



Promoting Learning  Development Across the Lifespan

**George Mason University  
College of Education and Human Development  
Secondary Education Program  
3 credits Spring 2019**

**EDUC 675.001: RESEARCH IN SECONDARY EDUCATION**

Meeting Day/time: Mondays 4:30 p.m.–7:10 p.m.

Class Location: Thompson 1018 - Fairfax

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**Prerequisite(s):** EDCI 790 and licensure; enforced by registration system

**Co-requisite:** M.Ed. Program Exit Requirement: *Teacher Research Impact Project*

**Note:** All students enrolled in this course must be working daily in or have access to a classroom setting classroom setting, since the major course assignment involves a classroom-based teacher research project. *If you do not have your own classroom, you will need to let the instructor know before or during the first class. Alternative arrangements used successfully in the past will be offered. \*See J. Recko exemplar under spring 2015 exemplars in Bb for a study completed by a student without a classroom.*

**UNIVERSITY COURSE CATALOG DESCRIPTION**

Links evidence of student learning to make informed instructional decisions. Engages students in critiquing various research paradigms, reviewing literature, and systematically collecting and interpreting evidence to improve practice. Facilitates completion of the M.Ed. exit requirement.

**COURSE OVERVIEW**

The major purpose of this course is for you to learn how to design and conduct a teacher research project situated in a classroom with the goal of improving your teaching and your students' learning. The course is designed to promote a professional teaching and learning community with peer review critical friend support. Throughout the course, you are completing a research component of your study in an informal manner that you will later insert into your final polished

paper. Your ultimate success with the final project requires your ongoing commitment to each step in the process and collaboration with peers for reciprocal review. The course provides an opportunity for your personal and ongoing professional development as a teacher; to consider who are you as a teacher and who you are becoming– your teacher professional identity). As a pedagogical self-study of teaching scholar, I will work to model the process I ask of you and share my ongoing self-study of teacher research and ideas for innovative ways to collect data. I work to live and model what I profess as a life-long learner through my ongoing professional development and collaboration with my self-study of teaching colleagues. Teaching is a beautiful professional craft filled with complexities and challenges, and also with much creativity and joy.

### **COURSE DELIVERY METHOD**

The course will be taught through a variety of activities to support the development of your teacher research projects involving: whole class and small group discussions, group, pair and group work, online work, and through dialogue and reflections of/in practice. Individual and group consultations are purposefully built into and integrated throughout the course design to support your ongoing efforts from launching your project to then enacting and writing about your teacher research.

### **LEARNER OUTCOMES**

This course is designed to enable students to:

1. demonstrate an understanding of the process and components embedded in teacher research by conducting and assessing a chosen teacher researcher inquiry situated in their classroom and with attention to its impact on students' learning;
2. design a research proposal which makes explicit links between theory and practice;
3. examine ethical considerations when conducting teacher research;
4. conduct teacher research using the self-study action research method which includes: articulating a research question, research rationale and proposal; review of related literature, design of methods, data collection/analysis, findings, discussion and implications with reflection of your role in the impact of learning for your students, yourself, and the education field; and abstract;
5. participate in “critical collaborative inquiries” (Samaras, 2011) to gain multiple and perspectives and collaborative experiences and in interpreting research and for validation and peer review of research;
6. demonstrate integration of national and state standards for content and pedagogy as related to the research question by reflecting on their own teaching practice and its impact on students' learning respective to students' discipline;
7. demonstrate skills and applications of visual and digital literacies in a collaborative teacher research project and teacher research impact collaborative presentation.

### **RELATIONSHIP TO PROFESSIONAL STANDARDS**

Students will demonstrate an understanding and application of subject area standards aligned with the *National Content Standards* and identified by their Specialized Professional Association (SPA); and an understanding and application of teaching and learning standards as outlined by *INTASC*. National Content Standards for respective discipline: NCSS, NCTE, NCTM, NSTA

National Council for the Social Studies <http://www.ncss.org/>

National Council of Teachers of English <http://www.ncte.org/>

National Council of Teachers of Mathematics <http://www.nctm.org/>

National Science Teachers Association <http://www.nsta.org/>

<http://books.nap.edu/readingroom/books/nses/>

INTASC: Interstate New Teacher Assistance and Support Consortium

[http://programs.ccsso.org/projects/interstate\\_new\\_teacher\\_assessment\\_and\\_support\\_consortium/](http://programs.ccsso.org/projects/interstate_new_teacher_assessment_and_support_consortium/)

Ballet for Kids & Partnership for 21st Century Skills and the professional guidelines, National Board for Teaching Standards: <http://www.battelleforkids.org/networks/p21>

Virginia State Standards

- Virginia Department of Education <http://www.pen.k12.va.us/>
- State of Virginia, SOL Resources  
[http://www.doe.virginia.gov/testing/sol/standards\\_docs/](http://www.doe.virginia.gov/testing/sol/standards_docs/)

State of Virginia Standards of Learning Test Information

<http://www.doe.virginia.gov/testing/index.shtml>

## REQUIRED READINGS

### Required Readings: Articles and Text

Racines, D. (September, 2017). *Using Self-Study to Advance Research in TESOL Teacher Education: Examining my English Learner Identity to Improve My Effectiveness as an Instructional Coach with Teachers of English Learners*. [\*TESOL Teacher Education Interest Section Newsletter\*](#). [located on Bb in req. readings folder]

Samaras, A. P. (2011). *Self-study teacher research: Improving your practice through collaborative inquiry*. Thousand Oaks, CA: Sage.

Online resources also available at: <http://www.sagepub.com/samaras/>

Samaras, A. P., & Roberts, L. (2011). Flying solo: Teachers take charge of their learning through self-study research. *Learning Forward, Journal of Staff Development*, 32(5), 42-45. [located on Bb in req. readings folder]

### Required Readings of CEHD Alumni ~ Exemplar Papers

[All exemplars are located in the Required Readings folder on Bb]

Allan, J. L. (2018). The art of culturally responsive teaching in a diverse classroom. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Irwin, S. (2018). Using assessment and reflection strategies to improve teacher differentiation and student self-regulation in the science classroom. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Meyers, E. (2018). Building self-efficacy in female high school science students. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Piskor, D. (2018). Students with a voice: Strategies to increase participation and discussion. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Shaughnessy, M. (2018). Facilitating risk-taking in the English classroom. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

*Additional exemplars will be showcased during class to highlight specific research components.*

## COURSE PERFORMANCE EVALUATION

### Attendance, Participation, and Peer Review (10 pts)

#### Attendance and participation

Attendance and participation at all classes, for the entire class period is a course expectation and absence will affect your grade. Successful completion of this course requires attendance at all Face-to-Face classes and active participation in the online critical friend work. Being on time is also essential and lateness will affect your grade. Class participation is a factor in grading; instructors may use absences, tardiness, or early departures as de facto evidence of non-participation and as a result lower the grade. It is your responsibility to notify the instructor ahead of time if you will arrive late or if you must miss class. You are responsible in working with your Critical Friend Team (CFT) for missed material.

Critical friends provide support as well as a feedback loop to improve your practice. It is *critical* to have friends in research but critical friends are *not critical* in their approach with each other (Samaras, 2011). Establish ground rules with “critical friends” and visit them often. Demonstrate positive professional dispositions. Professionals are responsible, ethical, and accountable.

\*Please read the Critical Friends folder on Bb under the syllabus folder. It pulled from the text.

You are expected to actively participate in class and in online discussions with openness, consideration, and effort to “hear for” and “**listen to**” **others as you also seek to be understood**. You might like to listen to this TED talk on the importance of listening.

[https://www.ted.com/talks/julian\\_treasure\\_5\\_ways\\_to\\_listen\\_better?language=en](https://www.ted.com/talks/julian_treasure_5_ways_to_listen_better?language=en)

#### Peer Review- Critical Friend Work

Your in-class activities involve sharing weekly updates, brainstorming ideas as a teacher about the classroom dilemma you are researching, exchanging ideas for strategies and lessons, and sharing how you are integrating standards in meaningful ways. As part of your course participation, you will have the opportunity to collaborate with critical friends as you develop your teacher research project. Critical Friend Inquiries (CFI, Samaras, 2011) are designed for peer review with support and to provide alternative perspectives on interpretation to increase the validity of your research. For us, those will be in the Log forum where you will post and receive peer feedback of your ongoing thinking and development of your final research project.

**It is your responsibility to respond to at least one critical friend team member for each log. Please assure that each team member receives a peer review. Place your feedback in the Log Forum discussion thread for each log. This is part of your participation grade. You are also required to provide feedback on one peer draft research report using tracking and comment bars.**

### Assignments

#### Readings

You are expected to complete all readings and come prepared to contribute to critical reflections and bring questions as they arise and especially as related to your research project.

*Make it a habit to write regularly and save your work in multiple places.*

Each assignment helps you build your final paper so missing one, pushes you immediately behind. Since this is a professional development course (post licensure), high quality work (i.e., “A” work) is expected on all assignments and in class participation. I will support that!

Title each assignment with your last name and the name of the project/assignment, e.g., Smith.Log1.01.28.19. Use Times Roman 12 pt. font, double-spaced for all assignments. For full consideration, all assignments are due and **posted electronically on Bb prior to the beginning of class on the day and time they are due**, unless otherwise announced. **It is your responsibility to check the Assignment/Review Discussion Thread each week where I post comments to you. I will email your grade to you individually.** Late entries will not be accepted without penalty, excepting extraordinary circumstances. I am available to clarify and assist on projects and assignments, yet with your contacting me within a reasonable timeframe. I reserve the right to add, alter, or omit any assignment as necessary during the course of the semester.

\*Please note: You will also find descriptions of assignments located in our text with examples from GMU secondary education alumni but the text and exemplars are resources. Use the templates and guidelines on the syllabus. That is, the purpose of the readings are to support your work but I have modified the assignments over time.

### **Possible Points**

- Attendance, Participation, and Peer Review (10 pts)
- Digital Self-Study Researcher Log (3 pts. each) (30 total)
- Draft 1 and CF Review (participation)
- Draft 2 for Professor ‘Red Flag’ check (formative)
- Self-Study Action Research Project (60 pts)
- Collaborative Teacher Research Impact Presentation (Master’s Exit Req)

*Total = 100 points*

### **Descriptions of Assignments:**

#### **1. Digital Self-Study Researcher Log (3 pts. each)**

Researchers systematically keep a running log of their thinking and actions as a part of the research process. Self-study scholars pay particular attention to the role they play in the research by documenting and cataloguing their reflections and the impact in the change they are exploring. These logs will help you to build your paper as you can cut/paste portions into the final research paper template located with the syllabus folder on Bb.

*\*\*\*For those who are using a digital copy of the text, I have included the Chapter number and a heading of where the reading is located.*

Understanding that many of you are in your first year teaching and working to maximize our face to face time, I have designed the log assignment to support your ongoing efforts towards a successful final project. **Please bring your laptop to class so you can complete the logs that are noted as in-class activities and post. Half of the logs are written during class with peer feedback.** (with ideas from one of my former students! S. Donnelly visit <https://rotatrclub.wordpress.com/>)

#### **Digital Self-Study Researcher Log #1: (in class activity)** ***Exploring your research question***

*It must be love!* You should choose a research question that really matters to you. It should be something you're curious about and willing to spend time researching and learning about. To quote one of my former students, "If you aren't eager to spend several days curled up reading about your topic, then it's not love, and you need to ditch it and find another topic" (Roberts, GMU alumna, 2009). Begin to articulate why this question for you and why now. What is the outgrowth of this puzzlement?

Read pp. 114-116 in text. [Ch. 6 "Author your research question" heading for digital text]

*Prompts:*

- *What are you curious about in your teaching?*
- *What are you curious about with regards to the learning of your students?*
- *What do you want to know more about?*
- *What do you want to start, reshape, or change, in your teaching?*
- *What do you want to keep doing in your teaching? What do you really do well? You could systematically document what is working.*
- *What might your students wonder about, need, or want? Ask them in a survey.*

### **Digital Self-Study Researcher Log #2:**

#### ***Considering your education-related life history***

Read and see prompts on Critical Friend inquiry 5.1 on pp. 95-98 in text. [Chapter 5. "Personal History Self-Study Method"]

This assignment will help you explore how personal learning experiences and culture shape your inquiry, practice, and your students' learning.

Consider how your preliminary research question might connect with your experience of school, how school felt, and how you best learned and when you felt most valued, connected, and at peace – or least valued, most disconnected, and most at war with yourself and with school. Where does this question come from for you? How might your students view the issue from their perspective and experiences?

Also consider:

*Prompts:*

- *How do your experiences help shape the way you teach?*
- *Comment on critical friend reflections.*

### **Digital Self-Study Researcher Log #3: (in class activity)**

#### ***Observing your classroom or recall from your internship or field experiences***

Read pp. 118-121 in text. [Chapter 6 "Observe your classroom"]

*Prompts:*

- *When you observe your classroom consider...*
- *What happens when...?*
- *What is...?*
- *How...?*
- *Draw a picture of something in your classroom that draws your attention.*
- *Write a curator title under your picture.*
- *Ask a critical friend to react to your picture and title as if they are walking through a museum.*

#### **Digital Self-Study Researcher Log #4: (in-class activity)**

##### ***Naming your research question and rationale***

Use 121-126 in text. [Chapter 6. “Articulate your rationale and proposal”]

*Prompts:*

- *Try to name your curiosity or research question (RQ).*
- *What do you care about it?*
- *Why should others care about it?*
- *What difference might it make in your students’ learning?*
- *Ask your critical friends: What questions do you have about my RQ?*

#### **Digital Self-Study Researcher Log #5: (in-class activity)**

##### ***Collecting data***

Read Chapters 8 & 9 in text.

*Prompts:*

- *What data might you collect? Consider student work, student feedback, anecdotes, photos, your reflections and notes.*
- *Ask your critical friends: What kinds of data would you suggest I collect?*

#### **Digital Self-Study Researcher Log #6:**

##### ***Enacting pedagogical strategies***

Read Chapter 7 in text.

*Prompts:*

- *Keep an observation and enactment log of your efforts and impact (see Piskor exemplar p. 50).*
- *What happens when...?*
- *What might happen differently if I ...?*
- *What are the keeper strategies for next time you teach this content? What would you change and why?*
- *Ask your critical friends if any of your strategies present any ethical concerns.*

#### **Digital Self-Study Researcher Log #7:**

##### ***Making the most of your literature review (begin during week 2!)***

Read pp. 127-134 in text. [Chapter 6 “Frame your question within the literature”]

*Prompts:*

- *Search for experts on your topic and read. What are they saying about your topic?*
- *How might your review of the literature guide you to act in your classroom?*
- *What ideas or strategies might you modify and enact? Plan and try them out.*
- *What does the literature review add to your understanding of your research topic?*
- *What common topics and themes have you found in the literature?*
- *Ask your critical friends: What other readings and experts do you recommend about my topic?*

#### **Digital Self-Study Researcher Log #8: (in-class activity)**

##### ***Analyzing your data***

Read Chapters 10 & 11 in text.

*Prompts:*

- *What patterns do you see in your data?*
- *What does the data show?*

- *Bring samples of your data to calls for your critical friends to validate.*
- *What further data might you collect based on what you see?*
- *What suggestions do your critical friends have?*

### **Digital Self-Study Researcher Log #9:**

#### ***Capturing your findings***

Read Chapter 12 in text.

Prompts:

- *Aim for 3 -5 major findings. What is the narrative/story you see?*
- *What is important? Surprising? Puzzling?*

### **Digital Self-Study Researcher Log #10:**

#### ***Discussing the impact and implications***

Prompts:

- *What does your study suggest for your next steps and further research?*
- *Why is your study important to you and others?*
- *Present your findings to critical friends and school colleagues.*

### **2. Peer and Professor Review of Draft 1 (participation grade)**

Post your draft for peer review. Critical friends use actual evaluation rubric to provide peer review along with tracking and comments on the peer draft.

### **3. Professor “Red Flag” check of Draft 2 with rubric (non-graded)**

### **4. Self-Study Action Research Project (60 pts)**

For your final report, use the TK20 Assessment Rubric below with attention to each detail. Look at the headings at the beginning of the semester so you can see where you are headed. The final paper template headings are posted in the syllabus folder in Bb.

### **Please use this checklist for common errors before submitting your final research paper:**

1. All teacher research reports must adhere to APA format. Your project should be useful to you and your students.
2. Use Times Roman 12 pt. font, double-spaced throughout paper including between paragraphs.
3. Do not use right justification for formatting.
4. Do not use any identifying information of students, staff, school, or school system.
5. Cite all works properly. Need at least 10 references.
6. Spell out acronyms when you note them the first time. e.g., English Language Learners (ELL).
7. Spell out all contractions, e.g., don't = do not
8. Include your data chart within the text of your paper.
9. Change everything to past tense, e.g., “I collected” instead of “I will collect.”
10. Include an appendix electronically only.
11. Please print final copy single sided.
12. Check that your abstract is written in third person and includes an implications sentence.
13. Just clip report at the top; no report binders or plastic sleeves are necessary.

### **5. Collaborative Teacher Research Impact Presentation (Required for Masters' Exit)**

The M.Ed. Program exit requirement is a teacher research impact project and presentation which is completed during your capstone course, EDUC 675. *The Teacher Research Impact Project and*

*Presentation is an ungraded requirement for EDUC 675, however, students are required to successfully complete a Teacher Research Impact Presentation in order to exit and graduate from the Secondary Education program. Your grade for EDUC 675 will be posted only upon successful completion of the Teacher Research Impact Presentation.*

Working in your theme-based critical friend team organized by broad areas of research interests, you will identify one authentic, alternative, contemporary media-based method through which you will share the impact of your teacher research. While you will make brief presentations of your ongoing individual research findings in class, the mission of this assignment is for your collaborative to design and enact a presentation using visually rich digital tools which brings together your papers and its impact of/for student learning and your professional development as a teacher (e.g., as differentiation, management, classroom environments, student engagement.) You might highlight the very importance of teacher research or summarize the findings of your group members' efforts around a common theme or topic. Examples will be offered.

## ASSESSMENT AND GRADING

### Participation and Peer Review Rubric

<i>Category</i>	<i>Exemplary 10 pts.</i>	<i>Accomplished 9 pts</i>	<i>Developing 8 pts</i>	<i>Undeveloped Below 8 pts</i>
Assignments are central to the development of your project. Attendance and participation are critical components of this course. It gives you the opportunity to learn from and contribute to building a positive classroom experience and learning community. Participants contribute to each other's learning by actively listening, exchanging ideas, sharing learning from reading and websites, peer view, and supporting each other's efforts on Discussion Thread	Successfully completes all assignments. Outstanding and consistent participation in discussions and class activities. Promotes conversation focused on the topic. Comments demonstrate a high level of understanding from assigned readings. Listens actively to peers. Embraces peer review; Prompts peer feedback and input. Purposely shares leadership.	Completes all assignments. Participates in discussions and activities on a regular basis; questions and comments reveal thought and reflection and contribution from assigned readings. Frequently involves peers in discussion. Conducts peer review; Shares leadership roles in group work.	Does not complete some assignments. Does not contribute to discussions or activities very often, but generally reveals some thought and reflection and some contribution from assigned readings. Follows rather than leads group activities. Solicits some peer discussion and peer review. Misses classes. Is late for class. Somewhat shares leadership roles in group work.	Few assignments completed. Few contributions to class discussions. Little evidence of participation and contribution. Shows little concern for peers' learning or input or peer review. Misses many classes and is late often. Does not share leadership roles in group work.

<b>3 pt. Assignments</b>	<b>Rubric Description for Digital Self-Study Researcher Logs</b>
A+ Exemplary 3+ points	Presents an exemplary narrative in the assignment to build her/his self-study action research project with thoughtful and relevant detail. Demonstrates a very high level of understanding and application from assigned readings. Submission reflects outstanding participation in f-t-f and online discussions and class activities and active listening and serious feedback with peers. Submitted on time. Provides exemplary peer response to assignment where relevant.
A Excellent 2.9 points	Provides a very adequate narrative in the assignment to build her/his self-study action research project with thoughtful and relevant detail which demonstrates a high level of understanding and application from assigned readings. Submission reflects excellent participation in f-t-f and online discussions and class activities and active listening and a high level feedback with peers. Submitted on time. Provides very adequate peer response where relevant.
A- Approaching Excellence 2.7-2.8 points	Provides an adequate narrative in the assignment to build her/his self-study action research project with thoughtful and relevant detail which demonstrates a good level of understanding and application from assigned readings. Submission reflects good participation in f-t-f and online discussions and class activities and active listening and serious feedback with peers. Submitted on time. Provides adequate peer response to assignment where relevant.
B and below Developing Less than 2.7 points	Provides a fair narrative in the assignment to build her/his self-study action research project with thoughtful and relevant detail which demonstrates an average level of understanding and application from assigned readings. Submission reflects average level of participation in f-t-f and online discussions and class activities and active listening and serious feedback with peers. Needs more work. Submitted late. Does not provide adequate peer response to assignment where relevant.

<b>Grade</b>	<b>Standards</b>	<b>Grading</b>	<b>Grade Points</b>	<b>Graduate Courses</b>
A	Meets Standard	93 – 100	4.00	Satisfactory / Passing
A-	Meets Standard	90 – 92.9	3.67	Satisfactory / Passing
B+	Approaches Standard	88 – 89.9	3.33	Satisfactory / Passing
B	Approaches Standard	83 – 87.9	3.00	Satisfactory / Passing
B-	Approaches Standard	80 – 82.9	2.67	<i>B- is not a passing course grade.</i>

### **Tk20 Performance-Based Assessment Submission Requirement**

Every student registered for any Secondary Education course with a required Tk20 performance-based assessment(s) (designated as such in the syllabus) is required to submit this/these

assessment(s), the Teacher Research Project and Impact Presentation, to Tk20 through 'Assessments' in Blackboard (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor). Failure to submit the assessment to Tk20 (through Blackboard) will result in the course instructor reporting the course grade as Incomplete (IN). Unless this grade is changed upon completion of the required Tk20 submission, the IN will convert to an F nine weeks into the following semester. See Rubric below.

### **Professional Dispositions**

See <https://cehd.gmu.edu/students/polices-procedures/>

### **Emergency Procedures**

You are encouraged to sign up for emergency alerts by visiting the website <https://alert.gmu.edu>. There are emergency posters in each classroom explaining what to do in the event of crises. Crisis in Education App at: <https://itunes.apple.com/us/app/in-case-of-crisis-education/id476578079?mt=8>

## CLASS SCHEDULE

Date	Topics	Assignment Due	Readings
<p>January 21: University Closed</p>		<p>Post logs assignments before class- except for the in-class logs. Respond to CF logs by the following Monday.</p>	<p>Chapters are located in text. All readings are in Bb folder.</p>
<p>Week 1 January 28</p> <p><b>On Campus</b></p>	<p><b>INTRODUCTION</b></p> <p>Becoming a Teacher Researcher</p> <p>Self-Study Action Research Method</p> <p>Critical Friend Teams</p>	<p>During first week, please upload a 5-minute video to introduce yourself.</p> <p>Also include: <i>What are your beliefs about how children learn?</i> <i>What stands out for you as a major teaching goal?</i></p> <p>Post Log 1 in-class activity</p>	<p>During first week, read Preface, Chapter 1 &amp; Appendix A</p> <p>Review the template of the final paper posted on Bb with syllabus.</p>
<p>Week 2 February 4</p> <p><b>On Campus</b></p>	<p><b>RESEARCH QUESTION</b></p> <p>Noticing your classroom</p> <p>Locating Your Research Question</p> <p>Searching the literature</p>	<p>Post Log 2</p> <p>Post Log 3 in-class activity</p>	<p>Read Samaras &amp; Roberts article</p> <p>Read Racines article</p> <p>Read Chapter 2 See Table 2.1</p> <p>Read <i>Meyers with</i> focus on <u>Intro/Rationale</u></p>
<p>Week 3 February 11</p> <p><b>Online work</b></p>	<p><b>LITERATURE REVIEW</b></p> <p>Build your Literature Review using electronic data bases: Start Log 7</p>	<p>Watch Samaras video on research design and method.</p>	<p>Read Chapters 4 &amp; 6</p> <p>Read <i>Piskor with</i> focus on <u>Literature Review</u></p>
<p>Week 4 February 18</p> <p><b>On Campus</b></p>	<p><b>DESIGN AND DATA</b></p> <p>Data Collection Techniques</p> <p>Ethical Teacher Researcher</p> <p>In-class critical friend and professor consultations</p>	<p>Post Logs 4 and 5 in-class activities</p>	<p>Read Chapters 7 &amp; 8</p> <p>Read <i>Allan with</i> focus on <u>Method</u></p>
<p>Week 5</p>	<p>Begin to collect data in the</p>	<p>Post Log 6</p>	<p>Read Chapter 9</p>

February 25 <b>Online and Field Work</b>	field  Try out pedagogical strategies		Read <i>Irwin with focus on Method and Findings</i>
Week 6 March 4 <b>On Campus</b>	<b>DATA ANALYSIS</b>  Dialogue circles of impact of pedagogical strategies  Data Analysis  In-class critical friend and professor consultations	Post Log 7	Read Chapter 10  Read <i>Shaughnessy with focus on Analysis and Findings</i>  Also check out: Mautz p.13 Payden pp. 10-11 Walsh p. 17
March 11  Spring Break March 11-15	No Class		<i>Have a wonderful spring break!</i>
Week 7 March 18 <b>Online Independent work</b>	<b>WRITING</b>  Writing as Process	Work on Draft 1 for peer and professor review	Read Chapters 11 & 12
Week 8 March 25 <b>On Campus</b>	<b>VALIDATION</b>  Assessing Research Quality  Validation Workshop  In-class critical friend and professor consultations	Post Draft 1 for Peer and Professor Review with tracking & comments  Post Log 8 in-class activity	Revise and Write, write, and write!
Week 9 April 1 <b>Online</b>	Virtual consultations with critical friends and professor as needed	Work on Draft 2  Post Log 9	No readings this week
Week 10 April 8	Meet with group to finalize Teacher Impact presentation	Post Draft 2 for Professor “Red Flag” check with	No readings this week

<b>Online Virtual Group Work</b>		rubric Post Log 10	
Week 11 April 15  <b>On campus</b>	<b>PRESENTATION</b>  Present and Make Public  Writing your Abstract (In-class activity)	Post and Present Collaborative Teacher Impact Presentations  Prepare 5 min presentation  Self-assess with peers in class	No readings this week
Week 12 April 22  <b>Online</b>	Revising and Polishing	Review professor feedback and revise	
Week 13 April 29  <b>Online</b>	Final Revisions and Polish	Finalize paper	
Week 14 May 6  <b>On Campus</b>	<b>CELEBRATION!</b>  Individual Presentations In 5 minutes tell us: <ol style="list-style-type: none"> <li>1. Ways your thinking changed from enacting your study</li> <li>2. Ways your practice has changed</li> <li>3. Most valuable insights/and productive mistakes</li> <li>4. Next steps for you</li> </ol>	Post Final Teacher Research Project BRING hard copy of your final paper and post Appendix online only.  <b>Post final paper on TK20 after receiving professor final comments and grade.</b>	No readings this week

### Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

## GMU Policies and Resources for Students

### *Policies*

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/> ).
- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

### *Campus Resources*

- Support for submission of assignments to Tk20 should be directed to [tk20help@gmu.edu](mailto:tk20help@gmu.edu) or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursessupport.gmu.edu/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

**For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .**

## READING RESOURCES

### *Additional Teacher Research Exemplars from GMU Alumni:*

Bristol, C. J. (2016). A deeper and more meaningful understanding of biology through journal entries. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Davis, K. (2016). *Using stations activities as a differentiation tool*. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Mamatova, M. (2016). *Using technology as an organizational tool*. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Mautz, M. (2014). *Promoting motivation in the classroom through goal-setting*. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Mayden, K. H. (2014). *Making classroom conversation count: Improving participation in discussion to enhance learning*. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Payden, J. (2014). *Using journal writing to develop students' mathematical communication skills*. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Saxena, B. (2014). *Using discourse strategies to develop critical and creative thinking in science*. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Schaperjahn, G. D. (2016). *Teacher and student trust through restorative and community circles*. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Sprague, L. (2014). *Management & madness: Discovering the balance between effective management and classroom morale*. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

Walsh, L. (2014). *Differentiation in an honors mathematics classroom: How to help each student individually reach their potential*. Paper submitted to the Secondary Education Program, Graduate School of Education, George Mason University, Virginia, in partial fulfillment of the requirements for the degree of master of education.

### **Teacher Research**

Donnelly, S. visit <https://rotatclub.wordpress.com/>

Falk, B., & Blumenreich, M. (2005). *The power of questions: A guide to teacher and student research*. Portsmouth, NH: Heinemann.

Goodnough, K. (2001). Teacher development through action research. *Action in teacher education*, 23 (1), 37-46. Access through GMU, Library, e-journal.

Hubbard, R. S., & Power, B. (1999). *Living the questions: A guide for teacher-researchers*. Portland, ME: Stenhouse.

Lassonde, C. A., Galman, S., & Kosnik, C. (Eds.), (2009). *Self-study research methodologies for teacher educators*. Rotterdam, The Netherlands: Sense.

Leedy, P. D., and Ormrod, J. E. (2001). *Practical research: Planning and design*. Upper Saddle River, NJ: Merrill.

- MacLean, M.S. & Mohr, M. (1999). *Teacher-researchers at work*. National Writing Project, Berkeley, CA.
- Meskin, T., Singh, L., & van der Walt, T. (2014). Putting the self in the hot seat: Enacting reflexivity through dramatic strategies. *Educational Research for Social Change (ERSC)*, 3(2), 5-20. (Bb)  
Retrieved from [http://ersc.nmmu.ac.za/view\\_edition.php?v=3&n=2#](http://ersc.nmmu.ac.za/view_edition.php?v=3&n=2#)
- Samaras, A. P., Frank, T., Apollon Williams, M., Christopher, E., Rodick, W. H. (2016). A collective self-study to improve program coherence of clinical experiences. *Studying Teacher Education*, 2(12), 170-187.
- Samaras, A. P., & Freese, A. R. (2006). *Self-study of teaching practices primer*. New York, NY: Peter Lang.
- Samaras, A. P., Freese, A. R., Kosnik, C., & Beck, C. (Eds.) (2008). *Learning communities in practice*. The Netherlands: Springer Press.
- Samaras, A. P., & Pithouse-Morgan, K. (2018) Self-study research in a polyvocal professional community design. (pp. 245-257). In J. K. Ritter, M. Lunenberg, K. Pithouse-Morgan, K., A. P. Samaras, E. & Vanassche, E., (Eds.), *Teaching, learning, and enacting self-study research*. Dordrecht, The Netherlands: Springer.
- Samaras, A. P., & Sell, C. (2013). Please write: Using critical friend letters in teacher research. *Teacher Education Quarterly*, 40 (4), 93-109.
- Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York: Teachers College Press.
- Thomas, R. M. (2005). *Teachers doing research: An introductory guidebook*. Boston: Pearson/Allyn & Bacon.
- Wilcox, D. R., & Samaras, A. P. (2009). Examining our Career Switcher teachers' first year of teaching: Implications for alternative teacher education program design. *Teacher Education Quarterly*, 36 (4), 173-191.
- Zenkov, K. & Harmon, J. (2009). Picturing a writing process: Using photovoice to learn how to teach writing to urban youth. *Journal of Adolescent and Adult Literacy*, 52(7), 575-584.

### TEACHER RESEARCH RESOURCES

\*Please also visit the web links for online resources posted on Bb. Also see:

*Ipad Apps for teachers by content*

<https://www.lynda.com/iPad-tutorials/Welcome/142960/150546-4.html>

*Office for Educators*

<https://www.lynda.com/K-12-Education-training-tutorials/1797-0.html>

*Brite Building Resilience in Teacher Education*

[www.brite.edu.au](http://www.brite.edu.au)

*Networks: An online journal for teacher research*

<http://journals.library.wisc.edu/index.php/networks/index>

*Studying Teacher Education: A journal of self-study of teacher education practices:*

<https://www.tandfonline.com/loi/cste20>

Self-Study of Teacher Education Practices Special Interest Group <http://aera.net/sstepsig109>

Biennial International Conference on the Self-Study of Teacher Education Practices [see "Conference History" and scroll down to "Conference Proceedings" where you will have access to pdf of papers from proceedings] <http://www.castleconference.com/conference-history.html>

*Samaras.EDUC675.Sp19*

## **Survey and Questionnaire Development**

See: <http://writing.colostate.edu/guides/guide.cfm?guideid=68>

See: file titled "Questionnaire.Johnson" in Data Collection Tools Folder in Bb

Fowler, F. J. (2013). *Survey research methods*. Los Angeles, CA: Sage.

<http://www.amazon.com/Survey-Research-Methods-Applied-Social/dp/1452259003>

**Data Collecting Tools:** Go to Google docs, then spreadsheets to create survey.

Also Survey Monkey <http://www.surveymonkey.com/home.asp>

## **Data Analysis**

Czaja, R., & Blair, J. (1996). *Designing surveys: A guide to decisions and procedures*. Thousand Oaks, CA: Pine Forge Press.

Patton, M. Q. (2015). *Qualitative evaluation and research methods*. Los Angeles: Sage.

Rovessi, C., & Carroll, D. J. (2002). *Statistics made simple for school leaders*. Lanham, MD: Scarecrow Press.

Salkind, N. (2000). *Statistics for people who think they hate statistics*. Thousand Oaks, CA: Sage.

Saldaña, J. (2013). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage.

## **Research and Writing**

American Psychological Association (2009). *Publication Manual of the American Psychological Association*. American Psychological Association: Washington, DC.

Booth, W. C., Colomb, G. G., & Williams, J. M. (1995). *The craft of research*. Chicago, IL: The University of Chicago.

Dahl, K. K. (1992). *Teacher as writer: Entering the professional conversation*. Urbana: NCTE.

## **National Reports and Test Reporting Centers**

The Nation's Report Card/National Assessment of Educational Progress

<http://nces.ed.gov/nationsreportcard/>

National Center for Educational Statistics <http://nces.ed.gov/help/sitemap.asp>

TIMSS and PIRLS The International Math and Science Study and International Literacy Study

<http://www.timss.org/>

Best Evidence/School Reform Reports/School Models. Johns Hopkins University

<http://www.bestevidence.org>

**EDUC 675, “Research in Secondary Education”**  
**Teacher Research Project Description and Assessment Rubric (60 points)**  
*(Includes suggested page lengths for each section)*

**Title Page and Abstract (2 points possible)**

Your title can be as creative as you like—take researcher/artistic license with this. In 125 to 150 words, what was your study about? What was your major finding? An abstract writing strategy: take one sentence from each section of your final project (introduction, literature review, methodology, findings, and discussion) to craft the perfect abstract. Consider the following questions as you draft your title and abstract:

- 1) Have you provided a single, articulate, concise paragraph of no more than 150 words?
- 2) Does your abstract concisely describe your purpose and the context, method, key findings, and significance of your research?

<b>Suggested 2 pages: 1 page for title, 1 page for abstract</b>				
<b>Rubric Score</b>	<b>Does not meet expectations 1</b>	<b>Approaches expectations 2</b>	<b>Meets expectations 3</b>	<b>Exceeds expectations 4</b>
<b>Grade Score</b>	<b>F Less than 1.4 points</b>	<b>C 1.4 – 1.5 points</b>	<b>B to B+ 1.6 – 1.7 points</b>	<b>A- to A 1.8 – 2 points</b>
<b>Title and Abstract</b>	Project is so brief, incomplete, or off-topic that any reasonably accurate assessment is impossible.	Project includes only general statements about the study. Information on methods and procedures to be followed is sketchy or missing. Falls short of 150 words or greatly exceeds the 150-word limit	Project includes an identifiable summary (max 150 words) that addresses the purpose of the study. Touches on methods and procedures to be followed, but is not sharply focused.	Project includes a concise (max 150 words) summary that reports factually on the purpose of the study and the methods and procedures to be followed.

**Introduction, Rationale, Area of Focus, and Research Questions (5 points possible)**

Briefly describe the setting, including the community, school, students, and other relevant information. Demographic information in your introduction should focus on your school, while demographic information in your methodology should focus specifically on the students you worked with in your study. What is the purpose of your study? What problem or issue are you addressing? Describe why the concerns are important to you and what your research might help you learn as a result of its conduct. What is its background and significance? What is (are) your research question(s)? Do you have a hypothesis? If so, what is it and how did you formulate it? Be sure that your research questions steer you toward a descriptive response. Consider the following questions as you draft your introduction, rationale, area of focus, and research questions:

- 1) Have you explained the outgrowth of your study?
- 2) Have you offered perspectives that shaped this question for you?
- 3) Have you situated the study in terms of explaining the outgrowth of these questions in the context of your work? (e.g., your students, classroom, school, district)

- 4) Have you clearly and concisely explained why this research is important? Have you addressed the broader educational and social significance of this research?
- 5) Have you clearly and concisely stated the research problem?
- 6) Have you clearly and concisely stated your main research question and any sub-questions?

<b>Suggested 3-4 pages</b>				
<b>Rubric Score</b>	<b>Does not meet expectations 1</b>	<b>Approaches expectations 2</b>	<b>Meets expectations 3</b>	<b>Exceeds expectations 4</b>
<b>Grade Score</b>	<b>F Less than 3.5 points</b>	<b>C 3.5 – 3.9 points</b>	<b>B to B+ 4 – 4.4 points</b>	<b>A- to A 4.5 – 5 points</b>
<b>Introduction, Rationale, Area of Focus, and Research Questions</b>	Project is so brief, incomplete, or off topic that any reasonably accurate assessment is impossible.	Project includes minimal information on the context/theoretical framework for the study. Does not offer a rationale for the study's execution, or does so only superficially. Explicitly states the research question and purpose of the study.	Project includes an adequate context/theoretical framework for the study and a defensible rationale for its execution, though one or both may be weakly developed. Explicitly states the research question and purpose of the study.	Project includes a sound context/theoretical framework for the study and a compelling rationale for its execution. Clearly and explicitly states the research question and purpose of the study.

**Literature Review (8 points possible)**

In order to properly address a research question you need to be familiar with previous investigations of your topic. You should conduct a literature review in which you cite and synthesize a minimum of ten (10) sources and discuss how they informed your design. Teacher research appeals to a broad range of research resources, including reports of teachers' experiences. Transitions should connect one annotated source with the next. At the end of the literature review, include a one-paragraph summary of the major discoveries in your review, connecting these to the focus of your study. References must be from refereed journals, books (generally not textbooks), curriculum resources, and scholarly compilations. NOTE: The literature review should emphasize synthesis and analysis (Bloom, 1956, 1984). *Use direct quotes very sparingly.* Craft your literature review as a story of the study of your topic.

Consider the following questions as you draft your literature review:

- 1) Did you conduct an ongoing literature review which informed your research?
- 2) Is the review relevant and connected to your study?
- 3) Is the review adequate, coherent, and analytical?
- 4) Does the review include references from a variety of sources?
- 5) Is the review integrated into a conceptual framework with a mapping of the theories, literature, and phenomena that help to inform your study?

<b>Suggested 4-6 pages</b>				
<b>Rubric Score</b>	<b>Does not meet expectations 1</b>	<b>Approaches expectations 2</b>	<b>Meets expectations 3</b>	<b>Exceeds expectations 4</b>
<b>Grade Score</b>	<b>F Less than 5.6 points</b>	<b>C 5.6 – 6.3 points</b>	<b>B to B+ 6.4 – 7.1 points</b>	<b>A- to A 7.2 – 8 points</b>
<b>Literature Review</b>	Project is so brief, incomplete, or off-topic that any reasonably accurate assessment is impossible.	Project includes fewer than 8 peer-reviewed cites, published reports of empirical research. Does not explicitly highlight gaps in the literature to which the proposed study will respond. Summarizes cited works sequentially, rather than synthesizes and organizes them thematically. Relies heavily on direct quotes.	Project includes at least 8 peer-reviewed cites, published reports of empirical research. Highlights gaps in the literature to which the proposed study will respond. Organizes the literature by identifiable themes, although organization within themes may follow no clear or consistent pattern of presentation. Attempts to synthesize referenced sources. Uses few direct quotes.	Project includes at least 10 peer-reviewed cites, published reports of empirical research. Highlights gaps in the literature to which the proposed study will respond. Organizes the literature by clearly identifiable themes, proceeding from general to more specific within each theme. Effectively synthesizes referenced sources, using few, if any, direct quotes.

**Description of the Method (15 points possible)**

In this section describe how you implemented your research. Include a description of subjects (i.e., students, teachers, administrators), the context of the research, the strategies and materials (put sample material in an appendix), the number and total time of each research session, and a complete description of the methodologies. Repeat your question(s) in this section—remind us often what you are studying. Describe how you selected your subject sample—why did you choose these individuals and who are they, in terms of gender, ethnicity, age, grade level, language/culture, and educational achievement? Describe ALL of your methods, including what influenced the selection of your methodology and design, what measures you took to assure the validity of your study, and how you triangulated your data. Be sure to include a table and timeline of your methods—what you collected and when. Be sure to describe what type of data you collected—for example, did you do a needs assessment (e.g., via a test) to address student achievement, and then design and implement a new instructional strategy? Or did you observe a group of students to see how they behaved in a particular context, and then interview them to ascertain their reasons? Did you do a series of in-depth interviews with students or teachers? How do the data relate to your research question? How do they relate to your masters curriculum? Finally, describe how you planned to make sense of—analyze—your data in light of your research question(s). Provide rich descriptions of HOW you reviewed your data, the themes that became apparent in your reviews, and your ultimate findings. Consider the following questions as you draft your literature review:

- 1) Have you described your research context, including your community, school, and classroom contexts?

- 2) Have you included demographic information of participants?
- 3) Did you include your reflection of the problem (e.g., behaviors observations, possible causes)?
- 4) Have you explained the reasons for your pedagogies based on your observations of your classroom and the literature reviewed?
- 5) Have you described in detail what data you collected, how you collected it, and when you collected it, including data generated from your pedagogies and strategies?
- 6) Are your data from multiple sources?
- 7) Did you include a description of the pedagogical strategies you enacted?
- 8) Did you explain how you analyzed your data?
- 9) Have you included and explained the role of your peers in your data interpretations and validation?
- 10) Did you explore using visuals and technologies for analyzing and displaying your findings in a coherent manner?

<b>Suggested 4-6 pages</b>				
<b>Rubric Score</b>	<b>Does not meet expectations 1</b>	<b>Approaches expectations 2</b>	<b>Meets expectations 3</b>	<b>Exceeds expectations 4</b>
<b>Grade Score</b>	<b>F Less than 10.5 points</b>	<b>C 10.5 – 11.9 points</b>	<b>B to B+ 12 – 13.4 points</b>	<b>A- to A 13.5 – 15 points</b>
<b>Description of the Method</b>	Project is so brief, incomplete, or off-topic that any reasonably accurate assessment is impossible.	Project includes explanation of the study design, procedures followed, sampling methods, and analytical tools (including any statistical tests), given the stated purpose of the study; explanations, however, are not fully developed. Mentions ethical issues raised by the study but addresses them only superficially.	Project includes explanation of the study design, procedures followed, sampling methods, and analytical tools (including any statistical tests), given the stated purpose of the study. Discusses ethical issues raised by the study and how they were addressed.	Project includes explanation and justification of the appropriateness of the study design, procedures followed, sampling methods, data collection and analytical tools (including any statistical tests), given the stated purpose of the study. Discusses ethical issues raised by study and explains how they were addressed.

**Results and Findings (15 points possible)**

In this section, indicate what you discovered or found as a result of your data gathering. Focus on results that are related to your research concern and answer your research questions or shed light on your research hypotheses. Introduce your findings before you begin to describe them, and remind us of your research question again. Organize this section in a way that makes sense for your data/findings—by student, by theme, by data source, etc. Use illustrative examples from your data to SHOW us your findings. Use tables to summarize and SHOW us what you’ve learned. Focus on what’s truly interesting in your findings, even if you have limited data to support this. Feel free to use mini case studies to illustrate your findings, through the lens of a few students. Remember that the goal is to share what you learned about your teaching for yourself first; our goal is not NECESSARILY to extract findings that will

be generalizable across EVERY teaching setting. Interpret your data in as much detail as possible, describing whether or not—or how—your findings corroborated your expectations. Were there any surprises in your findings? Can you think of alternative explanations for your findings? Consider the following questions as you draft your results/findings:

- 1) Did you restate your research question and what was found through your research?
- 2) Are the findings thoroughly and adequately presented?
- 3) Is there convincing evidence to support your themes?
- 4) Is there connection and coherence among the separate themes?
- 5) Did you explain your findings to peers and colleagues to gain their perspectives on your interpretations?

<b>Suggested 8-12 pages</b>				
<b>Rubric Score</b>	<b>Does not meet expectations 1</b>	<b>Approaches expectations 2</b>	<b>Meets expectations 3</b>	<b>Exceeds expectations 4</b>
<b>Grade Score</b>	<b>F Less than 10.5 points</b>	<b>C 10.5-11.9 points</b>	<b>B to B+ 12-13.4 points</b>	<b>A- to A 13.5-15 points</b>
<b>Results and Findings</b>	Project is so brief, incomplete, or off-topic that any reasonably accurate assessment is impossible.	Project includes reporting and interpretation of narrative and numerical data with little apparent concern for accuracy and objectivity. Analytical tools are inappropriate to the methodology. Provides, at best, tenuous links between study outcomes, hypotheses (if stated), and the original research question.	Project includes reporting and interpretation of narrative and numerical data accurately, objectively, and concisely. For the most part, analytical tools are appropriate to the methodology. Does not highlight explicit links between study outcomes, hypotheses (if stated), and the original research question; however, such links may logically be implied.	Project includes reporting and interpretation of narrative and numerical data accurately, objectively, and concisely using analytical tools appropriate to the methodology. Highlights explicit links between study outcomes, hypotheses (if stated), and the original research question.

**Discussion. Reflection. Implications. Recommendations. Impact Presentation. and Action Plan (10 points possible)**

In this section reflect on the findings of your data collection and discuss what they might mean to you as a teacher and teacher researcher. What did you learn from the study? How did it relate to your masters curriculum? How will it influence your teaching—that is, based on the results and themes that emerged from the study, what changes will you make in your teaching? How will you share these findings with others—specifically, how did you share your project and its results via your “Teacher Research Impact Presentation”? What are the implications for future research? Speculate on what it would mean if your data pointed in one direction versus another. Again, focus on what’s truly interesting in your data/findings, even if you have limited information to support this. Make some bold recommendations for how we might serve students better. Be sure to describe what all of this information—the teacher research process, your data, your findings—mean to you as a professional and a person. Describe how you might share the findings of your

paper—with your principal, your grade level team, other teachers who are working with these students, use it in a workshop, claim it as an area of expertise on your resume, etc. Be sure to describe potential implications of your study and its findings for other teachers and for education policymakers. Consider the following questions as you draft your discussion, reflection, implications, recommendations, and action plan:

- 1) Have you adequately explained the implications of your study for your students' learning?
- 2) Have you adequately explained the implications of your study for your professional development?
- 3) Have you adequately explained the implications of your study for your teaching and reframing of your practice?
- 4) Have you adequately explained the implications of your study for the education field?
- 5) Have you adequately explained the relevance of your study for national and state education standards?
- 6) Have you discussed any limitations?
- 7) Have you identified areas for future research possibilities?

<b>Suggested 4-6 pages</b>				
<b>Rubric Score</b>	<b>Does not meet expectations 1</b>	<b>Approaches expectations 2</b>	<b>Meets expectations 3</b>	<b>Exceeds expectations 4</b>
<b>Grade Score</b>	<b>F Less than 7 points</b>	<b>C 7 – 7.9 points</b>	<b>B to B+ 8.0 – 8.9 points</b>	<b>A- to A 9 – 10 points</b>
<b>Discussion, Reflection, Implications, Recommendations, and Action Plan</b>	Project is so brief, incomplete, or off topic that any reasonably accurate assessment is impossible.	Project addresses practical implications of study findings including how they will be shared with others. Attempts to discuss threats to validity, but does so superficially and/or fails to offer antidotes. Does not consistently support assertions or interpretations using sound arguments consistent with study findings. Does not describe recommendations for future research, or how results will be applied in practice.	Project addresses theoretical/practical implications of study findings including how they will be shared with others. Highlights threats to validity, reporting on how they were addressed. Supports assertions/interpretations using sound arguments consistent with study findings. Does not describe recommendations for future research, or how results will be applied.	Project includes evaluation of the study's strengths and weaknesses. Addresses theoretical/practical implications of study findings including how they will be shared with others. Highlights threats to validity, reporting on how they were addressed. Supports assertions/interpretations using sound arguments consistent with study findings. Describes recommendations for future research, and how results will be applied in the practice.

**References, Appendices, Writing Styles, Mechanics, and General Notes (5 points possible)**

Include a complete list of references in APA format. Append all appropriate materials, including, if relevant, any questionnaires, inventories, assessments, sample student work, etc. Include at least one example of each tool you use—it's ideal to include one blank version and one version completed by one of your research subjects. In addition, follow these general guidelines:

- The model for your study report is not a master's thesis nor traditional class research paper, but rather paper prepared focuses more on practicalizing theory into your teaching practice.
- It is expected that the entire project will be described in a 25-30 page paper; please do not exceed the 30-page limit.
- Write in the past tense as much as it makes sense to do so
- Your paper must be anonymous; do not include names of school district, school, teachers, or students.
- Be sure to make a personal and professional connection to your topic and project
- Feel free to revise your questions based on data, to make these questions more focused

Consider the following questions as you draft your references and appendices and consider the overall writing quality of your paper:

- 1) Did you follow the APA style for the report for a running head, page numbering, references, citations, and the appendix?
- 2) Does the report include a title page with project title, author's name, and author's professional affiliation?
- 3) Are references current and from different sources?
- 4) Are all references cited in the research report included in the references? Have you provided a complete reference list of all print and non-print (Internet) references?
- 5) Is the report coherent, concise, and well structured with a clear purpose?
- 6) Is the report grammatically correct with proper usage of language?
- 7) Does the report have your distinctive focus and voice? Have you used professional language (i.e., no jargon)? Have you written in an accessible style and presentation?

Rubric Score	Does not meet expectations 1	Approaches expectations 2	Meets expectations 3	Exceeds expectations 4
Grade Score	F Less than 3 points	C 3 – 3.9 points	B to B+ 4 – 4.4 points	A- to A+ 4.5 – 5 points
<b>References, Appendices, Writing Styles, Mechanics, and General Notes</b>	Paper is so brief, incomplete, or off-topic that any reasonably accurate assessment is impossible.	Paper falls short of accepted standards for master’s level composition. Drafting errors and error patterns are widespread. Voice, verb tense, and writing style vary from section to section. Technical terms are used incorrectly and/or imprecisely, reflecting only a rudimentary understanding of the underlying concepts. Text is formulaic, relying heavily on paraphrases and “borrowed” materials not formally cited. Transitions are weak, contributing to an apparent lack of direction. Paper does not adhere to formatting specifications provided in course text and materials. Citations and references page do not follow APA style.	Paper is well written with few notable drafting errors. Voice, verb tense, and writing style are generally consistent with few exceptions that do not substantially diminish readability. Most technical terms are used correctly, reflecting adequate understanding of the underlying concepts. Text is original, but opinions and propositions are not consistently supported by logic and references to published research. Transitions do not connect sections seamlessly but do not substantially diminish readability. Paper does adhere to formatting specifications provided in course text and materials. Citations/references page do not follow APA style.	Paper is well written with no notable drafting errors. Voice, verb tense, and writing style are consistent throughout. Technical terms are used precisely and accurately, reflecting a firm understanding of underlying concepts. Text is original; opinions and propositions are supported by strong logic and formal references to published research. Sections are linked with unifying transitions, giving the report a clear sense of direction. Paper adheres to formatting specifications provided in course text and materials. Citations/references page follow APA style.

**Grading Scale for Research Project**

60 points: Substantially meets the project and report requirements. All criteria are addressed fully.

56-59 points: Meets the project and report requirements. Criteria adequately addressed.

55-53 points: Meets some, but not all, of the project and report requirements. Weaknesses in addressing some of the criteria.

53 points and below: Does not meet the project and report requirements. Weaknesses in addressing the majority of the criteria.

*Please note that B- is not a passing grade*