George Mason University
College of Education and Human Development
Secondary Education Program
Spring 2022

SEED 675 (Section DL1) Research in Secondary Education
3 credits
Wednesdays, 4:30-7:10 pm
Class Location: Online

Note: This course is fully online, using a combination of synchronous meetings via Zoom and asynchronous tasks. See the Class Schedule for details.

Faculty
Name: Melissa Hauber, PhD
Office Hours: By appointment (https://calendly.com/mhauber)
Office Location: Zoom classroom
Email Address: mhauberr@gmu.edu

Synchronous Class & Office Hours Zoom Link
https://gmu.zoom.us/j/98509917914?pwd=UHd0U2lMcU5BR2dVejdNaDdseS9rQT09

Prerequisites/Corequisites
SEED 522 (required prerequisite), SEED 669/EDRD 619 (required prerequisites or corequisites), SEED 440/540 (recommended prerequisite; formerly EDUC 372/672).

University Catalog Course Description
Links evidence of student learning to make informed instructional decisions. Engages students in critiquing various research paradigms, reviewing literature, and systematically collecting and interpreting evidence to improve practice.

Note: All students enrolled in this course must be working daily in or have access to a classroom setting classroom setting (during the semester in which they enroll in this course or a semester following), since the major course assignment involves a classroom-based teacher research project. Offered by the School of Education. May not be repeated for credit.

Course Overview
The purpose of this course is for you to learn how to design and conduct a teacher research project situated in a classroom with the goal of improving your teaching and your students' learning. The course is designed to promote a professional teaching and learning community with peer review/critical friend support. Throughout the course, you will complete stages of your research project (proposal) to compile into your final paper. Your ultimate success with the final project requires your ongoing commitment to each step in the process and collaboration with peers for reciprocal review. As a whole course, it provides an opportunity for your personal and ongoing professional development.

Course Delivery Method
This course will be delivered fully online using a combination of synchronous and asynchronous instructional approaches and large group, small group, and individual activities. The course will be hosted via the Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason username (everything before @masonlive.gmu.edu) and password. **Synchronous sessions will be held via Zoom. Login information will be sent by GMU email prior to the first week of class.**

Under no circumstances may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements
To participate in this course, students will need to satisfy the following technical requirements:
- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see:
  https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers
  To get a list of supported operation systems on different devices see:
  https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems
- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students will need a headset or built-in microphone for use with the Zoom web conferencing tool.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
  - Adobe Acrobat Reader: https://get.adobe.com/reader/
  - Windows Media Player:
    https://support.microsoft.com/en-us/help/14209/get-windows-media-player
  - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations
- Course Week: Our course week will begin on Monday and end on Sunday. All synchronous meetings will take place on Wednesdays as indicated on the Class Schedule.
- Log-in Frequency: Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 3 times per week. In addition, students must log-in for all scheduled online synchronous meetings.
- Participation: Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.

- Technical Competence: Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues: Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload: Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- Instructor Support: Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues via web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- Netiquette: The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them so others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words*. Remember that you are not competing with classmates but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.
- Accommodations: Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Services.

Learner Outcomes or Objectives
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 project 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;
4. Conduct teacher research which includes research question(s), a research proposal, a review of related literature, methods/design, data collection/analysis, findings, and a discussion of impact on students, teachers, and the education field;
5. Participate in critical and 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 their research question(s) by reflecting on their own teaching practice and its impact on students' learning; and
7. Demonstrate skills in the application of technology and use of resources in teacher research.
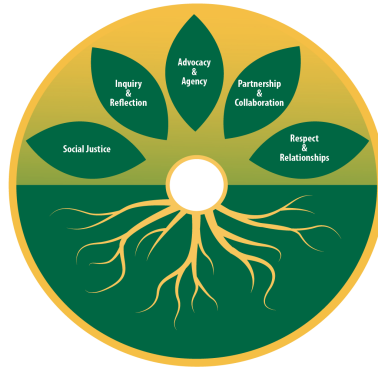
Professional Standards
By the end of this course students will demonstrate an understanding and application of subject area standards aligned with the National Content Standards and identified by their Specialized Professional Association (SPA):
- Social studies teachers: National Council for the Social Studies, http://www.ncss.org
- English teachers: National Council of Teachers of English, http://www.ncte.org

- Math teachers: National Council of Teachers of Mathematics, http://www.nctm.org
- Science teachers: National Science Teachers Association, http://www.nsta.org

Students should also have an understanding of and be able to apply the standards of the Interstate New Teacher Assistance and Support Consortium (INTASC): https://ccsso.org/sites/default/files/2017-12/2013_INTASC_Learning_Progressions_for_Teachers.pdf

The Secondary Education (SEED) Program "Seeds"

As illustrated by the model above, the SEED program is guided by five "Seeds" or principles that students are expected to understand and learn to apply in their teaching and professional lives: Social Justice, Inquiry and Reflection, Advocacy and Agency, Partnership and Collaboration, and Respect and Relationship. SEED students address each Seed in a developmental fashion, twice during their licensure program and once again during the master's teacher research capstone experience:

- Each Seed is introduced, and students demonstrate initial understandings and consider initial applications to teaching of the Seeds (as determined by the program and course instructor) during one of the five pre-licensure courses ("Foundations," Methods I, Human Development, Methods II, Content Literacy)
- All five Seeds are revisited, and students demonstrate deeper conceptual understandings of and identify applications to their teaching of the Seeds (in a manner they determine) during internship and internship seminar.
- All five Seeds are explored more deeply, and students demonstrate mastery understandings of, applications to their teaching and teaching inquiries (via their teacher research Methodologies), and future integrations of the Seeds into their teaching and teaching inquiries (via their teacher research Discussions)

Course	Seed/Definition	Key Assignment Description
"Foundations of Secondary Education"	**"Advocacy and Agency"** The SEED program educates teachers to develop a commitment to advocating for and developing agency in every young person. Teachers' advocacy activities begin with pedagogical interactions and extend into school and community contexts. Similarly, teachers' consideration of youths' agency begins with enabling them to act independently and make	**Multi-Genre Blog** The multi-genre blog is a collection of self-contained artifacts, representing multiple genres, united by a common theme. Each piece included in the collection must represent an aspect of the teacher candidate's teaching philosophy, and be drawn from their research, clinical and life experience, and class discussions. The blog must demonstrate the teacher candidate's

	choices in their own best interests—in the classroom and beyond.	understanding of why and how they will advocate for their students' well-being and success and help their students develop greater agency in school and beyond.
Methods I	**"Social Justice"** The SEED program educates teachers to develop a commitment to social justice. Such a commitment encompasses the belief that all members of our school, university, and broader communities can contribute to disrupting inequitable interactions, practices, and structures, with a focus on enhancing each individual's opportunity to learn and succeed. Social justice is also closely aligned with "equity," which involves the implementation of anti-oppressive and antiracist interactions, practices, and structures that ensure that every individual has an unbiased, impartial, responsive, and appropriately-scaffolded opportunity for academic and professional success.	**Lesson Plan** Using a provided format, the lesson plan must include objectives, standards, instructional plans, assessments, classroom layout(s), a teacher script, and all materials that would be given to students as part of the lesson. The lesson must demonstrate the teacher candidate's ability integrate justice concepts/content into their instruction.
"Human Development and Learning"	**"Relationships with and Respect for Youth"** The SEED program educates teachers to develop relationships with and respect for youths. When a school culture promotes respect, support for students' identities, senses of belonging, and tolerance, students are able to work as active participants in the classroom and the community. Secondary teachers who create a welcoming environment in their classrooms; who strive to know and honor students' backgrounds, preferences, and perspectives; who build relationships with young people based on trust and mutual understanding; and who connect curriculum to students' cultures hold key to effective instruction. Their instruction will contribute to developing unique individuals who will be able to connect their life experiences to learning.	**Case Study/Student Application Project** The case study/student application project is a summative assessment of the teacher candidate's ability to use psychological theory to analyze problems in a classroom and practice approaches a thoughtful, ethically principled teacher would use to solve problems. The case study/student applicant project must demonstrate the teacher candidate's understanding of how and why teachers can use psychological theories and principles to develop relationships with and demonstrate respect for youths, with an ultimate goal of enhancing adolescents' school and life success.
Methods II	**Inquiry and Reflection** The SEED program educates teachers who appreciate and know how to ask questions about their practices and who are critically reflective of their pedagogies, empowered by evidence. The ability to inquire and reflect on one's teaching practice is foundational to educators' ongoing and self-directed professional growth across their professional lifespans. Educators who can inquire	**Unit Plan/Lesson Implementation** Teacher candidates will use the "backwards design" process to develop a plan for teaching a unit which actively involves students in meaningful learning; individualizes learning to accommodate the strengths and needs of students; and provides authentic assessments. Unit plans will include objectives, a calendar, and an outline of each day in the unit. One lesson of the unit

	into and consistently implement effective instructional practices--and who can critically reflect on and evaluate their pedagogies--will be the most responsive teachers and will best inspire students to learn.	must be taught/co-taught in the teacher candidate's clinical experience classroom, and the unit plan and lesson implementation must demonstrate the candidate's understanding of how and why teachers use inquiry and reflection to improve their pedagogical practices and enhance student learning.
Content Literacy	**"Collaboration and Partnership"** The SEED program educates teachers who value collaborative engagement in learning and teaching and supporting collaboration through different forms of partnership. Collaboration takes on many forms, including collaboration amongst teacher candidates and their peers, course instructors and faculty advisors, mentor teachers in schools, their students and their students' families and caregivers, and amongst experts in their fields of teaching. These collaborations occur through a shared understanding of partnership. By spanning multiple boundaries, the SEED program supports partnerships with local schools and their divisions, with state and national professional associations, and with international experiences in other countries.	**Disciplinary Literacy Inquiry Project** Teacher candidates complete an inquiry into methods of supporting students' comprehension in their respective content areas. Using resources from class and peer-reviewed articles, candidates develop an understanding of how to guide and deepen students' comprehension, addressing questions including "Why is it important to be literate in our respective subject areas?". The inquiry project must demonstrate the candidate's understanding of how why teachers collaborate with other education professionals, students, families and caregivers and others to support students' subject area comprehension and literacy learning.
Internship and Internship Seminar	**All SEED Seeds: Applications to Teaching** All five Seeds are revisited, and students demonstrate deeper conceptual understandings of and identify applications to their teaching of the Seeds during internship and internship seminar.	
Teacher Research (for master's students only)	**All SEED Seeds: Applications to Teaching and Teaching Inquiries** All five Seeds are explored more deeply, and students demonstrate mastery understandings of, applications to their teaching and teaching inquiries (via their teacher research Methodologies), and future integrations of the Seeds into their teaching and teaching inquiries (via their teacher research Discussions)	

Required Text

Mertler, C. (2020). *Action research: Improving schools and empowering educators* (6th ed.). SAGE
     Publications.

Note: The textbook includes important online resources at https://edge.sagepub.com/mertler6e.
Additional readings, web-based resources, and exemplars will be showcased to highlight specific
research components; these will be provided as PDFs and links via Blackboard. If financial constraints
necessitate it, you may use the previous (5th) edition of the textbook along with the online resources.

Additional Resources
These are just a few useful sources you might want to add to your library or browser bookmarks. Books marked with * are available online through the Mason library.

APA Formatting
American Psychological Association (2020). *Publication manual* (7th ed.). American Psychological Association.
Note: Guidelines available from the Purdue Online Writing Lab:
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html

Action Research
Baily, S., Shahrokhi, F., & Carsillo, T. (2017). *Experiments in agency: A global partnership to transform teacher research*. Sense Publishers.*
Kemmis, S., McTaggart, R., & Nixon, R. (2013). *The action research planner: Doing critical participatory action research*. Springer Science & Business Media.*
McNiff, J. & Whitehead, J. (2009). *You and your action research project*. Routledge.
McNiff, J. (2016). *Writing up your action research project*. Routledge.
Noffke, S. E., & Somekh, B. (2009). *The SAGE handbook of educational action research*. SAGE Publications.*

Qualitative Design and Analysis
Maxwell, J.A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). SAGE Publications.
Saldaña, J. (2013). *The coding manual for qualitative researchers*. SAGE Publications.

Course Performance Evaluation
Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

Assignments
- Attendance, Classwork, and Participation   20%
- Teacher Research Project   80%
  - Research Project Drafts   20%
  - Research Presentation   10%
  - Final Project Report   50%

General
- All assignments should be turned via Blackboard on the due date indicated in the schedule below. All projects must be typed, in 12-point font, with one-inch margins, double-spaced, in Times New Roman font, and follow APA guidelines.
- Please title each assignment with your last name, the name of the project/assignment, the version of the assignment (e.g., "Draft"), and the date you are submitting it (e.g., Smith_Literature_Review_Draft_2.1.21).
- Writing quality (including mechanics, organization, and content) is figured into the overall points for each writing assignment, so please proofread carefully. Rubrics will be provided via Blackboard.

- Late papers and projects will not be accepted without penalty, excepting extraordinary circumstances.
- I am happy to provide clarifications and guidance on projects and assignments via email or during office hours, but please contact me within a reasonable timeframe.
- I reserve the right to add, alter, or omit any assignment as necessary during the course of the semester.

Attendance, Classwork, and Participation (20%)

- You are expected to attend all class periods of courses for which you register. Class attendance and participation with the whole group, in critical friend groups, and in 1-on-1 conferences are important not only to the individual student but to the class as whole.
- Instructional activities have been carefully structured in order to use our time together most effectively and to reduce "Zoom fatigue," so please come to synchronous sessions ready to engage actively and thoughtfully.
- You are expected to read/view the assigned materials, arrive promptly, attend all class meetings for the entire session, and participate in class discussions.
- Mutual respect and collaboration are central to this class and crucial to effective action research. Your attendance, thoughtfulness, clarity, and active sharing of responsibility for our classroom community will affect your grade.
- Demonstration of positive and collaborative professional dispositions toward colleagues during peer reviews, along with a willingness to accept constructive criticism, is a course expectation.
- Class participation is a factor in grading; instructors may use absences, tardiness, or early departures as de facto evidence of nonparticipation and as a result lower the grade. Two partial attendances are equal to one absence, and missing 30% or more of class sessions will result in automatic course failure.
- Please silence all mobile phones, computers, and other devices when you participate in our class.
- If, due to an emergency, you will not be able to participate during a given week of class, please contact me as soon as possible via email prior to any scheduled class, meeting, or conference time. You are responsible for obtaining information given during class discussions.

Teacher Research Project (80%)
Each participant will design and conduct a teacher research project that is relevant to their present or future teaching position. Outlines, examples, descriptions, and rubrics of these projects will be provided. You will write a literature review on the topic, design research methods, collect and analyze data, write up your research report, and share the results of your study with an outside audience. It is possible to partner with another student for the purpose of sharing data and researching different aspects of a common topic; each partner, however, must submit an original, stand-alone report.

Research Project Drafts (20%)
According to the timeline in the weekly schedule below, students will submit draft sections of each of the research project proposal sections – the research questions, literature review, methods, findings, and discussion. These will be shared with peer review groups and with me for feedback and then revised as necessary for the final project. Specific guidelines and rubrics will be provided during the course.

Please note that projects or papers submitted for credit in another course cannot also be used for a grade in this course. When considering research topics, you should identify a research question that really matters to you. It should be something about which you are curious and which you are willing to spend time researching and learning about.

Research Presentation (10%)
Each participant will make a short (3-5 minute) in-class presentation on their project (proposal) at the end of the semester; guidelines for these presentations will be provided.

Final Research Report (50%)
Students will revise and update project components as necessary and compile them into the final research report with an introduction, references, and appendices. Additional detail can be found in the project outline on the last page of the syllabus and the complete project description and rubric on Blackboard. This report will be due during the last week of the semester.

Assessment Grading
All assignments will be evaluated holistically; the general rubric is described below, and a specific rubric provided with each assignment.

> A= 95-100%
> A- = 90-94%
> B+ = 87-89%
> B = 83-86%
> B- = 80-82%
> C = 70-79%
> F = Below 70%

- "A" level score = Student work is well-organized, exceptionally thorough and thoughtful, candid, and completed in a professional and timely manner. Student followed all format and component guidelines, as well as including additional relevant component. Student supports assertions with multiple concrete examples and/or explanations. Significance and/or implications of observations are fully specified and extended to other contexts. Student work is exceptionally creative, includes additional artifacts, and/or intentionally supports peers' efforts.
- "B" level score = Student work is well organized, thorough, thoughtful, candid, and completed in a professional and timely manner. Student followed all format and component guidelines. Student supports assertions with concrete examples and/or explanations. Significance and/or implications of observations are fully specified.
- "C" level score = Student provides cursory responses to assignment requirements. Student did not follow all format and component guidelines. Development of ideas is somewhat vague, incomplete, or rudimentary. Compelling support for assertions is typically not provided.
- "F" level score = Student work is so brief that any reasonably accurate assessment is impossible.
- Incomplete (IN): This grade may be given to students who are passing a course but who may be unable to complete scheduled course work for a cause beyond reasonable control. The student must then complete all the requirements by the end of the ninth week of the next semester, not including summer term, and the instructor must turn in the final grade by the end of the 10th week. Faculty may grant an incomplete with a contract developed by the student with a reasonable time to complete the course at the discretion of the faculty member.

Professional Dispositions
See https://cehd.gmu.edu/students/polices-procedures/

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

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

Campus Resources
- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or https://cehd.gmu.edu/aero/tk20. Questions or concerns regarding use of Blackboard should be directed to https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/.
- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:
As a faculty member, I am designated as a "Responsible Employee," and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason's Title IX Coordinator by calling 703-993-8730 or emailing titleix@gmu.edu.

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

Human Subjects Research Review Process
Any research that will be publicly disseminated must have prior approval of the GMU Human Subjects Review Board (HSRB). Teacher research that is used solely for the purpose of studying pedagogical aspects may be conducted without additional permission but cannot be disseminated.

Class Schedule

Date & Mode	Topic/Focus	Reading & Videos Due	Individual Tasks	CFG Tasks
Week 1 (1/24-30) **Synchronous class 1/26**	Course overview and introduction to (participatory) action research	Ch. 1: Introduction to Action Research Video: Conversation with Dr. Craig Mertler about Action Research	Teaching context and topic survey	N/A
Week 2 (1/31-2/6) **Synchronous class 2/2**	The action research process	Ch. 2: Overview of the Action Research Process Stribling, 2017	Chapter 2 quiz Identify topic	N/A
Week 3 (2/7-13) **Asynchronous**	Identifying a topic and literature reviews	Ch. 3: Planning for Action Research & Reviewing Related Literature	Chapter 3 quiz **Complete the research topic survey** Sign up for individual conference (2/16) Begin collecting and reading articles and completing either the literature review table or annotated bibliography (10 sources) due 2/20	N/A
Week 4 (2/14-20) **Individual conferences 2/16 (during class)**	Literature reviews	Student-selected resources	**Attend conference at scheduled time** **Submit completed literature review table or annotated bibliography (10 sources) by 2/20**	

Week 5 (2/21-27) Synchronous class 2/23	Research questions and design	Ch. 4: Developing a Research Plan Marciano & Warren, 2019	Chapter 4 quiz **Literature review worksheet due 2/27**	
Week 6 (2/28-3/6) Synchronous class 3/2	Data collection	Ch. 5: Collecting Data Additional resources on Blackboard	Chapter 5 quiz	
Week 7 (3/7-13) Synchronous class 3/9	Arts-based methods	Wilson & Flicker, 2014 Zenkov et al., 2016 Call-Cummings et al., 2020 Johnson & Kendrick, 2017 Read/view additional resources on Blackboard.	**Research design (question(s), data collection plan & instruments) due 3/13**	Data collection plan & instruments peer review
Week 8 (3/14-20) Spring Break				
Week 9 (3/21-27) Asynchronous	Research ethics and validity	Shore, 2014 Zeni, 2009 Dick, 2014 Optional: Lac & Fine, 2018	**Complete CITI basics course and submit completion report, due 3/27.** Collect data	
Week 10 (3/28-4/3) Synchronous class 3/30	Data analysis	Ch. 6: Analyzing Data Read/view additional resources on Blackboard.	Chapter 6 quiz **Literature review draft due 4/3** Collect data	Literature review peer review
Week 11 (4/4-10) Synchronous class 4/6	Collaborative data analysis	Flicker, 2014 Read/view additional resources on Blackboard.	**Methods draft due 4/10** Collect data	Methods draft peer review

Week 12 (4/11-17) **Synchronous class 4/13**	Findings & APA format	Ch. 8: Writing an Action Research Report Read/view examples on Blackboard.	Chapter 8 quiz Collect and analyze data	
Week 13 (4/18-24) **Asynchronous**	Action planning & discussion	Ch. 7: Next Steps and Future Cycles: Developing an Action Plan Omori, 2018 Read/view examples on Blackboard.	Chapter 7 quiz Analyze data & draft findings **Findings draft due 4/24**	Findings peer review
Week 14 (4/25-5/1) **Synchronous class 4/27**	Summarizing and sharing your research	Ch. 9: Sharing and Reflecting	Chapter 9 quiz **Discussion draft due 5/1**	Discussion peer review
Week 15 (5/2-8) **Synchronous class 5/4**	Presentations & course wrap-up	N/A	**Research presentations**	
Week 16 (5/8-15) **Asynchronous**	Final projects	N/A	**Final teacher research project reports due 5/11**	

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students

SEED 675 Project Outline

1. Title page
2. Abstract (125-150 words)
3. Introduction (3-4 pages)
   a. Setting and demographics of school/community
   b. Area of focus you are addressing
   c. Rationale: the reason for or purpose of your project
   d. Research question(s)
      i. Hypothesis (if you had one)
4. Literature Review (4-6 pages synthesizing 10+ sources)
5. Method (4-6 pages, order can vary within reason)
   a. Subjects/participants and how they were chosen
   b. Context of the research (class demographics and/or relevant details, instructional context of the 'intervention')
   c. Research question(s)
   d. Strategies/design implemented (including notes of any changes)
   e. Materials used (include in appendix if possible)
   f. Number of sessions and total time
   g. Data sources and types (table)
   h. Data analysis method
6. Results/Findings (8-12 pages)
   a. Introduction/overview of findings
   b. Description of findings (organize by theme/student/data source, etc.)
   c. Connections to research question(s)
   d. Interpretations: what findings mean
7. Discussion (4-6 pages, (4-6 pages)
   a. Relation of your findings to the literature/theory on the topic
   b. Reflection on your learning
   c. Implications for your teaching and future research
   d. Recommendations for others
   e. Action Plan for your findings outside of class
   f. Limitations
8. Conclusion
9. References
10. Appendices