George Mason University
College of Education and Human Development
Secondary Education (SEED) Program

EDUC 597 (002) – "Research in Secondary Education"
1 Credit, Spring 2024
Wednesday, 7:20-10:00 pm
Face-to-face sessions in Thompson Hall L028 (Fairfax Campus); asynchronous/synchronous online sessions

Faculty

Name: Chris Seeger, PhD, Instructor
Office Hours: By appointment, virtually; office hours sign-up: **Sign Up Here**
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Synchronous (Zoom) Class Link: **https://gmu.zoom.us/j/8413120383**

Prerequisites/Corequisites

Required Prerequisites: SEED 540, SEED 522, Methods I, Methods II, EDRD 619, and EDCI 597 (or equivalent to SEED 675)

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. Notes: 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. Equivalent to EDUC 675.

Note: The course is equivalent to one portion of SEED 675. With the 2+1 credit conversion the SEED program is using the temporary course numbers of EDCI 597 (2-credits) and EDUC 597 (1 credit) as substitutions for SEED 675. EDCI 597 is a prerequisite for EDUC 597.

Course Overview

The goal 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. The course provides an opportunity for your personal and ongoing professional development.

Course Delivery Method

This course will be delivered via a hybrid model, with face-to-face, asynchronous, and synchronous sessions, relying on 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 @gmu.edu or @masonlive.gmu.edu) and email password.

*Notes: All SEED classes have designated delivery modes and specific modes for each class session (e.g., face-to-face, virtual synchronous, virtual asynchronous). The majority of SEED classes are held in a face-to-face mode. **Students are expected to attend every class session in the mode it is offered.** If you must miss a class session for illness or another valid reason, you are expected to proactively communicate (ahead of the class session) with your instructor about your expected absence. Course material will be presented and course objectives met in a variety of ways, including through class discussions, small and large group activities, individual and group work sessions, lecture, student presentations, and clinical experience in a face-to-face format. Visual aids and various uses of technology will be used to complement an interactive approach to learning. Synchronous and asynchronous teaching methods will be employed during the semester.*

Note: Under no circumstances may 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 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/

- o Windows Media Player: https://support.microsoft.com/en-us/help/14209/get-windows-media-player
- o Apple Quick Time Player: www.apple.com/quicktime/download/

- Expectations
    - <u>Course Week:</u> Our course week will begin on the Wednesday of each week.
    - <u>Log-in Frequency:</u> 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 twice per week. In addition, students must log-in for all scheduled online synchronous meetings.
    - <u>Participation:</u> 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.
    - <u>Technical Competence:</u> 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.
    - <u>Technical Issues:</u> 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.
    - <u>Workload:</u> 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.
    - <u>Instructor Support:</u> Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to the Mason Fairfax campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
    - <u>Netiquette:</u> 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.
    - <u>Accommodations:</u> Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Services.

Learner Outcomes or Objectives

Upon successful completion of SEED 675 (or the EDCI 597/EDUC 597 sequence) students will be able to do the following:	Methods by which your acquisition of each objective are measured:
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	• Active Participation in class discussions • Textbook reading, article readings, video assignments • Draft research project components • Constructive peer group work • Action research project • Research presentation
2) Prepare a research proposal which makes explicit links between theory and practice	• Draft research project components • Constructive peer group work

	● Action research project ● Research presentation
3) Examine ethical considerations when conducting teacher research	● Active participation in class discussions ● Textbook reading, article readings, video assignments ● Written responses

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	● Active participation in class discussions ● Textbook reading, article readings, video assignments ● Draft research project components ● Constructive peer group work ● Action research project ● Research presentation
5) Participate in critical and collaborative inquiries to gain multiple perspectives in interpreting research and for validation and peer review of research	● Active participation in class discussions ● Constructive peer group work
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	● Active participation in class discussions ● Constructive peer group work ● Action research project
7) Demonstrate skills in the application of technology and use of resources in teacher research	● Action research project ● Research presentation

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
● Computer science teachers: Computer Science Teachers Association: https://csteachers.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

Required Texts and Materials

Required Texts
- Mertler, C. (2020). *Action research: Improving schools and empowering educators* (6th ed.). Sage Publications.
- American Psychological Association (2020). *Publication manual* (7th ed.). American Psychological Association.
- *Teacher exemplar action research papers for each content area are located on Blackboard in the course content folder.*

Required Materials
Project Poster Display Board: size 36" x 48"

Additional Resources: 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.

Mills, G. E. (2018). *Action research: A guide for the teacher researcher* (6th ed.). Pearson.

Noffke, S. E., & Somekh, B. (2009). *The SAGE handbook of educational action research*. SAGE Publications.

Additional Resources: Qualitative Design and Analysis

Creamer, E.G. (2018). *An introduction to fully integrated mixed methods research*. Sage Publishing.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research* (4th ed.). Sage.

Maxwell, J.A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Sage Publications.

Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage.

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage.

Stake, R. E. (2006). *Multiple case study analysis*. Guilford Press.

Ravitch, S. M., & Carl, N. M. (2021). *Qualitative research: Bridging the conceptual, theoretical, and methodological.* Sage Publications.

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Sage Publications.

Course Performance Evaluation

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

General Expectations

Written Assignments

- Written assignments are to be submitted on Blackboard by the due date at the start of class. Blackboard time stamps all submitted work.
- Assignments will not be accepted after the due date. Any assignment may be resubmitted for an improved grade—with prior permission.
- Written assignment rubrics indicate "format and writing are of professional quality." This refers to the assignment being an overall piece of quality work that is grammatically correct with no errors; well composed and articulated; typed with 12-point font, double-spaced, and one-inch margins; contains appropriate diction and usage such as "students" instead of "kids"; and is proofread.
- All work should be your own and original. Copyright law is to be respected in all assignments. Any item taken from another source (the internet, classroom teacher, or a curriculum guide) must be noted and cited. Incorporating an idea or using another's material and not indicating the source is plagiarism and violates Mason's Honor Code. Plagiarism encompasses the following:
  1) Presenting as one's own the words, the work, or the opinions of someone else without proper acknowledgment.
  2) Borrowing the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment." (from Mason Honor Code online at https://catalog.gmu.edu/policies/honor-code- system/)
  3) Paraphrasing involves taking someone else's ideas and putting them in your own words. When you paraphrase, you need to cite the source using APA format.

4) When material is copied word for word from a source, it is a direct quotation. You must use quotation marks (or block indent the text) and cite the source.

Electronic tools (e.g., SafeAssign) may be used to detect plagiarism if necessary. Plagiarism and other forms of academic misconduct are treated seriously and may result in disciplinary actions.

Protocol and Expectations

Internet, mobile devices, and social media: While in class your attention should be focused on class related activities and discussion. The legitimate educational purpose of our class is to help prepare you for your professional career. This includes demonstrating courtesy and respect for your peers and myself by practicing and modeling the effective use of technology. Your attention in class is important for your learning. Your participation grade will be reduced accordingly for failing to follow these guidelines regarding computers, tablets, phones, and other electronic devices:

- Engaging in personal emails, instant messaging, texting, social media, games, and web surfing are not appropriate during class time.
- Unless you are using your device for approved notetaking, your laptops or other device should be off or in sleep mode until we are ready to use them.
- Demonstrate ethical and responsible behavior during class and on the GMU network.
- In general, use your laptops and other devices in class as you would expect your students to use theirs.
- Online synchronous classes: Students must maintain webcam "on" status

Attendance Policy

1) In accordance with the GMU Attendance Policies (University Catalog, 2023-2024), "Students are expected to attend the class periods of the courses for which they are registered. In-class participation is important not only to the individual student, but also to the class as a whole. Because class participation may be a factor in grading, instructors may use absence, tardiness, early departure, or failure to engage in online classes as de facto evidence of nonparticipation." See https://catalog.gmu.edu/policies/academic/registration-attendance/#ap-1-6.
2) If you must be absent from class, inform the instructor prior to the beginning of the class session. Missed classes (or portions of classes) will result in loss of participation points. Unless there are extenuating circumstances that have been shared with the instructor, more than two missed classes will result in a failing grade, and you must retake the course if you wish to earn credit.
3) Absence from class to observe a religious holiday, to serve jury duty, or to participate in required military service are exemptions to the above policy. If you anticipate being absent for any of these reasons, please make arrangements at least 48 hours in advance. See https://catalog.gmu.edu/policies/academic/registration-attendance/#ap-1-6-1
4) In addition, **you are expected to be on time to class** each week unless 48 hours advance notice has been provided to the instructor.

Use of Generative-Artificial Intelligence (AI) Tools

Use of Generative-AI tools should be used following the fundamental principles of the Honor Code. This includes being honest about the use of these tools for submitted work and including citations when using the work of others, whether individual people or Generative-AI tools.

When explicitly stated by the instructor, Generative-AI tools are allowed on the named assignment. Students will be directed if and when citation or statement-of-usage direction is required. Use of these tools on any assignment not specified will be considered a violation of the academic integrity policy. All academic integrity violations will be reported to the office of Academic Integrity. Some

student work may be analyzed using an originality detection tool focused on AI tools. Generative AI detection tool use will be revealed when the assignment directions are provided to students.

Due: Ongoing
Points: 100
Purpose: Continuous attendance, active participation, and adherence to protocol procedures are the attributes that allow our class sessions to be collaborative, maintain high standards, and encourage learning to take place. Students are expected to attend all class periods of courses for which they register. Class attendance and participation with the whole group, in constructive peer groups (CPG), and in 1-on-1 conferences are important—not only to the individual student, but to the class as a whole. This course is designed to provide ongoing opportunities to learn through conversation. These conversations provide spaces for you to think out loud, to explore your conceptional understandings, to share uncertainties and successes, to ask questions, and to learn from each other. Like written assignments, class participation is both a central means of learning and an assessment tool. Your participation will be determined by your active participation in class activities and discussions, your professional conduct in class, and clear evidence that you have completed course readings and tasks.
Procedures: Attendance is a prerequisite for class participation; **absences and tardiness will have a negative impact** on your participation grade. Attend each class session and actively participate in class discussions and activities without extraneous distractions and off-task activities (i.e., texting, reading email, etc.). This applies to in-person and online classes. Active participation/protocol adherence is determined by the rubric below:

Rubric for Active Participation/Protocol Adherence

	Acceptable	Unacceptable
Active Participation /75	- participates ***actively*** in class discussions and activities (asks questions, engages in conversation and hands-on activities, etc.) - participation is respectful and inclusive of others in the class - spends time only on the tasks associated with this course and the instructor's directions - comes to class with knowledge of prepared readings and pre-class assignments - clear evidence of competition of course tasks - online classes: Student maintains video "on" - follows GMU's policies on attendance and code of conduct as indicated in the University Catalog	- does not participate ***actively*** in class discussions, activities - participation is not respectful and inclusive of others - does not spend time only on the tasks associated with this course and the instructor's directions - did not come to class with knowledge of prepared readings and pre-class assignments - no evidence of competition of course tasks - online classes: Student maintains video "off" - does not follow GMU's policies on attendance and code of conduct as indicated in the University Catalog - absent from ____ class session - tardy to ____ class sessions - departed ____ class sessions early
Protocol Policy /25	- attention is focused on activities and discussion while in class: does not engage in personal emails, instant messaging, texting, social media, games, and web surfing, etc. - electronic devices are off or in sleep mode unless using the device for notetaking - demonstrates ethical and responsible behavior in class and on the GMU network - emergency phone calls taken outside classroom - professional conduct in class by participating appropriately in conversation by using appropriate terms, being inclusive and respectful to the instructor and fellow classmates	- attention is NOT focused on activities and discussion while in class, such as: - engages in personal emails, instant messaging, texting, social media, games, and web surfing - does not demonstrate ethical and responsible behavior in class and on the GMU network - does use mobile telephone to call or text - does not use professional and ethical judgment when posting messages on social media networks - does not engage in professional conduct in class by participating appropriately in conversation by using appropriate terms, being inclusive and respectful to the instructor and fellow classmates - does not follow GMU's policies on attendance and code of conduct as indicated in the University Catalog

• uses professional and ethical judgment when posting messages on social media networks. (**Note**: DO NOT post pictures of children or classmates on <u>any</u> social media platform.) • follows GMU's policies on attendance and code of conduct as indicated in the University Catalog	

Assignment 2: Rough Draft Research Project Components

Due:

Methodology	February 14th
Results/Findings	April 3rd
Discussion	April 10th

Points:

Methodology	60 points
Results/Findings	60 points
Discussion	60 points

Purpose: You will complete various rough drafts of each section of your final project to confirm you are carrying out your research project in a thoughtful, paced, and monitored process. This paced and incremental approach also ensures you are conducting your research in a timely manner and in a way that safeguards the process for you and your participants. The Merriam Webster dictionary defines rough draft as "a first version of something (such as a document) that needs a lot of editing and rewriting." Each draft you submit is a first version of your final Action Research Project focused on the Methodology, Results/Findings, and Discussion sections of the Action Research Project. Please see "Research Project Details" located at the end of this syllabus and on Blackboard for specific descriptions of each section.

Procedures:

1) **Drafts:** You will submit ONE Microsoft Word document on Blackboard through the template you create. The document will contain the five research project sections: the Introduction, Literature Review, Methodology, Results/Findings, and Discussion along with the title page, appendices, and references. You will add to the document as you progress through each graded component. This ONE document will be added to each time you complete a component of the research project and upload it to Blackboard. The rubric below is used **each time** one of the draft components is submitted to the instructor. You have already submitted the introduction, literature review, and reference drafts in the EDCI 597 course that is a prerequisite for this course.

2) You will find three assignments on Blackboard: Draft Methodology, Draft Findings/Results, Draft Discussion. You will upload your ONE Microsoft Word document to each of these assignments. The rubric below is used **each time** one of the rough draft components is submitted to the instructor.

Rubric for component marked: Methodology: _____ Results/Findings: _____ Discussion: _____			
	Excellent	**Adequate**	**Unacceptable**
Draft submitted for completion to instructor /60 per draft	draft component was uploaded to Blackboard by due date/time draft includes much detail for all items for the component as described in the "Research Project Outline" Format and writing are of professional quality (double-spaced, error-free, well composed and articulated, overall quality work, organized)	draft component was uploaded to Blackboard by due date/time draft includes some detail for all items for the component as described in the "Research Project Outline" format and writing flow well and are easy to read with only minor typos and mistakes. somewhat professional some unorganized areas draft component is missing _____ as described in the "Research Project Outline"	draft component was not uploaded to Blackboard by due date/time draft lacks detail and is difficult to understand for the component as described in the "Research Project Outline" format and writing are incomplete, disorganized, unedited, and/or difficult to follow. not professional in appearance

Assignment 3: Constructive Peer Group Reviews

Due: February 21st, April 10th, April 17th, and April 24th
Points: 100 (25 points each for reviews on February 21st, April 10th, April 17th, and April 24th)
Purpose: Constructive Peer Groups contribute to each other's learning by actively listening, exchanging ideas, and supporting each other's research and writing processes.
Procedures: You will be placed in Constructive Peer Groups. You will share your ONE Microsoft Word document with your Constructive Peer Group for your peers to provide feedback to you using the "Constructive Peer Group Review of Research Project Form" (located on Blackboard). This is a back-and-forth process of feedback between you and your peers. The completed form addressing your peers' draft writings will be uploaded to Blackboard after each draft section is due (February 17th for the Methodology, April 10th for the Findings, and April 17th for Discussion). You will also upload the completed form with all feedback at the end of the semester. You are uploading the form **YOU** completed for your peer(s). It is imperative that you provide detailed feedback as indicated in the instructions on the form.
Note: There is a steep grade penalty for not providing feedback within a week of receiving your peer's work.

Rubric for Constructive Peer Group

	Excellent	Adequate	Unacceptable
Constructive Peer Group Feedback /100 (25 or each review)	• embraces peer review process • met with Constructive Peer Group face-to-face or virtual during assigned time • peer completes Constructive Peer Group Review of Research Project Form with detailed advice for each section and returns the form back to peer(s) in a timely manner • peer review is thoughtful, constructive, and complete • glow/grow statements are used	• peer completes Constructive Peer Group Review of Research Project Form with advice • peer review does not provide detailed guidance for improvement, is not thoughtful or constructive, incomplete • uses glow/grow statements to limited extent to support peer(s)	• does not meet with Constructive Peer Group face-to-face or virtually • does not complete Constructive Peer Group Review Form for peer(s) • Constructive Peer Group Review of Research Project Form is not complete • does not provide peer(s) feedback in a timely manner; more than one week past the share date • peer review feedback is not thoughtful and/or is very critical and and/or not constructive. • does not use glow/grow statements to support peer(s) • shows little concern for peers' learning/input/peer review

Assignment 4: Action Research Project

Due: April 24th
Points: 500
Purpose: The purpose of this course is to link evidence of student learning to make informed instructional decisions. This assignment aims to engage students in creating an action research project with the intention of engaging students in critiquing various research paradigms, reviewing literature, and systematically collecting and interpreting evidence to improve practice.
Procedures: You will design and conduct a teacher action research project that is relevant to your present teaching position. Outlines, examples, descriptions, and rubrics of these projects will be provided. The project will entail that you collect and analyze data and share the results of your study with our class. With special permission from the instructor, 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. This final action research project contains five chapters (Introduction, Literature Review, Methodology, Results/Findings, and Discussion) with a title page, references, and appendices. You may use an updated, complete Introduction, Literature Review, and References sections from your previous 2-credit research course for this final action research project. The final paper must be submitted to SafeAssign and a copy of the SafeAssign report submitted to Blackboard with the assignment. Projects or papers submitted for credit in another course cannot be used for a grade in this course, except from your 2-credit research course that is a prerequisite for EDUC 597. *Please note that B- is not a passing grade for this assignment.*

Note: Data collection cannot begin until the methodology section is reviewed and approved by the instructor.

Special Note re: Human Subjects in Research: Any research or action research that will be disseminated publicly must have prior approval of the GMU Research Development, Integrity, and Assurance (RDIA) office or the Institutional Review Board (IRB). Human Subjects Training must be completed prior to seeking RDIA/IRB approval. **Inquiry/action research that is used solely for the purpose of studying pedagogical aspects may be conducted without additional permission but cannot be disseminated.** Detailed information on what is involved in submitting a proposal to the

RDIA/IRB: Human Subjects - Office of Research Integrity and Assurance (https://oria.gmu.edu/topics/human-subjects/)

Action Research Project Rubric

(The rubric below results in a total point value that will be multiplied by 5 to create a point value for the final Action Research Project.)

	Does Not Meet Expectations	Approaches Expectations	Meets Expectations	Exceeds Expectations
	0-3.5 points / F	3.5-4 points / C	4-4.5 points / B	4.5-5 points / A
Title Page 1 page 5 points	Title page is missing	Title page includes few of the required elements.	Title page includes most of the required elements.	Title page includes Research Project Title, author's Name, George Mason University, Course Number, instructor's name, Submission Date
	0-6.9 points / F	7-7.9 points / C	8-8.9 points / B	9-10 points / A
Introduction, Area of Focus, Rationale, and Research Questions 3-4 pages 10 points	Section is so brief, incomplete, or off-topic that accurate assessment is impossible. Does not clearly explain the context or state study setting, operationally define the study terms, the research purpose or questions.	Project includes minimal information on the context framework for the study. Does not offer a rationale for the study or does so only superficially. States study setting, operationally defines the study terms, the research question and purpose of the study but may be unclear or lack specificity.	Project includes an adequate context and/or theoretical framework for the study and a defensible rationale for its execution, though one or both may be weakly developed. Explicitly states study setting, operationally defines the study terms, the research question and purpose of the study.	Project includes a sound context/theoretical framework for the study and a compelling rationale for its execution. Clearly and explicitly states the study setting, operationally defines the study terms, research question, and purpose of the study.
	0-10.5 points / F	10.5-12 points / C	12-13.5 points / B	13.5-15 points / A
Literature Review 4-6 pages 15 points	Literature review is so brief, incomplete, or off-topic that accurate assessment is impossible.	Includes fewer than 4 peer-reviewed empirical research sources. Does not make a clear case for the project focus. Summarizes cited works sequentially, rather than synthesizing and organizing them thematically. Relies heavily on direct quotes.	Includes at least 4 peer-reviewed empirical research sources. Makes a reasonable case for the project focus. Organizes literature by identifiable themes, although organization within themes may be unclear. Attempts to synthesize referenced sources. Uses few direct quotes.	Includes at least 5 peer-reviewed empirical research sources. Identifies gaps in the literature to which the study responds and makes a clear case for the project focus. Organizes the literature by clearly identifiable themes, proceeding from general to more specific within each theme. Effectively synthesizes referenced sources, using few, if any, direct quotes.
	0-13.9 points / F	14-15.9 points / C	16-17.9 points / B	18-20 points / A
Methodology 4-6 pages 20 points	Methods section is so brief, incomplete, or off-topic that accurate assessment is impossible. Does not clearly describe how the study was conducted, what data sources were used, or how data were analyzed.	Includes explanation of the study design, procedures followed, sampling methods, and analytical tools (including any statistical tests), given the stated purpose of the study; explanations, however, are not fully developed. Mentions ethical issues raised by the study but	Includes explanation of the study design, procedures followed, sampling methods, and analytical tools (including any statistical tests), given the stated purpose of the study. Discusses ethical issues raised by the study and how they were addressed.	Includes explanation and justification of the appropriateness of the study design, procedures followed, sampling methods, data collection and analytical tools (including any statistical tests), given the stated purpose of the study. Discusses ethical issues raised by study and

		addresses them only superficially.		explains how they were addressed.

	0-13.9 points / F	14-15.9 points / C	16-17.9 points / B	18-20 points / A
Results/Findings **8-12 pages** **20 points**	Results/findings section is so brief, incomplete, or off-topic that accurate assessment is impossible. Does not clearly explain what was discovered through analysis of the data.	Includes reporting and interpretation of narrative and/or numerical data with little apparent concern for accuracy and objectively. Analytical tools are inappropriate to the methodology. Provides, at best, tenuous links between study outcomes, hypotheses (if stated), and the original research question(s).	Includes reporting and interpretation of narrative and/or numerical data accurately, objectively, and concisely. Analytical tools are mostly appropriate to the methodology. Does not highlight links between study outcomes, hypotheses (if stated), and the original research question; however, such links may be implied.	Includes reporting and interpretation of narrative and/or numerical data accurately, objectively, and concisely using analytical tools appropriate to the methodology. Highlights explicit links between study outcomes, hypotheses (if stated), and the original research question.
	0-13.9 points / F	**14-15.9 points / C**	**16-17.9 points / B**	**18-20 points / A**
Discussion, Reflection, Implications, Recommendations, **Impact Presentation, and Action Plan** **4-6 pages** **20 points**	Section is so brief, incomplete, or off-topic that accurate assessment is impossible. Does not meaningfully discuss the implications of the study or describe a plan for future application or action.	Addresses practical implications of study findings including how they will be shared with others. Does not consistently support assertions or interpretations using sound arguments consistent with study findings. Does not describe recommendations for future research or how results will be applied in practice.	Addresses theoretical/practical implications of study findings including how they will be shared with others. Supports assertions and interpretations using sound arguments consistent with study findings. Does not describe recommendations for future research or how results will be applied.	Includes evaluation of the study's strengths and weaknesses. Addresses theoretical/practical implications of findings, including how they will be shared with others. Highlights threats to validity, reporting on how they were addressed. Supports assertions and interpretations using sound arguments consistent with findings. Describes recommendations for future research and how results will be applied in practice.
	0-6.9 points / F	**7-7.9 points / C**	**8-8.9 points / B**	**9-10 points / A**
References, Appendices, Writing Styles, Mechanics, and General Notes **10 points**	Paper is so brief, incomplete, or off-topic that accurate assessment is impossible.	Paper falls short of accepted standards for master's level composition. Rough drafting errors and error patterns are widespread. Voice, verb tense, writing style vary from section to section. Technical terms are used incorrectly and/or imprecisely, reflecting a rudimentary understanding of the underlying concepts. Text is formulaic, relying heavily on paraphrases and "borrowed" materials not formally cited. Transitions are weak, contributing to an	Paper is well written with few notable rough drafting errors. Voice, verb tense, writing style are generally consistent with few exceptions that do not substantially diminish readability. Most technical terms are used correctly, reflecting adequate understanding of the underlying concepts. Text is original, but opinions and propositions are not consistently supported by logic and references to published research. Transitions do not connect sections	Paper is well written with no notable rough drafting errors. Voice, verb tense, and writing style are consistent throughout. Technical terms are used precisely and accurately, reflecting a firm understanding of underlying concepts. Text is original; opinions and propositions are supported by strong logic and formal references to published research. Sections are linked with unifying transitions, giving the report a clear sense of direction and cohesion. Paper adheres to formatting specifications

		apparent lack of direction or cohesion. Paper does not adhere to formatting specifications provided in course text and materials. Writing mechanics, citations and references page do not follow APA style.	seamlessly but do not substantially diminish readability. Paper does adhere to formatting specifications provided in course text/materials. Writing mechanics, citations, reference page mostly follow APA style.	provided in course text and materials. Writing mechanics, citations and reference page follow APA style.
Total points_____ x 5 = _____total for assignment				

Assignment 5: Research Presentation

Due: May 1st
Points: 120
Purpose: Research is not conducted just for the researcher to learn from; it is conducted so that others can learn and improve their own practice as well. It is important that you as a researcher share your project and findings with an audience. The peers in your class care about your research and are excited to see what you found out because of this months' long process.
Procedures: You will present your project. The presentation will be open to the SEED community. You will present your research project and findings using a poster presentation using a tri-fold board. See the Poster Presentation Guidelines, located on Blackboard for specific instructions.

	Excellent	**Adequate**	**Unacceptable**
Presentation /120	- presents using poster presentation using a tri-fold board - followed requirements from poster presentation guidelines - findings clearly documented, good visual design - arrived on time for presentation - articulated research data and findings in a poised, articulate manner - responded to questions well - engaged with peers in a positive manner - prepared for presentation -student is **professional** in appearance	- mostly followed requirements from poster presentation guidelines - findings were mostly documented, mostly a good visual design - articulated research data and findings in a mostly poised, articulate manner - mostly responded to questions well - mostly engaged with peers in a positive manner - mostly prepared for presentation	**Does not present OR** - Does not present using a tri-fold board - does not follow requirements from poster presentation guidelines - findings were not documented, visual design is difficult to follow - had a difficult time articulating research data - was not poised - did not respond to questions - did not engage with peers in a positive manner - was not prepared for presentation - student is **NOT professional** in appearance

General Expectations

Students are expected to submit all assignments in the appropriate Blackboard assignment or VIA online submission system. Assignments are due at 4:30 pm on the date indicated, unless otherwise indicated.

- Late work will not be accepted without a prior request.
- All submitted work must be typed unless otherwise indicated.
- See class protocol for additional information.

Assignment	Points	Due Date
Active Participation/Protocol Adherence	100	Ongoing
Methodology Draft	60	February 14th
Methodology Draft Constructive Peer Group Review	25	February 21st
Results/Findings Draft	60	April 3rd
Results/Findings Constructive Peer Group Review	25	April 10th
Discussion Draft	60	April 10th
Discussion Draft Constructive Peer Group Review	25	April 17th
Action Research Project	500	April 24th
Constructive Peer Group Review	25	April 24th
Research Presentation	120	May 1st
TOTAL	**1000**	

Note: The 1000 points are converted to the 100-point grading scale below.

Grading Scale

A = 95-100%

A- = 90-94%

B+ = 87-89%

B = 83-86%

B- = 80-82%

C = 70-79%

F = Below 70%

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 at the latest 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.

Note: B- or below is not a passing course grade for licensure

Professional Dispositions

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

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: 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/ http://oai.gmu.edu/the-mason-honor-code/).
- 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 VIA should be directed to viahelp@gmu.edu or https://cehd.gmu.edu/aero/assessments . 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, exual harassment, interpersonal violence, and stalking

As a faculty member, I am designated as a "Non-Confidential Employee," and must report all disclosures of sexual assault, sexual harassment, 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 or support measures 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/.

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 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 choices in their own best interests—in the classroom and beyond.	**Teacher Candidate Digital Portfolio** This digital portfolio is a website the teacher candidate creates to begin assembling products and artifacts that illustrate their emerging philosophy of teaching, experiences designing instructional materials, interviews and reflections from clinical experiences, and professional documents such as resumes and work experience. Pieces that teacher candidates add to the digital portfolio demonstrate their agency as educators inside and outside of classrooms, candidates' advocacy of critical issues relevant to secondary education, and candidates' thinking on how educators, their learners, policy makers, and community members all have different agency in making choices related to secondary education. ***Note: Students will also be asked to identify what <u>they</u> consider to be evidence of their understanding/application of this Seed, in course, program, and professional projects and activities.***
Methods I	**"Social Justice"** The SEED program educates teachers to develop a commitment to social justice. Such a commitment encompasses the belief that all	**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

	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.	part of the lesson. The lesson must demonstrate the teacher candidate's ability integrate justice concepts/content into their instruction. ***Note: Students will also be asked to identify what <u>they</u> consider to be evidence of their understanding/application of this Seed, in course, program, and professional projects and activities.***
"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. ***Note: Students will also be asked to identify what <u>they</u> consider to be evidence of their understanding/application of this Seed, in course, program, and professional projects and activities.***
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 into and consistently implement effective	**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 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

	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.	student learning. ***Note: Students will also be asked to identify what <u>they</u> consider to be evidence of their understanding/application of this Seed, in course, program, and professional projects and activities.***
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. ***Note: Students will also be asked to identify what <u>they</u> consider to be evidence of their understanding/application of this Seed, in course, program, and professional projects and activities.***
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)

Class Schedule

Notes
- *Faculty reserve the right to alter the schedule as necessary, with notification to students.*
- *1:1 conferences are available at student request at any point during the semester*

Class Date	Class Topic and Activities	Reading/Assignment Due
Session 1 **Wednesday** **January 17th, 7:20-10:00** **Virtual synchronous** **1:1 conferences**	Pre-class conferences: Email will be sent for sign ups Planning Research Methodology	Your draft Action Research Project
Session 2 **Wednesday** **January 24th, 7:20-10:00 pm** **In person**	Finalizing Research Methodology Learning How to Code Data Creating Themes Data Analysis: Quantitative and Qualitative Meet with Constructive Peer Groups	**Read:** In Mertler - Ch. 4: Developing a Research Plan
Wednesday **February 14th**		**Rough Draft Due to CPG: Methodology** draft section due to Constructive Peer Group for feedback **Rough Draft Due to Blackboard: Methodology** draft section. Add to previously created template from 2-credit course. Upload to Blackboard in "Assignments"
Wednesday **February 21st**		**Constructive Peer Group Review on Draft Methodology** due to CPG members and Blackboard
DATA COLLECTION cannot begin until the Methodology section is reviewed and approved by the instructor		
February/March **Field Work: Data collection in your classroom** *All data collection must be complete by spring break*		
Session 3 **Wednesday** **February 28th, 7:20-10:00** **Virtual synchronous**	Review: Writing the Findings Section Findings Section Data Analysis Writing the Discussion Section Action planning Meet with Constructive Peer Group in a Zoom room during class time.	**No assignments due –** **Work on data collection**
Session 4 **Wednesday** **April 3rd, 7:20-10:00** **Virtual synchronous**	Individual conferences: Email will be sent for sign ups	**Rough Draft Due to CPG: Findings** draft section due to Constructive Peer Group for feedback

1:1 conferences	Meet with Constructive Peer Group in a Zoom room during class/conference time.	**Rough Draft Due to Blackboard: Findings** draft section. Add to previously created template. Upload to Blackboard in "Assignments"
Wednesday **April 10th**		**Constructive Peer Group Review on Draft Findings** due to CPG members and Blackboard
March/April **Field Work: Data analysis**		
Session 5 **Wednesday** **April 10th, 7:20-10:00** **Virtual synchronous**	Presentation expectations discussed Meet with Constructive Peer Group in a Zoom room during class time.	**Rough Draft Due to CPG: Discussion** draft section due to Constructive Peer Group for feedback **Rough Draft Due to Blackboard: Discussion** draft section. Add to previously created template. Upload to Blackboard in "Assignments"
Wednesday **April 17th**		**Constructive Peer Group Review on Draft Discussion** due to CPG members and Blackboard
April: Reread your entire paper, ensuring all components are updated and complete.		
Week of April 22nd: Course evaluations and course wrap-up		
Wednesday **April 24th**		**Action Research Project and** **Constructive Peer Group reviews due to Blackboard**
Session 6 **Wednesday** **May 1st, 4:00-5:00 pm** **In person**	Action Research Project Poster Presentation	**Action Research Project Poster** Presentations Location TBD Time: 4-5pm **Hardcopy of Action Research Project paper brought to presentation** **Poster Presentation Photo of Poster due** *Note: Bring laptop to complete course evaluations*

Action Research Project Details

This document is a compilation of information from the various work of Dr. Kristien Zenkov, Dr. Melissa Hauber, Dr. Lynda Herrera. Dr. Meg Mascelli - George Mason University

Reminders
- This project is part of your normal, everyday teacher practice to link evidence of student learning to make informed instructional decisions.
- Your project must focus on **student engagement, efficacy, or achievement**.
- Only 1 research question for this project
- You cannot interview or record (video or sound) students.
- Your data collection takes place in 1 class period over 6-8 class sessions.
- You must have a reflective journal as one source of data collection.
- The majority of your paper will be written in the past tense. Remember that the final paper is submitted AFTER the action research is completed.

Sections of the Action research Project
1) Title page
2) Introduction (3-4 pages)
   a. Establishment of the context of the study using a personal story to connect the topic to the teacher-research.
   b. Setting and demographics of community, school division, and school
   c. Area of focus you are addressing.
   d. Rationale: the reason for or purpose of your project
   e. Action research question (only 1)
   f. Hypothesis
3) Literature Review (4-6 pages)
   a. Introduction
   b. Establishment of 2 themes (categories) using the relevant research
   c. Connection of relevant research to action research question
4) Methodology (4-6 pages)
   a. Setting (description of the classroom)
   b. Role of teacher-researcher
   c. Action research question framed in relationship to methodology.
   d. Materials used (surveys, lesson plans, documents, etc....referred to in appendix)
   e. Detail scope and sequence of implementation
   f. 3 data collection sources
   g. Timeline of implementation of data collection (in table)
   h. Triangulation of data collection sources explained.
   i. Explain trustworthiness of data collection.
   j. Ethical considerations
5) Findings (6-10 pages)
   a. Overview of findings
   b. Data analysis method explained.
   c. Description of findings
   d. 2 themes (patterns) explained.
6) Discussion (4-6 pages)
   a. Reflection: what findings mean to the teacher-researcher, how do the findings connect to the literature on the topic, and how do the findings connect to the action research question
   b. Implications: what findings mean for teaching and learning
   c. Limitations: what limits emerged due to the action research
   d. Recommendations: how future instruction can be developed based on findings
   e. Impact presentation of action research
   f. Action Plan for teaching and learning based on findings.

7) References
8) Appendices

Note: Each section is explained in detail below.

Title Page
- This section is one page.
- Your paper will begin with a title page, numbered page 1.
- The title should summarize your action research and should be limited to 12 words.
- All items on the title page must be centered.

The title page must include the following, in this order:
- Action Research Project Title
- Your name
- George Mason University
- Appropriate course number: Action Research in Secondary Education
- Instructor's name
- Submission date

Introduction
- The introduction begins on page 2.
- This section should be approximately 3-4 pages in length.
- Center the word 'Introduction' and continue typing on the very next double-spaced line.
- It is recommended that you have subheadings within this section to assist with organization: **Introduction, Setting, Teacher-Researcher, Area of Focus, Rationale, Action Research.**
- The purpose is to set the stage for the action research and provide an overview of the action research project.

Note: Use the "Writing the Introduction" handout for additional guidance.

Establish the context of the action research: A helpful tactic is to begin this section with a story that you experienced that highlights the classroom issue/problem/topic of the action research you are attempting to address. This will pull the reader into your paper.

The purpose is to set the stage for the action research and provide an overview of the action research project.
This section of the action research report tells the reader what you did in the action research. (The purpose of this action research was...).

Setting: Briefly describe the setting where your action research occurred: begin with the community, then the school district, and lastly the school and your classroom(s) (how many students, location, anything special about the school in terms of sports, clubs, community building, etc..). You may use graphics, charts, etc., to visually share demographic information.

Note: Demographic information in your introduction should focus on your school, while demographic information in your methods section should focus specifically on the students you worked with in your action research.

*Important: Be sure to add **a footnote** regarding pseudonyms at the first mention of a community, district, school, or person's name: "All names in this paper are pseudonyms."*

Teacher Researcher: Explain **your role** in the classroom. Use the term "teacher- researcher" – this is YOU (your length of tenure in education and at the school, your philosophy of education, your teaching style, etc.). Include your role in the classroom as the action researcher. Describe your mentor, if applicable (length of tenure in education and at the school, philosophy of education, teaching style, your role in their classroom, etc.)

Area of Focus:
- You should describe the context of your action research (what are you examining in this paper?)
- Define any of your terms (known as operationally defining your terms) such as "cooperative learning" groups, primary sources, or concept mapping **and how** you will use these terms in your action research.
- Address why this action research is important to you, your teaching, and the larger teaching community.

Rationale:
- You should focus on the purpose of your action research
- What problem/issue you are addressing
- Why these concerns are important to you
- What your action research might help you learn

Action Research:
- State your action research question [ONLY ONE!!!]
- Explain any hypothesis you might have (what do you think will be the results of this action research?)
- Explain how you formulated your hypothesis
- Briefly explain HOW you will examine this action research question
- Briefly explain what intervention you will use (you can revisit this once you have a better idea of your methodology)

Literature Review
- This section should be approximately 4-6 pages in length.
- Do not purposely start a new page for this section.
- Center the words 'Literature Review' and continue typing on the very next double-spaced line.
- It is recommended that you have subheadings within this section to assist with organization: Introduction, subheadings/categories (create two subheadings/categories and provide a label for each), conclusion.

Note: Use the Graphic Organizer handouts for the "Literature Review" and "How to Write a Literature Review" for additional guidance.

You must have a **minimum of 5 references** in which you cite and synthesize in this section. Your references must be from current peer-reviewed, academic, research-based journals from the past ten years.

You need to be familiar with previous investigations of your topic and discuss how these investigations informed your design to properly address your action research question. The review of the literature should consist of a summary of relevant research related to the action research 's main topic.

The literature review forms a context in which the reader can view and understand your action research as it related to the current literature in the field of education. You summarize and analyze the literature in this section. The **emphasis is on synthesis and analysis** (Bloom, 1956, 1984).

This is the concrete foundation for your action research – without this section your action research would exist alone, in a black hole. After you have read your references: ask yourself...what are the 2

things I learned from these sources that inform my thoughts about my question or my methodology? These two "things" become your <mark>subheadings/categories</mark>.

Open your literature review with a "road map": tell us the minimum two <mark>subheadings/categories</mark> topics you will address in the body of your review.

Use **direct quotes very sparingly**. Craft your literature review as a story of the research of your topic. At the end of the literature review, include a one-paragraph summary of the major discoveries in your review, connecting these to the focus of your action research question. Transitions should connect one subheading with the next.

A good literature review answers the following questions:
- o What are the minimum two ==subheading categories== that emerged after you read the articles?
- o What is missing in the literature ("There is a paucity of action research …")?
- o In what ways is your action research design based on other's action research?

Methodology
- This section is 4-6 pages.
- Do not purposely start a new page for this section.
- Center the word 'Methodology' and continue typing on the very next double-spaced line.
- It is recommended that you have subheading within this section to assist with organization: ==**Introduction, Classroom Setting, Participants, Intervention, Data Collection Sources, Ethical Considerations, Conclusion.**==

This section includes a narrative explaining the action research design and the minimum three data collection sources/procedure (method) by which you collected the data for your action research project.

Describe how you implemented your action research, including the type of action research approach you used (i.e., qualitative case study). Remember: You are only implementing your action research in ONE class period over a 2–3-week period.

Begin by describing the challenge the students/class faces: This is the problem you are trying to solve through your action research. Repeat your action research question to remind the reader what you are looking to achieve through your action research.

Be sure to explain the materials you used in collecting your data and place those sample materials in an appendix (student sample work, journaling prompts, surveys, lesson plans, etc.)

Each step should be **described in detail**, so the reader knows <u>exactly</u> how the action research was conducted: think in terms of a very detailed lesson plan here. A reader should be able to replicate your action research, based on what you explain in this section. **BE EXACT – PROVIDE DETAILS!**

==**Classroom Setting:**== Begin by describing your immediate setting - your classroom. Describe the physical room. How is the room organized? How does the room highlight the content taught? Describe the lighting, space, and location in the school.

==**Participants:**== Describe the students in your classroom. You may incorporate a chart to highlight the demographics of your class.

Highlight at least students in the classroom as examples of students on whom you are concentrating with regard to improving their engagement or academic achievement via your intervention.
- o Why did you choose these individuals?
- o Who are they in terms of gender, ethnicity, age, grade level, language/culture, and educational achievement?

- o How many years in the division, family life, academic ability, standardized data collected, peer relations, personality, physical description, etc.?
- o What are their current levels of engagement or academic achievement?
- o What do you hope to accomplish with each student through your action research?

The Intervention: Begin by again explaining the problem you are attempting to address (what do you want to improve).

Describe, in detail, your intervention. Your intervention is what you are doing to fix what you think is the problem. For example, how did you implement mindfulness? How did you use VTS? How did you implement icebreakers to create engagement? How did you implement literature circles? How did you implement graphic organizers?)

Describe the length of the intervention: How many sessions and/or total time did it take to implement the intervention? You must describe how you are logistically incorporating the intervention into your classroom setting. If you are trying a different instructional method, describe it thoroughly and explain how the students will be instructed. If you are implementing a new program, describe what the program does and step-by-step how you implemented the program.

Data Collection Sources: You must have at least three methods of data collection to ensure triangulation. Describe, in detail, your three methods of data collection (reflective journal, student check-ins, surveys, assessments, teacher interviews, tally sheets, observations, student records, written responses, etc.). You can include a triangulation matrix to assist with this section. ONE data collection source MUST BE a teacher reflective journal. **You cannot conduct student interviews. You cannot audio or visually record students.**

Describe your data collection. You must be specific:
- Where do you conduct the teacher interviews?
- Where and how do you take the notes?
- What are the questions you will ask (be sure to place these in an appendix)?
- How will you observe the students? What do the tally sheets look like (these should be in an appendix)?
- How will the teacher interviews be conducted?
- How will you examine student records?
- What kind of records? Which tests? Student work?
- Are there other documents you will use?
- How will you triangulate the data?
- What measures did you take to assure the trustworthiness of your action research?

Be sure to include a table and timeline of your methods:
- o What did you collect and when?
- o How does the data relate to your action research question?

Ethical Considerations: **Address ethical issues raised by action research and explain how you addressed ethical issues – it helps to think about your CITI training course here and share in this section that you took the training course and received your CITI certificate.**

Note: DETAILS, DETAILS, AND MORE DETAILS are the key to this section!!!!

Results/Findings
- This section is 6-10 pages.

- Do not purposely start a new page for this section.
- Center the word 'Results' and continue typing on the very next double-spaced line.
- It is recommended that you have subheading within this section to assist with organization: **Analysis of Data Collection, Overview of Findings, Themes (create a minimum two themes and provide a label for each), Conclusions.**

In this section, indicate what you discovered or found because of your data gathering. Focus on findings that answer your action research question or shed light on your action research hypotheses.

This section focuses on the results of your project in which you take all the data you collected and describe it. You will provide rich descriptions of **how** you reviewed your data and **the themes** that emerged because of your findings.

==Analysis of Data Collection:== Begin by describing how you analyzed your results. What exactly did you do to code and create themes using your data?
- o What was the process you went through to analyze your data?
- o Nothing is too mundane here! You may literally write, "I sat at my kitchen table and..."
- o How did you make sense of your data?
- o Be sure to briefly repeat the minimum three data collection methods you used to create triangulation.

==Overview of Findings==: Explain the general overview of what you discovered as a result of implementing your intervention.

==Themes:== Then highlight the minimum two main themes that emerged from the data. After deciding on these themes (creating a subheading for each) you will give specific examples of the theme as demonstrated in your data collection. For example:
- Theme 1: Plants like water
    - o Daisy: My data .... My evidence of this...I concluded that...based on...
    - o Hosta: The hosta said, "...."
    - o Tomatoes: In my reflective journal, I wrote in April 20 that....
- Theme 2: The sun is not always a benefit.
    - o Daisy: While discussing the sun with my mentor, she said, "...."
    - o Hosta: My data demonstrated that Hosta are not sun tolerant. This was supported by...
    - o Tomatoes: Mary wrote, "tomatoes make her want to learn more about...."

Use illustrative examples from your data to summarize and SHOW us your findings - these can include student samples. Yes—you can add charts/graphs/tables. Feel free to use mini case studies to illustrate your findings, considering your action research outcomes through the lens of the experiences of the minimum two students you previously highlighted.

Notes: Be sure to report on student achievement, efficacy, and engagement. You are primarily reporting on data patterns in this section; you will make sense of these results in your discussion section. You do not want to discuss implications for your action research here – that is done in the next section.

Discussion
- This section is 4-6 pages.
- Do not purposely start a new page for this section.
- Center the word 'Discussion' and continue typing on the very next double-spaced line.

- It is recommended that you have subheading within this section to assist with organization: **Reflection, Implications, Limitations, Recommendations, Impact Presentation, and Action Plan.**

This section includes what conclusions you draw from the action research, the implications for current action research findings, the limitations of the action research, the recommendations for further action research in the action research area, how you will present this data in an impact presentation, and an action plan for your classroom.

Reflection:
- o Begin with what the findings mean to the teacher-researcher, how do the findings connect to the literature on the topic, and how do the findings connect to the action research question.
- o You should also include what you THINK! What you thought of the process, what you learned from the action research, and what you learned from the process.
- o Remember that the goal is to share what you learned about your teaching for yourself first; our goal is not necessarily to extract findings that will be generalizable across EVERY teaching setting.
- o Interpret your data in as much detail as possible, describing whether, and in what ways, your findings corroborated your expectations.
- o This section should explain any inconsistencies between your action research findings and findings described in the literature review.
- o How did your data answer your action research questions?
- o What do your results mean?
- o What do you think about your action research? About your students?

Implications:
- o What do the findings mean for teaching and learning?
- o Future action research possibilities should be identified, and generalizability of conclusions discussed.
- o Be careful: Do not use the word 'prove'…your action research is too limited to imply that it can prove your hypothesis or be applied to a larger population.

Limitations:
- o Describe the limitations of your action research. Reflect on weaknesses of the action research.
- o What limitations emerged in the manner in which you implemented your action research?
- o Was your intervention flawed? In what ways?
- o Did you do something as a researcher that impacted the action research negatively?
- o Were there extenuating circumstances?

Recommendations:
- o Focus on what's truly interesting in your data/findings, even if you have limited information to support this.
- o How might future instruction be developed based on findings?
- o Make some bold recommendations for how we might serve students better.
- o Be sure to describe all of this information – the teacher's research process, your data, your findings.
- o What does this all mean to you as a professional and a person?

Impact Presentation:
- o Describe how you will share the findings of your paper at the SEED poster presentation with your peers.
- o Detail these individuals/groups responses to your study and outcomes.

Action Plan:
- o How might you incorporate the teacher action research process into your future professional life?
- o How might you change *your* teaching practice based on your findings?

References
- Start on a new page.
- Center the word 'References' at the top.
- Double-space all reference entries.
- The reference list is an alphabetical list (by author's last name) of all the sources cited in the text.
- Do not indent the first line of each entry; indent all proceeding lines of the entry only.
- See examples or the Publication Manual of the American Psychological Association for specific formats.
- Include a complete list of references **in APA format.**

Appendices
- Start on a new page.
- Center the word 'Appendix' at the top of each new Appendix.
- Be sure to add a letter to each new Appendix (Appendix A, Appendix B, etc....).
- Each appendix should begin on a new page.
- Ensure each Appendix in this section is referenced in the body of the paper.
- This section is where all relevant materials, including any questionnaires, inventories, assessments, graphs, charts, interview questions, sample student work, behavioral chart, etc. are appended.
- Include at least one example of each tool you use (graphic organizers, VTS visuals, etc.): it's ideal to include one blank version and one version completed by one of your action research participants.
- Please refer to the examples or the Publication Manual of the American Psychological Association for further information on this section.
- This should be where the things that do not fit elsewhere in your paper in the text go.
- If something interrupts the flow of the paper, it should be placed here.

Checklist
The appearance of your paper and the arrangement of its parts are important to the final presentation.
Consider the following questions for each section to help ensure that you meet the above criteria.

Writing Styles, Mechanics, and General Notes
- o Did you follow the APA style for the report for a page numbering, references, citations, and the appendix?
- o Is the original manuscript typed or printed on 8.5 x 11-inch white paper?
- o Is the entire manuscript double-spaced?
- o Is the manuscript neatly prepared and clean?
- o Have you used a 12 font for type style?
- o Are the margins at least 1 inch?
- o Are the title page, references, tables, etc. on separate pages?
- o Are all pages numbered in sequence, starting with the title page?
- o Is each paragraph longer than a single sentence but not longer than one manuscript page?
- o Are ALL names' pseudonyms? Pseudonyms are only to be used (for the district, the school, the teachers, the participant(s), and any other name). The very first time you use a name (whether in the introduction or method section) place a footnote. In the footnote write "All names in this paper are pseudonyms." You do not need to write such a disclaimer for any later mentioned names.
- o Did you spell out acronyms when you note them the first time (e.g., English Language Learners as ELL)?
- o Does the paper include a title page with the required information?
- o Is the paper coherent, concise, and well-structured with a clear purpose?
- o Is the paper grammatically correct with proper usage of language?
- o Does the paper have your distinctive focus and voice? Have you used professional language (i.e., no jargon) but written in an accessible style and presentation?
- o In addition, follow these general guidelines:
    - Write in the past tense as much as it makes sense to do so.
    - Be sure to make a personal and professional connection to your topic and project.
    - Feel free to revise your questions based on your data to make these questions more focused.
    - Grading Scale for Action Research Project: *Please note that B- is not a passing grade.*
    - This report strictly adheres to GMU's integrity policy.