the field of literacy and to your own professional growth.

Sincerely

Members of the Literacy Faculty

Introductory Letter to Graduate Candidates in C&I

Dear Prospective Master's Capstone Writer

Welcome to the graduate research sequence for the Curriculum and Instruction in Inclusive Settings Program in the College of Education at the State University of New York at Fredonia. The primary goal of this sequence is to prepare professional educators who can understand the multiple functions of research in education; design master's level research projects that address important educational questions and problems; conduct projects in an orderly manner; and generate conclusions that advance research and/or practice. This *Handbook* provides general guidelines for successfully completing the research sequence of courses. The ultimate program goal is to prepare educators who are wise consumers and producers of educational research and, more importantly, professionals who value research and see the important roles that it can play in improving educational outcomes for children and youth.

Research is a systematic process of collecting, analyzing, and interpreting information to increase understanding of a phenomenon about which we are interested or concerned (Leedy & Ormrod, 2005). Although research projects can vary in nature, complexity, and duration, the research process itself is quite predictable

- 1 Research starts with a question or problem.
- 2 Research requires clear articulation of a goal or purpose.
- 3 Research requires a specific plan or methodology for proceeding.
- 4 Research requires the collection and interpretation of information (data) in an attempt to resolve the problem or question that originated the research.
- 5 Research is, by its nature, cyclical.

Your research experience begins as soon as you enter the graduate program. It is nurtured through coursework, independent readings, and applied teaching experiences. There are thousands of unanswered educational problems and questions about children, curricula, teachers, schools, and communities that must be addressed, and there may be no more opportune time to do so than now. The key is to select questions and problems that are educationally important and that interest YOU as a professional educator. Use this *Master's Thesis/Project Capstone Handbook* as a guide for becoming a better researcher and practitioner.

This *Handbook*:

- (a) describes required research-related coursework for TESOL, Curriculum and Instruction, and Literacy candidates,
- (b) highlights intended learning outcomes for each course of the Research Sequence,
- (c) offers a variety of master's project options,
- (d) provides some project outlines, and
- (e) includes links to completed research projects in the College of Education.

Remember, "Anything worth doing is worth doing well.

Anything not worth doing is not made worth doing by doing it well"
(Baer, 1998).

Introductory Letter to Graduate Candidates in TESOL

Dear TESOL Program Candidate

Welcome to the graduate research sequence in the College of Education at the State University of New York at Fredonia. The primary goals of this sequence are to prepare professionals who can understand the multiple functions of research in education and fields related to language and learning; to design Master's level research projects that address important educational questions and problems; to conduct projects in an orderly manner; and to generate conclusions that advance research and/or practice.

This handbook provides general guidelines for successfully completing the research sequence of courses. The ultimate program goal is to prepare professionals who are wise consumers and producers of research and, more importantly, professionals who value research and see the important roles that it can play in improving and exploring avenues within the scope of language and learning.

Research projects can vary in nature, complexity, and duration; however, the research process itself is quite predictable:

Research starts with a question or problem.

Research requires clear articulation of a goal or purpose.

Research requires a specific plan or methodology for proceeding.

Research requires the collection and interpretation of information (data) in an attempt to resolve the problem or question that originated the research.

Research is, by its nature, cyclical.

Your research experience begins as soon as you enter the graduate program. It is nurtured through coursework, independent readings, and applied teaching experiences. There are thousands of unanswered questions about language, learning, children, curricula, teachers, schools, and communities that must be addressed, and there may be no more opportune time to do so than now. The key is to select questions and problems that are important and that interest YOU as a professional. Use this *Master's Thesis/Project Capstone Handbook* as a guide for becoming a better researcher and practitioner.

This handbook:

- (a) describes required research-related coursework for TESOL, Curriculum and Instruction, and Literacy candidates;
- (b) highlights intended learning outcomes for each course of the Research Sequence;
- (c) offers a variety of Master's capstone options;
- (d) provides some project outlines; and
- (e) includes links to completed research projects in the College of Education.

We look forward to working with you on this meaningful project!

Sincerely
TESOL Faculty

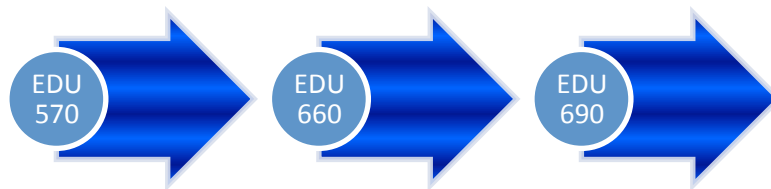
The Role of the *Research Sequence* of Courses

Graduate Programs in the College of Education of the State University of New York at Fredonia are designed to prepare teachers to deliver effectively the P-12 curriculum through a process that includes ongoing data collection and analysis followed by innovations/changes in practice for the purpose of improving student outcomes. The skills necessary to engage in this research process are addressed in three separate courses, collectively known as the *Research Sequence*. Because development of these skills is cumulative, no two courses in the sequence may be taken at the same time; each course must be successfully completed before the next course may be taken.

C&I and TESOL candidates are required to take the EDU 570/660/690 Research Sequence.

Literacy candidates are required to take the EDU 570/651/659 Research Sequence.

C&I and TESOL Graduate Programs Research Sequence of Courses



Literacy Graduate Program Research Sequence of Courses



Course Descriptions (Links to University Catalog)

[EDU 570: Using Educational Research to Inform Practice](#)

[EDU 651: Issues in Research and Literacy](#)

[EDU 659: Master's Thesis/Project in Literacy](#)

[EDU 660: Conducting Educational Research](#)

[EDU 690: Master's Thesis/Project](#)

Each course in the Research Sequence is designed to support the development of skills and ideas that will be necessary to complete the Master's degree Capstone. The Intended Learning Outcomes (ILOs) are integrated into each course in the [Literacy Sequence](#) and the [TESOL/C&I Sequence](#), and are designed to lead to the completion of a Master's Capstone. The Research Sequence is designed to scaffold candidates into becoming scholarly teachers, reflecting on core educational values, and answering important and relevant questions and problems within the school context through the process of data collection and analysis. In addition to the Intended Learning Outcomes (ILOs), candidates enrolled in TESOL or Literacy are required to meet professional organization requirements and Standards and should therefore also read the ILOs in course-specific syllabi.

Master's Capstone Options

Empirical research studies, curriculum projects, and professional development projects are forms of inquiry designed to address issues/problems related to education. Reflection on their selected meaningful topic (often one explored in Master's coursework completed prior to EDU 651/EDU 660) is very important for candidates and should be done before considering what type of Master's Capstone option will best fit the question or problem articulated in EDU 651/EDU 660.

Regardless of program, all Master's Capstones will involve asking a question (or stating a problem), collecting and analyzing data to answer the question, drawing conclusions (or creating a curriculum), sharing findings with the educational community, and reflecting on the process to improve schooling and the profession. This *Handbook* contains project options for [Literacy](#) and [C&I/TESOL](#). Professors for the research sequence courses will advise candidates about appropriate and valid methods for pursuing their question or problem of interest. In addition, a candidate's thorough review of the literature will provide insight into how other researchers and curriculum developers have addressed similar problems.

If the selected option for the Capstone involves the use of people of any age for data collection, then the candidate, with the support of a faculty sponsor (usually the EDU 660 or 651 professor), must submit a Human Subjects Review (HSR) Proposal to the Office of Sponsored Programs. Because of this additional requirement, candidates should be mindful that both EDU 651 and EDU 660 are time sensitive courses. A current HSR proposal form can be downloaded from the [Fredonia Office of Sponsored Programs](#) website.

Instructions for Manuscript Preparation of a Master's Capstone

Electronic – The final document is to be submitted electronically as a PDF file on a CD (compact disc) to the Thesis Project Advisor. This electronic document is to be accompanied by a printed copy of the Capstone Cover page, of the Project Certification Page, of the Abstract, and a completed copy of the Reed Library Permissions Packet. Candidates who wish to have a paper copy for personal binding and keeping may submit a complete paper copy of the entire project for signatures and to be returned to the candidate.

Style – The final document must adhere to the manuscript style of the current edition of the *Publication Manual of the American Psychological Association* (APA) in matters of preparation, format (tables, figures, charts, graphs), appendices, mechanics, and language unless indicated otherwise in this *Handbook*.

Type face and size – Use 12-point font in Times New Roman. Use the same font and size throughout the manuscript. Deviation from this is permissible for tables, figures, charts, graphs, and appendices (this adheres to APA format).

Line spacing – Use double-spacing throughout the entire document including block quotes; exceptions are the Cover page, Certification page, Table of Contents, References pages, and Appendices, all of which are to be single-spaced.

Margins – Use 1 inch margins for all margins in the electronic copy; any paper copies should have a left margin of at least 1.25” to allow for binding. Non-textual material (e.g., photos, illustrations, etc.) must fall within these margins. Left justify text, but right margin may be justified or unjustified.

Pagination – Cover page is not counted and does not receive a page number. All preliminary pages (Certification page, Abstract, Table of Contents, and List of illustrations/tables/figures) also do not require a page number. The text pages body of the document, beginning with first page of the Introduction or Chapter 1, are to be numbered with Hindu-Arabic numerals (*i.e.*, start with “1” then “2” etc.). Page numbers should be top right inside of the header.

To start the page numbering at #1 and after the preliminary pages, place cursor near bottom of the last preliminary page (the Table of Contents) and insert a *section-break*. Move cursor to the next page and go to Insert Page Number. Insert page number and start at 1 (even though this is page 5 of the document).

Running head -- Use first 2 or 3 words of the title in all capital letters (all caps) starting at left margin in header. Running head may not exceed 50 characters including spaces and punctuation. Running heads should start on the same page the page numbers start.

Master's Capstone Order of Sections for All Capstone Options

Regardless of the graduate program for which a capstone is written, the research process itself remains quite constant and predictable.

Therefore all College of Education Graduate Capstones will contain the following sections presented in this order:

Cover Page	(see Template)
Project Certification Page	(see Template)
Abstract	(refer to <i>APA Manual</i>)
Table of Contents	
List of Tables and Figures	(optional)
Introduction	
Literature Review	
Methodology	
Results	
Discussion	
References	
Appendix	(optional)

For all Capstone options, an electronic copy of the Cover page, the completed Capstone Certification page without signatures, and the Abstract will be stored with the final electronic copy of the Master's Capstone on a server as part of Reed Library Archives.

Cover Page Template

TITLE
(BOLD IN ALL CAPITALS -- CENTERED)

by

[Insert Candidate Name]

A Master's Thesis/Project Capstone
Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science in Education
[Insert Program Name]
Department of [Insert Department Name]
State University of New York at Fredonia
Fredonia, New York

Month Year [when submitted]

Capstone Certification Page Template

State University of New York at Fredonia
Department of [Insert Department Name]

CERTIFICATION OF THESIS/PROJECT CAPSTONE WORK

We, the undersigned, certify that this project entitled [Insert CAPSTONE TITLE] by [Insert CANDIDATE NAME], Candidate for the Degree of Master of Science in Education, [Insert Program Name], is acceptable in form and content and demonstrates a satisfactory knowledge of the field covered by this project.

[Insert Course Instructor's Name, PhD. or EdD.]
Master's Capstone Advisor
[Insert EDU 659/690] Course Instructor
Department of [Insert Instructor's Department Name]

Date

[Insert Chair's Name, PhD. or EdD.]
Department Chair
Department of [Insert Program's Department Name]

Date

Dean Christine Givner, PhD.
College of Education
State University of New York at Fredonia

Date

Instructions for Submission of Capstone

The Program Capstone will be deemed “completed” upon evaluation and approval of the submitted Master’s Capstone by the Capstone Advisor/Course Instructor and submission of a course grade by the Course Instructor.

To submit the capstone, candidates must

- ⇒ Prepare an abstract (no more than 250 words) according to APA guidelines and include it in the submitted Master’s Capstone.
- ⇒ Prepare an electronic version (PDF) of the Master’s Capstone according to the manuscript instructions provided in this *Handbook*.
- ⇒ Print a paper copy of the Cover page, the Capstone Certification page, and the Abstract.
- ⇒ Print and complete the Reed Library Permissions Packet.
- ⇒ Submit to the Capstone Advisor/Course Instructor a plain standard-size office file folder with tab labeled with Candidate’s last name, first name, and F#. This folder must contain “hard copies” (paper-printed copies) of Cover page, Certification page, Abstract, completed Reed Library Permissions Packet,
AND
a CD (compact disc) containing a single PDF file of the completed, corrected Master’s Capstone document (with all pages including Cover page, Certification page, Abstract, Table of Contents, and Appendices if there are any). The CD must be fastened in some way to the inside of the file folder. The following must be written directly on the CD:
Candidate’s last name, first name, F#, and course number (EDU 659 or EDU 690).
- ⇒ After the Capstone Advisor/Course Instructor signs off on the Capstone Certification page, submit the file folder and all its required contents to the Department Chair of your Program for signature.

Depending on the timing of the submission, the Capstone Advisor/Course Instructor or the candidate will submit the completed capstone to the Department Secretary of the candidate’s Program. If the Department Secretary is unavailable, the capstone folder may be submitted to the Secretary of the other COE Department. The candidate will in a timely fashion receive an email receipt from the Secretary of the candidate’s Program Department to verify the date of submission. After the Department Chair signs off on the Capstone Certification page, the Dept. Secretary will see that the capstone is sent to the COE Dean for signature.

- ⇒ An electronic copy of the Cover page, the fully signed Project Certification page, and Abstract will be stored with the final electronic copy of the Master’s Capstone on a server as part of the Reed Library Archives.

Professional Standards for Master's Capstone

This *Handbook* applies to all Graduate Programs in the College of Education; therefore there are a number of Professional Standards that apply.

Council for Exceptional Children (CEC) Program Standards For Special Education Teacher Preparation (2002)

www.cec.sped.org/Content/NavigationMenu/ProfessionalDevelopment/ProfessionalStandards

Standard 1: Foundations	Standard 6: Language
Standard 2: Development and Characteristics of Learners	Standard 7: Instructional Planning
Standard 3: Individual Learning Differences	Standard 8: Assessment
Standard 4: Instructional Strategies	Standard 9: Professional / Ethical Practice
Standard 5: Learning Environments & Social Interactions	Standard 10: Collaboration

InTASC -- Interstate Teacher Assessment and Support Consortium --Standards (2011)

www.ccsso.org/Documents/2011/InTASC%202011%20Standards%20At%20A%20Glance.pdf

- Standard 1: Learner Development
- Standard 2: Learning Differences
- Standard 3: Learning Environments
- Standard 4: Content Knowledge
- Standard 5: Application of Content
- Standard 6: Assessment
- Standard 7: Planning for Instruction
- Standard 8: Instructional Strategies
- Standard 9: Professional Learning and Ethical Practice
- Standard 10: Leadership and Collaboration

IRA -- International Reading Association *Standards For Reading Professionals (2010)*

www.reading.org/General/CurrentResearch/Standards/ProfessionalStandards2010.aspx

- Standard 1 Foundational Knowledge
- Standard 2 Curriculum and Instruction
- Standard 3 Assessment and Evaluation
- Standard 4 Diversity
- Standard 5 Literate Environment
- Standard 6 Professional Learning and Leadership

TESOL/CAEP Standards for P–12 Teacher Education Programs (2010)

www.tesol.org/advance-the-field/standards/tesol-caep-standards-for-p-12-teacher-education-programs

- Domain 1 Language
- Domain 2 Culture
- Domain 3 Planning, Implementing, and Managing Instruction
- Domain 4 Assessment
- Domain 5 Professionalism

NBTPS -- National Board for Professional Teaching Standards (2002)

http://www.nbpts.org/the_standards/the_five_core_propositions

The five core propositions that express the effectiveness, knowledge, skills, dispositions, and commitments of the accomplished teacher:

1. Teachers are committed to students and their learning.
2. Teachers know the subjects they teach and how to teach those subjects to students.
3. Teachers are responsible for managing and monitoring student learning.
4. Teachers think systematically about their practice and learn from experience.
5. Teachers are members of learning communities.

Intended Learning Outcomes (ILOs) for EDU 570 Course of Research Sequence

These next sections of the *Handbook* cross-reference the Professional Standards listed in the previous section to the appropriate Intended Learning Outcomes (ILOs) for each course in the Research Sequence of each COE graduate program.

As a result of successfully completing this course, Candidates will be able to:	Professional Standards*	Performance-based Assessments/assignments
Knowledge 1. understand the concepts and components of empirical research, including statement of problem, literature review, methodology, data collection and analysis, findings, and implications.	CEC 1, 7 INTASC 4, 9 IRA 1, 6 TESOL 3a, 5a NBPTS 1, 2	Inquiry Question Professional Training Discussion Leader Literature Review Reflection
2. identify the components of empirical research in published studies.	CEC 1 INTASC 4, 9 IRA 1, 6 TESOL 5a NBPTS 2	Discussion Leader Literature Review Reflection
3. read a variety of education research and analyze its scientific quality and applicability to educational practice.	CEC 4, 7 INTASC 9 IRA 1, 2, 5, 6 TESOL 3a,b, 5a NBPTS 1, 2	Professional Training Discussion Leader Literature Review Reflection
4. develop skills for locating and retrieving research literature	CEC 9 INTASC 4, 9 IRA 1, 6 TESOL 5a, 5b NBPTS 2 5	Professional Training Literature Review Reflection
5. appropriately use the citation format of APA (American Psychological Association).	CEC 9 INTASC 4, 9 IRA 1, 2, 6 TESOL 2a,b, 5c NBPTS 2 5	Professional Training Literature Review Reflection
Pedagogy 6. apply educational research in Candidate's instructional practices.	CEC 4, 7 INTASC 5, 8 IRA 1, 2 TESOL 3a,b 5a,b NBPTS 1,2,4,5	Inquiry Question Discussion Leader Literature Review Reflection
7. generate in writing a research question (question may (or may not form the basis for the Candidate's thesis/capstone project).	CEC 1, 7 INTASC 9 IRA 1, 6 TESOL 5a NBPTS 1,2,4,5	Inquiry Question Literature Review Reflection
Diversity 8. recognize research limitations that may be reflective of bias or a disregard for diversity.	CEC 9 INTASC 1, 2 IRA 1, 4 TESOL 2b, 5a NBPTS 1, 4	Professional Training Discussion Leader Reflection Literature Review

9. understand the requirement for addressing issues and variables related to diversity in research design.	CEC 9 INTASC 1, 2 IRA 1, 4 TESOL 2a, 5a NBPTS 1, 4	Inquiry Question Professional Training Reflection, Discussion Leader Literature Review
Professionalism 10. communicate in various formats their research understandings and findings.	CEC 7, 10 INTASC 9, 10 IRA 6 TESOL 5b, 5c NBPTS 2, 5	Discussion Leader Reflection Literature Review
11. articulate the ethical principles inherent in education research, especially research with human subjects.	CEC 1, 9 INTASC 9 IRA 6 TESOL 2a, 5b NBPTS 1, 5	Professional Training Discussion Leader Reflection

(* ILOs will be aligned with the cross-cutting theme of Diversity after standards are made available and upon further direction from CAEP)

Intended Learning Outcomes (ILOs) for C&I Research Sequence

Second Course EDU 660 As a result of successfully completing this course, Candidates will be able to:	Professional Standards*	Final Course EDU 690 As a result of successfully completing this course, Candidates will be able to:	Professional Standards*
reflect on core educational values and relate to a Master's Capstone topic. Identify a problem statement or question related to the topic.	CEC 9 INTASC 9 NBTPS 2, 5	implement proposed research study or curriculum product	CEC 9 INTASC 5, 9 NBTPS
review current research on Master's capstone topic and find credible, relevant, and similar research articles on the topic	CEC 9 INTASC 9 NBTPS 2, 5	collect data to answer a research question or create curriculum product to address problem	CEC 9 INTASC 9 NBTPS 4, 5
synthesize research on Master's capstone topic	CEC 9 INTASC 9 NBTPS 2, 5	analyze data to answer research question or create curriculum product to address problem	CEC 9 INTASC 9 NBTPS 4, 5
articulate a research question or curriculum problem	CEC 9 INTASC 9 NBTPS 2, 5	reflect on the research process, the product created or the research question answered, and future direction	CEC 9 INTASC 9 NBTPS 4, 5
write a proposal for the Master's capstone including a literature review, articulated research question or curriculum problem, and articulated methodology	CEC 9 INTASC 9 NBTPS 2, 5	write a Master's Capstone document articulating the research process and in accordance with the Master's Thesis/Capstone Project Handbook	CEC 9 INTASC 9 NBTPS 4
write and submit a proposal for Human Subjects review (if applicable)	CEC 9 INTASC 9 NBTPS 2, 5	-----	-----

(* ILOs will be aligned with the cross-cutting theme of Diversity after standards are made available and upon further direction from CAEP)

Intended Learning Outcomes (ILOs) for TESOL Research Sequence

Second Course EDU 660 As a result of successfully completing this course, Candidates will be able to:	Professional Standards*	Final Course EDU 690 As a result of successfully completing this course, Candidates will be able to:	Professional Standards*
reflect on core educational values and relate to a Master’s Capstone topic. Identify a problem statement or question related to the topic.	CEC 9 INTASC 9 NBTPS 2, 5	implement proposed research study or curriculum product	CEC 9 INTASC 5, 9 NBTPS
review current research on Master’s capstone topic and find credible, relevant, and similar research articles on the topic	CEC 9 INTASC 9 NBTPS 2, 5	collect data to answer a research question or create curriculum product to address problem	CEC 9 INTASC 9 NBTPS 4, 5
synthesize research on Master’s capstone topic	CEC 9 INTASC 9 NBTPS 2, 5	analyze data to answer research question or create curriculum product to address problem	CEC 9 INTASC 9 NBTPS 4, 5
articulate a research question or curriculum problem	CEC 9 INTASC 9 NBTPS 2, 5	reflect on the research process, the product created or the research question answered, and future direction	CEC 9 INTASC 9 NBTPS 4, 5
write a proposal for the Master’s capstone including a literature review, articulated research question or curriculum problem, and articulated methodology	CEC 9 INTASC 9 NBTPS 2, 5	write a Master’s Capstone document articulating the research process and in accordance with the Master’s Thesis/Capstone Project Handbook	CEC 9 INTASC 9 NBTPS 4
write and submit a proposal for Human Subjects review (if applicable)	CEC 9 INTASC 9 NBTPS 2, 5	-----	-----

(* ILOs will be aligned with the cross-cutting theme of Diversity after standards are made available and upon further direction from CAEP)

Intended Learning Outcomes (ILOs) for Literacy Research Sequence

Second Course EDU 651 Intended Learning Outcomes As a result of successfully completing this course, Candidates will be able to	Professional Standards*	Final Course EDU 659 Intended Learning Outcomes As a result of successfully completing this course, Candidates will be able to	Professional Standards*
identify curricular needs or research problems/issues that are based on the major components of reading and writing, and/or language development	IRA 1, 6 INTASC 4, 9 NBTPS 2	select a topic for personal research and study that is relevant to current literacy foundations or literacy learning or instructional practices for literacy	IRA 1, 6 INTASC 4, 9 NBTPS 2
critically analyze and critique literacy research in terms of theory, design, and content (including psychological, sociological, and linguistic foundations of literacy)	IRA 6 INTASC 4, 9 NBTPS 2	provide a coherent rationale (including relationship to IRA Standards and NYS ELA Standards) for that selection	IRA 1, 6 INTASC 4, 9 NBTPS 2
design a research study, or Professional Development Project, that demonstrates a clear understanding of the research process and addresses key issues in the foundations of literacy	IRA 1, 6 INTASC 4, 9 NBTPS 2	understand major empirical research that describe the cognitive, linguistic, motivational, and socio-cultural foundations of reading and writing development, processes, and components	IRA 1, 6 INTASC 4 NBTPS 2
demonstrate knowledge of the ethics and procedures for conducting research with human subjects	IRA 6 INTASC 9 NBTPS 1	collect data to answer a research question	IRA 6 INTASC 9 NBTPS 4, 5
write a proposal for the Master's Project including a literature review, articulated research question or issue and articulated methodology	IRA 6 INTASC 9 NBTPS 4, 5	reflect on the research process, the product created or the research question answered, and future direction	IRA 6 INTASC 9 NBTPS 4, 5
demonstrate knowledge of the ethics and procedures for conducting research with human subjects	IRA 6 INTASC 9 NBTPS 1	produce a Master's capstone that articulates the research process and is in accordance with the Master's Project Handbook	IRA 6 INTASC 9 NBTPS 5
-----	-----	Disseminate knowledge to literacy educators, other teachers, and/or other members of the educational community.	IRA 6 INTASC 10 NBTPS 5

(* ILOs will be aligned with the cross-cutting theme of Diversity after standards are made available and upon further direction from CAEP)

Examples of Master’s Capstone Options for C&I/TESOL Graduate Programs

Research Options				Curriculum Project
	Research to Practice	Single Case Design Studies	Qualitative and Quantitative Research (other than Research to Practice)	
definition	Research to practice (sometimes called Action Research) is one where practitioners look systematically at ways to deal with issues they are close to. (e.g. instructional practices, social issues of schooling, behavior modification)	Single case research designs are a rigorous, scientific methodology used to define basic principles of behavior and establish evidence-based practices (Horner et al., 2005).	Quantitative Research describes with numbers and can include: survey, co-relational, causal-comparative, experimental, or descriptive. Qualitative Research describes with words and can include: Ethnography or Historical Research. Historical research may include artifacts. Books, periodicals, diaries, videotapes, and transcripts of face-to-face discussion.	A Curriculum Project contributes to the field of teaching by enhancing communication of a subject matter. (e.g. a teacher’s guide, and instructional manual, the development of supplemental teaching methods)
purpose	To investigate and improve the author’s practice	To solve school-related problems related to academic, behavioral and/or interpersonal performance of children and youth	To investigate meaningful questions surrounding schooling	To solve school-based problems by improving curriculum
use	Improve classroom instruction, improve school conditions	Improve classroom instruction, enhance pupil performance, and/or solving naturally occurring educational problems	Inform schooling related to school factors inside or outside the classroom.	Increase professional knowledge in area of expertise
example titles	Does the Jigsaw Method Increase Student Enjoyment among Third Graders? Effects of Strategic Recess Scheduling on Student On-Task Behaviors among First Graders .	<i>Effects of a Self-Monitoring Intervention Package on Special Education Students’</i> <i>Organizational Skills in an Inclusion Classroom</i> <i>Effects of Group Contingencies and Mystery Motivators on 7th Grade Students’ Homework Completion and Accuracy</i>	<i>Parent’s Attitudes toward Bilingualism and the role of School in Promoting Bilingualism</i> <i>Attitudes of Middle School Personnel Toward Heritage Language Maintenance for Language Minority Students</i>	<i>Creating Web Quests in Alignment with NYS History Standards to Encourage Higher Order Thinking</i> <i>Calculator Use as Replacement Units for Students with Special needs Learning Algebra</i>
Suggestion for dissemination	Improve instruction, present and use at school site, publish in teacher-researcher journal	Improve instruction, enhance classroom behavior, and/or improve interpersonal relationships in school	Publish in educational journal, evidence of scholarship for entrance to doctoral program	Improve curriculum and instruction, present at use at school site

Examples of Master’s Capstone Options for Literacy Graduate Programs

Aspect	Option 1 Empirical Research	Option 2 Professional Development Project
Definition	an inquiry into a literacy-related problem/issue where researcher generates own raw data through experiment, observation, survey, etc.	an inquiry into a literacy-related problem/issue where researcher gathers data from the findings of previously completed research studies
Purpose	To investigate a literacy-related problem/issue through direct and personal means	To investigate a literacy-related problem/issue through understanding and synthesis of previous research
Use	To increase the knowledge in the field of literacy and/or directly apply the knowledge to practice (including the “action” of the researcher as practitioner in the classroom)	To increase the knowledge in the field of literacy and apply the knowledge to the professional development of practitioners in the field
Sample Titles	<p><i>Differentiated Instruction Implemented in a Grade 10 English Classroom: A Case Study</i></p> <p><i>The Impact Of Interactive Whiteboard Instruction Compared To Chalkboard Instruction For First Graders</i></p> <p><i>Pigeon Talk: How Picture Books Teach Students To Write Interactive Digital Storybooks</i></p>	<p><i>What Research Shows About Using Prediction Strategies With Technology as Pre-Reading Activities</i></p> <p><i>The Application of What Research Says About The Effect of Dramatic Play on Preschool Learners: A Literacy Coaching Project</i></p>
Dissemination	Distribution of knowledge through making Masters Project available in campus library; presenting research in oral presentation to colleagues, literacy educators, and teachers via conference presentations or workshops.	Distribution of knowledge through making Masters Project available in campus library; presenting research in oral presentation to colleagues, literacy educators, and teachers via conference presentations or workshops.

Sample Outlines of Master’s Capstones in C&I/TESOL

In general, research and curriculum options for the Master’s Project will follow the outline below. However, the course instructor will have the final authority to approve any modifications to this outline. Because of this, guidelines may vary by course instructor.

<i>Research Options</i>		<i>Curriculum Option</i>
Content Required	Name of Section	Content Required
Introduce the problem Explore importance of problem	Introduction	Introduce the problem Explore importance of problem
Describe relevant scholarship State research question State purpose of research study State theoretical framework	Review of Literature	Describe relevant scholarship State curriculum problem State purpose of curriculum project State theoretical framework
Detailed account of how the study was conducted Conceptual and operational definitions Section describing participants and setting Description of procedures used in study Description of interventions used (if applicable) Description of instruments used (along with psychometric properties) Description of research design Validity considerations	Methodology	Detailed account of how the curriculum was developed Conceptual and operational definitions Section describing intended audience for use of this curriculum Description of all steps taken to design the curriculum Description of the scope and sequence of the entire curriculum including a detailed standards alignment Validity considerations
Summarize the collected data and the analysis performed Present enough data to justify the conclusions Present all data, including those that run counter to expectation and missing data	Results	Insert completed curriculum
Evaluate and interpret the implications of results Draw inferences and conclusions from results Emphasize theoretical or practical consequences of results Similarities and differences between your results and the work of others should be used to contextualize, confirm, and clarify your conclusions.	Discussion	Reflect on curriculum development. Did your final curriculum project match your research question and design? How so? What are the limitations of the curriculum project? How would you do it differently next time? What are the implications of it? How will you use and disseminate this curriculum project? Future plans?
APA format	References	current APA format
CITI certificate	Appendix	CITI certificate, etc.

Sample Outlines of Master’s Capstones in Literacy

Option 1: Empirical Research

Project is a research study that generates its own data on a topic relevant to literacy. If the project requires that the researcher work with people, then research will require approval by the Human Subjects Review Committee.

Cover Page

Project Certification Page

Abstract

Table of Contents

Chapter 1: Introduction

Statement of Problem

Background

Terminology

Theoretical Framework

Rationale

Chapter 2: Literature Review

Introduction to the Review

Subheadings (the sections/categories the review divides into)

Summary of the Review

Chapter 3: Methodology

Design of Study

Subjects (or Participants --whichever term applies to the study)

Procedures:

Data Collection

Data Analysis

Chapter 4: Results and Interpretation

Results

Reliability of Data

Interpretation of Data

Chapter 5: Discussion and Conclusion

Overview of Study and Findings

Significance of the Findings

Limitations of the Findings

Conclusion: Answer to the Research Question

Recommendations for Future Research

(or plans for action—such as using data to influence own teaching practices)

References (APA current edition)

Appendix (copies of research instruments or data analysis charts)

Sample Outlines of Master’s Capstones in Literacy

Option 2: Professional Development Project

Project is an extensive literature review that produces finding that are then made applicable for literacy educators, teachers, and members of the educational community. The typical format for dissemination is some form of professional development project such as conference presentation or workshop or video.

Cover Page

Project Certification Page

Abstract

Table of Contents

Chapter 1: Introduction

Statement of Problem

Background

Terminology

Theoretical Framework

Rationale

Chapter 2: Literature Review

Introduction to the Review

Subheadings (the sections/categories the review divides into)

Summary of the Review

Chapter 3: Methodology

Data Collection

Data Analysis (e.g., coding techniques)

Chapter 4: Results and Application

Results of the Review

Application of Results to a Professional Development Project

Design of Professional Development Project

Literacy Coaching Workshop Goals and Objectives

Proposed Audience and Location

Proposed Workshop Format and Activities

Proposed Resources for Workshop

Proposed Evaluation of Workshop

Workshop Ties to Professional Standards (state and IRA)

Chapter 5: Discussion and Conclusion

Overview of Study and Findings

Significance of the Findings

Limitations of the Findings

Conclusion: Answer to the Research Question

Recommendations for Future Research

(or plans for action—such as using data to influence own teaching practices)

References (APA current edition)

Appendix (agenda/outline of coaching workshop; and evaluation of ProfDev)

Candidate Checklist for Submission of Capstone

Graduate Candidate

Your Program Capstone will be deemed “completed” upon evaluation and approval of the submitted Master’s Capstone by the Capstone Advisor/Course Instructor and submission of a course grade by the Course Instructor.

However, it is *your* responsibility to submit your Program Capstone to your Capstone Advisor/Course Instructor for evaluation and to continue revising and resubmitting it until your Capstone reaches approval level. This page provides you with a checklist so you can track your progress in preparing your capstone for submission.

- _____ Have proofread the entire capstone for grammar and punctuation errors.
- _____ Have checked all the References for correct APA format.
- _____ Have added an Appendix if appropriate
- _____ Have written a cover page according to the template in this Handbook.
- _____ Have written an Abstract and included it in the capstone document.
- _____ Have created a Table of Contents and double-checked the page numbers.
- _____ Have sequenced all pages (including Certification) as per the order in this Handbook.
- _____ Have created an electronic version (PDF) of the entire capstone (cover, abstract, TofC)
- _____ Have printed a paper copy of the Cover page
- _____ Have printed a paper copy of the Capstone Certification page
- _____ Have printed a paper copy of the Abstract.
- _____ Have printed a paper copy of the Reed Library Permissions Packet.
- _____ Have filled in and signed the paper copy of the Reed Library Permissions Packet.
- _____ Have burned the one file electronic version (PDF) of the capstone onto a CD.
- _____ Have written *on* the CD
 - _____ my last name (family name)
 - _____ my first name
 - _____ my Fredonia ID # (F#)
 - _____ my course number (EDU 659 or EDU 690).
- _____ Have obtained a plain standard-size office file folder.
- _____ Have written on the folder tab
 - _____ my last name (family name)
 - _____ my first name
 - _____ my Fredonia ID # (F#)
- _____ Have placed inside the folder the “hard copy” (paper-printed copy) of
 - _____ the Cover page
 - _____ the Capstone Certification page
 - _____ the Abstract
 - _____ the completed and signed Reed Library Permissions Packet.
- _____ Have fastened the CD inside the folder in some way (maybe in an envelope and stapled)
- _____ Have smiled with happiness as handed the folder and contents to my Capstone Advisor.

Upon Dean approval, the Dean will sign the Certification page and have the Registrar and you informed of your successful completion of your capstone.