

FOUNDATIONS OF EDUCATION RESEARCH METHODS: THEORY AND PRACTICE

INSTRUCTOR: Sonali Raje

CLASS MEETINGS: Tuesday and Thursday: 11 am to 1 pm; Main Bldg Room 217

COURSE DESCRIPTION:

This research methods course is designed to give doctoral students an introduction to the broad variety of traditions available to the educational researcher. Each of these traditions makes fundamental assumptions about the nature of knowledge, viable research questions and the use of unique methodological tools. Throughout this course we will understand the differences between qualitative and quantitative research methods along with examples of how these can be applied in practice.

COURSE FORMAT:

Each class will focus on discussion of the weekly readings with group and whole class discussion. One person will be in charge of leading the group discussion each week. ***Each student will submit a response paper no later than Sunday evening of the previous weekend- and no later than 5 pm.*** No late responses are accepted as this does not allow the instructor or lead discussant to prepare a meaningful class discussion outline.

All readings will be assigned ATLEAST one week in advance either from the given textbooks or attached as pdf files as a listserv email to the entire class.

COURSE MATERIALS:

1. Research Methods in Education (1994).4TH Edition, Cohen, L., and Manion, L. (Eds.)
Routledge
2. Handbook of complementary methods in education research (2006). Green, J.L., Camilli, G., and Elmore, P.B. (Eds). Published for AERA by Lawrence Earlbaum Assoc.
3. Other readings as disseminated throughout the course.

COURSE GOALS:

1. Learn to distinguish between qualitative and quantitative research methods and understand the importance of each methodology

2. Develop skills in analyzing and critiquing research articles that use education research methods
3. Synthesize findings from prior research in your specific area of interest and identify area which need more work.
4. Utilize some of these methods in designing your own research questions along with a plan to carry out the research and analyze the data.

COURSE EVALUATION:

Each student's performance will be graded on three aspects.

FORMATIVE ASSESSMENTS:

Weekly response papers: (30%). Everyone is expected to read each assigned article to be able to obtain a complete understanding of the material we are covering in class.

Response papers should go beyond "I like/don't like this paper" sort of comments. You should provide a thoughtful analysis of the following: "why" is the work important, is there adequate justification provided in the paper for the work, how meaningful is the research methodology, how does it potentially benefit future research, does it have practical implications for teaching- if not- are you able to think of any- and finally what questions does it leave unanswered.

Class Participation (20%): ACTIVE participation in a meaningful discussion is required. If you write the response papers based on the above criteria- we should be able to have a very meaningful and enriching conversation in class for each type of research method.

Summative Assessment

Essay- You will summarize three topics from the readings you have completed in class. Please feel free to include real life examples (without naming names) and explain why you chose teaching as a profession.

Statement of teaching philosophy: This is a 1-2 page position paper that describes your teaching philosophy based on what you learned this semester. Please include at least FIVE major ideas/theories in your paper, explaining how they fit within your developing philosophy of teaching. Applications to the classroom should be made for each idea/theory. This paper should illustrate how a solid understanding of educational psychology plays a role in a well-developed, articulate statement of what you think teaching looks like (or should look like) in the classroom. Please focus on your specific discipline, but you may add comments on other areas.

GRADES

1. Lack of submission of two or more response papers will result in a half-percentage point grade deduction for every missing response paper.

2. Class participation should occur in a constructive manner. While disagreements are welcome, all arguments and counter arguments should be presented in a polite and professional tone of voice to ensure that the conversation is beneficial to everyone.
3. Class Presentation: When you prepare your presentation for your given week- you need to incorporate all of the information from everyone's response papers and prepare a synthesis of that, which you will use to lead the discussion. You will be peer-graded for this assignment based on a common grading rubric created in class.
4. Summative assessment: rubric: 1. Clear Powerpoints (5% of grade), Logical flow of talk (intro, background, problem stated, why is this work necessary, what will you do, justification of chosen research methodology, expected results and discussion, future work) all need to be included in both – the oral presentation and written research paper.

WEEKLY SCHEDULE

The following represents a rough tentative schedule for the course

Week 1: Aug 17th

Topic: On Becoming an Educational Researcher. Issues, Ethics, Epistemology and Philosophy No response paper required- only class attendance.

Readings:

1. Labaree, D. F. (2003). The peculiar problems of preparing educational researchers. *Educational Researcher*, 32(4), 13-22.
2. Strike, K. A. (2006). The ethics of educational research. In J. L. Green, G. Camilli, & P. B. Moore (Eds.), *Handbook of complementary methods in educational research* (pp. 57-73). Mahwah, NJ: Lawrence Erlbaum Associates.

Week 2: Aug 22nd and 24th

Topic: Qualitative and Quantitative Methods

Readings:

1. Howe, K. R. (1992). Getting over the quantitative-qualitative debate. *American Journal of Education*, 100(2), 236-256.
2. Eisenhart, M., & DeHaan, R. (2005). Doctoral preparation of scientifically based educational researchers. *Educational Researcher*, 34(4), 3–13

Week 3. Aug 29th and 30th.

Topic: Clinical Interviews

Readings:

1. Chapter 13. The Interview
2. Chapter 21. *Handbook of Complementary Methods in Education Research*

Week 4 Sep 5th and 7th

Topic: Case Studies

Readings:

1. Case Studies: Chapter 5. Research Methods in Education.

Week 5: Sep 12th and 14th

Topic: Development of coding schemes in qualitative education research

Readings:

1. Chapter 10. Handbook of Complementary Methods in Education Research

Week 6: Sep 19th and 21st

Topic: Experimental Designs and Quasi-experimental designs

Readings:

1. Shadish, W. R. (2006). Quasi-experimental design. In J. L. Green, G. Camilli, & P. B. Moore (Eds.), Handbook of complementary methods in educational research (pp. 539-550). Mahwah, NJ: Lawrence Erlbaum Associates. Cook, T. D. (2006).

Week 7: Sep 26th and 28th

Topic: Randomized experiments in education research

1. Randomized experiments in educational research. In J. L. Green, G. Camilli, & P. B. Moore (Eds.), Handbook of complementary methods in educational research (pp. 551-566). Mahwah, NJ: Lawrence Erlbaum Associates.

Week 8: December 5th and 7th

Topic: Surveys and Co-relational Methods in Education Research

Readings:

1. Chapter 4, Research Methods in Education
2. Readings: Chapter x. Research Methods in Education

Week 9: December 12th and 14th

Topic: Hypothesis Testing and Statistical Tests (t-tests, ANOVAs, ANCOVAs, chi-square)

Readings: to be assigned

Week 10: December 19th and 26th

Topic: Introduction to Measurement Theory and Item Response Theory

Week 11: Jan 2nd and 4th

Topic: Triangulation