

**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 2017
Tuesdays, 4:30-7:10, Robinson A 243**

Faculty

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Prerequisites/Corequisites

Successful completion (with a grade of B or higher) of EDRS 810, EDRS 811 and EDRS 812.

The course will not deal specifically with advanced statistical analysis methods, since these are not 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.

Learner Outcomes or Objectives

1. Understand the most important ways in which mixed methods research differs from single-method research, 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.

Professional Standards

Upon completion of this course, students will have met the following professional standards:
Not Applicable.

Required Texts

Teddlie, C., & Tashakkori, A. (2009). *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences*. Thousand Oaks, CA: Sage Publishing.

If you haven't used Maxwell's book *Qualitative Research Design: An Interactive Approach* in previous courses, you should read this, since I will frequently refer to it on issues of research design, methods, and validity; parts of the book are assigned reading.

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.)
Reading assignments are listed for the day on which they will be discussed.

Recommended Reference Books and Journals

American Psychological Association, *Publication Manual of the American Psychological Association*. Washington, DC: American Psychological Association.

Jennifer Greene, *Mixed Methods in Social Inquiry*. Jossey-Bass, 2007.

Thomas S. Weisner (Ed.), *Discovering Successful Pathways in Children's Development: Mixed Methods in the Study of Childhood and Family Life*. University of Chicago Press, 2005.

Judith L. Green, Gregory Camilli, & Patricia B. Elmore (Eds.), *Handbook of Complementary Methods in Education Research (3rd Edition)*. Lawrence Erlbaum, 2006.

The major journal for papers dealing with the methodology of mixed method research is the *Journal of Mixed Method Research*.

Course Delivery Method

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 (called “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.

Course Performance Evaluation

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:

1. your understanding of the readings (through your discussion of the material and your application of it to your research topic),
2. demonstration of an analytic/critical stance toward the material,
3. 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, starting with the second one, you are required to post a reaction to one or more of the readings for that class, on the class discussion folder on Blackboard, by midnight of the day before the class; this reaction can include questions that you feel the selected reading(s) didn't adequately answer. I will not try to evaluate the responses themselves, but simply whether you met the requirement to post a substantive 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.

COURSE SCHEDULE

Module 1: What is mixed method research?

Aug 29 Introduction to the course and to mixed method research

Teddlie & Tashakkori, *Foundations of Mixed Methods Research*, Chapter 1
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>
Maxwell, Expanding the history and range of mixed methods research (Blackboard)

Sept 5 Qualitative and quantitative

Teddlie & Tashakkori, *Foundations of Mixed Methods Research*, Chapter 2
Kidder & Fine, Qualitative and quantitative methods: When stories converge (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 12 Paradigm issues

Teddlie & Tashakkori, *Foundations of Mixed Methods Research*, Chapters 3-5
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 19 Mixed methods research examples

Minta et al, Hunting associations of badgers and coyotes
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*.

Sept 26 Writing about mixed method research

American Psychological Association, *APA Publication Manual*, Chapters 1-3.
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:

Howard S. Becker, *Writing for Social Scientists*.
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 3 Research design and research proposals

Module 1 assignment due

Teddlie & Tashakkori, *Foundations of Mixed Methods Research*, Chapters 6-7
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 10 – No class- Monday classes meet on Tuesday for Columbus Day break

Oct 17 – ONLINE CLASS “Scientific research” and mixed methods

Due to the evolving nature of this issue, there may be a change in the readings assigned

Teddlie & Tashakkori, *Foundations of Mixed Methods Research*, Chapters 8-9

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](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://ep-ology.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)

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 24 Mixed methods data analysis

Teddlie & Tashakkori, *Foundations of Mixed Methods Research*, Chapters 10-11

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)

Nix & Barnette, The data analysis dilemma: Ban or abandon. A review of null hypothesis significance testing (Blackboard)

Simmons, J.P., Nelson, L.D., and Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Perspectives on Psychological Science* 22, 1359-1365 (November 9, 2014). DOI: 10.1177/0956797611417632 (Blackboard)

Zimmer, Good scientist! You get a badge.

<http://www.slate.com/articles/health_and_science/science/2012/08/reproducing_scientific_studies_a_good_housekeeping_seal_of_approval_single.html>

Gelman, Too good to be true (and the study authors' response and Gelman's comments on this)

<http://www.slate.com/articles/health_and_science/science/2013/07/statistics_and_psychology_multiple_comparisons_give_spurious_results_single.html>

Widaman, Confirmatory theory testing: Moving beyond NHST. *Score*, Jan 2015. Access online at <<http://www.apa.org/divisions/div5/pdf/Jan15Score.pdf>>

Cumming, *Understanding the New Statistics: Effect Sizes, Confidence Intervals, and Meta-Analysis*.

Matthew Miles & A. Michael Huberman, *Qualitative Data Analysis: An Expanded Sourcebook*. Sage Publications, 1994.

Maxwell & Miller, Categorizing and connecting strategies in qualitative data analysis (Blackboard)

http://en.wikipedia.org/wiki/Exploratory_data_analysis

<http://www.itl.nist.gov/div898/handbook/eda/eda.htm>

Oct 31 **Validity and generalizability**

Maxwell, *Qualitative research design*, 3rd ed., chapter 6, "Validity" (Blackboard)

James, Jeter vs. Everett (Blackboard)

Leibovici, Effects of remote, retroactive, intercessory prayer (Blackboard)

Becker, Generalizing from case studies. In Eisner & Peshkin, *Qualitative inquiry in education* (Blackboard)

Castle, Fox, & Souder, Do professional development schools make a difference? A comparative study of PDS and non-PDS teacher candidates (Blackboard).

Recommended:

Maxwell, Validity and reliability in research: A realist perspective (Blackboard).

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>

Maxwell & Chmiel, Generalizing in and from qualitative data analysis (Blackboard)

Module 3: Integrating approaches, methods, and data

Nov 7 **Strategies for integrating approaches**

Module 2 assignment due

Teddle & Tashakkori, *Foundations of Mixed Methods Research*, Chapter 12

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 14 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)

Nov 21 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)
Milgram, *Obedience to authority*. Harper & Row, 1974

Recommended:

Tolman & Szalacha, Dimensions of desire: Bridging qualitative and quantitative methods in a study of female sexuality (Blackboard)
Eckert, Three waves of variation study: The emergence of meaning in the study of sociolinguistic variation (Blackboard)
Maxwell, Diversity and methodology (Blackboard)

Nov 28 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 5 Final class

Module 3 assignment due

Core Values Commitment

The College of Education and 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/>.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <http://oai.gmu.edu/the-mason-honor-code/>).
- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason 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.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <http://ods.gmu.edu/>).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursessupport.gmu.edu/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .

Full references

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- Maxwell, Joseph A., "Expanding the history and range of mixed methods research." In press in the *Journal of Mixed methods Research*.
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