George Mason University
College of Education and Human Development
Graduate School of Education

EDCI 559 Research and Assessment in Elementary Education, 3 credits
Sec. 001
Spring 2015
Tuesdays, 4:30-7:10 PM
Mason Hall D005

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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. Prerequisite(s): Admission into elementary education graduate program; capstone course for degree must be taken last in programmatic sequence. Hours of Lecture or Seminar per week: 3

Learning Outcomes

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.

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	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

Nature of the Course
This course is structured to utilize multiple instruction formats. We will engage in face-to-face class sessions, as well as scheduled online discussions and activities. Face to face class sessions will include small/large group discussions and tasks, lecture, and student led discussions and activities.

Required Texts
Mills, G. E. (2013). *Action research: A guide for the teacher researcher (5th ed.).* Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Additional selected readings will be posted on Blackboard.

Assignments

Assignment descriptions follow. More detailed information will be provided in class. The *Action Research Report (PBA)* rubric is attached at the end of this syllabus.

Assignment	Points
Readings and Activities (In-class and Online)	20
Action Research Report (PBA)	35
Quantitative Data Collection Trial	15
Qualitative Data Collection Trial	15
Action Research Presentation and Handout	15
Total	100

Readings and Activities (In-class and Online) [Outcomes 1,2,3,4,5,6,7,8,9,10]

It is expected that you will complete all assigned readings and tasks each week. You also must be "present" during each class session by actively engaging with the content and your peers. Online discussions and activities must also clearly demonstrate your thoughtful completion of the readings and tasks. You are expected to attend class and complete all assigned readings and tasks BEFORE class begins for that day. In the event of an emergency, your instructor must be notified of your absence in advance of class.

Action Research Report [Outcomes 1,2,3,4,5,6,7,8,9,10]

This is the major assignment for this class and is the Performance Based Assessment (PBA) for the course. *The Action Research Report will detail the process and findings for an action research project that you conduct during your Spring 2015 internship placement.* If you do not have a Spring 2015 internship placement, you will write a proposal for research and change all of the sections below to future tense (I will…).

The final written report (or proposal) will include the five major sections below. These sections will be submitted throughout the semester for formative feedback from peers and your instructor. These drafts MUST be submitted by their syllabus due dates. Not doing so will affect your Readings and Activities (In-class and Online) grade. Points will also be earned for quality of writing and use of APA style. See attached rubric. Please see *TRA Report-Proposal Template* on Blackboard for more details about the sections below and for differences between the report and proposal sections.

- Part One: Rationale and Research Question
- Part Two: Literature Review
- Part Three: Instructional Context and Change
  - Describe your school, community, classroom and student population; and
  - Describe the instructional change
- Part Four: Data Collection and Student Assessment **NEEDS TO BE COLLECTED BY START OF INDEPENDENT TEACHING (IT – 3/23 – 4/28)**

- o 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
    - o Part 5a: Describe how you analyzed your data
    - o Part 5b: Identify and describe limitations to your study (use what you learned both from your experience and from what you learned in the course)
    - o Part 5c: Describe your findings and their implications for teaching and learning

Note: If you conducted it, you will be using your question and data from your spring 2015 action research.

Quantitative Data Collection Trial   [Outcomes 4,5,6]
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 Report. Typically students do better when the topic can be asked of non-school personnel- for example, you may ask parents about their views of schools, ask college students to identify top issues in education, etc. Your survey instrument must be workshopped with and approved by your critical friends.

Qualitative Data Collection Trial   [Outcomes 4,5,6]
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 Report. Your data collection protocol must be workshopped with and approved by your critical friends.

Action Research Presentation   [Outcomes 1,2,3,7]
You will present your Action Research. This presentation will be based on your written report (see above). You will participate with other sections of EDCI 559 in a roundtable session. You will prepare a one-page handout for distribution to your audience.

Please Note: Your assignments are only accepted via Blackboard (except the PBA- that is uploaded to TaskStream).
You must name your file in the following way:
    Yourlastname_assignment
    For example, for the quantitative assignment, mine would be: groth_quant

Grading Scale and Policies
        A=93-100; A-=90-92; B+=87-89; B=80-86; C=70-79; F=below 70
        Remember: A course grade less than B requires that you retake the course.

Note:
Assignments earning less than a passing grade may be rewritten and resubmitted so that the assignment is satisfactorily completed. In fact, because learning is the goal, I may *require* you to redo an assignment that is far below expectations.

Late work will NOT be accepted without prior approval by your instructor. **Any assignment submitted past the syllabus deadline <u>without prior approval</u> will earn 0 points.** Late submission of your Action Research Report sections will affect your Readings and Activities (In-class and Online) grade.

All written papers must 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 6th Edition APA manual, the OWL at Purdue is an excellent resource http://owl.english.purdue.edu/owl/resource/560/01/.

TaskStream Requirements
Every student registered for any Elementary Education course with a required performance-based assessment (designated as such in the syllabus) is required to submit this assessment (EDCI 559: *Action Research Proposal*) to TaskStream (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of your performance-based assessment will also be provided using TaskStream. **Failure to submit the assessment to TaskStream will result in the course instructor reporting the course grade as Incomplete (IN).** Unless this grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

GMU POLICIES AND RESOURCES FOR STUDENTS

1. Students must adhere to the guidelines of the George Mason University Honor Code [See http://academicintegrity.gmu.edu/honorcode/].
2. Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/1301gen.html].
3. Students are responsible for the content of university communications sent to their George Mason University 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.
4. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See http://caps.gmu.edu/].
5. Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See http://ods.gmu.edu/].
6. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
7. The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See http://writingcenter.gmu.edu/].

PROFESSIONAL DISPOSITIONS
Students are expected to exhibit professional behaviors and dispositions at all times. [See http://cehd.gmu.edu/assets/docs/forms/secondary_ed/sec_ed_handbook.pdf]

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/

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See http://gse.gmu.edu/]

Emergency Procedures
You are encouraged to sign up for emergency alerts by visiting the website https://alert.gmu.edu. There are emergency posters in each classroom explaining what to do in the event of crises. Further information about emergency procedures exists on http://www.gmu.edu/service/cert

Important information needed for successful completion of licensure:

IMPORTANT INFORMATION FOR LICENSURE COMPLETION

Student Clinical Practice: Internship Requirements

Testing

Beginning with Spring 2015 internships, **all** official and passing test scores must be submitted and in the Mason system (i.e. Banner/PatriotWeb) by the internship application deadline. Allow a minimum of six weeks for official test scores to arrive at Mason. Testing too close to the application deadline means scores will not arrive in time and the internship application will not be accepted.

Required tests:

Praxis Core Academic Skills for Educators Tests (or qualifying substitute)
VCLA
Praxis II (Content Knowledge exam in your specific endorsement area)
  For details, please check http://cehd.gmu.edu/teacher/test/

Endorsements

Please note that ALL endorsement coursework must be completed, with all transcripts submitted and approved by the CEHD Endorsement Office, prior to the internship application deadline. Since the internship application must be submitted in the semester prior to the actual internship, please make an appointment to meet with the Endorsement Specialist and plan the completion of your Endorsements accordingly.

CPR/AED/First Aid

Beginning with spring 2015 internships, verification that the Emergency First Aid, CPR, and Use of AED Certification or Training requirement must be submitted and in the Mason system (i.e. Banner/PatriotWeb) by the application deadline. Students must submit one of the "acceptable evidence" documents listed at http://cehd.gmu.edu/teacher/emergency-first-aid to CEHD Student and Academic Affairs. In order to have the requirement reflected as met in the Mason system, documents can be scanned/e-mailed to CEHDacad@gmu.edu or dropped-off in Thompson Hall, Suite 2300.

Background Checks/Fingerprints

All local school systems require students to complete a criminal background check through their human resources office (not through George Mason University) **prior to beginning field hours and internship**. Detailed instructions on the process will be sent to the student from either the school system or Mason. Students are **strongly advised** to disclose any/all legal incidents that may appear on their records. The consequence of failing to do so, whether or not such incidents resulted in conviction, is termination of the field hours or internship.

Please Note

Your G-Number must be clearly noted (visible and legible) on the face of the document(s) that you submit.

Application

The internship application can be downloaded at http://cehd.gmu.edu/teacher/internships-field-experience

Deadlines

Spring internship application:
Traditional: September 15

Fall internship application:
Traditional: February 15
Year Long Internship: April 1 (All testing deadline are August 1 immediately proceeding the fall start; RVE deadline is December 1)

EDCI 559 Spring 2015 Course Calendar

Date	Readings	Topics and Activities	Assignments Due
1/5		*Students will complete two online modules prior to start of class in exchange for two face to face classes during independent teaching.*	**To be completed by Tuesday 1/20 before class** Module 1 Online work: Searching for articles, APA, CBIT Training Module 2 Online Work: What is Action Research?
1/20	Mills Ch. 1	*Introducing Teacher Research* • Inquiry as a part of teaching, not apart from it (surfacing potential benefits and challenges) • How does academic research differ from action research? • Critical Friends Groups	
1/27	Mills Ch. 3	*Crafting and reflecting on your teacher research* • Wonderings and questions • Writing your introduction and research question • The 5 Whys *Reviewing the Literature* • Connecting academic and action research	**Due Sunday 2/1** Part 1: Rationale and Research Question
2/3		• *Designing your study* • Introduction: Types of Research Designs • Developing the action plan	**Due Sunday 2/8** Part 3: Context and Change
2/10	Mills Ch. 2	*Ethics in Action Research* *Qualitative Data Collection and Analysis* • Matching methods to questions (chart) • Bring your data from the spring • Surfacing bias, being open	**Due Sunday 2/15** Part 2: Literature Review Draft

2/17	Mills Ch. 4, 5 (Qual)	*Quantitative Data Collection and Analysis* • Matching methods to questions (chart)	**Due Sunday 2/22** Part 4: Data Collection Plan
2/24	Mills Ch.4, 5 (Quant) App. B	*Designing Quantitative Trial* • What makes a good survey? • Have your group's survey approved before leaving class.	Once the data collection section is approved, begin collecting data for your action research study. Collect data for your group's quantitative trial.
3/3	Mills Ch. 5, 6	*Analyzing data of Quantitative Trials* • Bring group data to class. *Evaluating the Quality of Action Research* Is all action research "good" research?	Continue collecting data for your action research study.
3/10		**GMU Spring Break – No Class**	Continue collecting data for your action research study.
3/17	Mills Ch.7	*Designing Qualitative Trial* • Interviews and Focus Groups • Have your group's interview questions approved before leaving class.	Continue collecting data for your action research study. Collect data for your group's qualitative trial.

3/24	Mills Ch 8 App. C	*Organizing and Displaying Findings* • Summarizing data *Analyzing data of Qualitative Trials* • Bring group data to class.	
3/31	Mills Ch. 9	***Elementary School Districts Spring Break – No Class***	
4/7		**No Class – Due to January Online Class**	**Due Sunday 4/12** Qualitative and Quantitative Group Trial Results Due
4/14		*In class Presentations of Qualitative and Quantitative Trials* *Drawing Implications from Findings* • Parts a, b, c of Data Analysis section	**Due Sunday 4/19** Part 5: Data Analysis Draft handout
4/21		**No Class – Due to January Online Class**	
4/28		*Workshopping your presentation and handouts*	**Due Sunday 5/3** Final Handout for presentation
5/7**		*Please note: this is a Thursday* *4:30 Action Research Symposium*	Presentation
5/10		Submit Action Research Report – No Class	**Due Sunday 5/10 midnight** Action Research Report or Proposal (PBA)

Note: Calendar is tentative and may be modified in line with course needs.

Action Research Proposal (PBA) Rubric

Levels/Criteria	3	2	1
Introduction: Describes the problem. Clear research question stated. Significance of problem is addressed.	The problem is described in details. The description fully leads the reader to the research question. The research question is clear. It is measureable. 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 measureable. 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 measureable. The significance of the problem is unfocused and rambles. It is not clear why this is an important topic to study.
Literature Review: Research studies are used. Analysis of literature is evidence. Synthesis of literature is evident.	At least ten research studies are used to support the literature review. These are from respectable journals. The studies are appropriate for the topic. Analysis of the literature is well-developed. It connects directly to the problem statement and the research question. There is a good synthesis of the literature. This goes beyond restating what is in the articles. Student is able to tie the studies together and connect this back to the importance of the topic.	Six to nine research studies are used. At least one of them is from a respectable journal. The studies are somewhat appropriate for the topic. The analysis of the literature is adequate. It connects somewhat to the problem statement and research question, but leaves the reader wanting to know more. There is an adequate synthesis of the literature. Student primarily relies on restating the research studies to support the topic, but is able to include own thoughts regarding the studies.	Less than six research studies are used. The articles are not from respectable journals. The studies are not appropriate for the topic. The analysis of the literature is inadequate. It does not connect to the problem statement and research question. There is an inadequate synthesis of the literature. The studies are treated separately and not tied together. Student is unable to connect studies to the importance of the topic.
Context and Intervention Provided: Setting Described.	The setting is fully described. It includes, size of school, location, grade level, subject taught, etc. All pertinent information is included.	The setting is adequately described. Most information is included, but not all. The population is adequately described. Most information is included, but not all.	Setting is not included or inadequately described. It is not clear where the research will be conducted. Population is not included or

Levels/Criteria	3	2	1
Population identified. Intervention.	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.	Intervention is adequately described, but either the description of the intervention or the implementation is confusing.	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.	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.

Levels/Criteria	3	2	1
Analysis of Data: Appropriate analysis for data collected. Implications from data proposed.	The entire analysis of the data is appropriate. The information gathered will address the research question. Implications from the data are well-developed and fully discussed. The implications are connected back to the results of the data analysis.	The majority of the analysis is appropriate. However, it is not clear how other parts will be analyzed. 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.	The analysis is inappropriate or not well-defined. 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.
References: Full citations for all sources mentioned. Use of APA style for formatting. All listed references are used in the paper. Most references are from scholarly sources.	All sources are completely and correctly cited. All articles cited are referenced in the proposal and all references contain complete citations. All citations and references follow APA style. There are no errors. All references listed are cited in the proposal. All references are from scholarly sources (journal articles, text books, etc.) They are not just from websites.	Only one source is not cited correctly. There are one to three APA errors. One reference is not cited in the proposal. The majority of the references are from scholarly sources.	Two or more sources are not cited correctly. There are four or more APA errors. Two or more references are not cited. The majority of the references are not from scholarly sources.

Levels/Criteria	3	2	1
Overall Style: Clear, concise writing. Grammar and punctuation. Multiple levels of headings used to organize ideas.	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.