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

Spring 2012  
EDUC 675 Section 002  
Research in Secondary Education

Instructor: Amos O. Simms-Smith  
Day and Time: Wednesdays 7:20 p.m. -10p.m.  
Class Location: Innovation Hall 320  
Email: asimms1@gmu.edu  
Office hours: By appointment

COURSE DESCRIPTION

This course is designed to help beginning teachers understand and enact concepts and principles of teacher research into their practice. Students will learn how to identify and use research literature and systematic evidence to improve practice for students’ learning. Emphasis is placed on linking research and practice to make informed instructional decisions. Co-requisite: M.Ed. Exit Requirement. Pre-requisites: Licensure and EDUC674. To be taken as the last course in the M.Ed.

CEHD Core Values

In 2006, the College of Education and Human Development (CEHD) adopted five core values on which to focus: collaboration, ethical leadership, innovation, research-based practice, and social justice. This course supports each of these values by providing multiple learning experiences that necessitate collaboration. Students are afforded opportunities to reflect on their teacher leadership roles in school contexts; to design and engage in innovative research-based practice, and analyze and reflect on their pedagogies on a critical reflection level for social justice. These Core Values are
aligned with course goals:

COURSE GOALS
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; RESEARCH-BASED PRACTICE; INNOVATION
2. Prepare a research proposal which makes explicit links between theory and practice; RESEARCH-BASED PRACTICE
3. Examine ethical considerations when conducting teacher research; RESEARCH-BASED PRACTICE; SOCIAL JUSTICE
4. 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; RESEARCH-BASED PRACTICE
5. Participate in “critical collaborative inquiries” to gain multiple perspectives in interpreting research and for validation and peer review of research; COLLABORATION; ETHICAL LEADERSHIP
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; SPA STANDARDS respective to students’ discipline;
7. Demonstrate skills in the application of technology and use of resources in teacher research; INNOVATION

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 visit: 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_proposition
COLLEGE EXPECTATIONS AND UNIVERSITY HONOR CODE

The Graduate School of Education (GSE) expects that all students abide by the following:

Students are expected to exhibit professional behavior and dispositions.

*Commitment to the profession*
  - Promoting exemplary practice
  - Excellence in teaching and learning
  - Advancing the profession
  - Engagement in partnerships

*Commitment to honoring professional ethical standards*
  - Fairness
  - Honesty
  - Integrity
  - Trustworthiness
  - Confidentiality
  - Respect for colleagues and students

*Commitment to key elements of professional practice*
  - Belief that all individuals have the potential for growth and learning
  - Persistence in helping individuals succeed
  - High standards
  - Safe and supportive learning environments
  - Systematic planning
  - Intrinsic motivation
  - Reciprocal, active learning
  - Continuous, integrated assessment
  - Critical thinking
  - Thoughtful, responsive listening
  - Active, supportive interactions
  - Technology-supported learning
  - Research-based practice
  - Respect for diverse talents, abilities, and perspectives
  - Authentic and relevant learning

*Commitment to being a member of a learning community*
  - Professional dialogue
  - Self-improvement
  - Collective improvement
  - Reflective practice
  - Responsibility
  - Flexibility
  - Collaboration
  - Continuous, lifelong learning

*Commitment to democratic values and social justice*
  - Understanding systemic issues that prevent full participation
  - Awareness of practices that sustain unequal treatment or unequal voice
  - Advocate for practices that promote equity and access
  - Respects the opinion and dignity of others
  - Sensitive to community and cultural norms
Appreciates and integrates multiple perspectives

**Student Expectations**
- Students must adhere to the guidelines of the George Mason University Honor Code [See http://academicintegrity.gmu.edu/honorcode/].
- 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 [See http://ods.gmu.edu/].
- Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/1301gen.html].
- 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, and program will be sent to students solely through their Mason email account.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

**Campus Resources**
- 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/].
- 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/].
- For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See http://gse.gmu.edu/].

**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 TEXTS**

**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**

**REQUIRED READINGS**


*Other assigned readings made available in class.*

**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 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 me know during our first class. Alternative arrangements used successfully in the past will be offered.***

**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. **SAVE YOUR WORK FREQUENTLY.**

**COURSE REQUIREMENTS AND EVALUATION**

Participation and Class Assignments  
1. Attendance, Class Activities, Readings  
2. Critical Friend Inquiries in Class and Online Work  
3. Research Proposal  
4. Draft Literature Review  
5. Peer Review of Research Project Draft

Teacher Research Project Report  

1. **Participation and Class Assignments (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 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.

Critical Friend Inquiries (CFI)
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.

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 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. 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.02.16.12. Keep a copy of all assignments which you will insert into the appendix of your report. MAKE IT A HABIT TO SAVE YOUR DRAFT AND FINAL WORK IN MULTIPLE PLACES.

*For APA Guidelines online: http://owl.english.purdue.edu/owl/resource/560/01/

Recommended Weekly Researcher Log

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

**Memos**

One way to enhance your thinking process and develop your research is to capture your observations, questions, and insights in the form of “analytic memos.” You can think of these as “come as you are” pieces of writing (Maxwell, 2011, personal communication); “ways of getting ideas down on paper (or in a computer), and of using this writing as a way to facilitate reflection and analytic insight” (Maxwell, 2005, p. 12). You are required to complete three memos on areas of dissonance related to literature review, data collection, and data analysis and interpretation.

**Research Question and Proposal**

*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.
**Draft Literature Review**

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 Samaras, pp. 127-134). Format is your choice, e.g. annotated bibliography, narrative to insert directly into final report.

<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 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. Works very closely and consistently with peers/ critical friends for feedback and input.</td>
<td>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 learning and offers feedback.</td>
<td>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. Misses classes. Is late for class.</td>
<td>Few meaningful contributions to class discussions. Little evidence of participation and contribution from assigned readings. Shows little concern for peers’ learning or input. Misses classes and is late for class. Does not make up work.</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 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.

**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 and the context, method, key findings, and significance of your research?

*5 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?

*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 stated your main research question and any subquestions?

*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. Have you explained the reasons for your pedagogies based on your noticing of your classroom and the literature reviewed?
4. 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?
5. Are your data from multiple sources?
6. 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?

**15 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 and Implications)**

-- You will also present this orally in class --
1. Have you adequately explained the implications of your study for your students’ learning?
2. Have you adequately explained the implications of your study to your teaching and reframing of your practice?
3. Have you adequately explained the implications of your study to the education field?
4. Have you adequately explained the relevance of your study to national and state education standards?
5. Have you discussed any limitations?
6. Have you identified areas for future research possibilities?

**15 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

**5 points possible**
Grading Scale for Research Project:

Exemplary: 70 points. Substantially meets the project and report requirements. All criteria are addressed fully.


Developing: 58-62 points. Meets some, but not all, of the project and report requirements. Weaknesses in addressing some of the criteria. Consider revision.

Undeveloped: 57 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.

<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


**Qualitative Analysis**


**Quantitative Analysis and Statistics**


**Research and Writing**


**Help with Research**

- [http://library.gmu.edu/mudge/Dox/basics.html](http://library.gmu.edu/mudge/Dox/basics.html)

**Data Collecting Tools**

- Go to Google docs, then spreadsheets to create survey

**National Reports and Test Reporting Centers**

- TIMSS and PIRLS The International Math and Science Study and International Literacy Study [http://www.timss.org/](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/](http://www.pen.k12.va.us/)
- State of Virginia, SOL Resources [http://www.pen.k12.va.us/VDOE/Instruction/sol.html](http://www.pen.k12.va.us/VDOE/Instruction/sol.html)

**Tentative Course Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Readings/Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/25</td>
<td>OVERVIEW OF COURSE AND PROJECT</td>
<td><em>Post all work to CFs &amp; Professor on MyMason Bb</em></td>
</tr>
<tr>
<td></td>
<td>FINDING YOUR RESEARCH QUESTION</td>
<td></td>
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<tr>
<td></td>
<td>“I wonder about” inquiry</td>
<td></td>
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<tr>
<td>2 2/1</td>
<td>ONLINE</td>
<td>Read Chapters 1 and 2 (Samaras)</td>
</tr>
<tr>
<td></td>
<td>RESEARCH RATIONALE</td>
<td>Read Chapter 1 (Mills)</td>
</tr>
<tr>
<td></td>
<td>RESEARCH DESIGN</td>
<td>Read Chapter 3: pp. 64-66 (Mills)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overview Self-Study Resource Center at <a href="http://www.sagepub.com/samaras/">http://www.sagepub.com/samaras/</a></td>
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<tr>
<td></td>
<td></td>
<td>POST: Education-related Life History</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Use CFI 5.1 pp. 95-98)</td>
</tr>
<tr>
<td>3 2/8</td>
<td>RESEARCH DESIGN</td>
<td>Read Chapter 7 (Samaras)</td>
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<tr>
<td></td>
<td>RESEARCH ETHICS</td>
<td>Read Chapter 2 pp. 3 (Mills)</td>
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<td></td>
<td>CRI 7.1 pp. 154-157</td>
<td></td>
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<tr>
<td></td>
<td>Task 1 p. 37</td>
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<tr>
<td>4 2/15</td>
<td>LITERATURE REVIEW WORKSHOP</td>
<td>Literature Review Overview</td>
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<tr>
<td></td>
<td></td>
<td>Read Chapter 3: pp. 44-60 (Mills)</td>
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<tr>
<td>Week</td>
<td>Date</td>
<td>Activity</td>
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<tr>
<td>5</td>
<td>2/22</td>
<td>ONLINE</td>
</tr>
<tr>
<td>6</td>
<td>2/29</td>
<td>COLLECTING &amp; ORGANIZING DATA WORKSHOP</td>
</tr>
<tr>
<td>7</td>
<td>3/7</td>
<td>ONLINE</td>
</tr>
<tr>
<td></td>
<td>3/14</td>
<td>SPRING BREAK</td>
</tr>
<tr>
<td>8</td>
<td>3/21</td>
<td>DATA ANALYSIS &amp; INTERPRETATION WORKSHOP</td>
</tr>
<tr>
<td>9</td>
<td>3/28</td>
<td>ONLINE</td>
</tr>
<tr>
<td>10</td>
<td>4/4</td>
<td>ABSTRACT LIMITATIONS WORKSHOP</td>
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<tr>
<td>11</td>
<td>4/11</td>
<td>ONLINE</td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
<td>Notes</td>
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<tr>
<td>4/18</td>
<td>VALIDATION WORKSHOP</td>
<td>Read Chapters 11 (Samaras)</td>
</tr>
<tr>
<td></td>
<td>CFI 11.2 pp. 220</td>
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</tr>
<tr>
<td>4/25</td>
<td>ONLINE</td>
<td>POST: Draft 2 of Research Paper 2</td>
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<tr>
<td></td>
<td></td>
<td>POST: CF Feedback on Research Draft 2</td>
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<tr>
<td></td>
<td></td>
<td>Use tracking and comments feature on Microsoft Office</td>
</tr>
<tr>
<td>5/2</td>
<td>ONLINE: WRITING YOUR PAPER</td>
<td>Work with CF on final revisions and for final manuscript polishing</td>
</tr>
<tr>
<td>5/9</td>
<td>PRESENTATIONS: REFRAMING OF PRACTICE</td>
<td>Bring Discussion Section of your project to class to share</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*POST and BRING hard copy of Final Research Project Paper</td>
</tr>
</tbody>
</table>