George Mason University
College of Education and Human Development

EDUC 675 Section 001
Teacher Research in Secondary Education

Research I 202
Spring 2010
Tuesdays 4:30 p.m. – 7:10 p.m.

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COURSE DESCRIPTION

This course is designed to help beginning teachers understand and apply concepts and principles of teacher research and study of their practice. Students will learn how to identify and use research literature and systematic evidence to improve practice. Emphasis is placed on linking research and practice to make informed instructional decisions.

Pre-requisites: Licensure. To be taken as the last course in the M.Ed. You must have completed ALL of your coursework and internship to take this course.
Co-requisite: M.Ed. Portfolio.

YOUR MEd. PORTFOLIO

YOU are required to attend PORTFOLIO* prep workshops - TBA
Go to the Secondary Education Portfolio website at blackboard.gmu.edu for all info regarding the portfolio and rubrics, etc.

SEED Program – Portfolio Presentation is a mandatory session for the M.Ed. degree.
The portfolio grade is P/F and has NO impact on the grade for EDUC675. However, your grade for EDUC675 will not be released until the portfolio receives a grade of 'P'.

A copy of the 'Teacher Research Report' completed in this course must be included in your M.Ed. Portfolio.

COURSE OBJECTIVES

This course is designed to enable students to:
1. demonstrate an understanding of the process and components used in self-study teacher research by conducting and assessing a scholarly inquiry situated in their classroom

2. prepare a research proposal which makes explicit links between theory and practice;
3. examine ethical considerations when conducting teacher research;
4. conduct teacher research which includes: research question(s), research proposal; review of related literature, methods, data collection/analysis, findings, discussion of contributions to students, teacher, and education field; and abstract;
5. participate in "critical collaborative inquiries" to gain multiple perspectives 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 in their Master's portfolio;
7. demonstrate skills in the application of technology and use of resources in teacher research

NATURE OF COURSE DELIVERY

The course will be taught through a variety of activities to support the development of students' self-study teacher research projects involving: whole class and small group discussions, group, pair and group work, online work, and dialogue and reflections about practice. Web-based documents and correspondence are accessible through a course Blackboard page which students will use regularly throughout the course and which require students to be able to post and access. Computer with Internet access and current GMU email account is needed.

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 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://www.ccsso.org/content/pdfs/corestrd.pdf
Also see:
>   The Partnership for 21st Century Skills Framework
>   http://www.21stcenturyskills.org/index.php?option=com_content&task=view&id=254&Itemid=120
>   National Board of Professional Teaching Standards
>   http://www.nbpts.org/the_standards/the_five_core_propositio

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT EXPECTATIONS

The Graduate School of Education expects that all students abide by the following: Students are expected to exhibit professional behavior and dispositions. You need to become familiar with the professional dispositions:
http://cehd.gmu.edu/teacher/professional-disposition

Students must follow the guidelines of the University Honor Code. See
http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code. Students must agree
to abide by the university policy for Responsible Use of Computing. See http://mail.gmu.edu
and click on Responsible use of Computing at the bottom of the screen.
Students with disabilities who seek accommodations in a course must be registered with the
GMU Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning
of the semester. See www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.

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://www.gmu.edu/service/cert.

REQUIRED TEXT

Samaras, A. P. (2010). *Self-study teacher research: Improving your practice through
    collaborative inquiry.* Thousand Oaks, CA: Sage.
        DRAFT book material will be made available through Blackboard.

GMU email, Internet access, courses.gmu.edu

American Psychological Association (2009). *Publication manual* (6th.ed.*)*. Washington, DC,
    American Psychological Association (Available as reference at library).

COURSE REQUIREMENTS AND EVALUATION

1.   Participation   30%

        Participation includes:
            • Attendance
            • Readings, Class Activities, and Online Participation
            • Critical Friend Work
            • Weekly Researcher Log
            • Presentation of Research

2.   Teacher Research Project Report   70%

1.   Participation (30%)

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.

Readings, 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 on both 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.

Critical Friend Work
As part of your course participation, you will have the opportunity to work with a critical friend(s) to catalogue 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 and ideas for strategies and lessons, sharing how you are integrating standards in meaningful ways, and peer review of your research report. The memos are designed to co-support each other's research and to provide alternative perspectives on interpretation to increase the validity of your research. 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 blackboard space to post and respond to each other's memos in the "Critical Friend."
Specifically:
> You will find the 3 critical friend inquiries (CFI) and examples in the textbook.
>> CF Memo 1: located in Chapter 4 (CFI 4.1 Research question and dilemma)
>> CF Memo 2: located in Chapter 8 (CFI 8.1 Pedagogies and Data Collection)
>> CF Memo 3: located in Chapter 11 (CFI 11.1. Data Analysis)
> You will have the opportunity to work in a discipline-based team for peer review of your research draft which is a reciprocal process.

Assignments
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 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 on our class **Blackboard drop box at** http://courses.gmu.edu/. You need to install Java at java.com to upload assignments. Title each assignment with your last name and the name of the project/assignment, e.g., Smith.ResProp.02.16.10. Also bring a copy of the completed assignment to class for discussion which you can later place in the appendix of your report.

Weekly Researcher Log
 Post your weekly updates and progress of your teacher research project each week on your personal researcher log. **See Self-Study Research Project Timeline Log in Chapter 2. Table 2.2)**. This is your tentative timeline and tool to self-regulate your progress and the research process.

Presentation of Research

You are required to present your research project to your peers in an 8 minute presentation that includes a one-page handout of a special research resource for your peers, e.g., a research tool you found, a survey they can adapt in their classroom, technology tool you discovered, student exemplar that highlight the impact of your work, personal reflection to share. Oral presentations need to be professional and stay within the time frame allocated for the presentation and in consideration of peers' presentations.

Rubric for Participation

Category	Exemplary 30 pts.	Accomplished 27-29 pts	Developing 25-26 pts	Undeveloped Below 25 pts
Attendance/ Participation 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 community. Participants contribute to each others' learning in critical friend work by actively listening, exchanging ideas, sharing learning from reading and websites, and supporting each other's efforts.	Outstanding Participation; participates regularly and actively in discussions and activities. Promotes conversation focused on the topic. Comments demonstrate a high level of understanding and contribution from assigned readings. Listens actively to peers. Prompts peer feedback and input.	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.	Doesn't 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. Misses classes. Is late for class.	Few meaningful contributions to class discussions. Little evidence of participation and contribution from assigned reading. Shows little concern for peers' learning or input. Misses classes and is late for class. Does not make up work.

Minute Exit Folders

Each of you will be given a file folder. Use this folder to submit your assignments. I will return assignments in your individual folder. Also, at the end of each class, please take a minute and *write a brief reflection on the class session and what question(s) remain unanswered* in your folder. Please date each entry. Your comments will provide feedback to help me be responsive to your learning needs. Turn your folder in at the end of each class.

2.   Teacher Research Project Report (70%)

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. Your project should be useful to you and your students. A written a report that includes the specific headings and subheading are listed in Chapter 12 of our textbook.

All assignments require: American Psychological Association (2009). *Publication Manual of the American Psychological Association*. American Psychological Association: Washington, DC. (Available as reference at library). *For APA Guidelines online: http://owl.english.purdue.edu/owl/resource/560/01/

Research Proposal
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 with it and honor its incompleteness as part of the research process. Ask yourself does the written or visual proposal and presentation include or demonstrate:

- **Purpose: A clearly defined focus and purpose**
  What is the problem/issue to be addressed?

- **Rationale: Why you chose to explore this research topic and why it matters to others**
  What is going on your classroom which brings your attention to this problem/issue? What are your hunches about the reasons for this problem/issue? Why are you interested in this topic and why does it matter to you, your students, and the field?

- **Method and Data Sources:** How do you propose to go about exploring your inquiry? What is your context? Who are your participants? What are you considering as possible pedagogical strategies? What data sources are you considering that would be available to you?

Draft Literature Review
- 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 and themes to design your conceptual framework or mapping of the "big ideas" and connections you find in the literature to your study.

Performance-Based Assessment of Self-Study Teacher Research Project
Criteria for Evaluating the Research Report (70 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, context, method, key findings, and significance?
5 points possible

Rationale
1. Have you clearly and concisely explained why this research is important to you? Have you offered perspectives that shaped this question for you?
2. Did you provide a rationale for why this research is important to your students?

3. Have you addressed the broader educational and social significance of this research?
5 points possible

Statement of the Research Problem/Question
1. Have you clearly and concisely stated the research problem?
2. Have you clearly and concisely state your main research question and any sub questions?
5 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., 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. Does your data include a variety of sources from multiple sources?
7. Did you include a timeline for the data you collected and your planned interventions?
8. Did you explain how you analyzed your data and include a complete data audit trail?
9. Have you included and explained the role of your critical friends in your data interpretations?
10. Did you explore using visuals and technologies for analyzing and displaying your findings in a coherent manner?
15 points possible

Findings
1. Did you circle back to your research question(s) and discuss how they relate your findings?
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 share your findings with your critical friend?
10 points possible

Discussion, Self-Study of Teaching, and Implications
1. Have you explained the possible implications to your students' learning?
2. Have you explained the possible implications of to your understanding of teaching?
   Have you offered a self-assessment of how you addressed the self-study methodological components using the Five Foci chart?
   Have you discussed how you reshaped your practice from critical friend feedback?
   Does your discussion include evidence of your deep reflection and self-study of teaching?

Revisit your original research questions. 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.
3. Have you adequately explained the possible implications to the education field?
4. Have you adequately explained the possible implications of your study to national and state education standards?
5. Have you discussed any limitations and identified future research possibilities?
10 points possible

References and Appendix
1. Did you follow the APA style for the report, references, citations, and appendix?
2. Are references current and from different and high quality sources?
3. Have you provided a complete list of all print and non-print (internet) references?
5 points possible

Organization
1. Does the report include a cover page, title, author's name and professional affiliation?
2. Is your report well organized, grammatically correct, coherent and complete?
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?
4. Are all references cited in the research report included in the references?
5 points possible

Grading Scale for Research Project:
Exemplary: 70 points. Exceeds meeting criteria, multiple sources of evidence that substantially exceeds requirements.

Accomplished: 63-69 points. Provides convincing evidence of sound work, substantially meets requirements.

Developing: 58-62 points. Provides basic and somewhat convincing evidence that moderately meets criteria. Consider revision.

Undeveloped: 57 points and below. No evidence or little evidence of meeting the criteria.

Final Grades
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

Grade	Standards	Grading	Grade Points	Graduate Courses
A+	Substantially Exceeds Standard	99 - 100	4.00	Satisfactory / Passing
A	Meets Standard	93 – 98.9	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	Satisfactory* / Passing

READING RESOURCES

Teacher Research

Greely, K. (2000). *Why fly that way?: Living community and academic achievement.* NY: Teachers College.

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

Kagan, D. M. (1993). *Laura and Jim and what they taught me about the gap between educational theory and practice.* NY. State University of New York Press.

Kosnik, C., Beck, C., Freese, A. R., & Samaras, A. P. (Eds.), (2006). *Making a difference in teacher education through self-study: Studies of personal, professional, and program renewal.* Dordrecht, The Netherlands: Springer.

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.

Reason, P. Three approaches to participative inquiry (1994). In N. Denzin & Y. Lincoln, (Eds.). *Handbook of qualitative research.* Sage.

Samaras, A. P., & Freese, A. R. (2006). *Self-study of teaching practices primer.* NY: Peter Lang.

Samaras, A. P. (2002). *Self-study for teacher educators: Crafting a pedagogy for educational change.* Peter Lang.

Samaras, A. P., Freese, A. R., Kosnik, C., & Beck, C. (Eds.) (2008). *Learning communities in practice.* The Netherlands: Springer Press.

Thomas, R. M. (2005). *Teachers doing research: An introductory guidebook.* Boston: Pearson/Allyn & Bacon.

Qualitative Analysis

Bogdan, R. C., & Biklen, S. K. (1992). *Qualitative research for education: An introduction to theory and methods.* Boston, MA: Allyn & Bacon.

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

Denzin, N. K., & Lincoln, Y. S. (Eds.) (2005). 3rd Ed. *Handbook of qualitative research.* Thousand Oaks, CA: Sage.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis.* Thousand Oaks, CA: Sage.

Patton, M. Q. (1990). *Qualitative evaluation and research methods (Second Edition).* CA: Sage.

Reason, P. Three approaches to participative inquiry (1994). In N. Denzin & Y. Lincoln, (Eds.). *Handbook of qualitative research.* CA: Sage.

Seidman, I. E. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences.* New York: Teachers College Press.

Stake, R. E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage Publications.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage.

Quantitative Analysis and Statistics

Bartz, A. E. (1999). *Basic statistical concepts (4th ed).* Upper Saddle River, NJ: Merrill.

Berk, K. N., & Carey, P. (2000). *Data analysis with Microsoft Excel: Updated for Office 2000.* Belmont, CA: Duxbury.

Cronk, B. C. (2002). *How to use SPSS: A step-by-step guide to analysis and interpretation(2nd ed).* Los Angeles, CA: Pyrczak Publishing.

Jaeger, R. M. (1993). *Statistics: A spectator sport (Second Edition).* Newbury Park, CA: 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.

Research and Writing
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, IL: NCTE.

Writing a Research in Action Paper
Writinghttp://www.gmu.edu/departments/english/composition/wits/research/index.html

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

Data Collecting Tools, e.g., 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/
- Best Evidence/School Reform Reports/School Models. Johns Hopkins University http://www.bestevidence.org/index.htm

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
- State of Virginia Standards of Learning Test Information http://www.pen.k12.va.us/VDOE/src/SOLassessments.shtml
- FCPS Grading Policy http://www.fcps.k12.va.us/Directives/R2430.pdf

Also see the Self-Study Resource Center File in Samaras (2010) textbook.

Tentative Class Schedule

Week	Topic	Readings/Assignment Due
1 1/19	INTRODUCTION Overview of Self-Study Teacher Research Overview of M.Ed. Portfolio Rory Dipplod, Secondary Education Portfolio Coordinator	Introductory note emailed about bringing your personal learning event.
2 1/26	RESEARCH QUESTION RESEARCH PROCESS	Read Preface, Chapters 1 & 2 Overview Chapter 12 **Bring: Artifact and your response to the "I wonder about" inquiry.** See Chapter 1, Critical Friend Inquiry 1.1. Please <u>bring an artifact</u> (object) to help us learn a little about your research interests. For example, a student who was interested in improving children's reading brought in an old favorite book. Another student brought a bucket filled with treasures she collected at the beach that highlighted her interest in hands-on science inquiry as a teacher professional development science coordinator. It's a way for us to get to know each other's areas of research interests. Again, the artifact is a tool to prompt your thinking about your research. >Start noticing your classroom. >Brainstorm possible research topics
3 2/2	RESEARCH DESIGN BEGINNING A LIT REVIEW	Read Chapters 4, 5, & 6 **POST Critical Friend Research Memo 1 & Response**. It is located in Chapter 4: CFI 4.1.
4 2/9	RESEARCH ETHICS DATA COLLECTION WORKSHOP	Read: Chapters 7 & 8 **POST Research Proposal for Professor Feedback**

5 2/16	ONLINE LIT REVIEW WORK	**POST Draft Review of Literature any time this week for Professor Feedback** Read: Chapters 9 & 10
6 2/23	DATA ANALYSIS WORKSHOP	**POST Critical Friend Research Memo 2 & Response.** It is located in Chapter 8: CFI 8.1. Read Chapter 11
7 3/2	VALIDATION WORSKHOP	Begin analyzing data
3/9	Spring Break!	
8 3/16	WRITING WORKSHOP Using research project in your M.Ed. Portfolio APA Format	**POST Critical Friend Research Memo 3 & Response.** It is located in Chapter 11: CFI 11.1. Read Chapter 12
9 3/23	FINDINGS WORKSHOP	Dialogue about findings
10 3/30	ONLINE CF WORK	**POST: Research Paper Draft to Critical Friend and Professor**
11 4/6	ABSTRACT WORKSHOP	**Bring:** Abstract Draft on jump drive Read Chapter 13
12 4/13	ONLINE CF WORK	**POST: Project Title** **POST: Feedback on Research Paper to Critical Friend**
13 4/20	RESEARCH PRESENTATIONS >Invite your colleagues and family	**POST and Bring: Handout for Presentation**
14 4/27	SEED PORTFOLIO PRESENTATIONS	Portfolio Presentation Days Sign up with Rory for 4/27 or 4/28 A draft copy of your research project needs to be placed in your M.Ed. Portfolio.
15 5/4	Exit Reflection on Professional Growth and Continued Goals	**Final Day to POST in drop box and BRING hard copy of Final Research Project Paper**