

EDUCATION 360
Research in Education

Spring 2014
W 11:30am-2:00pm
Stein 440

Jack Schneider
Stein 437
jschneid@holycross.edu

Office hours: Monday 1:30-2:45pm and Friday 10:30-11:45am

Course Description

This course has two aims. The first is to help you *read* educational research with a degree of comfort. Given the breadth of the field and the brevity of a single semester, you will not become experts. But you will learn how to approach educational scholarship competently and confidently. And you should walk away from the course knowing where to locate research, how to distinguish high-quality work, and how to efficiently extract findings and results.

This course is also designed to help get you thinking about *conducting* educational research. Again, you will not become experts. Nor will you be exposed to every methodological approach in a very broad field of study. But you will learn how to generate a research project, how to structure an effective plan, how to think nimbly about challenges, how to collect data, and how to distill your findings into a valuable contribution.

Course Expectations

1. Readings: Do the assigned readings prior to class discussions and be prepared to ask and answer questions in class. As a rule of thumb, shorter readings should be read more slowly and more carefully than longer ones.

2. Participation in class: Participation in discussions, group work, and email is important in this class as a way of deepening your understanding of the main ideas of the course and practicing key skills. Useful contributions take a number of forms—building on the comments of others, bringing new points to light, raising questions, carefully listening—but are common in that they foster an environment of discovery. In short, your participation is not merely as an *individual*, but as a *member of a whole*; bear that in mind. Attendance is a requirement; missing more than two classes will require instructor consent.

3. Writing: We will focus a great deal on writing in this class, and you will be asked to complete several different kinds of assignments over the semester. For much more detail, see the Guidelines for Analytical Writing at the end of the syllabus.

*While you will not be explicitly evaluated on these course expectations, failure to meet them will adversely affect your ability to fully contribute as a member of the class and, consequently, your grade. Meeting 75% of expectations, in other words, roughly translates to a C.

Grading and Assignments

Your course grade will be broken down into the following categories:

1. Research Critiques: 10% each (total 20%)
2. Research Critique Revisions: 10%
3. Research Synthesis: 25%
4. Research Memos: 10% each (total 20%)
5. Research Proposal: 25%

All assignments, unless otherwise noted, should be single-spaced and uploaded via Moodle.

*Late work for all assignments will be graded down one-third of a grade (i.e. A→A-) for each day it is past due.

1. Research Critiques

Due: February 5 and 12

You will write two research critiques—one quantitative, one qualitative. The aim here is to learn by doing. So, you will be putting into practice some of what you will have learned in the first few weeks. But primarily you will be facing new challenges in these assignments.

For your first critique, you will choose a qualitative research study.

For your second critique you will choose a quantitative research study.

Each critique should be roughly 1,000 words in length. And each should address the following:

- How did you find this study? What does that indicate?
- What is this study about? How do you know?
- Is this high-quality research? How do you know? What are the indicators?
- In what ways does this piece of research look like other research in the genre? (You will have to look at other articles to answer this)
- In what ways does this piece of research *not* look like other research in the genre?
- What is the most interesting finding in this study? Why do you believe that to be true?
- If I wanted to read more research that was similar, what should I read? Provide citations for 3-5 articles and explain how you chose them.
- Finally, what did you *struggle with* in this study?

You may write this in essay form or you may write it in memo form. What matters most is that you have addressed all of the questions above, that you have done so in an organized and thorough manner, and that you have used evidence to support all claims.

2. Research Critique Revisions

Due: February 19

We will discuss your research critiques in class. And we will also discuss relevant readings and concepts. After having digested all of this, you will have a chance to revise your research critiques. If you complete all of the requirements for your first drafts, you will receive full credit for the assignment. For this assignment, you will be graded on the quality of your critiques and not merely on the degree to which you engaged in the process.

3. Research Synthesis

Due: Draft due February 26

Final due March 12

For this assignment you will be writing a synthesis of research – a close cousin to a literature review. The primary aim of this assignment is to practice figuring out what the research “says” about a particular issue.

Near the beginning of the semester, you will select six articles for your research synthesis. But you are not wedded to those articles. In fact, you should continue searching for better materials as we move from week to week, and as you learn more about educational research.

Ultimately, you will want to choose between four and six studies to read and synthesize for this assignment. Your synthesis should be roughly 1,500 words in length. In the synthesis, you should be sure to address the following:

- Framing: What is the issue? Why should we care about it?
- Studies included: What were the criteria for selection? Why did these make the cut?
- Findings: What is commonly found by these studies? What can we say with certainty?
- Possibilities: What is found in some studies but not others? What accounts for this?
- Future directions: What remains unanswered by this research? What needs to be done?

Your first draft will receive comments but not a grade. Only your final draft will be graded.

4. Research Memos

Due: March 26 and April 9

Your first memo will be about your initial findings. Your second memo will discuss new findings. Each memo will be graded on the degree to which you are making progress, the focus you display, and your ability to identify promising trends. We will discuss this further in class.

5. Research Proposal

Due: During final exam block (TBD)

For this assignment you will be putting together a research proposal. This is different from a research paper, because much of the research will *not have been completed*. Instead, you will draw on your preliminary research, as well as on what you know about education research in general, to propose a larger study that you might take on in graduate school.

The proposal should include the following:

- Overview of the topic
- Description of importance of topic
- Brief description of previous research done by others on the topic
- Rationale for your study and how it differs from previous research
- Overview of the preliminary research you have conducted (description, key findings, promising results)
- Visual representation of your preliminary results (graph, map, etc.)
- Rationale for *further inquiry* (beyond your preliminary research)
- Description of what that further research would examine
- Methodology and data sources for proposed study
- Budget and timeline for proposed study

Your proposal should be roughly 3,000 words in length. Of course, proposals will vary based on the particular nature of the project. So in general you should strive to strike a balance between giving your reader enough detail to make the project clear, and being brief enough that you do not lose the attention of a busy reader (*a la* a grants officer).

In this vein, you should take great care in how your proposal is organized and in the way that it looks. Strive for clarity and professionalism. These, alongside your ability to identify a promising area of research, and your ability to conceive of a study, are common evaluative criteria.

You will present your research proposal to the class in a 10 minute pitch. The pitch will be in the style of a grant inquiry to a potential funder. The class will then provide comments and ask questions for 10 minutes, during which the exercise will resemble a research group meeting. The dual nature of this exercise will give you the opportunity to share your work, to practice valuable skills, and to receive feedback on your project.

Course Texts

All of your readings for this course are available on Moodle. You should either print them out or use a software program that allows you to annotate your readings. Further, you should bring your annotated readings—hard copy or digital—to the class meeting for which they are due. Do not come to class empty handed.

Classes and Readings

PART I: Reading, Understanding, and Evaluating Education Research

Week 1 (1/22): Introduction: What is educational research?

No readings to be completed for first class

Time will be spent during class introducing students to the field of educational research, as well as introducing the general topic of inquiry for the semester.

Week 2 (1/29): Mapping the field: What does educational research look like (and why)?

Readings to be completed by class time:

1. Michael Feuer, Lisa Towne, and Richard Shavelson, “Scientific Culture and Educational Research,” *Educational Researcher* (2002)
Read only section 3 “Culture and Community”
2. David Berliner, “Educational Research: The Hardest Science of All,” *Educational Researcher* (2002)
3. Pamela Moss, et al., “Learning from Our Differences: A Dialogue Across Perspectives on Educational Research,” *Educational Researcher* (2009)

Assignment to be completed by class time:

Find three quantitative studies and three qualitative studies related to a theme you are interested in

Week 3 (2/5): Qualitative research: What are its subfields and what are its methods?

Readings to be completed by class time:

1. Phil Brown, “Qualitative Methods in Environmental Health Research,” *Environmental Health Perspectives* (2003)
2. Joseph Maxwell, “Causal Explanation, Qualitative Research, and Scientific Inquiry in Education,” *Educational Researcher* (2004)
3. Lynn Westbrook, “Qualitative Research Methods: A Review of Major Stages, Data Analysis Techniques, and Quality Controls” (1994)

Assignment to be completed by class time:

First Research Critique

Week 4 (2/12): Quantitative research: What are its subfields and what are its methods?

Readings to be completed by class time:

1. Introduction to Quantitative Research
2. Patrick McEwan, "Quantitative Research Methods in Education Finance and Policy"
3. Education Commission of the States, "Understanding Statistics Tutorial"

Assignment to be completed by class time:

Second Research Critique

Week 5 (2/19): Evaluating research: How do we know if it's any good?

Readings to be completed by class time:

1. Denis C. Phillips, "Validity in Qualitative Research, Or, Why the Worry about Warrant Will Not Wane," *Education and Urban Society* (1987)
2. Education Commission of the States, "How Do I Know If Research Is Trustworthy?"
3. Regina Nuzzo, "Statistical Errors," *Nature* (2014)
4. Sandra Mathison, "Why Triangulate?" *Educational Researcher* (1988)

Assignment to be completed by class time:

Revised Research Critiques

Week 6 (2/26): Synthesizing research: How can we figure out what the research "says"?

Readings to be completed by class time:

1. Michael J. Dunkin, "Types of Errors in Synthesizing Research in Education," *Review of Educational Research* (1996)

Assignment to be completed by class time:

First draft of research synthesis

Week 7: SPRING BREAK

PART II: Conducting Education Research

Week 8 (3/12): Designing a study: What are the component parts of a research project?

Assignment to be completed by class time:

Final draft of research synthesis

In class, we will choose research topics and discuss this process

Week 9 (3/19): Collecting data: What counts as data and where can we find it?

Assignment to be completed by class time:
Plan for data collection

In class, we will work on data collection and have a visit from the research librarian

Week 10 (3/26): Dealing with data challenges: Workarounds, adjustments, and proxies

Assignment to be completed by class time:
First Research Memo

In class, we will continue to work on data collection and discuss challenges

Week 11 (4/2): Getting and receiving feedback: How can we help each other?

No assignment due. Continue conducting research.

In class we will work in pairs on our research, taking turns assisting each other

Week 12 (4/9): Compiling data: How can we begin to piece together a picture?

Assignment to be completed by class time:
Second Research Memo

In class we will work on compiling data

Week 13 (4/16): Telling a story: What does it all mean?

No assignment due. Continue conducting research.

In class we will work in groups, sharing writing

Week 14 (4/23): Writing Workshop

Readings to be completed by class time:

1. Gary Fine, "The Ten Commandments of Writing," *American Sociologist* (1988)
2. Michael G. Pratt, "For the Lack of a Boilerplate: Tips on Writing Up (and Reviewing) Qualitative Research," *Academy of Management Journal* (2009)

Assignment to be completed by class time:
Very rough draft of research proposal

Week 15 (4/30): Research Proposal Presentations

This final class period will be treated as a cross between a grant meeting and a research group meeting. The aim is to practice discussing research in progress, as well as to receive feedback on your proposals.

Guidelines

Guidelines for Critical Reading

As a critical reader of a particular text (a book, article, speech, proposal), you should use the following questions as a framework to guide you as you read:

1. What's the point? This is the analysis issue: what is the author's angle?
2. Who says? This is the validity issue: on what are the claims based?
3. What's new? This is the value-added issue: what does the author contribute that we don't already know?
4. Who cares? This is the significance issue, the most important issue of all, the one that subsumes all the others: is the text worth reading? Does it contribute something important?

If this is the way critical readers are going to approach a text, then as an analytical writer you need to guide readers toward the desired answers to each of these questions.

Guidelines for Analytical Writing

In writing papers for this (or any) course, keep in mind the following points.

1. Pick an important issue: make sure that your analysis meets the "so what" test. Why should anyone care about this topic? Pick an issue or issues that matters and that you really care about.
2. Provide analysis: a good paper is more than a catalogue of facts, concepts, experiences, or references; it is more than a description of the content of a set of readings. A good paper is a logical and coherent analysis of the key issue(s) related to your theme. This means that your paper should aim to *explain* rather than describe.
3. Keep focused: don't lose track of the point you are trying to make and make sure the reader knows where you are heading and why. Cut out anything extraneous to your main point.
4. Aim for clarity: don't assume that the reader knows what you're talking about; it's your job to make your points clearly. In part this means keeping focused and avoiding distracting clutter. Proceed as though you were writing for an educated person who has not read the material you are referring to.
5. Provide depth, insight, and connections: the best papers are ones that go beyond making obvious points, superficial comparisons, and simplistic assertions. They dig below the surface of the issue at hand, demonstrating a deeper level of understanding and an ability to make interesting connections.
6. Support your analysis with evidence: you need to do more than simply state your ideas, however informed and useful these may be. You also need to provide evidence that reassures the reader that you know what you are talking about, thus providing a foundation for your argument. Remember that you are trying to accomplish two things with the use of evidence. First, you are

saying that it is not just you making this assertion but that authoritative sources and solid evidence back you up. Second, you are supplying a degree of specificity and detail, which helps to flesh out an otherwise skeletal argument.

7. Draw on course materials. Your papers should give evidence that you are taking this course. You do not need to agree with any of the readings or presentations, but your paper should show you have considered the course materials thoughtfully.

8. Recognize complexity and acknowledge multiple viewpoints. You should not reduce issues to either/or, black/white, good/bad. Papers should give evidence that you understand and appreciate more than one perspective on an issue.

9. Do not overuse quotation: in a short paper, long quotations (more than a sentence or two in length) are generally not appropriate. Even in longer papers, quotations should be used sparingly unless they constitute a primary form of data for your analysis. In general, your papers are more effective if written primarily in your own words, using ideas from the literature but framing them in your own way in order to serve your own analytical purposes. However, selective use of quotations can be very useful as a way of capturing the author's tone or conveying a particularly aptly phrased point.

10. Cite your sources: You need to identify for the reader where particular ideas or examples come from. This can be done through in-text citation: give the author's last name, publication year, and (in the case of quotations) page number in parentheses at the end of the sentence or paragraph where the idea is presented—e.g., (Schneider, 2011, p. 22); provide the full citations in a list of references at the end of the paper. You can also identify sources with footnotes or endnotes: give the full citation for the first reference to a text and a short citation for subsequent citations to the same text.

11. Take care in the quality of your prose: a paper that is written in a clear and effective style makes a more convincing argument than one written in a murky manner, even when both writers start with the same basic understanding of the issues. However, writing that is confusing usually signals confusion in a person's thinking. After all, one key purpose of writing is to put down your ideas in a way that permits you and others to reflect on them critically, to see if they stand up to analysis. So you should take the time to reflect on your own ideas on paper and revise them as needed.