George Mason University
College of Education and Human Development
Secondary Education Program

Fall 2012
EDUC 675 Section 003: Research in Secondary Education (3 credits)
Mondays 4:30 p.m.-7:10 p.m. Innovation 328

Instructor Information:
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Email: asamaras@gmu.edu
Web: mason.gmu.edu/~asamaras
Blog: teaching-insideout.com
Class Location: Innovation 328
This capstone class of the M.Ed. program should be taken last.

Pre-requisites: Licensure and EDUC674.

Co-requisite: Portfolio-Best Practices Showcase (BPS) is the M.Ed. Exit Requirement.

BEST PRACTICES SHOWCASE
Best Practices Showcase (BPS) is the M.Ed. Exit Requirement where you as a M.Ed. Candidate present your understandings, applications, and critical reflection of standards-based and content pedagogical knowledge to peers, faculty, and school community partners in a poster session with a focus on assessing the impact of your pedagogies on student learning and on your professional development. NOTE: The Best Practices Showcase is NOT included as part of your grade for EDUC675. However, you MUST successfully complete your Best Practices Showcase and present it to the Secondary Program Faculty. Your GRADE for EDUC675 will be posted only upon successful completion of the Best Practices Showcase requirements. Information will be provided about BPS.
COURSE DESCRIPTION
The portfolio (BPS) is submitted during the semester the candidate is enrolled in EDUC 675. Helps beginning teachers become more effective by critiquing various research paradigms, reviewing the research literature, and systematically collecting and interpreting evidence to improve practice. Emphasizes linking evidence of student learning to make informed instructional decisions.

COURSE LEARNING OUTCOMES
This course is designed to enable students to:

1. demonstrate an understanding of the process and components used in teacher research by conducting and assessing a chosen scholarly inquiry situated in their classroom and impact on students’ learning;
2. prepare a research proposal which makes explicit links between theory and practice;
3. examine ethical considerations when conducting teacher research; conduct teacher research which includes: research question(s), research proposal; review of related literature, methods, data collection/analysis, findings, discussion of impact on students, teacher, and education field; and abstract;
4. participate in “critical collaborative inquiries” to gain multiple perspectives in interpreting research and for validation and peer review of research;
5. 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; SPA STANDARDS respective to students’ discipline;
6. demonstrate skills in the application of technology and use of resources in teacher research.

RELATIONSHIP TO PROFESSIONAL STANDARDS
At the end of this course 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 student’s respective discipline: NCSS, NCTE, NCTM, NSTA
- 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://www.ccsso.org/content/pdfs/corestrd.pdf

Virginia State Standards
- Virginia Department of Education http://www.pen.k12.va.us/
- State of Virginia, SOL Resources http://www.pen.k12.va.us/VDOE/Instruction/sol.html

NATURE OF COURSE DELIVERY
The major purpose of this course is for you to learn how to conduct teacher research and apply it in your classroom in order to improve your teaching and students’ learning. Having said that, I would like to let you know that I support you every step of the way and help you scaffold the components of your final required paper. I also work to promote a professional teaching and
learning community of peer critical friend support. Throughout the course, you are completing a step informally that you later insert into your final paper. Build it with a commitment to each step in the process, and it comes together! The course will be taught through a variety of activities to support the development of your self-study teacher research projects involving: whole class and small group discussions, group, pair and group work, online work, and through dialogue and reflections about practice.

***The course requires that you have access to a classroom to conduct your research. If you do not have your own classroom, you will need to let the instructor know during the first class. Alternative arrangements used successfully in the past will be offered.

REQUIRED READINGS
2) Select and read an exemplar project on Bb to read sections through the course.
3) Other assigned readings made available in class.

ONLINE STUDENT STUDY SITE FOR TEXT: [http://www.sagepub.com/samaras/](http://www.sagepub.com/samaras/)
See Chapter Resources for each chapter:
• PowerPoint Slides
• Self-Study Scholar Advice
• Chapter Summary
• Discussion Question


COURSE MATERIALS ONLINE
The My Mason/ Blackboard site can be found at [http://mymason.gmu.edu](http://mymason.gmu.edu). Use the same login as your GMU email. Web-based documents and correspondence are accessible through a course Blackboard page which you must assess and use regularly throughout the course and which require you to be able to post and access. You must have access to GMU email and with other email account forwarded to GMU mail account on MyMason. Please inform of any accessibility problems the first day of class.

COURSE ASSIGNMENTS AND EVALUATION

Participation, Attendance, and Readings Integrated into Assignments below:  40%

1) Critical Friend Inquiries and Online Work (20%)
2) Research Proposal (5%)
3) Draft Literature Review (5%)
4) Draft Teacher Research Report (5%)
5) Peer Review of Draft Teacher Research Report (5%)

Descriptions of assignments are posted on Bb.

Participation and Attendance
Attendance 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 classes and
active participation in the discussions. Being on time is also essential and lateness will affect your grade. Please notify instructor ahead of time if you must miss class and work with peers for missed material.

Weekly Exit Folders
Each of you will be given an exit file folder. At the end of each class, please take a minute and write the BIG ideas you learned for that class and the BURNING questions you have in your exit folder. Please date each entry. Your comments will provide feedback to help me be responsive to your ongoing learning needs. Turn your folder in at the end of each class.

Readings, In-Class Activities, and Online Participation
You are expected to complete all readings and participate in class and all online discussions with openness, consideration, and effort to “hear for” and “listen to” others as you also seek to be understood. Come to class prepared to contribute your critical reflections of your own experiences and ideas presented by your critical friends. Demonstration of positive and collaborative professional dispositions towards colleagues during peer review, along with a willingness to accept constructive criticism is a course expectation and a professional disposition.

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. All assignments must be completed. Assignment will be assessed using posted criteria known to the student. For full consideration, all assignments are due to professor electronically in the digital drop box prior to the beginning of class on the day and time they are due, unless otherwise announced. Blackboard will not accept deposits after the due date and time of class.

All written assignments are to be word-processed using Times Roman 12 pt font, double-spaced, and submitted electronically under “Assignments” on MyMason. Title each assignment with your last name and the name of the project/assignment, e.g., Smith.ResProp.09.16.12. Keep a copy of all assignments which you will insert into the appendix of your report.

MAKE IT A HABIT TO WRITE REGULARLY AND SAVE YOUR WORK IN MULTIPLE PLACES.


1) Critical Friend Inquiries (CFI) (20%)
As part of your course participation, you will have the opportunity to work with critical friends in the process of developing your final research project. The CFI are designed for peer review with support and to provide alternative perspectives on interpretation to increase the validity of your research. Your work involves sharing weekly updates in class, sending and corresponding to critical friend research memos, brainstorming ideas as a teacher about the classroom dilemma you are researching, exchanging ideas for strategies and lessons, sharing how you are integrating standards in meaningful ways, and conducting a peer review of the draft research report. You will have the opportunity to work in a discipline-based team for peer review of your research draft which is a reciprocal process.
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. Establish ground rules with “critical friends” and visit them often. Use your group blackboard space to post files and communicate frequently.

2) Research Question and Proposal (5%)

It must be love: For your research paper, 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. 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? Write a research proposal. You may also elect to add a visual representation to your research proposal. The idea is for the visual to help you figure out your “thesis” and not to enter an art show. Approach this assignment from where you are and honor its incompleteness as part of the research process. Ask yourself does the proposal give you a solid framework to launch your project. Include each subtitle listed on p. 123 in our textbook. See example on pp. 124-126.

3) Draft Literature Review (5%)

Post a draft of your literature review on MyMason and begin to ask yourself:

- What does the literature review add to your understanding of your research topic?
- What common topics and themes have you found in the literature?
- What ideas for pedagogical strategies can you adapt from the literature?

Use the topics to design your conceptual framework or mapping of the “big ideas” and connections you find in the literature to your study (See pp. 127-134). Format is your choice, e.g. annotated bibliography, narrative to insert directly into final report.

4) Draft Teacher Research Report (5%)

Post a draft of your teacher research report for professor and critical friend input.

5) Peer Review of Draft Teacher Research Report (5%)

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

### Participation and Assignments Rubric

<table>
<thead>
<tr>
<th>Category</th>
<th>Exemplary 40 pts.</th>
<th>Accomplished 37-39pts</th>
<th>Developing 34-36pts</th>
<th>Undeveloped Below 34 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>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</td>
<td>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</td>
<td>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</td>
<td>Few assignments completed. Few contributions to class discussions. Little evidence of participation and contribution. Shows little concern for peers’ learning or input</td>
</tr>
</tbody>
</table>
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.

| assigned readings. | review; Shares leadership roles in group work. | discussion and peer review. Misses classes. Is late for class. Somewhat shares leadership roles in group work. | peer review. Misses many classes and is late often. Does not share leadership roles in group work. |

**Teacher Research Project**

**Recommended Weekly Researcher Log**

It is highly recommended that you keep a researcher log of progress of your teacher research project each week and include it in the appendix of your final report. See Self-Study Research Project Timeline Log in Chapter 2. Table 2.2, pp. 28-29). This is your tentative timeline and tool to self-regulate your progress and the research process.

You are required to write a report that includes the following sections: Rationale/Introduction, Research Question, Review of Related Literature, Method, Context, Participants, Data Collection, Analysis, Findings, Limitations, and Discussion including your reflections of self-study and implications for practice/further research. All teacher research reports must adhere to APA format. No report binders or covers; just clip. Your project should be useful to you and your students. A written a report that includes the specific headings and subheading are posted below and on Bb. Look at the headings at the beginning of the semester so you can see where you are headed. Look at the newest exemplar reports posted on Bb.

**Performance-Based Assessment of Teacher Research Project**

Criteria for Evaluating the Research Report (60 Total Possible Points)

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

2 points possible

**Rationale**
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 this puzzlement 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?

3 points possible

**Statement of the Research Problem/Question**
1. Have you clearly and concisely stated the research problem?
2. Have you clearly and concisely stated your main research question and any subquestions?
2 points possible

**Review of Literature and Conceptual Framework**
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?

10 points possible

Research Method
1. Have you described your research context; community, school, and classroom context?
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 noticing 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 and include a data audit trail?
9. Have you included and explained the role of your critical friends in your data interpretations and validation?
10. Did you explore using visuals and technologies for analyzing and displaying your findings in a coherent manner?

20 points possible

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 your critical friend to gain his or her perspective on your interpretations?

10 points possible

Discussion, Reflections on Self-Study of Teaching, and Implications
1. Have you assessed meeting the Five Foci (methodological components) of self-study research using CFI 11.3 (pp. 222-225)?
2. Have you adequately explained the implications of your study to your students’ learning?
3. Have you adequately explained the implications of your study to your professional development?
4. Have you adequately explained the implications of your study to your teaching and reframing of your practice? Revisit your original research question. Take a retrospective journey and reflect back on the “self” or your role and the conscious (and perhaps at the time unconscious) consequences of your actions in the process of studying your teaching practice.
5. Have you adequately explained the implications of your study to the education field?
6. Have you adequately explained the relevance of your study to national and state education standards?
7. Have you discussed any limitations?
8. Have you identified areas for future research possibilities?
10 points possible

References and Appendix
1. Did you follow the APA style for the report for a running head, page numbering, references, citations, and the appendix? Does the report include a title page with project title, author’s name, and author’s professional affiliation?
2. Are references current and from different sources?
3. Are all references cited in the research report included in the references? Have you provided a complete reference list of all print and nonprint (Internet) references?

Organization, Grammar, and Mechanics
1. Is the report coherent, concise, and well structured with a clear purpose?
2. Is the report grammatically correct with proper usage of language?
3. 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?
3 points possible

Grading Scale for Research Project:

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


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

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

Please note that B- is not a passing grade in licensure courses. A student who receives an overall grade of B- must repeat the course.

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Standards</th>
<th>Grading</th>
<th>Grade Points</th>
<th>Graduate Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Meets Standard</td>
<td>93 – 100</td>
<td>4.00</td>
<td>Satisfactory / Passing</td>
</tr>
<tr>
<td>A-</td>
<td>Meets Standard</td>
<td>90 – 92.9</td>
<td>3.67</td>
<td>Satisfactory / Passing</td>
</tr>
<tr>
<td>B+</td>
<td>Approaches Standard</td>
<td>88 – 89.9</td>
<td>3.33</td>
<td>Satisfactory / Passing</td>
</tr>
<tr>
<td>B</td>
<td>Approaches Standard</td>
<td>83 – 87.9</td>
<td>3.00</td>
<td>Satisfactory / Passing</td>
</tr>
<tr>
<td>B-</td>
<td>Approaches Standard</td>
<td>80 – 82.9</td>
<td>2.67</td>
<td>Satisfactory* / Passing</td>
</tr>
</tbody>
</table>
READING RESOURCES

Teacher Research


Analysis


Research and Writing


Writing a Research in Action Paper

Help with Research http://library.gmu.edu/mudge/Dox/basics.html

Data Collecting Tools: Go to Google docs, then spreadsheets to create survey.
Also Survey Monkey http://www.surveymonkey.com/home.asp

National Reports and Test Reporting Centers
• A Nation at Risk http://www.ed.gov/pubs/NatAtRisk/risk.html
• 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/]

GEORGE MASON UNIVERSITY POLICIES AND RESOURCES FOR STUDENTS

a. Academic integrity (honor code, plagiarism) – Students must adhere to guidelines of the George Mason University Honor Code [See [http://academicintegrity.gmu.edu/honorcode/].
b. Mason Email – Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, division, and program will be sent to students solely through their Mason email account. Students must follow the university policy for Responsible Use of Computing [See [http://universitypolicy.gmu.edu/1301ge.html]].
c. Counseling and Psychological Services – The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops, and outreach programs) to enhance students’ personal experience and academic performance [See [http://caps.gmu.edu/]].
d. Office of Disability Services – Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor in writing at the beginning of the semester [http://ods.gmu.edu/].
e. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
f. The Writing Center (Optional Resource) – The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See [http://writingcenter.gmu.edu/]].
g. University Libraries (Optional Resource) – The George Mason University Libraries provide numerous services, research tools, and help with using the library resources [See [http://library.gmu.edu/]].

10. 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.

11. GSE website: www.gse.gmu

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. Further information about emergency procedures exists on [http://library.gmu.edu/service/cert].
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings/Assignment Due</th>
</tr>
</thead>
</table>
| 1    | 8/27  | **OVERVIEW OF COURSE AND PROJECT**<br>**FINDING YOUR RESEARCH QUESTION**<br>
*Post all work on Discussion Thread on Bb*  
**During the first week, read** Preface and Chapter 1  
In class activity: “I wonder about” inquiry.  
Use Critical Friend Inquiry (CFI) 1.1 pp. 5-6 |
| 9/3  | Labor Day NO CLASS | |
| 2    | 9/10  | **RESEARCH RATIONALE**<br>**RESEARCH DESIGN**<br>
Overview Chapters 2 & 12  
Overview Self-Study Resource Center at [http://www.sagepub.com/samaras/](http://www.sagepub.com/samaras/)<br>
*Bring Research Artifact and present*<br>
Use CFI 5.3 pp. 104-106  
Read Chapter 6  
Choose exemplar project on Bb to read through semester |
| 3    | 9/17  | **Technology-enhanced Learning (TEL)**<br>**ONLINE WORK**<br>
Use library databases to develop lit review  
Read Chapter 4  
Read literature review of exemplar project  
POST draft research question |
| 4    | 9/24  | **RESEARCH ETHICS**<br>**ORGANIZE DATA**<br>
Read Chapters 7 & 8  
POST draft Review of Literature to date |
| 5    | 10/1  | **DATA COLLECTION WORKSHOP**<br>
Read Chapter 9  
POST Research Proposal  
Use CFI 6.3, pp. 123-126 |
| 6    | 10/9  | **TEL ONLINE WORK**<br>
*COLUMBUS DAY*  
NO CLASS 10/8  
*NOTE: Mon classes meet instead on Tues Oct 9 this week.*  
Read Method section of exemplar project  
POST Data Collection/Pedagogical Strategies Research Memo  
Use CFI 8.1 & Response, pp. 171-172 |
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/15</td>
<td>TEL ONLINE WORK</td>
<td>Meet with CF on VoIP to pilot and refine data collection instruments, e.g., surveys, interviews, observation protocols</td>
</tr>
<tr>
<td>10/22</td>
<td>TEL ONLINE WORK</td>
<td>Work in field to collect and document data.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Read</strong> Chapter 10</td>
</tr>
<tr>
<td>10/29</td>
<td>DATA ANALYSIS</td>
<td>Read Chapter 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Read analysis section of exemplar project</strong></td>
</tr>
<tr>
<td>11/5</td>
<td>CODING AND VALIDATION WORKSHOP</td>
<td><strong>POST Data Analysis Research Memo</strong> Use CFI 11.1 &amp; Response, p. 215</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Read</strong> Chapter 12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bring a piece of data for check coding.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CFI 11.2 pp. 220 will be done in class workshop</td>
</tr>
<tr>
<td>11/12</td>
<td>TEL ONLINE WORK</td>
<td><strong>POST: Post Draft Research Paper Draft with Project Title</strong></td>
</tr>
<tr>
<td>11/19</td>
<td>ABSTRACT AND LIMITATIONS WORKSHOP</td>
<td><strong>Read</strong> Chapter 13</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Bring</strong> your abstract draft on jump drive</td>
</tr>
<tr>
<td>11/26</td>
<td>TEL ONLINE WORK</td>
<td><strong>POST: CF Feedback on Research Draft Using Rubric</strong></td>
</tr>
<tr>
<td>12/3</td>
<td>PRESENT: IMPACT OF STUDY ON STUDENT LEARNING</td>
<td><strong>POST and BRING hard copy of Final Teacher Research Project Paper.</strong> No plastic sleeves or covers. Just clip.</td>
</tr>
<tr>
<td></td>
<td>BPS MEd. Program Exit Conference</td>
<td><strong>SEED Program – The Best Practices Showcase Presentation is mandatory for the M.Ed. degree. The Best Practices Showcase grade is P/F and has NO impact on the grade for EDUC675. However, your grade for EDUC675 will not be released until the Best Practices Showcase receives a grade of ‘P’</strong></td>
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