Y520 Strategies for Educational Inquiry

Spring 2017 Section 32679

Syllabus subject to change

Instructor: Pengfei Zhao

Office Hours: By appointment online

Email: pzhao@indiana.edu (please send emails for all class-related inquiries through Canvas)

All times mentioned are in **Eastern Standard Time in the USA**.

Course Description

This course introduces graduate students who are interested in consuming and engaging in educational inquiry to various purposes, methodological approaches, and practices of educational and social research. As an introductory course, it will lead students to explore widely accepted approaches in collecting and interpreting data. It will also help students employ appropriate vocabulary and conceptualizations to engage in conversations about educational research. Y520 aims to lay a foundation for your study of educational inquiry. The course is not meant to prepare you with statistical skills required for quantitative data analysis or interpretive skills required for qualitative data analysis. Those skills, such as data collection, developing instruments, data analysis, and ethics can be acquired in subsequent courses offered by Inquiry Methodology Program in School of Education, Indiana University Bloomington. The orientation of this course is instead conceptual and introductory. You will leave the class with an understanding of basic research concepts and processes involved in educational inquiry.

Course Objectives

By the end of the class, you will be able to

- Grasp basic concepts related to educational and social inquiry
- Describe general procedures and processes of educational and social inquiry
- Compare and contrast different research designs
- Identify general issues that will influence the quality of inquiry, such as ethical issues, the issues of validity, etc.
- Develop the ability to critique and evaluate published studies according to appropriate criteria and vocabulary
- Obtain a preliminary understanding of how to connect methodological knowledge and insights with your field and professional practice

Course Materials

Required textbooks and articles:

We will be using one textbook for this course along with a variety of research articles. Creswell, John. (2015). *Educational Research: Planning, Conducting, and Evaluating Qualitative and Quantitative Research*. 5th Edition. Published by Pearson. Its e-textbook is available at http://www.mypearsonstore.com/bookstore/educational-research-planning-conducting-and-evaluating-9780133831535

The following articles will be used to supplement the Creswell text during the course. These articles can be accessed through Canvas under the "files" tab found on the left-hand side of the main course site:

Allison, P. & E. Pomeroy (2000). How shall we "know"? Epistemological concerns in research in experiential education. *Journal of Experiential Education* 23(2): 91-98.

Biesta, G. (2014). Improving education through research? From effectiveness, causality and technology, to purpose, complexity and culture. Conference Paper presented at AERA 2014, Philadelphia.

Boote, D. N. & P. Beile (2005). Scholars before researchers: On the centrality of dissertation literature review in research preparation. *Educational Researcher*, 34(6), 3-15.

Carspecken, P. (1996). Validity claims and three ontological claims (Ch.4). *Critical Ethnography in Educational Research*. New York and London: Routledge.

Carspecken, P. (Unpublished). Excerpts from "Critical qualitative social research" 1-9.

Creswell, J. W. & D. L. Miller (2000). Determining validity in qualitative inquiry. *Theory Into Practice* 39(3): 124-130.

Davidson, E. (2011). Managing risk and "giving back": Aspiration among working-class Latino youth in Silicon Valley. *Ethnography*, 12(1), 89-113.

Dennis, B. (Forthcoming). Tales of working without/against a compass: Rethinking ethical dilemmas in educational ethnography.

Edwards, K. E. & S. R. Jones. (2009). "Putting my man face on": A grounded theory of college men's gender identity development. *Journal of College Student Development*, 50(2), 210-228.

Figlio, D. (2007). Boys named sue: Disruptive children and their peers. *Education* 2.4: 376-394.

Grix, J. (2002). Introducing students to the generic terminology of social research. *Politics* 22(3): 175-186.

Goddard, J. & R. Foster. (2002). Adapting to diversity: Where cultures collide: Educational

issues in northern alberta. Canadian Journal of Education / Revue Canadienne De L'éducation 27(1): 1-20.

Hostetler, K. (2005). What is "good" education research? *Educational Researcher*. 34(6): 16-21.

Paulus, T. M., J. N. Lester & P. Dempter. (2014). Reviewing the literature (Chapter 4). In *Digital Tools in Qualitative Research*, London: Sage.

Peshkin, A. (1988). In search of subjectivity—One's own. Educational Researcher 17(7): 17-21.

Polkinghorne, D. (2005). Language and meaning: Data collection in qualitative research." *Journal of Counseling Psychology* 52(2): 137-145.

Piran, N. & H. C. Cormier. (2005). The social construction of women and disordered eating patterns. *Journal of Counseling Psychology*, 52(4), 449-558.

Roulston, K. & S. A. Shelton (2015). Reconceptualizing bias in teaching qualitative research methods. *Qualitative Inquiry*, 21(4), 332-342.

Ross, K., B. Dennis, P. Zhao & P. Li. (In print). Exploring graduate students' understanding of research: Links between identity and research conceptions. *International Journal of Teaching and Learning in Higher Education*.

Salsburg, D. (2002). *The Lady Tasting Tea: How Statistics Revolutionized Science in the Twentieth Century*. New York: Henry Holt and Company. (Chapter 2)

Hernandez, L. E. (2016). Complicating the rhetoric: How racial construction confounds market-based reformers' civil rights invocations. *Education Policy Analysis Archives*, 24, 103.

Thompson, P. (2013). The digital natives as learners: Technology use patterns and approaches to learning. *Computers & Education*, 65, 12-33.

Optional readings:

Fraenkel, J. & N. Wallen (1993). *How to Design and Evaluate Research in Education*. New York: McGraw Hill.

IRB tutorial course for studies on human subject

Online resources

There are several online websites providing useful information about research methodology. You may find useful research updates and other interesting information about educational research methodology there. You are not required to check out these websites. I just list them below as supplementary resources.

- Methodspace (http://www.methodspace.com/)
- Open Data Foundation (http://www.opendatafoundation.org/)

- The Qualitative Report (http://www.nova.edu/ssss/QR/index.html)
- Top Qualitative Research Blogs (http://www.qualitative360.com/news-and-blogs/11-editor-s-pick-top-qualitative-research-blogs)

Other optional materials and useful websites

For some of the weeks, I include a few supplementary and optional resources to extend the assigned readings. These resources include mini-lecture videos, website links, power points, and optional readings. I strongly encourage you to use these resources. Before the start of each week's forum discussion, I will send you an email explaining different types of materials.

Course Requirements and Expectations

The course is delivered through the online teaching and learning platform of Canvas. Please take some time to familiarize yourself with Canvas tools during the first week of the class. This online section of Y520 is a discussion-based course. Most of the work you will do involves participating in the online discussion in a meaningful way. Your discussion participation will also be afforded the largest percentage of points in the constitution of the total grades of the course. Therefore, your active participation in the discussion is vitally important. Also: I hope you will not feel deflated or intimidated by the complexity of some of the **readings.** One important goal of this class is to learn the appropriate way to approach and evaluate difficult empirical or theoretical materials and make best use of them for your study or professional development. With that said, I don't expect you to completely understand everything assigned for the class. In fact, I will not grade you for misunderstanding the content of the readings, and you can surely do a good job without mastering everything in the readings. Nevertheless, I see the necessity for you to demonstrate your engagement with the class by reading the course materials thoroughly, joining the online conversation constructively, contributing to an encouraging and supportive learning environment, and completing your writing assignments thoughtfully.

Activities and assignments

<u>Discussion forums</u>

This online course highlights discussion forum (under the "discussions" tab of Y520 course site on Canvas) as the central virtual space where teaching and learning will take place. We will have 14 discussions, one for each week, except for the week of spring break and the last week of the semester. The discussion for each week starts at 8am on Monday and ends at midnight on Saturday. I will grade your posts after every weekend and provide my feedback promptly. The feedback for the first two weeks will be more detailed than later so that you will have a better understanding of the criteria according to which I grade your posts.

The whole class will be divided into three discussion groups. You only need to post in your group but are encouraged to read the posts from all the groups. For each week, I will post 4 to 5 discussion questions for each group, and you are expected to **post a minimum of 3 substantive posts**. This means that you don't have to post under every discussion thread, but please make

sure that you engage in the conversation in at least two threads each week. You are expected to **post one of the substantive posts before midnight of each Wednesday and the other two before the midnight of each Sunday**. Logistically, your post can be an answer to the original question that I post under a specific discussion thread, or it can be a response to your group mate's posts. Each substantive post is worth up to 4 points and the full score for one week's forum discussion is 4*3=12 points. The total points for forum discussions are 12*14=168 points. To make substantive posts you need to satisfy some of the following criteria:

- · Contribute to the conceptual, theoretical or empirical development of the discussion on research methodology
- Directly refer to the reading and weave the cited content into your argument
- · Connect the reading or questions under examination to your personal, research or professional experiences
- · Bring counter perspective into the conversation in a way that helps deepen the understanding of the topic being discussed
- · Provide examples to analytically illustrate the points being discussed
- Introduce external information that enriches the understanding of the topic
- Apply the concepts and knowledge introduced in the class to your field
- Engage in conversations in at least two threads

You don't have to do all of the things listed above to receive full credits. These criteria just serve as guidelines for you to consider when making your substantive posts. Please imagine the discussion as meaningful, constructive and supportive conversations between you, your classmates and me. As your instructor, I will make my best efforts to support everyone's learning, and engage in the conversation not as someone to judge you, but as a co-learner in the online community. I will chime in the conversation frequently to facilitate the development of the argument, clarify confusions, engage in dialogs and foster a supportive learning environment.

Examples of substantive posts:

Over the semesters, I've found it helpful to provide examples of substantive posts. Here are two examples of substantive posts.

This is a very interesting question and one that is worth considering. To be considered objective, research should not be influenced by personal feelings or opinions. According to Allison and Pomeroy (2000), our beliefs about knowledge and reality "inevitably shape choices and actions within the world and, more specifically, within research" (p. 92). Not to get too philosophical but if our beliefs will "inevitably" shape the choices, actions, and decisions researchers will ultimately make then can "objective research" or "objectivity in research" truly exist?

I think that a small amount of bias is expected and acceptable given human nature. Every researcher (every person for that matter), has a much different background that has helped to shape who they are and what they believe. But when I first thought about "objectivity in research" I focused on the methods (i.e. audience, survey items, interview questions, interpretations, etc). I did not focus that objectivity could potentially be affected before the study actually even began. I did not consider that one's ontology or epistemology may prevent

them from being objective. I think it is possible that if one's perspectives were such that it prevented them from seeing other possible interpretations, that objectivity could suffer.

I would be interested in if someone has seen a scenario in which a researcher's ontological or epistemological perspective adversely affected the objectivity of a study.

To consider methodologies, I did two things. First, I explored Professor Evans' final paragraph in which she discussed interviews she conducted with students. Second, I considered the Allison and Pomeroy "Table 1 * Four Philosophical Approaches to Research" (2002, p. 94). From that table, I concluded Professor Evans leans closest to the critical theory on the philosophical continuum. Starting at the top of the table and working my way down, I believe the aim of her inquiry is to critique classroom management practices in hopes of transforming techniques and emancipating students. Her ontology is based on the historical perspective of societal use of exclusionary discipline, which has crystalized over time. Her epistemology is subjective and based on the value of education, which brings us to methodology. Allison and Pomeroy summarize the methodology from a critical theory approach as "methods seen as involving dialogue with participants as sources of information" (2002, p. 94).

Stepping back from the table for a moment, I consider how Grix summarizes methodology as "how we can go about acquiring this knowledge" (2002, p. 180). So, I believe Professor Evans can answer her ontological and epistemological questions most effectively with one-one-one interviews. How she can go about learning is to talk with students. Further, she doesn't mention talking with teachers, but I would expect that to be a part of her research as well. I think it would be very effective to study two classrooms, one in which traditional exclusionary discipline is utilized and the other using more restorative principles, as Evans talks about in her second to last paragraph. It would be interesting to talk to students (particularly students who encountered discipline problems) from both classrooms one-on-one about how the respective approaches felt and impacted them individually. Likewise, it would be interesting to talk to the teachers about in intricacies of both classroom environments.

Considering methods, I would expect a qualitative study highly dependent on analyzing the dialogue between the researcher and the students/teachers. Some quantitative data, perhaps via surveys, might be important to compare the two classroom environments as well.

Check-in conversations

During the course, you will have two opportunities to have real time one-to-one online conversations with me via Skype or Canvas. The first check-in conversation is required and will take place in **Week 4** of the course; the second is optional and will take place in **Week 15**. Ideally, each of the conversation will last for 10 to 15 minutes. One week prior to the conversations, I will send out a canvas link to schedule the meetings. The primary purpose of the conversations is to check in with you to see if you have any questions or concerns about the class. In particular, I would like to take this time to brainstorm with you about how you can make best use of this class in your research or professional development. With this to be said, please

pay attention to the practical feature of the conversation and engage in the dialogues with ideas about how you want to transform THE knowledge outside there into YOUR knowledge. Participating in the required conversation with good preparation is worth **10 points**. You will not earn extra points by participating in the optional check-in conversation.

Mid-term exam

At the end of Week 8, you will have an online mid-term exam. You can access the exam anytime during **the weekend of Week 8**. Once you start to work on it, you will have 1 hour to finish it. The exam includes 15 multiple-choice questions and is designed to be open-book. The main purpose of the exam is to see if you could apply the concepts and terms introduced in this class in real research scenarios. I will prepare review materials for you one week before the exam. The exam is worth **30 points**.

Article critique rubric & Article critique

The final assignment for the class will be a written article critique about a peer-reviewed journal article of your choice. The article can be an empirical study using qualitative, quantitative or mixed method approach from a peer-reviewed journal. First, you need to synthesize the course content and develop an article rubric that you will use to evaluate the article. After you submit your rubric to me, I will provide my constructive feedbacks for you to revise the rubric. Then you are expected to revise your rubric. Please note that the revision process may involve more than one round of communication with me. After we both are satisfied with the rubric, you will have my approval to work on your article critique. The goal of this assignment is for you to practice critiquing research studies. The length of the critique should be no longer than four pages, 12-font, double spaced. This article critique rubric is worth **20 points** and the critique itself **40 points**. The former will be due on **March 26th** and the latter on **April 28th**.

Course Grades

Grades are figured on all of the graded course requirements. There are a total of 258 points, divided as follows:

Mid-term exam	30 points	Gr	ade configurations
Forum discussion participation (14 weeks)	12*14=168 points	A+ A	~98% and above ~93% and above
Article critique rubric	20 points	A-	~90 – 92.9%
Article critique	40 points	B+	~87 - 89.9%
Check-in conversation (twice)	10 points	B	~83 – 86.9%
TOTAL	268 points	В-	~80 – 82.9%

Course Policies

Students with Disabilities—Students with visual, hearing, physical, and/or learning disabilities

who may require modifications to curriculum, instruction, or assessment should contact me. I can make modifications and accommodations after the student has presented documentation indicating qualification for services from IU Disability Services for Students (DSS). The DSS office is located in Franklin Hall 006, and can be reached at 855-7578, http://www.indiana.edu/~iubdss

Academic Honesty – I value academic integrity as a fundamental expectation for students. Therefore, in both your individual work and/or teamwork, please cite carefully all references to other authors and researchers. Dishonesty may result in failing the course and may impact your enrollment status in the University. It is your responsibility to abide by all policies and regulations on academic and personal conduct as stated in the Code of Student Rights, Responsibilities, and Conduct, which can be accessed at

http://www.dsa.indiana.edu/Code/index1.html

(Links to an external site.)

For information on how to recognize plagiarism, visit http://www.indiana.edu/~istd/ (Links to an external site.)

Religious Holidays – Students who would like to request an accommodation for missing exams and assignments due to religious observances should follow the procedures outlined by Indiana University's Religious Holy Days/Holidays policy. If you have a conflict with an exam or assignment for this reason, please let me know as early as possible. Also, you are expected to fill the form required for requesting accommodations using this link: http://www.indiana.edu/~vpfaa/welcome/forms.shtml

Policy on Late Assignments – You are expected to submit all your assignments electronically via "assignment" section of the main Y520 site on Canvas before the due date and time. Please plan to do so and remember to back up your work when using a computer.

COURSE SCHEDULE (January - May 2017)

Week # and starting date	Content	Readings/Materials	Assignments
Week 1	Introductions	Course syllabus	Familiarize yourself with Canvas
January 9	and overview of		online learning system (seek help
	the class	Optional webinar:	from the instructor if there are any
		Canvas—Basics for	questions)
		students	
		https://connect.iu.edu/p5mr	Read the syllabus thoroughly
		9yqpy77/?launcher=false&f	
		csContent=true&pbMode=n	Introduce yourself and your learning
		ormal	goal to the class on the online forum.
		(Links to an external site.)	
			Make one substantive post on your

			understanding of research
Week 2 January 16	Conceptualizing Research	Creswell, pages 1-11 Biesta 2014	Participate in the online forum discussion, making at least 3 substantive posts
Week 3 January 23	The issues of ontology and epistemology in relation with social scientific research	Grix 2002 Allison and Pomeroy 2000 Carspecken Excerpts of "Critical qualitative social research" Pengfei's mini-lecture video	Participate in the online forum discussion, making at least 3 substantive posts
Week 4 January 30	Rethinking the dualistic terms: Qualitative vs. Quantitative Approaches, Subjectivity vs. Objectivity	Creswell, pages 11-27 Peshkin 1988 Carspecken, 1996 Roulston & Shelton 2015 Youtube video clip: https://www.youtube.com/watch?v=ddx9PshVWXI	Participate in the online forum discussion, making at least 3 substantive posts Check-in conversation with Pengfei
Week 5 February 6	Developing Research Questions/Inter ests & Hypotheses;	Creswell, Chaps. 2 & 4 Davidson 2011 Piran & Cormier, 2005. (Focus on the research question parts)	Participate in the online forum discussion, making at least 3 substantive posts
Week 6 February 13	Conducting a Literature Review	Creswell, Chap. 3 Paulus, Lester, & Dempster, 2014 Boote & Beile, 2005 Davidson 2011 (review) Piran & Cormier, 2005 (review) (Focus on the literature review parts) Guest lecture video on using Mendeley to conduct literature review by Dr.	Participate in the online forum discussion, making at least 3 substantive posts Submit the empirical article that you plan to critique by the end of this Sunday

		Mary Alice Varga, University of West Georgia	
Week 7 February 20	Collecting Data: Quantitative & Qualitative approach	Creswell, Chaps. 5 & 7 Polkinghorne 2005 Piran & Cormier, 2005. (review) Davidson 2011 (review) (Focus on the data collection parts) Pengfei's mini-lecture video on qualitative data collection and related ethical issues.	Participate in the online forum discussion, making at least 3 substantive posts
Week 8 February 27	Sampling, reliability & validity	Barbara Dennis on Sampling Strategies Carspecken 1996 (review) Creswell & Miller 2000 Thompson 2013 Goddard & Foster 2002	Participate in the online forum discussion, making at least 3 substantive posts Mid-term online exam
Week 9 March 6	Analyzing Quantitative Data: Descriptive & Inferential approaches	Creswell, Chap. 6 Salsburg 2002 Ch.2 Figlio 2007 Pengfei's mini-lecture on quantitative data analysis Ian Arthur's PPT on Descriptive and Inferential Statistics Optional: Fraenkel, J. & N. Wallen 1993	Participate in the online forum discussion, making at least 3 substantive posts
Week 10 March 13	No class!		

(Spring			
break)			
Week 11 March 20	Interpreting Qualitative Data	Creswell, Chap. 8 Hernandez 2016	Participate in the online forum discussion, making at least 3 substantive posts
		Pengfei's mini-lecture video on qualitative research software	The rubric for your article critique due by the midnight of this Sunday
Week 12 March 27	Designing quantitative studies	Creswell Chaps. 10, 11, 12 (Focus on one of the three chapters)	Participate in the online forum discussion, making at least 3 substantive posts
Week 13 April 3	Designing qualitative studies	Creswell Chaps. 13, 14, 15 (Focus on one of the three chapters)	Participate in the online forum discussion, making at least 3 substantive posts
		Edwards & Jones 2009	Revised article critique rubric due by the midnight of this Sunday
		Guest lecture video on ethnographic design by Yu Luo, Post-doctoral fellow, University of California, Berkeley	j
Week 14 April 10	Mixed method research, action Research	Creswell Chaps. 16&17 Ross, et al. In press	Participate in the online forum discussion, making at least 3 substantive posts
Week 15 April 17	Research ethics, evaluating research	Creswell 9 Hostetler 2005 Dennis, forthcoming	Participate in the online forum discussion, making at least 3 substantive posts
		Optional reading: IRB tutorial	Optional check-in conversation with Pengfei
Week 16 April 24			No forum discussion this week
			Article critique due by the midnight of this Friday

The readings assigned for a particular week *should be completed by* the beginning of that week. The week's discussion will be based on those readings.