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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Office Hours: by appointment

Date and Time: May 17 – June 18 (MWF 7:00 -10:05 pm)

Class Location: Science and Technology II 228

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 <u>Virginia State Technology Standards for Instructional Personnel</u>:
 - 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

- Jones, W. P., & Kottler, J. A. (2008). *Understanding Research: Becoming a Competent and Critical Consumer*. New York, NY: Pearson.
- 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		
Action Research Proposal Components		
1. Rationale and research question (Due: 5/22)		
2. Literature review (Due: 5/31)		
3. Context and Intervention (Due: 6/3)		
4. Data Collection Plan/Student Assessment (Due 6/8)		
5. Data Analysis Plan (Due 6/12)		
Final Action Research Proposal (PBA) (Due: 6/19)		
Action Research Proposal Presentation (6/18)		
Quantitative Data Collection/Report/Reflect (Survey		
Due for approval 5/28; Report Due 6/4)		
Qualitative Data Collection/Report/Reflect (Due 6/13)		
Class Participation		
Total		

Action Research Proposal (30 points) (Due: 6/19)

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 (6 points) (6/18)

The presentation will be based on the written proposal. Students will prepare a one-page summary for distribution to peers. Students may present using PowerPoint, poster, or in some other creative manner.

Components of Action Research Proposal (30 points)

- Part One: Rationale and research question (6 points)
- Part Two: Literature review (6 points)
- Part Three: Context and Intervention description of the school, community, classroom and student population and description of instructional intervention (6 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 (6 points)
- Part Five: Data Analysis Plan describe how you would you analyze them, if you collected them (6 points)

Class participation (10 points)

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 Seth. 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 (12 points) (DUE: Survey 5/28; Report Due 6/6) Groups of students will develop a short survey instrument with 10-12 questions, collect data from at least 15 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 (12 points) (DUE: 6/13)

Individually, 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).

B. Final Grading Scale

A = 100-94

A = 93-90

B + = 89-86

B = 85-80

C = 79-70

D = 69-65

F = below 65

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.)

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

<u>Quality of Written Work</u>. Written work should be word-processed in 12-point font. Legibility, organizational clarity, and standard English usage and mechanics are expected. Quotations, paraphrases, and references must appear in proper APA format.

<u>Cell Phones.</u> The university has a policy that requests students to turn off pagers and cell phones before class begins.

<u>Honor Code</u>. 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 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 Summer 2010

Date	Readings	Topics and Activities	Deliverables & Due Dates
5/17		Introduction to syllabus Overview of Action Research	de Duc Dutes
5/19	Jones 1 Mills 1	Library Searching Asking good research questions; narrowing a topic Meet in Johnson Center room A at 7pm Watch this 5 minute video at least twice http://infoguides.gmu.edu/content.php?pid=7745&sid=327054	3 research topics to search; explore possible rationale and research question(s).
5/21	Jones 2	Reviewing the Literature Component 1: Rationale and Research Questions Intro to APA Respond to email literature review activity	Component 1: Introduction, research question Due Sat. 5/22 by 8 pm.
5/24	Mills 2, 3	Continue Component 2: Review and Synthesis of Literature Introduction: Types of Research Designs	Summary of 3 research articles related to your topic
5/26	Jones 3 and Appendix A	Component 3: Context and Intervention. Student Assessment as evidence Designing Formative and Summative Assessments Groups formed and begin planning for Quantitative Activity	Component 2 – Literature Review Draft with at least 5 (out of ten required) resources and references; Due 5/31 by 8pm
5/28	Mills 4, 5	NO CLASS MEETING An assignment will be created; responses must be sent to instructor Component 4: Research design, methods, quantitative data collection Continue your planning for Quantitative Activity	Online assignment due 8 pm Sunday, 5/30
5/31	No class Memorial Day		Draft of Survey Due Friday 5/28 by 8 pm;
6/2	Jones 4, 5	Stats, stats and some more stats Component 4: Data collection, organization, and reading research reports	Component 3: Context, population, intervention. Due Thursday 6/3 by 8 pm
6/4	Mills Appendices B, C	Component 5: Introduction to data analysis	Quantitative Data Collection Results and Interpretation Due Sunday 6/6 by 8 pm.

6/7	Mills 6	Qualitative Research; Activities to get us started	Component 4: Method and data sources and formative and summative assessment plans. Due Tuesday 6/8 by 8 pm
6/9	Jones 6 & Appendix B	Analyzing Qualitative Data	
6/11	Jones 7 & Appendix C	NO CLASS MEETING Online Activity will be developed and an assignment will be due. Displaying results, summarizing data	Component 5: Data analysis plan due Saturday 6/12 by 8 pm
6/14	Mills 7, 8, 9	Individual present qualitative reports (5 minutes each) Action Research: Findings, conclusions, implications How to write a report Summary of all things research	Qualitative Data Collection Results and Interpretation Due Sunday 6/13 by 8 pm.
6/16	Mills Ch 5	Peer feedback; Ethics, Human Subjects; research considerations	
6/18	Proposal Presentations		Theory and practice paper due, Saturday 6/19 8pm.

^{*} Instructor reserves the right to adjust the syllabus throughout the semester