

and working through in three drafts to a first attempt at a study design. This paper need not be your dissertation topic; it's meant to help you think about and learn to develop your own research ideas. The second and related purpose is to expose you to a variety of research designs through various readings and class exercises. The third is to use these exercises to expose each of you to how students in different educational disciplines approach research in their fields. You will find CEP 930 the only class in which, for example, students from kinesiology work with students in K-12 administration in ways that help each other understand that their disciplines approach research differently, and that each has strengths and weaknesses. Finally, no book seems adequate for this complex task. I have developed a package of readings to assist you. Yet I would appreciate if the class can work together to come up with what an ideal "text" for CEP 930 would look like. It should be a fun exercise!

Assignments and Grades:

The course grade will be based on a paper (two drafts and a final version) that describes the equivalent of a problem statement for a dissertation proposal with accompanying design and methods implications (pass/no credit for first draft, 1/3 of grade for second draft, 2/3 grade for final paper). I also expect students to keep up with the readings and participate in class.

The Basics: Research Process, Philosophy of Science/Research, Measurement

Week 1 (August 25): Introduction to the Educational Research Scene

-On the mundane side: Prerequisites, text, assignments and grades, course outline

Note: The paper assignments for the course are attached to the end of the course syllabus.

-The research process

-Class exercise: What is a good design?

Assignment for Week 3: Come prepared (i.e., background reading) to discuss the topic described for Week 3.

Week 2 (September 1): No Class: Holiday

Week 3 (September 8): Class Exercise: Discuss the respective states of the art for (a) a research topic area of interest to you and (b) research methods in your field. Report to class as a whole.

-Implications for your research

Assignment for Week 4: Reading on Philosophy of Science

Note: Some of these readings are quite complex. I will explore the most important complexities in a lecture. I do not expect you to use these readings directly in your paper. I do expect that you understand the philosophical roots of your own research and what that implies for how you “make your case” for your proposed design approach.

The Natural Science Paradigm

Kuhn, T. The structure of scientific revolutions. Chicago: University of Chicago Press, 1970 (2nd ed.) Section V, pp. 43_51 (in bound package). Pay particular attention to how paradigms influence our interpretation of research results.

The Logic of the Social Sciences

Adorno, T. Sociology and empirical research. The positivist dispute in German sociology. Adorno, T. et al. (eds.). NY: Harper and Row, 1976, pp. 68-86 (in bound package).

Subjectivism in the social sciences. Related to Weberian sociology and, via Habermas, to Marxist analysis.

Popper, K. The logic of the social sciences. The positivist dispute in German sociology. Adorno, T. et al. (eds.). NY: Harper and Row, 1976, pp. 87-104 (in bound package). Objectivism, focus on disproof rather than on proof.

Dahrendorf, R. Remarks on the discussion of the papers by Karl R. Popper and Theodor W. Adorno. The positivist dispute in

German sociology. Adorno, T. et al. (eds.). NY: Harper and Row, 1976, pp. 123-130 (in bound package).

Week 4 (September 15): Philosophy of Science: How we know what we know or do we really know anything at all?

- Review: The first stages of the research process (problem definition and conceptual framework)
- Class Exercise: Translating policy statements into research topics

Assignment for Week 5: Reading on Measurement, Instrumentation, and Data Collection

Fairweather, G. & Davidson, W. An introduction to community experimentation: Theory, methods, and practice. NY: McGraw_Hill, 1986. Chapter 7 (in bound package). Good basic stuff.

Fairweather, G. & Tornatzky, L. Experimental methods for social policy research. NY: Pergamon, 1977. Chapter 9, pp. 201-223 (in bound package). More basic stuff.

Additional References (Not Required, Not in Bound Package)

Carmines, E., and Zeller, R. Reliability and Validity Assessment. Beverly Hills: Sage, 1979.

Week 5 (September 22): Measurement, Instrumentation, and Data Collection

- Multiple measures, ecological fallacy, units of analysis.
- Preparing Data for Analysis (data screening).

Week 6 (September 29): Class Exercise: The Role of Theory (and Practice) in Educational Research

Research and Design: Alternative Approaches

For the next several weeks we will discuss research design in the context of a particular policy problem: How do we ensure (or increase) access to post-secondary education for [various individuals and groups]? The policy implications cover the full K-16 range.

Week 7 (October 6): Survey Design

Assignment Due: Paper Draft 1.

Assignment for Week 8: Reading on Quasi-experimental Designs (next two weeks)

Glass, G. "Quasi-experiments: The case of interrupted time series." In Complementary methods for research in education, ed. R. Jarger (pp. 445-463 (in bound package). Washington, DC: AERA, 1988.

Freedman, D. (1987). As others see us: A case study in path analysis. Journal of Educational Statistics 12(2): 101-28 (in bound package).

Additional References (Not Required, Not in Bound Package)

Campbell, D., and Stanley, J. Experimental and quasi-experimental designs for research. Chicago: Houghton Mifflin, 1966.

Week 8 (October 13): Quasi-experimental methods: Prediction and explanation

Assignment for Week 9: Reading on Experimental Design

Porter, A. "Comparative experiments in educational research." In Complementary methods for research in education, ed. R. Jarger (pp. 391-415) (in bound package). Washington, DC: AERA, 1988.

Additional References (Not Required, Not in Bound Package)

Campbell, D., and Stanley, J. Experimental and quasi-experimental designs for research. Chicago: Houghton Mifflin, 1966.

Week 9 (October 20): The Field Experiment

Assignment for

Weeks 10-12: Reading on Qualitative Research Methods (we will cover these more or less in order)

Greene, D. & David, J. A research design for generalizing from multiple case studies. Palo Alto, CA: Bay Area Research Group, 1981 (in bound package).

Yin, R. Case study research: Design and methods (pp. 27-54). Beverly Hills: Sage, 1984.

Lincoln, Y., and Guba, E. *Naturalistic Inquiry*, Chapter 8 (pp. 187-220). Beverly Hills, Sage, 1985 (in bound package).

Erben, M. Biography and Research Method. In *Biography and Education: A Reader*, ed. M. Erben (pp. 4-17). London: Falmer Press, 1998 (in bound package).

Simon, R., and Dippo, D. On critical ethnographic research. *Anthropology and Education Quarterly*, 17: 195-202, 1996 (in bound package).

Rosenau, P.M. Post-modernism and the social sciences. Princeton: Princeton University Press, 1992 (pp. 109-137) (in bound package).

Lyon, D. *Postmodernity*. Buckingham, England: Open University Press, 1994. Chapter 2 (4-18) (in bound package).

Week 10 (October 27): Qualitative Research I: The Miles and Huber School vs. Naturalistic Inquiry

Assignment Due: Draft 2 of paper.

Week 11 (November 3): Class Exercise: Comparing distinct research designs for the same topic.

Week 12 (November 10): Qualitative Research II: Narrative/Historiography/Biography
Critical Theory

Assignment for Week

13:

Kae, J. Benefit-cost analysis in program evaluation. In *Handbook of Practical Program Evaluation*, ed. J. Wholey, H. Hatry, and K. Newcomer (pp. 456-488). San Francisco: Jossey-Bass, 1994 (in bound package).

Elmore, R. Backward mapping: Using implementation analysis to structure policy decisions. *Political Science Quarterly*, 94: 601-616, 1979-1980 (in bound package).

Lareau, A. *Home advantage: Social class and parental intervention in elementary education*. Appendix (pp. 187-223). London: Falmer, 1989 (in bound package).

Week 13 (November 17):

Managing the Relationships between Research and Practice

- Interpretation: Statistical Significance and Meaningfulness
- Human Subjects
- Decision-making and Policy Analysis
- Program Evaluation
- Technical Assistance

Assignment for Week 14: Readings on Comparative Education

Thiesen, G., and Adams, D. Comparative education research. In *International comparative education*, ed. R. M. Thomas (pp. 277-302). New York: Pergamon, 1990 (in bound package).

Noah, H. The use and abuse of comparative education. In *New approaches to comparative education*, ed. P. Altbach and G. Kelly (pp. 153-166). Chicago: University of Chicago Press, 1986 (in bound package).

Wirt, F. Comparing educational policies: Theory, units of analysis, and research strategies. In *New approaches to comparative education*, ed. P. Altbach and G. Kelly (pp. 275-292). Chicago: University of Chicago Press, 1986 (in bound package).

Week 14 (November 24):

Class Exercise: Comparative Education

Week 15 (December 1): Class Exercise: Design implications for studies using decision and policy analysis, evaluation, and cost analysis.

Class Discussion: The CEP 930 book

Assignment Due: Final Paper.

CEP 930: Research Paper Assignments

The purpose of this assignment is threefold: (1) to select a research topic of interest and document its evolution both as a topic and the common ways that research is conducted on the topic, (2) to translate a generic research topic into a research question(s), and (3) to develop a preliminary design and research approach that would allow to examine the selected research question(s). **Please send your papers to me via ANGEL (as an attachment) and I will send you my comments individually via Word's Track Changes and Comments.**

Draft 1 (due Week 7, October 6): Select any educational research-oriented topic of interest to you. Translate this generic topic into one or more research questions or hypotheses in a way that would allow you to carry out a research project. Maximum paper length: 3 pages (double-spaced).

Draft 2 (due Week 10, October 27): Building on the first draft, review the literature to describe the evolution of research on your selected topic. Evaluate the level of maturity of research on the topic--is the topic still in an exploratory stage, an advanced stage with few unanswered questions remaining, or something in between?--and cite evidence to support your position. In addition, describe the conventional way or ways that research on this topic is conducted (e.g., ethnography, single case study, experiment, survey) and how this has changed over time (if at all). Maximum paper length: 12 pages (double-spaced) [including a modified version of the first draft].

Final Paper (due last day of class, December 1): Develop a plan for examining your research question(s). For most of you this paper is very early in your dissertation work so I do not expect the paper to be a formal commitment to or exploration of a research topic. Nevertheless, do the best you can to prepare the paper according to the outline shown below. For a few of you--those taking the course in your third or fourth year of graduate study--I expect a more well-developed research design paper, one that helps you move toward your dissertation research. Maximum paper length: 15 pages (double-spaced).

Final Paper

1. Problem statement and research questions/hypotheses

Define the focus of the study and the focus of the research questions. Do not spend any time reviewing the literature beyond what you've done for Draft 2.

2. Conceptual Framework

Use a picture or describe in another way the factors you think necessary to examine the research question(s), including the interrelationships of these factors. For some of you this framework serves as an initial model for testing. For more exploratory or open-ended designs, you will still need to identify initial factors to help you form your data collection (e.g., interview questions) and select individuals or organizations for study.

3. Sampling and Design

Discuss your design and your sampling approach. This section should discuss (a) your design (e.g., case study, quasi-experiment), (b) how the design fits your stated research question, and (c) what you think the sample might look like and why.

4. Data collection

Describe the procedures you would use to ensure gathering high quality data.

5. Proposed Analytical Strategy

Describe the types of analyses you think would be appropriate for this study. Make sure these procedures relate to the research questions posed above. I recognize that you might only be able to speculate here.