EDCI/EDPS 788A
Seminar in Mixed Methods: Analysis of Teaching Quality
Dept of Teaching and Learning, Policy and Leadership
Fall 2012
Wednesday, 4:15 pm - 7:00 pm
Rooms 2212 Benjamin Building

Instructors:
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Office Hours:
Before and after class. Contact instructors to schedule appointments for other days and times.

Course Description
Mixed methods are an increasingly important study design in education research. Few courses, however, provide students with an opportunity to grapple with the challenges of conducting a mixed methods study. In this course, students will examine the epistemological and methodological issues involved in conducting such studies. Working individually and in small groups, students design and conduct analyses using existing datasets that include qualitative and quantitative data on the teaching of mathematics and reading in elementary schools. The primary goals of the course are for students to be able to formulate appropriate research questions, consider alternative mixed methods designs, and address methodological issues associated with working with qualitative and quantitative data in a single study. Students will collaborate on analytic exercises and a proposal to examine teaching quality and classroom context as part of a mixed methods study. The proposal will include the rationale for the study and preliminary analyses indicative of the proposal’s merit (similar to what would be required to present a paper at a professional conference).

Data for this course come from the High-Quality Teaching (HQT) study, directed by Linda Valli and Robert G. Croninger. The main purpose of the study was to examine what schools and teachers do to help fourth- and fifth-grade students succeed in reading and mathematics. Students are expected to have sufficient coursework in qualitative and/or quantitative methods to meaningfully participate in course activities. All information and materials relevant to the course will be on the EDPS/EDCI788A Blackboard site. Use your directory ID and password to access the site at https://elms.umd.edu.

Learning Objectives
By the end of the course students will be able to:
- Explain a range of controversies and challenges associated with mixed methods research.
- Critically examine empirical studies using mixed methods.
- Determine and engage in appropriate analytic strategies for mixed methods studies.
- Comparatively analyze various types of qualitative and quantitative data.
- Display qualitative and quantitative data in a variety of figures and tables.
- Clearly and accurately describe mixed methods analyses in written work.
- Interpret and explain various mixed method research designs.

**Pedagogical Approach**
A basic premise of the course is that students acquire a deeper understanding and appreciation of research through analytic exercises that encourage the actual investigation of education policies and practices. Although some class time will be devoted to lectures and discussions, students will spend much of their time learning about mixed methods through hands-on exploration of qualitative and quantitative data about teaching quality. Students will be required to write a series of papers, some of which require designing and conducting relevant analyses, drawing quality inferences, and communicating results to classmates and the instructors. Although the HQT study encompasses a broad range of different types of data, the analytic exercises will focus on a set of 20 case lessons conducted in 4th and 5th grade reading and mathematics classrooms. Each 60-minute lesson has a minimum of five different types of data, including transcribed audio-tapes, post-lesson teacher interviews, field notes, and time sampling surveys. Other possible data include teacher curriculum logs, teacher professional data, information about the students in the class (e.g., achievement, race, gender), and school-level data (e.g., principals interviews, student enrollment). The instructors and teaching assistant will help students create collaborative working groups, navigate the course database, and, if appropriate, the larger HQT datasets.

**Prerequisites**
Because this is *not* a course in basic qualitative or quantitative research techniques, students must already have acquired skills in those areas before enrolling in the course. Students whose primary interest is quantitative methods, at a minimum, should possess a basic understanding of descriptive statistics, bivariate statistics, and ordinary least squares regression. Students whose primary interest is qualitative methods, at a minimum, should possess a basic understanding of ways of gathering, analyzing, coding, and constructing themes from interview and observation data. Prior use of statistical software (e.g., SPSS) and qualitative software (e.g., NVivo) is also helpful, though not a prerequisite for the course. Students who are uncertain about whether they have the necessary prerequisites should discuss their prior preparation with the instructors.

**Expectations and Requirements**

*Attendance and participation.* We designed the course to scaffold the acquisition of knowledge and skills, so it is essential that you participate in each session. If you are prevented from doing so, please let the instructors and your group members know, preferably in advance. In these situations, it is the student’s responsibility to catch up on course material, especially small group obligations. Although being late for class may, on rare occasion, be unavoidable, chronic lateness should be avoided and may influence a student’s class participation grade.

*Course Readings and Homework.* Students should set aside sufficient time (e.g., at least nine hours a week) to complete required readings, analytic exercises, and a final project. Because the course places a heavy emphasis on the actual application of research strategies, students will have to spend time outside of class exploring datasets; constructing codes, themes, and measures; running statistical and qualitative analyses; and writing up results. Because assignments are sequential, keeping up with assigned deadlines is critical. Late assignments may result in the lowering of a student’s grade. Incompletes will be considered only for extraordinary circumstances.
Writing Quality and Style. When preparing written assignments students are expected to express their thoughts in a clear and concise manner. Emphasis should be placed on clarity of expression, not the number of pages written. Written assignments should be carefully proofread for grammatical and spelling errors and, when required, thoughts and quotes that are not your own should be properly cited. While APA (6th edition) format is preferred for citations, other formats may be used as long as they are consistently applied throughout the text. For easy access to citation systems and style manuals, click on the “University Libraries” tab of our Blackboard site. Look at the second box in the right hand column.

Course Assignments. Students’ final grades will be based on four components. Handouts outlining the details and expectations for written assignments will be distributed several weeks prior to the due date.

1. Participation – 15%
   Students should be prepared to share insights, questions, and critiques about readings and databases each time we meet.

2. Analytic Exercises – 45%
   The three analytic exercises involve completion of tasks associated with mixed methods studies. Most analytic exercises will be performed in groups of 3-4 students, the exception being the first assignment, which is to be done individually. Each exercise represents 15% of the student’s grade. The following brief descriptions are meant to provide a general idea about the type of activities encompassed by the exercises. Detailed instructions about the assignment are posted in ELMS.
   - Use a “simultaneous” or “sequential mixed methods design with a dominant qualitative paradigm or a dominant quantitative paradigm to examine some aspect of teaching quality. You must include in your analysis information from one quantitative and one qualitative data stream (e.g., the attribution scales/scores and the post-lesson interview data), and you must weight the interpretation of these data types to enhance the qualitative results. Report your findings/interpretations in a double-spaced 5-6 page paper. Make certain that your paper includes an appropriate research question (or set of questions), a brief description of the design, and a brief discussion of the study/results. This is a small group exercise.

   - Develop either a qualitative indicator of teaching quality based on quantitative data or develop a quantitative indicator of teaching quality based on qualitative data. You must include in your analysis information from only a qualitative or a quantitative data stream, and you must transform this data stream into a different form of data (i.e., qualitative into quantitative or quantitative into qualitative). Describe the indicator that you develop, its possible use in an analysis of teaching quality, the procedures that you used to develop the indicator, and provide appropriate evidence of the indicator’s “quality” or “soundness” for any future analyses using these data. This is a small group exercise. Report your findings/interpretations in a double-spaced 4-5 page paper.
Develop a prospectus for your final project. Using a mixed method design of your choosing, explain how you would use the course datasets to examine whether teaching quality varies with or is in some way dependent on classroom context. For the purposes of this study, classroom context may be conceptualized as the percentage of specific populations of students in a class (e.g., low achievers, FARMS students, etc.), whether a lesson involves instruction in reading or mathematics, or even the school in which instruction occurs. The proposal should include specific research questions, an explicit description of the design, the anticipated sample, and a proposed analytic strategy. This is a small group exercise. Report your findings/interpretations in a double-spaced 4-5 page paper.

3. **Final Presentation & Handout – 10%**
   Students will present their proposals to classmates during the final two weeks of the course. These presentations and papers will be done in groups of 3-4 students. Students will need to use Powerpoint for their presentations, have a handout for each class member, and include data displays in the handout, where appropriate.

4. **Final Project – 30%**
   The final project is meant to be a summative experience for students. Students will work in small groups to develop more fully their prospectus into a proposal that includes preliminary analyses. For the purposes of this assignment, we’ll use the American Educational Research Association’s (AERA) guidelines for submitting paper proposals to its annual meetings. Each proposal is to have a title page, an abstract of 100-120 words, and accompanying text of no more than 2,000 words that addresses the following: (1) Objectives or purpose of the study, (2) Perspective(s) or theoretical framework, (3) Description of methods, (4) Description of data sources, (5) Results and/or conclusions, and (6) Educational significance. The proposal should be appropriately referenced (the reference list is not included in the 2,000 word count). The final project is due by the end of Wednesday December 12th.

**Grading Scale**
We’ll use the following rubric in assigning letter grades for participation, the analytic exercises, the presentation, and the final project. The final grade for the course will be the weighted average of these grades (as specified under course assignments).

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**Materials**

**Required Readings.** All required readings are PDF files that can be downloaded from our Blackboard site.
Additional Resources. Although not required, we’ve identified three types of additional resources that you may find helpful. The first is a relatively new journal published by Sage: *Journal of Mixed Methods Research*. It contains articles about mixed methods as well as mixed methods studies from a range of disciplines (e.g., health, politics, education, psychology).

The second type of resource includes the mixed methods books listed below. You may already have one or more of these books in your personal library; if so they may serve as useful references to you during the course. The list is not meant to be comprehensive; rather, it identifies resources that we’ve personally found useful or that colleagues have found useful. We will make six chapters of Tashakkori & Teddlie’s *Handbook of mixed methods* (#12 below) available to you on our Blackboard site.


The third type of resource is a recommended website that discusses mixed methods. We’ve found the site at the Florida International University to be a helpful resource. The site is comprehensive and provides links to a range of mixed methods techniques and applications. It was developed by Abbas Tashakkori (http://www.fiu.edu/~bridges/).

**Statistical Software.** The quantitative data used in the class are coded as SPSS data files, a software package that conducts a range of data management and statistical analyses. SPSS is available at many University of Maryland locations on multiple platforms, including MAC and Windows. If you are interested in purchasing your own copy of SPSS, speak with Professor Croninger. A graduate student version of the SPSS modules may be purchased from Journey Ed for $199.98 (plus shipping). The student version, though cheaper, is not recommended. Please refer to the Journey Ed website for more information: http://www.journeyed.com/itemDetail.asp?ItmNo=72391573R

Most of the qualitative data have been coded using NVivo, a software package that facilitates the organization, coding, and sorting of qualitative data. These coded data will be made available to you, so you will not need to purchase the software. However, if you would like to purchase it yourself so that you can do more sophisticated data analysis, speak with Professor Valli. A student version, with a one-year license, is available for $200.00. More expensive options are also available. Please refer to the manufacturer’s website for more information: http://www.qsrinternational.com/quick-order.aspx

We will discuss how to gain access to the quantitative and qualitative software and datasets from on and off campus during the first class.

**General Instructional Policies**

**Religious Holidays.** The University System of Maryland policy (Assignments and Attendance on Dates of Religious Observance) provides that students should not be penalized because of observances of their religious beliefs; students should be given an opportunity, whenever feasible, to make up within a reasonable time any academic assignment that is missed due to individual participation in religious observances. It is the student’s responsibility to inform the instructor as soon as possible of any intended absences for religious observances. Additional information on this policy may be found at http://www.president.umd.edu/policies/iii510a.html.

**Code of Academic Integrity and Plagiarism.** All students are expected to abide by the code of academic integrity throughout this course and all other courses offered at the University of Maryland. Academic dishonesty, including cheating, fabrication, and plagiarism will not be tolerated and will be reported to the Student Honor Council. The full text of the University’s honor code is available at http://www.studenthonor council.umd.edu/code.html. Students, who have questions about the code, or their obligations under the code, should contact the student honor council chair at HonorCouncil@umd.edu. Information on plagiarism can be found at: http://www.lib.umd.edu/guides/citing.html.

**Documented Disabilities.** A student with a documented disability or any other special need who wishes to discuss academic accommodations should contact the instructors as soon as possible.
The University is obligated, whenever possible, to provide appropriate accommodations for students with disabilities. Students who have questions about their rights or accommodations may contact Disability Support Services (4-7682).

**Course Evaluation:** As a member of our academic community, you as a student have a number of important responsibilities. One of these responsibilities is to submit your course evaluations each term though CourseEvalUM in order to help faculty and administrators improve teaching and learning at Maryland. Please make a note now of the dates for Fall 2012 (Tues, Nov 27 - Wed, Dec 12) and the link at which you can access the submission system (www.courseevalum.umd.edu). If you submitted all of your evaluations in the fall or are a new student, you can also access all posted results from Fall 2008 forward via Testudo under CourseEvalUM Reporting. To retain this access, you must submit all of your evaluations each semester. If you do not have access right now, you can gain it by submitting past evaluations. More information is at: https://www.irpa.umd.edu/Assessment/CourseEval/stdt_faq.shtml.

**Class Schedule** *(Readings subject to change with advance notice)*

The schedule is organized around basic elements and issues of mixed methods research. We begin with an introduction to the High-Quality Teaching study and then explore some of the epistemological and methodological issues associated with mixed method research. As we read about mixed methods, we will examine various types of mixed methods studies and engage in exercises designed to provide you with an opportunity to apply some of what you are learning. The final project will be developing a proposal for a professional conference. (We’ll use AERA guidelines for the proposal.) Readings and assignments are posted for the week that they are due.

**Week 1 (Aug 29): Challenges and possibilities of mixed methods.**
Overview of course content, expectations, syllabus, assignments, and readings. Introduction to the High-Quality Teaching study: Why did we engage in the study? Why did we use mixed methods? How did we use mixed methods? We’ll also hand out a more detailed description of our expectations for the first assignment. The Fenstermacher and Richardson article, assigned for the first day of class, will provide you with insights into the study and the conceptual challenges associated with examining the quality of teaching experienced by students.

**Assignment for this week.**
Explore our Blackboard courses site (www.elms.umd.edu) and the HQT databases that you can access from that course site.

**Reading for this week.**


Week 2 (Sept 5): Challenges and possibilities of mixed methods cont.
What is a mixed methods study? We’ll discuss different answers to that question, including the historical emergence of mixed methods as a research paradigm, epistemological foundations for mixed methods, and the challenges associated with conducting such a study. We’ll also identify some of the key issues that have yet to be resolved.

Readings for this week.
Berliner, D. C. (2002). Educational research: The hardest science of all.


Week 3 (Sept 12): Challenges and possibilities of mixed methods cont.
We’ll continue discussing what does it mean to conduct a mixed methods study. We will discuss some of the historical objections to mixed methods designs, as well as newer developments that have prompted or encouraged its development as a legitimate research method.

Readings for this week.
Morse, J. (2002). Chapter 7, Principles of mixed methods and multimethod research design.

Ercikan, K., & Roth, W. (2006). What good is it to polarize research into qualitative and quantitative?


Week 4 (Sept 19): Designing Mixed Methods Studies
We’ll begin discussing different types of designs used in mixed methods studies. We’ll explore alternative typologies identified by researchers, and we apply some of these ideas to the examples of studies that we read during subsequent weeks. (Creswell and colleagues provide the template for doing so in their chapter.)

Readings for this week.
Creswell, J. et al. (2002). Chapter 8, Advanced mixed methods research designs.


Week 5 (Sept 26): Designing Mixed Methods Studies cont.
We’ll continue to examine different types of mixed methods designs and the rationale behind them. We’ll review some of the fundamental ways of categorizing mixed methods studies and apply some of these ideas to the Giannakaki article.

Readings for this week.


Assignment for this week.
1st analytic exercise due on Sept 29.

Week 6 (Oct 3): Conducting Mixed Methods Studies
This week we begin to discuss the actual implementation of a mixed methods design – the types of data collection strategies used, the intellectual challenges associated with conducting such a study, and the ways in which specific aspects of a study’s design can be used iteratively to enhance the quality of data. We’ll share some of our own experiences with the HQT study, too.

Readings for this week.


Week 7 (Oct 10) Conducting Mixed Methods Studies cont.
We will continue discussing issues associated with conducting a mixed methods study. We will use the Hill et al. article to consider the role of validation in mixed methods studies and the Christ article to examine recursiveness in longitudinal studies.

Readings for this week.


**Week 8 (Oct 17): Conducting Mixed Methods Studies cont.**
We will continue to examine examples of mixed methods studies, differences and similarities in designs, and special challenges associated with their implementation. We’ll also discuss issues associated with transforming one form of data into another – that is, quantifying qualitative data or qualifying quantitative data.

**Readings for this week.**


**Assignment for this week.**
2nd analytic exercise due on Oct 20.

**Week 9 (Oct 24): Analyzing Mixed Methods Data**
This week we will consider in greater detail the problems and possibilities associated with analyzing multiple data streams from a mixed methods design. Specifically, we’ll discuss strategies for organizing data and creating processes that enhance the analysis and the quality of possible inferences.

**Readings for this week.**


**Week 10 (Oct 31): Analyzing Mixed Methods Data cont.**
We will continue to discuss the challenges associated with analyzing quantitative and qualitative forms of data and some of the strategies for successfully doing so.

**Readings for this week.**


**Assignment for this week.**
3rd analytic exercise due on Nov 3.

**Week 11 (Nov 7): Analyzing Mixed Methods Data cont.**
We will discuss the epistemological issues associated with drawing inferences from the analyses of quantitative and qualitative data. Some of the questions that we will ask include: How do you evaluate a mixed methods study? What standards can be used to determine how much confidence to have reported results?

**Readings for this week.**


**Week 12 (Nov 14): Reporting Mixed Methods Results**
We will discuss issues associated with how to write up and present the results of a mixed methods study. Although we will focus on Sandelowski’s chapter, we will draw on all of the examples of mixed methods studies examined in class to consider the strengths and weaknesses of different presentations. We will consider similarities and differences in the challenges posed by mixed methods and mono methods studies.

**Readings for this week.**
Leech, N. (2012). Writing mixed research reports.

Sandelowski, M. (2002). Chapter 12, Tables or tableaux? The challenges of writing and reading mixed methods studies (available through the library course reserve site).

**Week 12 (Nov 21): No class. Happy Thanksgiving!**
Students should spend time this week working on your final projects and preparing your presentations.
**Week 13 (Nov 28): Reflections on Mixed Methods.**

We will set aside part of the class for students to work on their projects. The remainder of the time we will focus on reviewing what we have learned and discuss the strengths and weaknesses of mixed methods as a methodological approach.

**Readings for this week.**


**Week 14 (Dec 5): Final Projects.**

Students will present their final projects to classmates. The amount of time for presenting and discussing individual projects will depend on the number of groups but we anticipate that groups will have roughly 20 minutes to present with additional time for questions and answers. Students should plan on using Powerpoint and providing the audience with appropriate handouts. Note: All papers are due by the end of the day, Wednesday December 12th.