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

Spring 2016 Thursdays, 4:30-7:10, Thompson 2021

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	2119, but I don't check my voicemail regularly.

Prerequisites

Successful completion (with a grade of B or higher) of EDRS 810 and EDRS 812, or equivalent coursework or experience. EDRS 811 is recommended but not required.

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.

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, 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

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.
Howard S. Becker, Writing for Social Scientists. University of Chicago Press, 2007.
Stanley Milgram, Obedience to Authority. Harper, 1976. Reprinted 2009.

All of the assigned books should be available in the GMU bookstore and on Amazon. 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; 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.) 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 entirely different book, with substantially new chapter titles and authors.
- 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 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 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.

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 <u>http://ods.gmu.edu/</u>].
- 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/].

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?

Jan 21 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)

Jan 28 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)

Feb 4 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)

Feb 11 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*.

Feb 18 Writing about mixed method research

Howard S. Becker, Writing for Social Scientists, Preface and Chapters 1, 2, and 6.
Daryl Bem, Writing the empirical journal article (Blackboard)
Greene, Mixed Methods in Social Inquiry, Chapter 10 and Interlude 3
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
Howard S. Becker, *Writing for Social Scientists*, the rest of the book.
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

Feb 25 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)

Mar 3 "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? <<u>http://www.bmj.com/content/316/7126/201</u>>
- 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? <<u>http://nsidc.org/icelights/2012/05/16/what-is-</u> causing-arctic-sea-ice-decline/ - more-747

Freedman, Statistical models and shoe leather (Blackboard)

Phillips, Models v. mechanisms at FDA Center for Tobacco Products <<u>http://ep-ology.blogspot.com/2013/08/models-v-mechanisms-at-fda-center-for.html</u>>

- 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)

Mar 10 Spring break—no class

Mar 17 Mixed methods 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)

- 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. <<u>http://www.slate.com/articles/health_and_science/science/2012/08/reproducing_scientif</u> ic_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)

<<u>http://www.slate.com/articles/health_and_science/2013/07/statistics_and_psych_ology_multiple_comparisons_give_spurious_results.single.html</u>>

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

Mar 24 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)

- 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, <<u>http://www.slate.com/articles/health_and_science/human_nature/2012/06/new</u>

<u>family structures_study_is_gay_parenthood_bad_or_is_gay_marriage_good_.html</u>> Maxwell & Chmiel, Generalizing in and from qualitative data analysis (Blackboard)

Module 3: Integrating approaches, methods, and data

Mar 31 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)

Apr 7 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)

Apr 14 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)

Apr 21 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)

Apr 28 Final class

Module 3 assignment due

Full references

- Becker, Howard, "Generalizing from case studies." In Elliot Eisner & Alan Peshkin, *Qualitative Inquiry in Education*.
- Bem, Daryl, "Writing the empirical journal article." A version of this article appears in Darley, J.
 M., Zanna, M. P., & Roediger III, H. L. (Eds) (2003). *The Compleat Academic: A Practical Guide for the Beginning Social Scientist, 2nd Edition*. Washington, DC: American Psychological Association.
- Blumer, Herbert, "Sociological analysis and the 'variable." *American Sociological Review 21*(6), pp. 683-690 (Dec 1956). Reprinted in Blumer, *Symbolic Interactionism*, pp. 127-139.
- Boaler, Jo, & Staples, Megan, "Creating mathematical futures through an equitable teaching approach: The case of Railside School." *Teachers College Record 110* (3), pp. 608–645 (March 2008).
- Bryman, Alan, "Barriers to integrating quantitative and qualitative research." *Journal of Mixed Methods Research 1*(1), pp. 8-22 (Jan 2007).
- Camic, P. M., Rhodes, J. E., & Yardley, L., "Naming the stars: Integrating qualitative methods into psychological research." In Camic, P. M., Rhodes, J. E., & Yardley, L. (Eds), *Qualitative research in psychology: Expanding perspectives in methodology and design*, pp. 3-15 (2003). Washington, DC, US: American Psychological Association, xvi, 315 pp. doi: 10.1037/10595-001
- Castle, S., Fox, R., & Souder, K. "Do professional development schools make a difference? A comparative study of PDS and non-PDS teacher candidates." *Journal of Teacher Education* 57 (1), pp. 65-80 (Jan/Feb 2006).
- Chatterji, "Evidence on "what works": An argument for extended-term mixed-method (ETMM) evaluation designs." *Educational Researcher* 34(5), pp. 14–24. (June/July 2005)
- Cohen, Jacob. The Earth is round (p < .05). *American Psychologist 49*(12), pp. 997-1003 (Dec. 1994).

- Conrad, Kendon J. (Ed.), Critically Evaluating the Role of Experiments. New Directions for Program Evaluation 63. Jossey-Bass (1994).
- Cook, Thomas, and Reichardt, Charles (Eds), *Qualitative and Quantitative Methods in Evaluation Research*. Sage, 1979
- Cumming, Geoff, Understanding the New Statistics: Effect Sizes, Confidence Intervals, and Meta-Analysis. Routledge, 2012.
- Dillman, D. A., Smyth, J. D., & Christian, L. M., *Internet, Mail, and Mixed-mode Surveys: The Tailored Design Method*. Wiley, 2008. (Strongly recommended for those considering using surveys.)
- Eisenhart, Margaret, "Hammers and saws for the improvement of educational research." *Educational Theory* 55(3), pp. 245-261 (2005)
- Eisenhart, Margaret, "Science plus: A response to the responses to *Scientific research in Education. Teachers College Record 107*(1), pp. 52-58 (2005).
- Elbow, Peter, "The believing game and how to make conflicting opinions more fruitful." Online at <u>http://www.procon.org/sourcefiles/believinggame.pdf</u>.
- Freedman, David A., "Statistical models and shoe leather." In Freedman, *Statistical Models and Causal Inference: A Dialogue with the Social Sciences*, pp. 45-62. Cambridge University Press, 2010. Originally published in *Sociological Methodology 21*, pp. 291-313 (1991).
- Gigerenzer, Gerd, "Mindless statistics." *The Journal of Socio-Economics 33*, pp. 587–606 (2004).
- Guba, Egon (Ed.), The Paradigm Dialog. Sage Publications, 1990.
- Hall, Bronwyn, & Howard, Kirsten, "A synergistic approach: Conducting mixed methods research with typological and systemic design considerations." *Journal of Mixed Methods Research* 2(3), pp. 248-269 (2008).
- Hammersley, Martyn, "Deconstructing the qualitative-quantitative divide," in Hammersley, *What's Wrong with Ethnography*? Routledge, 1992.
- Howe, Kenneth, Closing Methodological Divides. Kluwer, 2003.
- Irwin, Sara, "Data analysis and interpretation: Emergent issues in linking qualitative & quantitative evidence." In S. N. Hesse-Biber & P. Leavy (Eds), *Handbook of Emergent Methods*, pp. 415-435. Guilford, 2008.
- James, Bill, "Inside-out perspective", in *The Bill James Baseball Abstract, 1984*, pp. 5-8. Ballantine Books.
- James, Bill, "Jeter vs. Everett." In *The Fielding Bible*; accessed online at http://www.billjamesonline.net/fieldingbible/jeter.asp
- Kaplan, Bonnie and Duchon, Dennis, "Combining qualitative and quantitative methods in information systems research: A case study." *MIS Quarterly 12*, pp. 571-586 (1988).
- Kidder, Louise, & Fine, Michelle, "Qualitative and quantitative methods: When stories converge." In Mark, M. M., and Shotland, R. L. (Eds.), *Multiple Methods in Program Evaluation*. San Francisco: Jossey-Bass, 1987.
- Leibovici, Leonard, "Effects of remote, retroactive, intercessory prayer on outcomes in patients with bloodstream infection: Randomised controlled trial." *British Medical Journal 323*, pp. 1450-1451 (2001).
- Lewontin, Richard, "The analysis of variance and the analysis of causes." *American Journal of Human Genetics 26*, pp. 400-411 (1974). Reprinted in Block and Dworkin (Eds.), *The IQ Debate*.

Marshall, M. J., & Barritt, L. S., Choices made, worlds created: The rhetoric of AERJ. *American Educational Research Journal* 27(4), pp. 589-609 (Winter 1990)

- Maxwell, Joseph A., "Causal explanation, qualitative research, and scientific inquiry in education." *Educational Researcher* 33(2), 3-11 (March 2004)
- Maxwell, Joseph A., "Diversity and Methodology in a Changing World." *Pedagogia 30*, pp. 32-40 (1995-96). A more recent version of this argument is in Maxwell, *A Realist Approach for Qualitative Research*, Chapter 4.
- Maxwell, Joseph A., "Expanding the history and range of mixed methods research." In press in the *Journal of Mixed methods Research*.
- Maxwell, Joseph A., "Explanation." In L. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods*. Thousand Oaks, CA: Sage Publications, 2008.
- Maxwell, Joseph A., "Paradigms or toolkits? Philosophical and methodological positions as heuristics for mixed methods research." *Midwest Educational Research Journal* 24(2), pp. 27-30 (2011).
- Maxwell, Joseph A., *A Realist Approach for Qualitative Research*. Thousand Oaks, CA: Sage Publications, 2011.
- Maxwell, Joseph A., "Re-emergent scientism, postmodernism, and dialogue across differences." *Qualitative Inquiry 10*, pp. 35-41 (February 2004)
- Maxwell, Joseph A., "Scientism." In William A. Darity, Jr. (Ed.), *International Encyclopedia of the Social Sciences*, 2nd ed., Vol. 7, pp. 364-365. Detroit: Macmillan Reference USA, 2008.
- Maxwell, Joseph A., "Using numbers in qualitative research." *Qualitative Inquiry 16*(6), pp. 475-482 (2010).
- Maxwell, Joseph A., "Using qualitative methods for causal explanation." *Field Methods 16(3)*, pp. 243-264 (August 2004).
- Maxwell, Joseph A., "The value of a realist understanding of causality for qualitative research." In N. Denzin (Ed.), *Qualitative Inquiry and the Politics of Evidence*. Walnut Creek, CA: Left Coast Press, 2008.
- Maxwell, Joseph A., Chmiel, Margaret, & Rogers, Sylvia. Designing integration in multi-method and mixed methods studies. In Sharlene Hesse-Biber and Burke Johnson (Eds.), Oxford Handbook of Multimethod and Mixed Methods Research Inquiry, pp. 223-239. Oxford, UK: Oxford University Press, 2015.
- Maxwell, Joseph, & Lincoln, Yvonna, "Methodology and epistemology: A dialogue." *Harvard Educational Review* 60(4), pp. 497-512 (November 1990).
- Maxwell, Joseph A., & Loomis, Diane, "Mixed methods design: An alternative approach." In Abbas Tashakkori and Charles Teddlie (Eds.), *Handbook of Mixed Methods in Social and Behavioral Research*, pp. 241-271. Sage Publications, 2003.
- Maxwell, Joseph A., & Miller, Barbara A., "Categorizing and connecting strategies in qualitative data analysis". In P. Leavy and S. Hesse-Biber (Eds.), *Handbook of Emergent Methods*, pp. 461-477. New York: Guilford Press, 2008
- Maxwell, Joseph A., & Mittapalli, Kavita, Realism as a stance for mixed method research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of Mixed Methods in Social and Behavioral Research*, 2nd edition, pp. 145-167. Thousand Oaks, CA: Sage Publications, 2010.
- Maxwell, Joseph A., Sandlow, Leslie J., & Bashook, Philip G., Combining ethnographic and experimental methods in evaluation research: A case study. In David Fetterman & Mary Ann Pitman, *Educational Evaluation: Ethnography in Theory, Practice, and Politics*. Sage Publications, 1986. Reprinted in *Evaluation Studies Review Annual 12* (1987).

McPhee, John. Annals of the Former World. NY: Farrar, Straus, & Giroux, 1998.

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- Morse, Janice M., & Tylko, Suzanne J., "The use of qualitative methods in a study examining patient falls." Unpublished paper presented at the Annual Meeting of the Society for Applied Anthropology, Washington, DC, March, 1985.
- Muth, William, "Conceptualizing incarcerated literacy learners: Pragmatic and dialectical uses of assessment data." Unpublished paper.
- Nix, Thomas W., and Barnette, J. Jackson, The data analysis dilemma: Ban or abandon. A review of null hypothesis significance testing. *Research in the Schools* 5(2), pp. 3-14 (1998).
- Nuzzo, Regina, Statistical errors. Nature 506 (13 February 2014), pp. 150-152.
- Oakley, Ann, "Paradigm wars: Some thought on a personal and public trajectory." *International Journal of Social Research Methodology* 2(3), pp. 247-254 (1999).
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- Phillips, Postpositivistic science: Myths and realities. In Egon Guba (Ed.), The Paradigm Dialog.
- Pitman, M. A., and Maxwell, J. A., Qualitative approaches to evaluation. In M. D. LeCompte,W. L. Millroy, and J. Preissle (Eds.), *The Handbook of Qualitative Research in Education*,pp. 729-770. Academic Press, 1992
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