

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

EDCI 559: Research and Assessment in Elementary Education (3 credits)

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Robinson A 337

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Office Hours: Tuesdays 3-4 and by appointment

Date and Time: January 19 – May 11 (Tuesdays – 4:30-7:10 pm)

Class Location: Robinson A246

Course Description

- A. Prerequisites: Admission into GMU Elementary Education Graduate program; capstone course for degree and must be taken last in sequence.
- B. 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. Individual session formats vary and may include lecture, small group/large group discussion, hands-on, interactive work, student presentations, and cooperative learning. Practical applications of theory are explored in group activities.

Standards

- A. National Board for Professional Teaching Standards:
 - Proposition 1: Teachers are committed to students and learning
 - Proposition 3: Teachers are responsible for managing and monitoring student learning
 - Proposition 4: Teachers think systematically about their practice and learn from their experience.
- B. National Technology Standards:
 - Standard IV: Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.
 - Standard V: Teachers use technology to enhance their productivity and professional practice.
- C. The [Virginia State Technology Standards for Instructional Personnel](#):
 - 1. Instructional personnel shall be able to demonstrate effective use of a computer system and utilize computer software.

2. Instructional personnel shall be able to apply knowledge of terms associated with educational computing and technology.
3. Instructional personnel shall be able to apply computer productivity tools for professional use.
4. Instructional personnel shall be able to use electronic technologies to access and exchange information.

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	NBPTS Propositions	NETS Standards
1	1, 3	V
2	1, 3, 4	IV & V
3	1, 3, 4	IV & V
4	4	V
5	4	V
6	4	V
7	1, 3, 4	IV & V
8	1, 3	IV & V
9	4	IV & V
10	4	V

Texts

A. Required Texts

Mertler, C. A. & Charles, C. M. (2005). *Introduction to educational research* (6th ed). Boston: Pearson Allyn & Bacon.

Mills, G. E. (2008). *Action research: A guide for the teacher researcher (3rd ed.)*. Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

B. Strongly Recommended

American Psychological Association. (2009). *Publication manual of the American Psychological Association (6th ed.)*. Washington, DC: Author.

Course Requirements

A. Assignments

Assignment	Points
Action Research Proposal Components	25
1. Rationale and research question (Due: 2/21)	
2. Literature review/Matrix (Due: 2/21)	
3. Context and Intervention (Due: 3/14)	
4. Data Collection Plan/Student Assessment (Due 3/28)	
5. Data Analysis Plan (Due 4/11)	
Final Action Research Proposal (PBA) (Due: 5/4)	30
Action Research Proposal Presentation (5/11)	5
Quantitative Data Collection/Report/Reflect (Survey Due 2/28; Report Due 3/21)	10
Qualitative Data Collection/Report/Reflect (Due 4/4)	10
Chapter Discussion/Class Participation	10
Reflection on Theory & Practice (Due: 4/18)	10
Total	100

Action Research Proposal (30 points) (Due: 5/4)

This is the major assignment for this class and is the Performance Based Assessment (PBA) for the course. The final written proposal will include the five components plus a short reflection. See attached rubric.

Action Research Proposal Presentation (5 points) (5/11)

The presentation will be based on the written proposal. Students will prepare a one-page summary for distribution to peers. Scoring criteria to be determined in class.

Components of Action Research Proposal (25 points)

- Part One: Rationale and research question (5 points)
- Part Two: Literature review (4 points); synthesis matrix (1 point)
- Part Three: Context and Intervention – description of the school, community, classroom and student population and description of instructional intervention (5 points);
- Part Four: Data Collection and Student Assessment Plan: specific plan on the data you will collect to answer your research question, and formative and summative student assessments designed to gather those data (5 points)

- Part Five: Data Analysis Plan – describe how you would you analyze them, if you collected them (5 points)

Class participation and leadership of chapter discussion (10 points)

Students, in pairs or small groups, will devise an active learning plan to engage class members in a discussion of the types of research chapters. Chapters will be determined at the start of the course. Students are expected to attend class and participate in small and large group discussions and submit written work on time. Points will be deducted for not doing so, unless previous arrangements have been made with Lynne. Students will be evaluated on their level of class participation. Attention will be paid to their level of interaction in discussions of the readings, group work, and other learning activities. Readings must be completed before class and drafts of assignments must be provided to your learning team on time to facilitate effective feedback discussions. Attendance, punctuality, preparation and engagement are essential.

Quantitative Data Collection and Report (10 points) (DUE: Survey 2/28; Report Due 3/21)

Students will develop a short survey instrument with 10-12 questions, collect data from at least 12 people, analyze the data using basic statistics, and write up a short report. This does not have to be related to the focus of your Action Research Proposal. (see scoring)

Qualitative Data Collection and Report (10 points) (DUE: 4/4)

Students will collect qualitative data through interviews, observation, or a focus group, code and interpret the data and write a short report. This does not have to be related to the focus of your Action Research Proposal. (see scoring)

Reflection on Theory & Practice (10 points) (DUE: 4/18)

Students will individually write a short (3 page) paper on the reality of educational theory and practice in today's schools. As your elementary education program comes to an end, we ask you to think about your extensive experiences in elementary schools and also the many teacher education courses you have taken. We know the reality of societal pressures on teachers and schools, which may exacerbate the challenges between your ideal teaching environment and the reality you have experienced thus far in schools. In light of these experiences, consider the following:

1. The best practices promoted in your GMU coursework
2. Your vision for your instruction (i.e., what your ideal classroom looks like; what you want your students to become)
3. What you have seen occurring in your internships (and perhaps in your own classroom)

For this assignment, write a reflective paper (not to exceed 3 pages) that addresses the following:

- To what extent do these three aspects overlap?
- Please give some examples of disconnects among these aspects (if any) and provide ways that you have been able to address this challenge.
- How do you plan to manage the competing needs/demands of being an exemplary educator in the educational system today? Please provide specific examples to illustrate your statements. (see attached rubric for evaluation criteria)

B. Final Grading Scale

94-100 = A
90-93 = A-
88-89 = B+
83-87 = B
70-79 = C
Below 70 = F

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:

Students are expected to exhibit professional behavior and dispositions. See <http://gse.gmu.edu> for a listing of these dispositions.

Students must follow the guidelines of the University Honor Code. See http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code.

Students must agree to abide by the university policy for Responsible Use of Computing. See <http://mail.gmu.edu> and click on Responsible Use of Computing at the bottom of the screen.

Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.

University and Elementary Program Policies

Attendance. This is an advanced graduate level course, therefore the quality of work, attendance, and informed participation are expected to be of the highest caliber. Unless it is an emergency situation, no absences are excused. Should you need to miss a class, it is your responsibility to inform the instructor ahead of time, turn in your assignments, collect any notes/assignments from a colleague, and do your utmost to remain current in the class. (See GMU Catalog, page 32.)

Late Assignments. Points will be deducted from late assignments without the prior consent of the instructor.

Quality of Written Work. Written work should be word-processed in 12-point font. Legibility, organizational clarity, and standard English usage and mechanics are expected. Unacceptable work may be returned for editing prior to grading. Quotations, paraphrases, and references must appear in proper APA format. If you require special assistance, see the instructor.

Cell Phones. The university has a policy that requests students to turn off pagers and cell phones before class begins. One cell phone will remain on in class that is registered with the Mason Alert System.

Honor Code. To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of George Mason University and with the desire for greater academic and

personal achievement, George Mason University has set forth a code of honor that includes policies on cheating and attempted cheating, lack of participation in group work, plagiarism, lying and stealing. Detailed information on these policies is available in the GMU Student Handbook.

Individuals with Disabilities. The university is committed to complying with the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 by providing reasonable accommodations for applicants for admission, students, applicants for employment, employees, and visitors who are disabled. Students requiring specific accommodations for a disability should contact the Disability Resource Center at 993-2474, or the University Equity Office at 993-8730.

EDCI 559 Course Schedule Spring 2010

Date	Topics and Activities	Readings	Deliverables & Due Dates
1/19	Introduction to syllabus Overview of Action Research Organize Leading Discussion;		
1/26	Data Driven Decision; Introduction to Action Research (AR); Preparing for Library Search Session	Mertler Chapters 3, 4 Mills Chapters 1, 2	
2/2	Library Search: Meeting in Library Instruction Room, Fenwick Library Reviewing the Literature Component 1: Rationale and Research Questions	Mertler Chapters 1, 5, 6	Email by 8 pm Sunday 1/31: 3 research topics to search; explore possible rationale and research question(s).
2/9	Component 2: Review and Synthesis of Literature Types of Research Designs	Mertler Chapters 2, 11 Mertler <i>Skim Chapters 12, 13, 14</i>	Email by 8 pm Sunday 2/7: Summary of 3 research articles related to your topic
2/16	Component 3: Context and Intervention. Student Assessment as evidence. Designing Formative and Summative Assessments	Chapters 1-6	
2/23	Component 4: Research Design, Methods, Quantitative Data Collection	Mertler Chapter 7 Mills Chapter 3	Components 1 & 2: Introduction, research question & literature review. Due Sunday 2/21 by 8 pm.
3/2	Organization for Quantitative Research project; Instrument approval		Draft of Survey Due Sunday 2/28 by 8 pm;
3/9	NO CLASS Spring Break -		.
3/16	Component 5: Data Analysis	Mertler Chapter 8, Appendix A Mills Appendices B and C	Component 3: Context, population, intervention. Due Sunday 3/14 by 8 pm
3/23	Qualitative Research	Mertler Chapter 10 Mills Chapter 6	Quantitative Data Collection Results and Interpretation Due Sunday 3/21 by 8 pm.
3/30	Analyzing Qualitative Data		Component 4: Method and data sources and formative and summative assessment plans. Due Sunday 3/28 by 8 pm
4/6	Displaying results, summarizing data, Groups present qualitative reports (individual reflection due to Lynne)		Qualitative Data Collection Results and Interpretation Due Sunday 4/4 by 8 pm.
4/13	Action Research: Findings, Conclusions, Implications	Mills Chapters 7, 8, 9	Component 5: Data analysis plan due Sunday 4/11 by 8 pm.
4/20	Peer feedback		Theory and practice paper due, Sunday 4/18 8pm.

4/27	Ethics, Human Subjects; research considerations	Mertler Ch 1, pp. 8-20 Mills Ch 5	
5/4	No class. Work on Research Proposal Presentation		Final proposal due: all parts, plus reflection; Due Sunday 5/2 by 8 pm
5/11	Proposal Presentations		