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

EDRS 824-001 (3 credits)  
MIXED METHODS RESEARCH: INTEGRATING QUALITATIVE AND QUANTITATIVE APPROACHES  
Fall 2015

Instructor: Joe Maxwell  
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Phone: Please use email for most communication; my office phone is 703-993-2119, but I don't check my voicemail regularly.  
Class meeting: Thursdays, 4:30-7:10; see course schedule  
Location: Robinson B 218

Prerequisites

Successful completion (with a grade of B or higher) of EDRS 811 and EDRS 812, or equivalent coursework or experience.

The course will not deal specifically with advanced statistical analysis methods, since these aren't essential for much mixed methods research, but you do need to have a good grasp of the basic concepts of both qualitative and quantitative research. If you anticipate using sophisticated statistical analysis for a planned mixed methods study, you need to be familiar with these techniques and their limitations; some of the limitations will be discussed in this course.

University Catalog Course Description

Advanced research seminar that integrates qualitative and quantitative approaches, methods, and data in a single study. The course covers the paradigms and “mental models” that inform both approaches, and the ways in which qualitative and quantitative goals, questions, methods, and interpretive strategies can be productively combined.

Expanded Course Description

This course is an advanced research seminar dealing with integrating qualitative and quantitative approaches, methods, and data in a single study. I will assume that you have a good basic understanding of both approaches; we will address some fundamental issues for each approach that are particularly relevant for combining these approaches. The course covers the assumptions and “mental models” that inform both approaches, and the ways in which qualitative and quantitative goals, questions, methods, analysis strategies, and presentation styles can be productively integrated.
Course Goals

1. Understand the most important ways in which mixed methods research differs from single-method research strategies, and the main issues that should be addressed in combining approaches.
2. Understand the most important strengths and limitations of both qualitative and quantitative research, and how to integrate these approaches in a mixed method study.
3. Be able to use these understandings to evaluate published mixed methods research.
4. Be able to plan and communicate the design and process of a mixed methods study.

Required Books


All of the assigned books should be available in the GMU bookstore. My commentary on the assigned chapters in Greene (on Blackboard) is also assigned for each week. If you haven’t used my book *Qualitative Research Design: An Interactive Approach* in previous courses, you should read this (a pdf file of the page proofs is on Blackboard), since I will frequently refer to it on issues of research design, methods, and validity.

Other assigned and recommended readings will be either placed on Blackboard, or the URL provided for accessing these on the Internet. (Full references are given at the end of the syllabus.) In addition to these, the Blackboard site includes papers of mine that may be relevant, and exemplary assignments from previous semesters. Reading assignments are listed for the day on which they will be discussed.

Recommended Reference Books and Journals

Abbas Tashakkori & Charles Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research (1st & 2nd editions)*. Sage Publications, 2003, 2010. The second edition is not simply an update of the first edition; it is an almost entirely different book, with substantially new chapter titles and authors.
The major journal for papers dealing with the methodology of mixed method research is the *Journal of Mixed Method Research*.

Course Structure and Requirements

Class meetings will be run as seminars. I expect you to come to class prepared to discuss the reading assignments, and encourage you to share with the class other readings and examples you have found that are relevant. I will email in advance my notes and discussion questions for each
week's readings. I will also give mini-lectures on topics that I think are not well addressed by available readings, and there will be in-class exercises dealing with certain skills. There will be opportunities for you to present to the class, and get feedback on, your own research, and how integrating approaches can be useful in your research (in EDRS 812, I call these “consultations”).

Before beginning the readings for a particular week I suggest that you ask yourself what your questions and concerns are about the topics for that week, and that you list these. After finishing a reading, jot down the author's main points. Then, ask yourself how these relate to your questions or concerns. Did the reading answer your questions? Did it give you new ideas or ways of approaching your study? How can you use what you learned from reading it? If an example of a mixed method study is assigned, analyze it in terms of the methodological readings. How do the latter’s ideas apply? How do they not apply? What are the methodological readings’ implications for this study, and vice versa? How can this example inform your own study?

We will often be reading articles or book chapters presenting different perspectives on the same issue. Think about each author's approach to mixed method research as you read his/her work, and how this fits into the different approaches we have discussed.

Grading

Written assignments

There will be three written assignments, corresponding to the three modules of the course; each of these will count for 25% of the grade. For each of modules, there will be a choice of several assignments, as described in the Guidelines for the assignments. Alternative assignments are possible to those that I suggest, but you need to discuss these with me and get my approval prior to doing the assignment. Page lengths for written assignments are suggestions only. Length is to be determined by the needs of the individual assignments.

My criteria for evaluating written assignments are: your understanding of the readings (through your discussion of the material and your application of it to your research topic), demonstration of an analytic/critical stance toward the material, appropriate application of the ideas, and clarity in organization and writing. Grading scale: A+. A, A-, B+, B, B-, C, F. Late assignments will not be accepted without my prior permission.

Class participation

Class participation will count for the final 25% of the grade. There are two components of this. The first is class attendance. If you need to miss a particular class, please let me know in advance (if possible), or explain the reason. The second component is that for each class after the first one, you are required to develop a reaction to, or a question about, one or more of the readings for that class, and to post these on Blackboard by midnight of the day before the class. I will not try to evaluate the responses themselves, but simply whether you met the requirement to post a response. I will respond on Blackboard to some of these reactions and questions, when I feel that I have something of general interest to contribute; you may also raise these issues in class. You
are also welcome to post responses to others' questions or reactions, as long as these are respectful and constructive. In-class participation will not be included in the participation grade, because it's too difficult for me to quantitatively evaluate this.

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**College of Education and Human Development**  
**Statement of Expectations**

**GMU Policies and Resources for students**

a. Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/the-mason-honor-code/].

b. Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/]

c. 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.

d. 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/].

e. 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/].

f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

g. 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/].

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**Professional Dispositions**  
Students are expected to exhibit professional behaviors and dispositions at all times.

**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/]
COURSE SCHEDULE

Module 1: What is mixed method research?

Sept 3  Introduction to the course and to mixed method research

Elbow, The believing game and how to make conflicting opinions more fruitful (Blackboard)
Galef, Surprise! The most important skill in science . . .
<http://www.slate.com/articles/health_and_science/science/2015/01/surprise_journal_not
ice_the_unexpected_to_fight_confirmation_bias_for_science.html>
Greene, Mixed Methods in Social Inquiry, Introduction and Chapters 1-3
Maxwell, Expanding the history and range of mixed methods research (Blackboard)

Sept 10  Qualitative and quantitative

James, Inside-out perspective (Blackboard)
Kidder & Fine, Qualitative and quantitative methods: When stories converge (Blackboard)
Hammersley, Deconstructing the qualitative-quantitative divide (Blackboard).
Maxwell, Using numbers in qualitative research (Blackboard).
Sandelowski, Unmixing mixed-methods research (Blackboard)

Recommended:
Camic et al, Naming the stars (Blackboard)
Blumer, Sociological analysis and the “variable” (Blackboard)

Sept 17  Paradigm issues

Greene, Mixed Methods in Social Inquiry, Chapters 4-5 and Interlude 1
Oakley, Paradigm wars (Blackboard)
Rabinowitz & Weseen, Power, politics, and the qualitative/quantitative debates in
psychology (Blackboard)
Maxwell, Paradigms or toolkits? Philosophical and methodological positions as heuristics for
mixed methods research (Blackboard)

Recommended:
Phillips, Postpositivistic science: Myths and realities (Blackboard)
Yanchar & Williams, Reconsidering the compatibility thesis and eclecticism: Five proposed
guidelines for method use (Blackboard)
Sleeter, Epistemological diversity in research on preservice teacher preparation for
historically underserved children (Blackboard)
Maxwell & Mittapalli, Realism as a stance for mixed methods research (Blackboard)
Maxwell, A realist approach for qualitative research (Blackboard)
Shulman, Summary and prognosis, in Shulman, Paradigms and programs (Blackboard)
Pawson & Tilley, Realistic evaluation.
Maxwell & Lincoln, Methodology and epistemology: A dialogue (Blackboard)
Pitman & Maxwell, Qualitative approaches to evaluation (Blackboard)
Sept 24  Mixed methods research examples

Weisner, Introduction to *Discovering successful pathways*.
Goldenberg, Gallimore, & Reese, Using mixed methods to explore Latino children’s development, in Weisner, *Discovering successful pathways*.
Weisner et al., Behavior sampling and ethnography (Blackboard)

Recommended:
Fricke, Taking culture seriously: Making the social survey ethnographic, in Weisner, *Discovering successful pathways*.

Oct 1  Writing about mixed method research

Daryl Bem, Writing the empirical journal article (Blackboard)
Maxwell, Reflections on rewriting my Diversity paper (Blackboard)
Maxwell, Guide to the APA Publication Manual: The most important things to remember. (Blackboard)

Recommended:
American Psychological Association Publication Manual
Marshall & Barritt, Choices made, worlds created: The rhetoric of AERJ (Blackboard)
Sandelowski, Tables or tableaux? The challenges of writing and reading mixed methods studies. (Blackboard)

Module 2: Design, analysis, and validity

Oct 8  Research design and research proposals

Module 1 assignment due

Greene, *Mixed Methods in Social Inquiry*, Chapters 6-7 and Interlude 2
Maxwell & Loomis, Mixed method design: An alternative approach (Blackboard)
Maxwell, Literature reviews of, and for, educational research (Blackboard)
Guest, Describing mixed methods research (Blackboard)

Recommended:
Maxwell, *Qualitative Research Design*, chapters 1- 4 and 7
Hall & Howard, A synergistic approach: Conducting mixed methods research with typological and systemic design considerations (Blackboard)
Oct 15  “Scientific research” and mixed methods

Platt, Strong inference (Blackboard)
Maxwell, The importance of qualitative research for causal explanation in education (Blackboard)
Understanding controlled trials: Why are randomised controlled trials important? <http://www.bmj.com/content/316/7126/201>
Smith and Pell, Parachute use to prevent death and major trauma related to gravitational challenge: Systematic review of randomised controlled trials (Blackboard)
Swern, A story of evidence-based medicine: Hormone replacement therapy and coronary heart disease in postmenopausal women (Blackboard)

Recommended:
Maxwell, Causal explanation, qualitative research, and scientific inquiry in education (Blackboard)
Maxwell & Chmiel, What makes mixed methods research "scientific"? (Blackboard)
Eisenhart, Hammers and saws for the improvement of educational research (Blackboard)
Eisenhart, Science plus (Blackboard)
Scriven, A summative evaluation of RCT methodology: & an alternative approach to causal research (Blackboard)
What is causing Arctic sea ice decline? <http://nsidc.org/icelights/2012/05/16/what-is-causing-arctic-sea-ice-decline/> - more-747
Freedman, Statistical models and shoe leather (Blackboard)
Phillips, Models v. mechanisms at FDA Center for Tobacco Products <http://epology.blogspot.com/2013/08/models-v-mechanisms-at-fda-center-for.html>
Shadish, Cook, & Campbell, Experimental and quasi-experimental designs for generalized causal inference.
Chatterji, Evidence on “what works”: An argument for extended-term mixed-method (ETMM) evaluation designs (Blackboard)
Conrad (Ed.), Critically evaluating the role of experiments.
Lewontin, The analysis of variance and the analysis of causes (Blackboard)
Maxwell, Re-emergent scientism, postmodernism, and dialogue across differences (Blackboard)
Maxwell, Explanation (Blackboard)
Maxwell, Scientism (Blackboard)

Oct 22  Data analysis

Greene, Mixed Methods in Social Inquiry, Chapter 8
Maxwell, Qualitative Research Design, Chapter 5, section on data analysis (pp. 104-116) (Blackboard)
Cohen, The Earth is round (p < .05) (Blackboard)
Nuzzo, Statistical errors (Blackboard)
Trafimow & Marks, Editorial (Blackboard)
Boaler & Staples, Creating mathematical futures (Blackboard)
Recommended:
Maxwell, Notes on key concepts in quantitative research (unpublished class notes), particularly the discussion of inferential statistics (pp. 11-15) (Blackboard)
Gelman, Too good to be true (and the study authors’ response and Gelman's comments on this)
Nix & Barnette, The data analysis dilemma: Ban or abandon. A review of null hypothesis significance testing (Blackboard)
Thompson, Statistical significance and effect size reporting: Portrait of a possible future (Blackboard)
Gigerenzer, Mindless statistics (Blackboard)
Maxwell & Miller, Categorizing and connecting strategies in qualitative data analysis (Blackboard)
http://en.wikipedia.org/wiki/Exploratory_data_analysis

Oct 29 Validity and generalizability

Greene, Mixed Methods in Social Inquiry, Chapter 9
Maxwell, Qualitative research design, 3rd ed., chapter 6, “Validity” (Blackboard)
James, Jeter vs. Everett (Blackboard)
Leibovici, Effects of remote, retroactive, intercessory prayer (Blackboard)
Castle, Fox, & Souder, Do professional development schools make a difference? A comparative study of PDS and non-PDS teacher candidates (Blackboard).
Becker, Generalizing from case studies. In Eisner & Peshkin, Qualitative inquiry in education (Blackboard)

Recommended:
Maxwell, A Realist Approach for Qualitative Research, Chapter 8: Validity (Blackboard).
Zimmer, Good scientist! You get a badge.
Saletan, <http://www.slate.com/articles/health_and_science/human_nature/2012/06/new_family_structures_study_is_gay_parenthood_bad_or_is_gay_marriage_good_.html>
**Module 3: Integrating approaches, methods, and data**

**Nov 5  Strategies for integrating approaches**

*Module 2 assignment due*

- Bryman, Barriers to integrating quantitative and qualitative research (Blackboard)
- Trend, On the reconciliation of qualitative and quantitative analyses: A case study (Blackboard)
- Kaplan & Duchon, Combining qualitative and quantitative methods in information systems research: A case study (Blackboard)
- Plano Clark et al., Practices for embedding an interpretive qualitative approach within a randomized clinical trial (Blackboard)

**Recommended:**
- Maxwell et al., Designing integration in mixed and multi-method studies (Blackboard)
- White, Of probits and participation: The use of mixed methods in quantitative impact evaluation (Blackboard)

**Nov 12  Examples: Integrating data collection methods**

- Maxwell, Sandlow, & Bashook, Combining ethnographic and experimental methods in evaluation research: A case study (Blackboard)
- Rank, The blending of qualitative and quantitative methods in understanding childbearing among welfare recipients (Blackboard)
- Kling et al., “Bullets don’t got no name,” in Weisner, Discovering Successful Pathways
- Bernheimer, Weisner, & Lowe, Impacts of children with troubles on working poor families: Mixed-method and experimental evidence (Blackboard)

**Recommended:**
- Tolman & Szalacha, Dimensions of desire: Bridging qualitative and quantitative methods in a study of female sexuality (Blackboard)

**Nov 19  Integrating analyses and results**

- Irwin, Data analysis and interpretation: Emergent issues in linking qualitative & quantitative evidence (Blackboard).
- Morse, Tylko, & Dixon, Characteristics of the fall-prone patient (Blackboard)
- Morse & Tylko, The use of qualitative methods in a study examining patient falls (Blackboard)
Recommended:
Eckert, Three waves of variation study: The emergence of meaning in the study of sociolinguistic variation (Blackboard)
Maxwell, Diversity and methodology (Blackboard)

Nov 26    Thanksgiving holiday; no class

Dec 3    More examples of integrating analyses and results

Weiss et al., Working it out: The chronicle of a mixed-method analysis, in Weisner, Discovering successful pathways.
Gibson-Davis & Duncan, Qualitative-quantitative synergies in a random-assignment program evaluation, and the commentary by Huston, in Weisner, Discovering successful pathways.
Zentella, Integrating qualitative and quantitative methods in the study of bilingual code switching (Blackboard)

Recommended:
Muth, Conceptualizing incarcerated literacy learners: Pragmatic and dialectical uses of assessment data. Unpublished paper (Blackboard)

Dec 10    Final class

Module 3 assignment due
Becker, Howard, "Generalizing from case studies." In Elliot Eisner & Alan Peshkin, Qualitative Inquiry in Education.


Cook, Thomas, and Reichardt, Charles (Eds), Qualitative and Quantitative Methods in Evaluation Research. Sage, 1979


Eisenhart, Margaret, "Hammers and saws for the improvement of educational research." Educational Theory 55(3), pp. 245-261 (2005)


James, Bill, "Jeter vs. Everett." In The Fielding Bible; accessed online at http://www.billjamesonline.net/fieldingbible/jeter.asp

Maxwell, Joseph A., "Using numbers in qualitative research." *Qualitative Inquiry* 16(6), pp. 475-482 (2010).


Tolman, Deborah, and Szalacha, Laura, "Dimensions of desire: Bridging qualitative and quantitative methods in a study of female sexuality," in Sharlene Hesse-Biber & Patricia Leavy (Eds), *Approaches to Qualitative Research*. *


