

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

**ELED 459: Research and Assessment in Elementary Education
Section DL1, 3 credits, Spring 2022
Wednesday, 4:30 -7:10 PM, Online**

Instructor Name: Dr. Debra Sprague
Office Hours: By Appointment
Office: Thompson Hall, Rm. 1403
Email: dsprag1@gmu.edu
Office Phone: 703-993-2069
Cell Phone: 703-855-6641

Required Corequisite: ELED 490

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 includes multiple instructional strategies and formats including synchronous and asynchronous online class sessions. Individual session formats vary and may include lecture, small group/large group discussion, hands on activities, interactive work, student presentations and cooperative learning. Practical applications of theory are explored in group activities. Assignments and in-class activities are designed to support the iterative writing process and require time to prepare. Throughout the course, you will be expected to make revisions of your drafts based on peer and instructor feedback in order to improve your work.

This course has been approved by the Faculty Senate Writing Across the Curriculum Committee to fulfill the Writing Intensive requirement in the Elementary Education (BSEd) major. It does so through a 500 word summative research statement and a 5000 word (minimum) action research report on problem of practice in your internship placement classroom due on _____. The research report is divided into six parts. Each part will be completed through a draft/feedback/revision process. The draft deadlines for each part are as follows

- a. Part One: Rationale and Research Question(s) Due: _____
- b. Part Two A: Annotated Bibliography 1 Due: _____
- c. Part Two B: Annotated Bibliography 2 Due: _____

- d. Part Three: Context and Instructional Change Due: _____
- e. Part Four: Data Collection and Student Assessment Due: _____
- f. Part Five: Data Analysis Due: _____
- g. Part Six: Findings and Implications Due: _____

The revised final draft will be due on _____.

The summative research statement (500 words) is due on _____.

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.

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.

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.

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 Blackboard Collaborate 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:
 - o 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

· Course Week:

Our course week will begin on the day that our synchronous meetings take place 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 three 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:

Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

LEARNING OUTCOMES

Students will be able to:

- Articulate the role of systematic evidence in the improvement of teaching and learning.
- Use educational research literature as a basis for reflecting on and improving their teaching practice.
- Make explicit linkages between research and assessment practice.
- Distinguish between the purposes and methods of theoretical, applied, and action research as well as quantitative and qualitative research.
- Explain the fundamentals of validity and reliability, and articulate the potential threats to validity within various research paradigms.
- Critique the quality of research studies within various paradigms.
- Describe the purpose and cycle of action research, specifically in relationship to assessment of their learners.
- Design appropriate and authentic assessments and analyze student data.
- Design an action research study based on research and student assessments.
- Use technology to assist in locating, using, conducting research, and analyzing data.

Outcomes and Standards (see below)

| 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 #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 #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* (6th ed.). Boston, MA: Pearson. (Previous editions may be used.)

Bb readings as assigned

COURSE PERFORMANCE EVALUATIONS:

Students are expected to submit all assignments on time in the manner outlined by the instructor.

ASSIGNMENTS

| Assignment | Points |
|--|--------------------------------|
| 1. Attendance and Participation [Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10] | 20 |
| 3. Component Drafts: [Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10] a. Part One: Rationale and Research Question(s) b. Part Two A: Annotated Bibliography 1 c. Part Two B: Annotated Bibliography 2 d. Part Three: Context and Instructional Change e. Part Four: Data Collection and Student Assessment f. Part Five: Data Analysis g. Part Six: Findings and Implications | 5 points EACH (35 total) |
| 3. Final Action Research Report (PBA) (5000 word minimum) [Outcomes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10] | 30 |
| 4. Action Research Poster Presentation and Handout (500 word minimum) [Outcomes 1, 2, 3, 7] | 15 |
| Total | 100 |

1. Attendance and Participation Expectations (20 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 48 hours in advance. In addition, **you are expected to be on time to class** each week unless advance notice has been provided to the instructor.

You are expected to contribute to both class and online 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.

When you are using cell phones, laptops, etc., *please be respectful of your peers and your instructor and do not engage in activities that are unrelated to class*. Such disruptions show a lack of professionalism and may affect your participation grade.

You must actively check the course Blackboard site and your GMU email for communications from the instructor, class discussions, and/or access to course materials at least twice a week.

All written papers are expected to be double-spaced, with 1" margins, and in 12-point font (Times New Roman, Calibri, or Arial). APA format is expected. If you do not have a 7th Edition APA manual, the OWL at Purdue is an excellent resource. <http://owl.english.purdue.edu/owl/resource/560/01/>

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

Assignments should be submitted electronically via Blackboard and are due by class time on the date indicated in an appropriate format (i.e., Word document). 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 or in an inappropriate format will be eligible for only 50% of the available points. If there is an emergency, contact me as soon as possible.

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 (1-6) (35 points)

These sections will be submitted throughout the semester for formative feedback. These drafts **MUST** be submitted by their syllabus due dates. They are worth 5 points each. Guidance with regards to the different elements of each section of the research process and the writing process will be provided throughout the semester in accordance with specific deadlines.

Part One: Rationale and Research Question(s) (due ____)

Part Two A: Annotated Bibliography #1 (due ____)

Part Two B: Annotated Bibliography #2 (due ____)

Part Three: Context and Instructional Change (due ____)

Describe your school, community, classroom and student population; and
Describe the instructional change

Part Four: Data Collection and Student Assessments (due ___)

Describe how you collected data to answer your research question(s). This includes formative and summative assessments designed to gather that data.

Part Five: Data Analysis (due ___)

Describe how you analyzed your data

Part Six: Findings and Implications (due ___)

Describe your findings and their implications for teaching and learning

3. Action Research FINAL Report (30 points) —VIA Requirement –DUE ... (5000 word minimum)

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 and a final implications section 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 and Implications

Final Report must be submitted via VIA by..., 11:59pm

4. Action Research Poster Presentation (15 points)

You will present your action research. This presentation will be based on your written final report (see above). You will prepare a conference-style roundtable presentation **and two-page summative research handout (500 word minimum)** for distribution to your audience. Date and location of presentation TBA.

Grading Scale

| Grade | GRADING | Grade Points | Interpretation |
|-------|---------|--------------|--|
| A | 95-100 | 4.00 | Represents mastery of the subject through effort beyond basic requirements |
| A- | 90-94 | 3.67 | |
| B+ | 87-89 | 3.33 | Reflects an understanding of and the ability to apply theories and principles at a basic level |
| B | 83-86 | 3.00 | |
| B- | 80-82 | 2.67 | |
| C* | 70-79 | 2.00 | Denotes an unacceptable level of understanding and application of the basic elements of the course |
| D | 60-69 | 1.00 | |
| F* | <69 | 0.00 | |

PROFESSIONAL DISPOSITIONS

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

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

COURSE SCHEDULE

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

| Date | Readings | Topics and Activities | Assignment Due |
|------|--|--|---|
| 1/26 | | Synchronous <ul style="list-style-type: none"> - Introductions and Syllabus - Review Teacher Research - Critical Friends Groups - Rationale and Research Question | |
| 2/2 | Mills Ch. 1 | Synchronous <ul style="list-style-type: none"> - Work on rationale and research question(s) - Designing your study | |
| 2/9 | Mills Ch. 3 | Asynchronous <i>Work on rationale and research questions</i> <i>Respond to instructor feedback provided on Part 1 draft.</i> | Part 1: Draft Rationale and Research Question(s) |
| 2/16 | | Synchronous Reviewing the Literature | |
| 2/23 | Mills Ch. 2 | Asynchronous <i>Work on reviewing the literature</i> <i>Respond to instructor feedback provided on Part 2a draft.</i> | Part 2A: Draft Annotated Bibliography: Find 5 research articles related to your topic |
| 3/2 | Mills Ch. 4, 5 (Quant) App. B | Synchronous <ul style="list-style-type: none"> - Qualitative Data Collection and Analysis - Quantitative Data Collection and Analysis - Context and Change overview | Part 2B: Draft Annotated Bibliography: Find 5 research articles related to your topic |
| 3/9 | Mills Ch.4, 5 (Qual) | Asynchronous <i>Individual Meetings with Mentor and Intern</i> <i>Work on Context and Change</i> <i>Respond to instructor feedback provided on Part 2b draft and Part 3</i> | Part 3: Draft Context and Change |
| 3/16 | | No class – GMU Spring Break | |

| | | | |
|------|----------------------------|---|--|
| 3/23 | Mills Ch. 5, 6 | Synchronous - Ensuring Trustworthiness - Validity, Reliability, Generalizability Critical Friends Group | Part 4: Draft Data Collection |
| 3/30 | | Asynchronous - Work on Data Collection <i>Respond to instructor feedback provided on Part 4 draft.</i> | |
| 4/6 | Mills Ch.7 | Synchronous - Analyzing data <u>Work on data collection</u> | |
| 4/13 | | Asynchronous Work on data analysis | Part 5: Draft Data Analysis |
| 4/20 | Mills Ch.8, 9 App. C | Synchronous Work on data analysis <i>Respond to instructor feedback provided on Part 5 draft.</i> - Preparing final research report | Part 6: Draft Findings and Implications |
| 4/27 | | Asynchronous <u>Work on Findings, Implications, and Presentation</u> <i>Respond to instructor feedback provided on Part 6 draft.</i> | |
| 5/4 | | Synchronous - Sharing Symposium | Final Draft Report, Presentation and Handout Due |

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

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 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 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, interpersonal violence, and stalking:

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

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

Action Research Rubric

| Levels/Criteria | 3 | 2 | 1 |
|--|--|--|--|
| <p>Introduction: Describes the problem. Clear research question stated. Significance of problem is addressed. InTASC 9 ACEI 5.1</p> | <p>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.</p> | <p>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.</p> | <p>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.</p> |
| <p>Annotated Bibliography: Research studies are used. Studies relate to the research question. InTASC 9 ACEI 5.1</p> | <p>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 questions. Bibliography is in APA style with no errors.</p> | <p>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 question. Bibliography follows APA style with no more than two errors.</p> | <p>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.</p> |
| <p>Context and Intervention Provided: Setting Described. Population identified. Intervention. InTASC 9 ACEI 5.1</p> | <p>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</p> | <p>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.</p> | <p>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.</p> |

| | | | |
|---|--|---|--|
| | implemented. Intervention is realistic. | | |
| 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 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 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 | The writing is very clear and concise. The reader | The majority of the writing is clear and | The majority of the reading is vague and |

| | | | |
|---|---|---|---|
| <p>writing. Grammar and punctuation. Multiple levels of headings used to organize ideas. InTASC 9 ACEI 5.1</p> | <p>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.</p> | <p>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.</p> | <p>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.</p> |
|---|---|---|---|