

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

**Course**

ELED 559: *Research and Assessment in Elementary Education*  
Section A01  
Summer 2021 (2 cr)  
Wednesdays 4:30 – 7:10pm

**Instructor**

Mandy Bean  
Office Hours: By appointment  
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**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 @masonlive.gmu.edu) and email password. The course site will be available on January 18<sup>th</sup>, 2021.

**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](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](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/](http://www.apple.com/quicktime/download/)

### **COURSE EXPECTATIONS**

**COURSE WEEK:** Our class will meet on Wednesdays 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.

**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 TEXT**

Mills, G. E. (2017). *Action research: A guide for the teacher researcher* (6<sup>th</sup> ed.). Boston, MA: Pearson.

**RECOMMENDED TEXT**

American Psychological Association (2019). *Publication manual* (7th ed.). American Psychological Association.

\*Note: APA guidelines are available online at <http://owl.english.purdue.edu/owl/resource/560/01/>

**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).

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](http://writingcenter.gmu.edu/?page_id=177)

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

**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 1 point deducted for each day it is late; this policy will be strictly followed.**

**PLEASE TAKE SPECIAL NOTE: Component Drafts (see below) should be submitted electronically via Google Drive and are due as indicated on the course syllabus schedule. Please use google docs to submit these drafts—do NOT use Microsoft Word. POST your google link in the Blackboard for each assignment.**

**ASSIGNMENTS SUMMER 2021**

<p>1. <b>Attendance and Participation</b> [Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]  -Class on May 5, Conference on May 12, Presentation Day</p>	<p>20 points  6.66 points EACH</p>	<p>Ongoing</p>
<p>2. <b>Component Drafts:</b> [Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10] a. <b>Part Five:</b> Data Analysis</p>	<p>10 total</p>	<p>Ongoing</p>

<ul style="list-style-type: none"> <li>• <b>Due Apr 29</b></li> </ul> <p>b. <b>Part Six: Findings</b></p> <ul style="list-style-type: none"> <li>• <b>Due May 23</b></li> </ul>	5 points EACH	
<p>3. <b>Final Action Research Report (PBA)</b> (Includes last section Implications)</p> <p>[Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]</p>	42	June 1
<p>4. <b>Action Research Poster and Presentation</b></p> <p>[Outcomes 1, 2, 3, 7]</p>	20	June 1
<b>TOTAL</b>	<b>92 points</b>	

## Assignments and/or Examinations

### 1. Attendance and Participation Expectations

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 48 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 **three times 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.*

### Assignment: Component Drafts (SUMMER)

**SUMMER 2021 Part Five:** Data Analysis  
Describe how you analyzed your data.

**SUMMER 2021 Part Six:** Findings and Implications  
What do the patterns and outliers have you noticed in your data? 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? What sense have your students made of your project methods and results?

**Assignment 2: Action Research FINAL Report —PBA Requirement (SUMMER)**

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 sections above for a total of six sections. Points will also be earned for quality of writing and use of APA style in FINAL REPORT. See attached rubric.

- Part One: Rationale and Research Question(s)
- Part Two: Annotated Bibliography
- Part Three: Context and Instructional Change
- Part Four: Data Collection and Student Assessments
- Part Five: Data Analysis
- Part Six: Findings
- Part Seven: Implications

**Assignment 3: Action Research Poster Presentation (SUMMER)**

You will present your action research at a symposium at the end of the summer course. This presentation will be based on your written final report (see above). **For the symposium, you will prepare a conference-style PowerPoint and one-page handout for your audience.**

**Grading**

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

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

Students are expected to exhibit professional behaviors and dispositions at all times. (See Elementary Education Program Handbook).

**Class Schedule**

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

<b>Wednesday, Apr 28</b> <i>asynchronous</i>		<ul style="list-style-type: none"> <li>• Work on data analysis</li> </ul>	Due May 2: <b>Draft: Data Analysis (Part 5)</b>
<b>Wednesday, May 5-7</b> <i>synchronous</i>	Mills Ch. 9 Writing Up Action Research	<ul style="list-style-type: none"> <li>• <b>VITAL</b> information on preparing final papers and presentations</li> </ul>	

<b>Wednesday, May 12</b> <b>4:30-7</b> <i>individual conferences</i>		<ul style="list-style-type: none"> <li>MEET WITH MANDY</li> </ul>	
<b>Week of May 19</b> <i>asynchronous</i>		<ul style="list-style-type: none"> <li>Prepare final papers and presentations</li> </ul>	Due May 23 Draft: Findings (Part 6)
<b>Week of May 26</b> <i>asynchronous</i>		<ul style="list-style-type: none"> <li>Preparing final papers and presentations</li> <li>Contact Mandy if you need help!</li> </ul>	
<b>Wednesday, June 2</b> <b>5:00</b> <i>synchronous</i>		<ul style="list-style-type: none"> <li>Final Presentations/Sharing Symposium</li> </ul> Reminder: Include IMPLICATIONS section in final	Due on Blackboard Tuesday June 1 Final Report & Final Presentation

### 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/> ).
- Students must follow the university policy for Responsible Use of Computing (see <https://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).

- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

*Campus Resources*

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

**Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:**

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

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

**Action Research Rubric**

Levels/Criteria	6	4	2
Introduction: Describes the problem. Clear research question stated. Significance of problem is addressed.  <b>InTASC 9</b>	The problem is described in details. The description fully leads the reader to the research question. The research question is clear. It is measurable. 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 measurable. 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 measurable. 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	At least nine to ten research studies are used to support the literature review. These are from respectable journals. The studies are appropriate for the topic and research	Five to eight research studies are used. At least one of them is from a respectable journal. The studies are somewhat appropriate for the topic and research	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.

to the research question. <b>InTASC 9</b>	questions. Bibliography is in APA style with no errors.	question. Bibliography follows APA style with no more than two errors.	
Context and Intervention Provided: Setting Described. Population identified. Intervention. <b>InTASC 9</b>	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. <b>InTASC 9</b>	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 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.	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 for the research question. Data collected is not ethical.
Analysis of Data: Appropriate	The entire analysis of the data is appropriate. The information gathered	The majority of the analysis is appropriate. However, it is not clear	The analysis is inappropriate or not well-defined.

analysis for data collected. <b>InTASC 9</b>	addresses the research question.	how other parts were analyzed.	
Findings and Implications: Findings are presented clearly. Implications from data proposed. Connects back to the findings. <b>InTASC 9</b>	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. <b>InTASC 9</b>	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.