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

EDCI 559: Research and Assessment in Elementary Education (3 credits)
Blackboard: http://courses.gmu.edu/

Dr. Lynne Schrum

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Office Hours: By appointment

Date and Time: May 21 – June 22 (M, W, F: 3:45 - 6:50 pm)

Class Location: Innovation 316

Graduate Assistant: Jori Beck jbeck12@masonlive.gmu.edu

Course Description (from catalog)

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, assessment, and instruction.
- 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. Use data to inform instructional planning and decisions
- 10. Design an action research study based on research and student assessments.
- 11. 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* (4th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

B. 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: 5/29)		
2. Literature review (Due: 6/3)		
3. Context and Intervention (Due: 6/7)		
4. Data Collection Plan/Student Assessment (Due 6/13)		
5. Data Analysis Plan (Due 6/16)		
Final Action Research Proposal (PBA) (Due: 6/21)		
Action Research Proposal Presentation (6/20)		
Quantitative Data Collection/Report/Reflect (Survey		
Due for approval 6/1; Report Due 6/10)		
Qualitative Data Collection/Report/Reflect (Due 6/17)		
Chapter Discussion/Class Participation		
Total		

Action Research Proposal (25 points) (Due: 6/21)

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) (6/20; Note time: 6:45-9:30 pm)
The presentation will be based on the written proposal. We will participate with all other sections of EDCI 559 in a Gallery Walk/Poster session. Students will prepare a one-page summary for distribution to peers. Students are encouraged to prepare a poster for this gallery walk although other options exist.

Components of Action Research Proposal (30 points)

- Part One: Rationale and research question (6 points)
- Part Two: Literature review (6 points) (in preparation, an analysis of three research articles will be sent for feedback on Sunday 5/27)
- 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(s), and formative and summative student assessments designed to gather those data (6 points)
- Part Five: Data Analysis Plan describe how you would you analyze the data, if you collected them (6 points)

Class participation and leadership of topic discussion (15 points)

Students, in pairs or small groups, will devise an <u>active-learning activity</u> to engage class members in a discussion of the types of research chapters. Chapters will be determined at the start of the course. <u>Students are expected to attend class</u> 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 <u>before class</u> 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 6/1; Report Due 6/10) Groups of students will develop a short survey instrument with 10-12 questions, collect data from at least 15 people each, analyze the data using descriptive statistics, and write up a short report. This does not have to be related to the focus of your Action Research Proposal (see scoring). Typically students do better when the topic can be asked of non-school personnel; for example, you may ask parents' views of schools, or identify top issues in education, etc.

Qualitative Data Collection and Report (12 points) (DUE: 6/17)

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); however, most individuals who tie them together feel they have a better handle on their topic. **Your proposal must be approved by Lynne**.

Please Note: Your assignments are only accepted electronically. You must name your file in the following way:
Yourlastname assignment

For example, for the quantitative assignment, mine would be: schrum_quant

B. Final Grading Scale

94-100 = A

90-93 = A-

88-89 = B+

81-87 = B

70-80 = C

Below 70 = F

CEHD Values

The College of Education and Human Development is committed to the following five core values: collaboration, ethical leadership, innovation, research based practice, and social justice. Students are expected to adhere to these principles: http://cehd.gmu.edu/values/

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:

- Students must follow the guidelines of the University Honor Code. See http://academicintegrity.gmu.edu/honorcode/ for the full honor code.
- Students with disabilities who seek accommodations in a course must be registered with the Mason Office of Disability Services (ODS) and inform the instructor, in writing, at the beginning of the semester. [See http://ods.gmu.edu].
- Counseling and Psychological Services (CAPS) offers a wide range of services to students that are provided by a staff of professional counseling and clinical psychologists, social workers, and counselors. The Center provides individual and group counseling, workshops, and outreach programs – experiences to enhance a student's personal and academic performance. [See http://caps.gmu.edu].
- All students must follow the university policy for Responsible Use of Computing. [See http://universitypolicy.gmu.edu/1301gen.html].
- All communication from the university, college, school, and program will be sent to students through their Mason e-mail account only. Students are responsible for the content of university communication sent to their Mason e-mail account and are required to activate their account and check it regularly.
- University policy states that all sound emitting devices shall be turned off during class unless otherwise authorized by the professor.

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. 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.

<u>Cell Phones.</u> 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.

<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 on these policies is available in the GMU Student Handbook.

<u>Individuals with Disabilities</u>. 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 2012

Date	Readings	Topics and Activities	Deliverables
			& Due Dates
5/21		Introduction to syllabus; what will we do for five weeks? Overview of Educational Research Organize Leading Discussion; Library Searching	
5/23	Jones Chapter 1; Mills Chapter 1	Introduction to Action Research Groups for supporting our Action Research (AR); Intro to APA - Overview of Friday's online assignment Watch this 5 minute video at least twice http://infoguides.gmu.edu/content.php?pid=7745&sid=327054	Email by 8 pm Tue 5/22: 3 possible research topics to search; explore possible rationale and research question(s).
5/25	Jones Chapter 2	ONLINE: Reviewing the Literature; Component 1: Rationale and Research Questions Respond to email literature review activity	Summary of 2-3 research articles related to your topic Email by 8 pm Sun 5/27
5/28		Memorial Day no Class; Please check email for dialogue regarding your article analysis! Feel free to email to Lynne and/or Jori drafts of your component 1	Component 1: Introduction, research question Due Tue 5/29 by 8 pm.
5/30	Mills 2, 3	Continue Component 2: Review and Synthesis of Literature Introduction: Types of Research Designs; Groups formed and begin planning for Quantitative Activity	
6/1	Jones: 3 and Appendix A	Component 3: Context and Intervention. Student Assessment as evidence. Designing Formative and Summative Assessments; Finish planning Quantitative Activity	Draft of Survey Due Sunday 6/1 by 9 pm; Component 2 – Literature Review Draft with at least 5 (out of ten required) scholarly references; Due 6/3 by 8pm
6/4	Mills Chapter 4; Jones 4	Component 4: Research Design, Methods, Quantitative Data Collection; Continue your efforts on Quantitative Activity	
6/6	Mills Chapter 5; 6	Stats, stats and some more stats Meet in quantitative groups for discussion of results, plan analysis	Component 3: Context, population, intervention. Due Thursday 6/7 by 8 pm
6/8	Jones	ONLINE: Component 4: Data Collection, organization, and reading	Quantitative Data

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	5;Appendix B	research reports; spend time analyzing quantitative data	Collection
			Results and
			Interpretation
			Due Sunday 6/10
			by 8 pm.
6/11	Mills	Qualitative Research: Introduction to Qualitative, considering our	Component 4:
	Appendices B	projects	Method and data
	and C		sources and
			formative and
			summative
			assessment plans.
			Due Tuesday
			6/12 by 8 pm
6/13	Mills Chapter	Component 5: and Data Analysis	•
	7; Jones	Activities on Analyzing Qualitative Data	
	Chapter 6	, ,	
6/15	Mills 7,	ONLINE Displaying results, summarizing data; Ethics, Human	Component 5:
	Appendix B &	Subjects	Data analysis
	C; Jones		plan due
	Chapter 7 &		Saturday 6/16 by
	Appendix C		8 pm
6/18	Mills Chapters	Individual present qualitative reports (5 minutes each) Action	Qualitative Data
	8, 9	Research: Findings, Conclusions, Implications; how to write a report;	Collection
		summary of all things research	Results and
			Interpretation
			Due Sunday 6/17
			by 8 pm.
6/20		Poster Fair and Gallery Walk – both 3:45 classes (Mason Hall)	
6/22		TBD	Action Research
			Proposal (PBA)
			due Thursday
			6/21 midnight