George Mason University
College of Education and Human Development

EDUC 675  Section 001
Research in Secondary Education

Innovation 317
Fall 2010
Mondays 4:30 p.m. – 7:10 p.m.

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Office hours  Call/email to set appt.

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 action 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 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 visit:
- National Board of Professional Teaching Standards http://www.nbpts.org/the_standards/the_five_core_proposition

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

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

REQUIRED READINGS


Must have access to GMU email and with other email account forwarded to GMU mail account on Blackboard at courses.gmu.edu.

COURSE REQUIREMENTS AND EVALUATION
1. Participation 30%
   - Attendance, Class Activities, Readings (integrated in assignments)
   - Critical Friend Inquiries in Class and Online, includes peer review of draft (15%)
   - Research Proposal (5%)
   - Draft Literature Review Sharing in Class (5%)
   - Final Presentation (5%)

2. Teacher Research Project Report 70%

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.

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 Inquiries
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 our textbook.
CFI 4.1, pp. 82-85 Research question and dilemma: Incorporate in artifact essay
CFI 8.1, pp. 171-172 Pedagogies and Data Collection
CFI 11.1, p. 215 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**
Keep a researcher log of progress of your project each week and include in the appendix of your final report. 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.

**Research Proposal**
*It must be love:* For your research paper, you should choose a topic 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).

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 each subtitle listed on p. 123 in our textbook.

**Draft Literature Review**
Post a draft of your literature review on Blackboard 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).

**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

<table>
<thead>
<tr>
<th>Category</th>
<th>Exemplary 30 pts.</th>
<th>Accomplished 27-29 pts</th>
<th>Developing 25-26 pts</th>
<th>Undeveloped Below 25 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance/Participation</td>
<td>Outstanding</td>
<td>Participates</td>
<td>Doesn’t contribute</td>
<td>Few meaningful</td>
</tr>
<tr>
<td>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.</td>
<td>to discussions or activities on a regular basis; questions and comments reveal thought and reflection and contribution from assigned readings. Frequently involves peers in learning and offers feedback.</td>
<td>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.</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

2. **Teacher Research Project (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.

**Performance-Based Assessment of 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 your 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 and 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 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.*

<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>Substantially Exceeds Standard</td>
<td>99 - 100</td>
<td>4.00</td>
<td>Satisfactory / Passing</td>
</tr>
<tr>
<td>A</td>
<td>Meets Standard</td>
<td>93 – 98.9</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


Qualitative Analysis


Quantitative Analysis and Statistics


Sage.

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
- The Nation's Report Card/National Assessment of Educational Progress http://nces.ed.gov/nationsreportcard/
- TIMSS and PIRLS The International Math and Science Study and International Literacy Study http://www.timss.org/

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

*Also visit the Self-Study Resource Center at http://www.sagepub.com/samaras/ for chapter summaries, powerpoints, and more.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings/Assignment Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INTRODUCTIONS TO OUR LEARNING COMMUNITY</td>
<td><strong>Read</strong> McNiff, Lomax, &amp; Whitehead, pp. 18-25 on e-reserves (“research”)</td>
</tr>
<tr>
<td>1</td>
<td>Overview of Course and Self-Study</td>
<td>In class activity: “I wonder about” inquiry. Use CFI 1.1 pp. 5-6</td>
</tr>
<tr>
<td>1</td>
<td>Teacher Research</td>
<td>Utilizing your research project as part of your M.Ed. Portfolio Sign up with Portfolio Coordinator for portfolio workshops and day of presentation</td>
</tr>
<tr>
<td>1</td>
<td>Overview of M.Ed.</td>
<td></td>
</tr>
<tr>
<td>9/6</td>
<td>Labor Day</td>
<td>Labor Day University Closed (Optional extra credit activity, Critical Friend Inquiry (CFI) 5.1 pp. 95-98)</td>
</tr>
<tr>
<td>2</td>
<td>RESEARCH RATIONALE</td>
<td><strong>Read</strong> Preface, Chapters 1 &amp; 2</td>
</tr>
<tr>
<td>2</td>
<td>FINDING YOUR RESEARCH QUESTION</td>
<td>Overview Chapter 12</td>
</tr>
<tr>
<td>2</td>
<td>Overview Self-Study Resource Center</td>
<td>Overview Self-Study Resource Center at <a href="http://www.sagepub.com/samaras/">http://www.sagepub.com/samaras/</a></td>
</tr>
<tr>
<td>2</td>
<td>Begin to frame your research proposal and study design.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>DESIGNING YOUR ACTION RESEARCH PROJECT</td>
<td>Begin to <strong>Read</strong> Chapters 4, 5, &amp; 6</td>
</tr>
<tr>
<td>3</td>
<td>BEGINNING A LIT REVIEW</td>
<td></td>
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<tr>
<td>4</td>
<td>RESEARCH ETHICS</td>
<td><strong>Read</strong>: Chapters 7 &amp; 8</td>
</tr>
<tr>
<td>4</td>
<td>DATA COLLECTION WORKSHOP</td>
<td><strong>Read</strong> McNiff, Lomax, &amp; Whitehead, pp. 26-32 on e-reserves</td>
</tr>
<tr>
<td>4</td>
<td>POST Research Proposal for Professor Feedback and Share with Discipline Team in Class.</td>
<td>Use CFI 6.3, pp. 123-126</td>
</tr>
<tr>
<td>5</td>
<td>LIT REVIEW WORK (online)</td>
<td><strong>POST Draft Review of Literature any time this week for Professor Feedback</strong></td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
<td>Details</td>
</tr>
<tr>
<td>-------</td>
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<td>-------------------------------------------------------------------------</td>
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<tr>
<td>10/11</td>
<td>Columbus Day Recess</td>
<td>Columbus Day Recess</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*NOTE: Mon classes meet instead on Tues this week</td>
</tr>
<tr>
<td>6</td>
<td>DIALOGUING ABOUT DATA COLLECTED</td>
<td>POST Critical Friend Research Memo 2 &amp; Response. CFI 8.1, pp. 171-172</td>
</tr>
<tr>
<td>10/12</td>
<td></td>
<td>Bring your data to class</td>
</tr>
<tr>
<td>7</td>
<td>DATA ANALYSIS WORKSHOP</td>
<td>Discussion with Critical Friends</td>
</tr>
<tr>
<td>10/18</td>
<td></td>
<td>Read Chapter 11</td>
</tr>
<tr>
<td>8</td>
<td>VALIDATION WORKSHOP</td>
<td>POST Critical Friend Research Memo 3 &amp; Response. Use CFI 11.1, pp. 215</td>
</tr>
<tr>
<td>10/25</td>
<td></td>
<td>Read Senese article on e-journal</td>
</tr>
<tr>
<td>9</td>
<td>FINDINGS WORKSHOP</td>
<td>Dialogue with critical friends about preliminary findings. CFI 11.2 pp. 220 will be done in class workshop</td>
</tr>
<tr>
<td>10</td>
<td>RESEARCH DRAFT (online work with in class consultation available)</td>
<td>POST: Research Paper Draft to Critical Friend and Professor</td>
</tr>
<tr>
<td>11</td>
<td>WRITING AND ABSTRACT WORKSHOP</td>
<td>Read Chapter 12, Review APA Format in Self-Study Resource Center</td>
</tr>
<tr>
<td>11/15</td>
<td></td>
<td>Read Chapter 13</td>
</tr>
<tr>
<td></td>
<td>POST: Project Title</td>
<td>Bring: Bring your abstract draft on jump drive or send to your email.</td>
</tr>
<tr>
<td>12</td>
<td>FEEDBACK OF PROJECT DRAFT (online work)</td>
<td>POST: Feedback on Research Paper to Critical Friend</td>
</tr>
<tr>
<td>11/22</td>
<td></td>
<td>Use tracking and comments feature on Microsoft Office</td>
</tr>
<tr>
<td>13</td>
<td>SEED PORTFOLIO PRESENTATIONS</td>
<td>A draft copy of your research project is required for your M.Ed. Portfolio.</td>
</tr>
<tr>
<td>11/29 &amp; 12/1</td>
<td></td>
<td>POST and Bring: Handout for Presentation</td>
</tr>
<tr>
<td>13</td>
<td>PRACTICAL PROJECT PRESENTATIONS</td>
<td>Final Day to POST in drop box and BRING hard copy of Final Research Project Paper</td>
</tr>
<tr>
<td>12/6</td>
<td></td>
<td></td>
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</tbody>
</table>