GEORGE MASON UNIVERSITY
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
GRADUATE SCHOOL OF EDUCATION

Course
ELED 559: *Research and Assessment in Elementary Education*
Section DL4, 3 credits
Spring 2024
Mondays 5:00 – 7:10pm

Instructor
Dr. Mandy Bean
Office phone: Please email
Office Hours: By appointment
Thompson 1406
abean5@gmu.edu

Prerequisites
Admission into elementary education graduate program; capstone course for degree must be taken last in programmatic sequence.

University Catalog Course Description
Provides teacher candidates an understanding of research paradigms utilizing systematic evidence to improve practice and further skills in assessment of learning outcomes. Emphasizes linking research and practice, making instructional decisions based on systematically collected data.

Course Overview
This course is designed to help teacher candidates understand various research paradigms utilizing research literature and systematic evidence to improve teacher practice, and to further their skills at assessment of learning outcomes. Course emphasizes linking research and practice and making instructional decisions based on systematically collected data.

Nature of Course Delivery
This course will be delivered online using both synchronous and asynchronous formats via Blackboard Learning Management system (LMS) housed in the MyMason portal, Zoom, and Google Drive. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @gmu.edu) and email password. The course site will be available on January 11, 2024. **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.**

The primary purpose of this course is for you to learn how to conduct action research and apply it in your classroom in order to improve your teaching and your students' learning. This student-centered, project-based course requires a combination of asynchronous and synchronous learning and individual conferencing. Your research questions and methodology will be the focus of the course and will drive readings, classroom discussions, peer review activities, reflections, and the action research project that you complete.

Please be aware that this course is not self-paced. Online classes are considered regular instructional time and the assignments given are the equivalent of a full in-class session. The online classes involve research, use of professional web sites, peer review, email with the instructor and classmates, readings, writing reflections, and other assignments. In general, we will engage in four activities across the course: 1) Mini-lectures, activities, and discussions related to research methods led by the instructor and course participants and supported by course text and selected readings 2) Discussions of the week's readings led by the instructor and course participants 3) Class and peer review group meetings in which students concentrate on selected readings, provide feedback and support for each other's writing and research

processes, and share how they have presented their research efforts to authentic audiences 4) Individual, small group, and whole group meetings to discuss research efforts.

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. The purpose of the draft research project sections and the peer review sessions will be to support completion of our action research projects and provide opportunities for us to learn about and analyze methods and techniques of action research. You will be expected to post your own assignments and respond to peers' feedback in accordance with the scheduled provided.

Students may schedule a one-on-one meeting to discuss course requirements, content, or other course-related issues. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

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 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/

COURSE EXPECTATIONS

COURSE WEEK: Our class will meet on Mondays as indicated on the Schedule of Classes.

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. Those unable to come to a Mason 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.

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 as 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.

ARTIFICIAL INTELLIGENCE: 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.

ACCOMMODATIONS: Learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

LEARNING OUTCOMES

   A. Students will be able to:
      1. Articulate the role of systematic evidence in the improvement of teaching and learning.
      2. Use educational research literature as a basis for reflecting on and improving their teaching practice.
      3. Make explicit linkages between research and assessment practice.

4. Distinguish between the purposes and methods of theoretical, applied, and action research as well as quantitative and qualitative research.
5. Explain the fundamentals of validity and reliability, and articulate the potential threats to validity within various research paradigms.
6. Critique the quality of research studies within various paradigms.
7. Describe the purpose and cycle of action research, specifically in relationship to assessment of their learners.
8. Design appropriate and authentic assessments and analyze student data.
9. Design an action research study based on research and student assessments.
10. Use technology to assist in locating, using, conducting research, and analyzing data.

B. Outcomes and Standards

Learning Outcomes	InTASC Standards
1	2, 3, 4, 5, 6, 9, 10
2	9, 10
3	6, 9
4	6,
5	6
6	6, 9, 10
7	6, 7, 9
8	6
9	6, 7, 9
10	4

PROFESSIONAL STANDARDS
Upon completion of this course, students will have met the following professional standards:

❖ **INTASC:**
Standard #2: Learning Differences. The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
Standard #3: Learning Environments. The teacher works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self motivation.
Standard #4: Content Knowledge. The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.
Standard #5: Application of Content. The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
Standard #6: Assessment. The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

Standard #7: Planning for Instruction. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Standard #8: **Instructional Strategies**. The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

Standard #9: Professional Learning and Ethical Practice. The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

Standard #10: Leadership and Collaboration. The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

REQUIRED TEXTS

Sagor, R. D., & Williams, C. (2017). *The action research guidebook: A process for pursuing equity and excellence in education*. Corwin Press. ***Will be provided.

Mills, G. E. (2017). *Action research: A guide for the teacher researcher* (6th ed.). Boston, MA: Pearson. ***Will be provided.

RECOMMENDED TEXT

American Psychological Association (2019). *Publication manual* (7th ed.). American Psychological Association.
Note: APA guidelines are available online at
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/index.html

WRITTEN WORK: All assignments must be written in Times New Roman, Calibri, or Arial, 12 point font, **DOUBLE-SPACED**,and follow APA (7th edition) formatting guidelines (see http://owl.english.purdue.edu/owl/resource/560/01/ for more information**). I will ask you to resubmit if it is NOT double spaced with a point deduction.** Also, please do not submit using google slides or the like. Please submit as a word doc to Blackboard.

Please Note: The GMU Writing Center offers online support via email. They will provide feedback on your writing within one hour. Graduate and professional writing can be difficult; I encourage you to take advantage of this service. http://writingcenter.gmu.edu/?page_id=177

All assignments and online activities are to be completed by the date listed in the syllabus.

ASSIGNMENTS

Assignment	Points
1) Attendance and Participation [Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]	3 points EACH synchronous session (24 total)

2) Component Drafts [Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10] 1. Research Question with paragraph on "why it matters to you" (a mini-rationale) 2. Alphabetical list of 10 peer-reviewed articles 3. Context of your School and Classroom: 4. Annotated Bibliography Chart 5. Instructional Change 6. Data Collection 7. Data Analysis 8. Findings	5 points EACH (40 total)
3) Action Research Poster Presentation [Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]	16
4) Final Action Research Report (PBA) [Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10] This final paper includes all the above sections **plus Rationale and Implications.**	20
Total	**100**

It is expected that all class assignments will be submitted on time to the correct location; therefore, **late assignments will not receive full credit**. **Assignments turned in late will have ½ point deducted for each day it is late; this policy will be strictly followed**. All assignments must be submitted on the due date stated in the syllabus and should be submitted in the format outlined below.

Note: I reserve the right to add, alter, or omit any assignment as necessary during the course of the semester. You will always receive advanced notice of any modifications.

ASSIGNMENTS

1. Attendance and Participation Expectations (8 sessions, 3 points each = 24 points)

This course operates with the assumption that knowledge is socially constructed and the most meaningful learning opportunities are those where you have the opportunity to offer and explore diverse perspectives with peers.

To do this **it is expected that you attend all scheduled classes** outlined within the syllabus. Absence from class to observe a religious holiday, to serve jury duty, or to participate in required military service, and medical emergencies are exceptions to the above policy. If you anticipate being absent for any of these reasons, please make arrangements **at least 24 hours in advance**. **In addition, you are expected to be ON TIME to class unless advance notice has been provided to the instructor.**

You are expected to contribute to both in class discussions and activities as well as genuinely listen to peers as they do the same. In addition, **YOU ARE EXPECTED TO BE PREPARED FOR EACH CLASS**, which means

having completed all assigned readings and tasks for that class. You must actively check Blackboard and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least *twice* **a week**.

Note: I reserve the right to add, alter, or omit any assignment as necessary during the course of the semester. You will always receive advanced notice of any modifications.

2. Component Drafts (8 drafts, 5 points each = 40 points)

These sections **MUST BE SUBMITTED BY THEIR DUE DATES** throughout the semester for formative feedback. They are worth 5 points each. ***Reminder: ½ point will be taken off*** PER DAY ***for late submissions.***

1. **Research Question with paragraph on "why it matters to you" (a mini-rationale)**

   Due SUNDAY FEBRUARY 4

   Write the research question in the correct format (provided in class). Underneath it, write a paragraph with the following questions as a guide:
   - describe the origin of your inquiry – how did it come to your attention as a research idea?
   - why does this matter to your classroom? Your students? Your school? The broader educational community?

2. **Alphabetical List of 10 peer-reviewed articles in APA format**

   Due SUNDAY FEBRUARY 11

   Review academic literature relevant to your question. Use ERIC or other platforms for searching. More information provided in class.

   - Use the APA, 7th edition, as the guide for formatting, for ALL sections:
     https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/apa_changes_7th_edition.html

3. **Context of your School and Classroom**

   Due SUNDAY FEBRUARY 18

   Describe your school, community, classroom and student population. Use the most up-to-date data.

4. **Annotated Bibliography Chart (Choose 8 from your 10 articles)**

   Due SUNDAY FEBRUARY 25

   Use the provided chart to answer these questions: *"What does the article tell you about your area of inquiry? What tensions exist in the studies? How might it inform your own study?"*

4. **Instructional change**

   Due SUNDAY MARCH 3

Describe the instructional change: what steps am I going to take to address or learn more about the issue in your question?

5. **Data Collection**

Describe *how* you will collect data to answer your research question. This should include includes formative and summative assessments designed to gather that data.

6. **Data Analysis**

Describe *how* you analyzed your data.

8. **Findings**

What are the findings from the data, both qualitative and quantitative? What do the patterns and outliers have you noticed in your data?

3. Action Research Poster Presentation: Symposium Slide (16 points)

You will present your action research at a symposium at the end of the course. This presentation will be based on your final analysis. ***For the symposium, you will prepare a conference-style digital poster on a google slide.*** Part of your points will be participation with your peers during the symposium.

4. Final Action Research Report (20 points)

This is the major assignment for this class and is the Performance Based Assessment (PBA) for the course. The final written report will include the component sections, with the ADDITION of two sections: Rationale and Implications. Points will also be earned for quality of writing and use of APA style in FINAL REPORT. See attached rubric.

- Title Page and Running Head (see APA)
- Section 1: Rationale and Research Question
- Section 2: Annotated Bibliography Chart
- Section 3: Context and Instructional Change
- Section 4: Data Collection
- Section 5: Data Analysis
- Section 6: Findings
- Section 7: Implications (see below for details)

- References
- Appendices

Implication Section: *What does your data tell you about the implications of your project— for you as a teacher, for your colleagues, for teacher education, and for educational policy? What should happen in your classroom, based on the results of your project so far? With whom might you share your project methods and results?*

GRADING

94-100 = A	90-93 = A-	88-89 = B+	81-87 = B	70-80 = C	Below 70 = F

PROFESSIONAL DISPOSITIONS
Students are expected to exhibit professional behaviors and dispositions at all times: https://cehd.gmu.edu/students/polices-procedures/. (See also Elementary Education Program Handbook).

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

Date	Readings (all on Blackboard)	Topics and/or Activities	Due dates & Information
Jan 22 **Synchronous** **ZOOM** **at 5:00**	**Sagor Ch 1:** Introduction to Action Research (AR) **Sagor Ch 2:** Finding a focus (selected pages) Skim Sample AR paper *"The Case for Shared Writing"*	• What is Action Research? • Introductions, Course Structure, Syllabus • Norm Setting for Class Meetings • Finding a focus	• Due on Jan 22: Come to class with the Google Slide **completed** prior to class: https://docs.google.com/presentation/d/1rt1Z6hs_2vIMG2rkF4RwCVXRPNDqg5_U1JAH04esyUM/edit?usp=sharing -*What makes my class unique?* -*What are the strengths of my current classroom?* -*What are the challenges of my current classroom?*
Jan 29 **Synchronous** **ZOOM** **at 5:00**	**Sagor Ch 3:** Refining a focus (selected pages) **Mills Ch 4:** Review of Related Literature (selected pages)	• Research Question construction • Using past research articles/literature to explore our questions • Creating your Annotated Bibliography Chart	• Due on Jan 29: Complete your journal entries; bring to class on Jan 29 – do not upload (small group sharing) • Due on Bb on Sunday Feb 4: *Research Question with paragraph on "why it matters to you" (a mini-rationale)*

Week of Feb 5 **Self-paced work week**	**Review 7th APA link** (see above)	• Find peer reviewed articles and prepare list • Review 7th edition of APA style	• Due on Bb on Sunday Feb 11: **Alphabetical List (by first author) of 10 peer-reviewed articles in <u>APA format</u>**
Feb 12 **Synchronous** ZOOM at 5:00	*Bb:* Sample AR Section of Context and Instructional Change "Through the lens of a critical friend" *(Costa & Kallick, 1993).* https://www.ascd.org/el/articles/through-the-lens-of-a-critical-friend	• What is the Context? • What is the Instructional Change? • Meet Critical Friends to establish communication	• Due on Bb on Sunday Feb 18: **Context of School and Classroom**
Feb 19 **Synchronous** ZOOM at 5:00	**Mills Ch 5:** Data Collection Part 1: techniques	• Qualitative Data Collection and Analysis • Quantitative Data Collection and Analysis	• Due on Bb on Sunday Feb 25: **Annotated Bibliography Chart**
Feb 26 **Synchronous** 3:30-7:00		• Individual 10 min. meetings with Dr. Bean	• You will meet with Dr. Bean • Be prepared to share updates and ask questions • Due on Bb on Sunday Mar 3: **Instructional Change**
Mar 4 **Asynchronous**	**Mills Ch 6:** Data Collection Part 2: Considerations (selected pages) **Sagor Ch 8:** Analyzing the Data (selected pages)	• Ensuring Trustworthiness • Validity, Reliability, Generalizability • Data Analysis: organizing and writing	• Due on Bb on Sunday Mar 10: **Data Collection**
Mar 11	Schedule meetings with Dr. Bean as needed	**No Class – IT, data collection***	• Due on Bb on Sunday Apr 14: **Data Analysis**
Mar 18		**No Class – IT, data collection***	
Mar 25		**No Class – IT, data collection***	
Apr 1		**No Class – IT, data collection***	

Apr 8		No Class – IT, data collection*	
Apr 15 **Synchronous** **ZOOM** **at 5:00**	**Mills Ch. 9:** Writing Up Action Research (selected pages)	• Preparing for the final research report • Partner work session with your Critical Friend(s)	• Due on Bb on Sunday Apr 21: **Findings**
Apr 22 **Synchronous** **ZOOM** **at 5:00**	Due on Google by April 22nd: (BEFORE CLASS) at 4:30pm: **Symposium Slide**	• Final Presentations with an Online Sharing Symposium	• Due on Google by Monday April 22 @ 4:30pm: **Symposium Slide**
			Due on Bb on Sunday April 28: FINAL Paper

CORE VALUES COMMITMENT
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 CAMPUS RESOURCES FOR STUDENTS

POLICIES
Students must adhere to the guidelines of the Mason Honor Code (see http://oai.gmu.edu/the-mason-honor-code/).

Students must follow the university policy for Responsible Use of Computing (see http://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 http://ods.gmu.edu/).

Students must follow the university policy stating that all sound emitting devices shall be silenced 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 http://coursessupport.gmu.edu/.

The Writing Center provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing (see http://writingcenter.gmu.edu/).

The Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance (see http://caps.gmu.edu/).

The Student Support & Advocacy Center staff helps students develop and maintain healthy lifestyles through confidential one-on-one support as well as through interactive programs and resources. Some of the topics they address are healthy relationships, stress management, nutrition, sexual assault, drug and alcohol use, and sexual health (see http://ssac.gmu.edu/). Students in need of these services may contact the office by phone at 703-993-3686. Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to http://ssac.gmu.edu/make-a-referral/.

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 information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

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

EMERGENCY PROCEDURES
You are encouraged to sign up for emergency alerts by visiting the website https://alert.gmu.edu. There are emergency posters in each classroom explaining what to do in the event of crises. Further information about emergency procedures exists on http://gmu.edu/service/cert

Final Paper: Action Research Rubric

Levels/Criteria	2-3 points	1-2 points	0-1 points
Introduction: Describes the problem. Clear research question stated. Significance of problem is addressed. *InTASC 9* *ACEI 5.1*	The problem is described in details. The description fully leads the reader to the research question. The research question is clear. It is measureable. The significance of the problem is addressed fully. It is clear why this is an important problem to study.	The problem is adequately described. The description partially leads the reader to the research question. The research question is vague. It is measureable. The significance of the problem is adequately addressed, but it is not clear as to why this is important.	The problem is not adequately described. It does not lead the reader to the research question. The research question is unclear. It is not measureable. The significance of the problem is unfocused and rambles. It is not clear why this is an important topic to study.
Annotated Bibliography: Research studies are used. Studies relate to the research question. *InTASC 9* *ACEI 5.1*	Eight research studies are used to support the literature review. These are from respectable journals. The studies are appropriate for the topic and research questions. Bibliography is in APA style with no errors.	Five to seven research studies are used. At least one of them is from a respectable journal. The studies are somewhat appropriate for the topic and research question. Bibliography follows APA style with no more than two errors.	Less than five research studies are used. The articles are not from respectable journals. The studies are not appropriate for the topic or research question.
Context and Intervention Provided: Setting Described. Population identified. Intervention. *InTASC 9* *ACEI 5.1*	The setting is fully described. It includes, size of school, location, grade level, subject taught, etc. All pertinent information is included. The population is fully described. It includes number of students, gender and ethnic breakdown, grade levels, academic abilities, etc. Information relevant to the research is included. Intervention is fully described. It is clear what the intervention is and how it will be implemented. Intervention is realistic.	The setting is adequately described. Most information is included, but not all. The population is adequately described. Most information is included, but not all. Intervention is adequately described, but either the description of the intervention or the implementation is confusing.	Setting is not included or inadequately described. It is not clear where the research will be conducted. Population is not included or inadequately described. It is not clear who will be participating in the research study. There is no intervention or implementation explained or the intervention does not align with the research question.
Research Design: Design of study matches goals. Formative and Summative Assessments included. Data sources appropriate. *InTASC 9* *ACEI 5.1*	The methodology chosen (quantitative, qualitative, mixed methods) is appropriate for the research question. There is adequate time allowed for data collection. The treatment is reasonable and ethical. There is a mixture of formative and summative assessments included in the	Two of the three stated criteria are adequate. Formative and summative assessments are included in the design. Copies are not included and they are not well described. Most, but not all, of the data sources are appropriate.	None or one of the criteria is adequate. The research is not ethical. Either formative or summative assessments are included, but not both. Copies are not included and they are not well described. The majority of the data sources are not appropriate

Levels/Criteria	2-3 points	1-2 points	0-1 points
	design. They are well-described or a copy is included. All data sources are appropriate for the research question. The information collected will help answer the question.		for the research question. Data collected is not ethical.
Analysis of Data: Appropriate analysis for data collected. *InTASC 9* *ACEI 5.1*	The entire analysis of the data is appropriate. The information gathered addresses the research question.	The majority of the analysis is appropriate. However, it is not clear how other parts were analyzed.	The analysis is inappropriate or not well-defined.
Findings and Implications: Findings are presented clearly. Implications from data proposed. Connects back to the findings. *InTASC 9* *ACEI 5.1*	Findings are presented in a clear format. Key findings are thoroughly discussed. Implications from the data are well-developed and fully discussed. The implications are connected back to the results of the data analysis.	Findings are presented in an appropriate format, although they could be clearer. Key findings are discussed in general terms. Implications from the data are adequately discussed. It is clear the student is able to interpret the findings. However, the implications are not tied back to the results.	Findings are not presented in a clear format or are absent. Key findings are not adequately discussed. Implications from the data are inadequately discussed. It is not clear the student is able to interpret the findings. The implications are not tied back to the results.
Overall Style: Clear, concise writing. Grammar and punctuation. Multiple levels of headings used to organize ideas. *InTASC 9* *ACEI 5.1*	The writing is very clear and concise. The reader can understand what the problem is and how the research will address it. There are no grammar and punctuation errors. There is evidence of multiple levels of headings. These are used appropriately in all instances.	The majority of the writing is clear and concise. There are one to three grammar and punctuation errors. There is evidence of multiple levels of headings. These are used appropriately in the majority of instances.	The majority of the reading is vague and unclear. The reader has difficulty seeing the connections between the various sections. There are four or more grammar and punctuation errors. There is no evidence of multiple levels of headings or these are used inappropriately in the majority of instances.