

George Mason University
College of Education and Human Development
PhD Program

EDRS 810 Section 002 – Problems and Methods in Education Research

3 credits, Fall 2022
Thursday 4:30-1:10PM, TH L019

Faculty

Name: Bethany L. Letiecq, PhD
Office hours: West 2102
Office location: by appointment
Office phone: 703-993-5076
Email address: bletiecq@gmu.edu

Prerequisite

Admission to the Ph.D. program or permission of the instructor.

University Catalog Course Description

Advanced in interpreting and applying educational research methods. Emphasizes comparisons of alternative philosophies of research, ways of formulating questions and hypothesis, research plans, and analysis procedures. Students evaluate existing studies, and investigate a range of research approaches.

Course Overview

The purpose of this course is to introduce doctoral students to the vocabulary and processes used in the field of educational research. Students will participate by composing a literature review, a qualitative proposal, and a quantitative proposal exploring problems in a field of interest.

Course Delivery Method

The class sessions will include lecture, discussion, and group work. There will be formative assignments (quizzes and discussions) and summative assessments (exam and assignments)

Learner Outcomes or Objectives

This course is designed to enable students to do the following:

- Be able to understand what research is and how it differs from other intellectual and practical activities in education
- Be able to understand the major approaches to educational research, and the implications of these for doing and evaluating research in education
- Be able to find, understand, evaluate, and apply published research that is relevant to their field

- Be able to design the basic components of small-scale research studies, both quantitative and qualitative, including:
 - o Identifying a research focus or area of interest to study
 - o Formulating the purposes of the study
 - o Utilizing a conceptual framework for the study
 - o Generating appropriate research questions
 - o Planning relevant and feasible methods of sampling, data collection, and analysis
 - o Anticipating plausible validity threats, and thinking of ways to deal with these
 - o Dealing appropriately with ethical issues in the research
- Be able to write coherently and clearly about the conceptual framework, questions, and methods used in a research study
- Be able to use the writing style described in the 7th edition of the Publication Manual of the American Psychological Association (APA) for writing term and research papers
- Be able to reflect critically on their actions and choices and use that reflection to inform practice
- Be able to present written research results clearly and coherently

Professional Standards

Upon completion of this course, students will have met the following professional standards: Not applicable for this course

Required Texts and Readings

Creswell, J. W. & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed-methods approaches*. Sage.

American Psychological Association. (2020). *Publication manual of the American Psychological Association (7th ed.)*. Author.

Other readings listed on course schedule and included on Blackboard

Recommended Texts

Collins, P.H. (2019). *Intersectionality as critical social theory*. Duke University Press.

Maxwell, J. (2012). *A realist approach to qualitative methods*. Sage.

Wallerstein, N., Duran, B., Oetzel, J., & Minkler, M. (Eds.). (2018). *Community-based participatory research for health* (3rd ed). San Francisco, CA: Jossey-Bass.

Zhao, P., Ross, K., Li, P., & Dennis, B. (2022). *Making sense of social research methodology: A student and practitioner centered approach*. Sage.

Zuberi, T. & Bonilla-Silva, E. (2008). *White logic, White methods: Racism and methodology*. Rowman and Littlefield.

My Approach/Commitment

In this course, my primary goal is to establish a safe, inclusive learning environment that will support our critical examination of research approaches and methods. I commit to being reflexive and flexible in my approach and will work on an individual level with each student to support your learning styles and educational goals, especially given COVID pandemic and related challenges.

Anti-Racism Statement

I affirm that in this class, faculty and students will work together to cultivate a more equitable, inclusive, accessible, and just learning environment for all participants, regardless of racial/ethnic background or other marginalized or minoritized positionalities. We will actively seek ways to:

- Make constant, conscious decisions to interrupt racism, other oppressive forces, and cultivate equity, inclusion, and justice for people of all racial/ethnic backgrounds, and in particular those from Black communities, Indigenous communities, immigrant communities and other communities of Color, who are most likely to bear the direct and indirect costs of systems of White supremacy;
- Interrogate histories of White supremacy and White-dominant culture, and to examine the ways in which these histories have impacted our individual beliefs, our interpersonal relationships, our institutional and structural policies and processes, and our entire society;
- Make a commitment to being responsible for our own relationships to, and actions within, systems of White supremacy; and
- Cultivate a practice of self-awareness and self-reflection that allows us to critically evaluate our own role in upholding White supremacy and identify the ways we can interrupt cycles of racism at the individual, interpersonal, institutional, and structural levels.

Diversity and Inclusion Statement

The College of Education and Human Development, an intentionally inclusive community, promotes and maintains an equitable and just work and learning environment. We welcome and value individuals and their differences including race, economic status, gender expression and identity, sex, sexual orientation, ethnicity, national origin, first language, religion, age, and ability status.

- We value our diverse student body and desire to increase the diversity of our faculty and staff.
- We commit to supporting students, faculty and staff who have been the victims of bias and discrimination.
- We promote continuous learning and improvement to create an environment that values diverse points of view and life experiences.
- We believe that faculty, staff and students play a role in creating an environment that engages diverse points of view.

We believe that by fostering their willingness to hear and learn from a variety of sources and viewpoints, our students will gain competence in communication, critical thinking and global understanding, and become aware of their biases and how they affect their interactions with others and the world.

Names and Pronouns Use Statement

If you wish, please share your name and gender pronouns with me and how best to address you in class and via email. I use she/her/hers for myself and you may address me as “Dr. Letiecq” (pronounced LaTeek) or Bethany in email and verbally. Additionally, I invite students to approach me before or after class and during office hours. I recognize that a student’s name and pronoun(s) can change during a semester if they are in transition. I encourage students to use the tools Mason provides to change your name and pronouns on Mason records if you so choose: <https://registrar.gmu.edu/UpdatingChosen-Name-Pronouns/>

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, hard copy). If you fall behind, it is essential that we communicate when feasible so that I can support you in achieving your academic goals.

As an 800-level course, this class requires a significant time commitment. It is **reading intensive**. Thus, please plan accordingly, as the readings have been carefully selected to support your growth as a researcher and scholar. Throughout the course, know that I will be here to support you and facilitate the learning process. My intent is to make this a truly meaningful learning (and growing) experience.

In all of your assignments, I am looking for evidence of: (1) understanding and the application of the concepts and processes learned and discussed in class and online; (2) critical reflection and responses to issues and concepts; (3) clarity of expression; (4) explicit connections among ideas; and (5) complete work with few to no grammatical or spelling errors. All assignments are due on the date listed in the Schedule table below. Incompletes and Withdrawals are strongly discouraged and are only given when the conditions of the university are met and after a conference with the instructor at the initiation of the student.

Assignments	Points
1. Participation	20
2. Homework Assignments	30
3. Article Peer-Review & Critique	20
4. Final Paper and Presentation	30

Your work should be original, thoughtful, rigorous, and thorough. Plagiarism in any form is not acceptable. Please err on the side of documenting and citing sources.

Assignment Descriptions

1. Participation (20 points)

Students are expected to actively participate in all aspects of class: attending all classes, respectfully contributing to class discussions and activities, and completing all course readings and all course tasks.

This class will be collaborative and interactive—be prepared for discussion. Questions are encouraged and expected, and alternative viewpoints are welcome. I value contributions to our discussions as we grow as a community of learners. However, I do expect you to support your assertions as we delve into complex topics, make linkages to extant works, and expand our knowledge. Also, I expect all of us to create an educational climate of open debate that is respectful and democratic. Familiarize yourself with the GMU Honor System and Code.

Participation will be evaluated according to the following criteria:

- Student is prepared for discussion and tasks, making linkages to course content and reading materials.
- Student maintains balance between speaking and listening roles.
- Student listens attentively to others and offers constructive feedback. All contributions should be considered and negotiated.
- Student supports and contributes to healthy, democratic engagement in class.
- Student shares leadership roles (if applicable).

[Other criteria and course commitments to be determined as a collective]

2. Homework Assignments (30 points total – 10 points each)

We will discuss these assignments in class in more detail. Please upload your completed works via Blackboard.

A. HSRB CITI Training Module Completion (10 points)

GMU requires a Mandatory Training for Persons Conducting Research Using Human Subjects. Modules in the **Basic Course** are required prior to applying to conduct any research at Mason using human subjects. For this course, you will be required to complete the Basic Course.

- Specific directions for how to log on can be found at the GMU Office of Research Integrity & Assurance website. This course can be accessed through this website: <https://oria.gmu.edu/topics/human-subjects/training/>

- **Please complete the Basic Course**

Turn in a hard copy to me or email it to me. Be sure to keep a copy of your CITI training electronically. IRB will need it for approval of future projects, such as your dissertation!

- GMU also requires that all researchers (including student researchers) submit a research application to the office of Human Subjects in Research PRIOR to conducting research. For this course, you should review the application form for class discussion.

- Application forms and guidelines can be found at the external project management site, IRBnet.org, and information from the GMU Office of Research Subject Protection about IRBnet is found here:

<https://oria.gmu.edu/topics/human-subjects/>

B. Positionality Statement (10 points)

For this assignment, write a 2-page MAX positionality statement (single-spaced, 1” margins acceptable). For a deeper discussion on positionality, read Secules (2021) on BB as well as: <https://files.eric.ed.gov/fulltext/EJ1268044.pdf> and <https://onlinelibrary.wiley.com/doi/full/10.1002/jee.20377>

For this assignment, write a positionality statement that identifies your key demographics in the spirit of transparency (e.g., “Establishing Transparency of Self Attributes” as described by Secules et al. 2021). Secules et al. (2021) also differentiates between “statements describing a process of maintaining trustworthiness and mitigating bias (Acknowledging Practice)...and... Contextualizing Methodology” (Section 6.1). You should address all three areas in your statement. We will discuss positionality and this assignment in detail in class.

C. Interview: Current Practices in Research (10 points)

This assignment focuses on understanding research in your professional area. For this assignment, you will interview someone in your specialization or secondary area who is involved in research, preferably someone at Mason. You will summarize your findings in a narrative report and a brief presentation in class. [Common questions will be provided, and further developed as a collective, focusing on approach, philosophical roots, theoretical orientation, positionality of researcher, methodology, analytical and interpretation considerations, and ethical dilemmas. Funding, grants management, structural barriers, and opportunities may also be considered. TBD!]

3. Article Peer-Review & Critique (20 points total – 5 points per critique):

A major aim of this course is to learn how to thoughtfully consume and critique research studies, with a focus in particular on applying course concepts to critique methodology and discuss validity issues. In order to apply new knowledge, you will complete a series of critiques or “peer-reviews” addressing key conceptual and methodological issues. We will focus on one article as a collective to get us started -- I will provide you with the article and we will keep revisiting this article to engage more deeply in discussions and critiques of key methodological considerations. For the remaining three critiques, you will select articles related to your research interests (at least one has to be quantitative and one qualitative; the third selection can be either or mixed methods). In total, you will write four (4), 1-2 page, single-spaced peer-reviews/critiques focusing on the topics below (also identified on the course schedule) that will build upon each other over the semester. Please be sure to cite all sources informing your review and critique using APA format (7th edition). More information about these critiques will be given in class.

Topics for peer-review and critique may include:

- Approach/Design considerations
- Theory integration
- Conceptualization to operationalization/Variable construction and measurement
- Measurement and meaning (e.g., measuring and meaning of race, burnout, achievement gap)
- Validity (discerning different applications by method/approach)
- Sampling/selection/representation/generalizability
- Causation vs correlation
- Intersectionality and ethical considerations

4. Final Paper and Presentation (25 points total):

At the end of the course, you will be required to write a final summative paper demonstrating your comprehension and application of course topics and prepare an in-class presentation based on materials from your readings, class discussion, and your more expansive review of the literature. You have agency, flexibility in topic selection/approach and how you wish to develop this assignment. All students should meet with me at least once to go over final paper plans (drafts welcome!). More information on the specifics of the assignment will be given in class.

(Basic requirements: Paper: APA format, 20 double-spaced pages MAX inclusive of references, 15 peer-reviewed references minimum; Presentation: PPT, 12 minutes max).

Example Paper topics:

a. **Critical Reflection:** Explore critical works such as Zuberi and Bonilla-Silva (2008) and reflect on the following APA apology acknowledging systemic racism in psychology:

<https://www.apa.org/about/policy/racism-apology>

Reflect on the following:

- In what ways has research in your field historically perpetuated systemic racism and other harmful forms of oppression? Provide examples.
- Are there particular methods, constructs, and/or measures that are accepted as the "norm" that may be particularly harmful to BIPOC and/or other marginalized people?
- In what ways have researchers in your field or across disciplines attempted to redress scientific racism?
- How will you personally advance an anti-racist/anti-oppressive research agenda? What is needed?
- What barriers do you anticipate as you progress in your paradigmatic shift work?

b. **Research Proposal (most popular):** Write a research proposal. Discuss your research philosophy, approach, positionality, theoretical framework guiding your study, research questions, research plan, and proposed methods. Include a discussion of analytical procedures, validity and reliability, and limitations.

Paper structure: Following APA (See examples in style guide)

Page 1:	Title page
Page 2:	Abstract (150 words)
Beginning on Page 3:	Introduction/Review of Literature/Significance of Study Study Purpose, Research Question/Hypotheses
(New Section)	Methods (Participants, Measures/Protocol, Procedure, Analytical Plan)
(New Page)	References

c. **Resistant Knowledge Project Proposal:** Read Patricia Hill Collins (2019) Intersectionality as Critical Social Theory and discuss your proposal for a "resistant knowledge project." [We can discuss this more fully if of interest. Request Letiecq et al. (2022) as example.]

Grading

The following is the grading scale. As noted above, your final grade is based on the number of points you earn throughout the semester.

GRADING SCALE:

Grades will be assigned based on the following:

A	93-100%
A-	90-92%
B+	88-89%
B	83-87%
B-	80-82%
C	70-79%
F	below 70%

Final grades are based on the assignments described above. "Extra credit" is not available.

Professional Dispositions: See <https://cehd.gmu.edu/students/polices-procedures/>

Tentative Class Schedule

DATE	TOPIC/FOCUS	TO BE COMPLETED PRIOR TO CLASS	ASSIGNMENTS DUE and/or NOTES ON IN-CLASS Activities
Week 1 8/25/22	Introductions; Course overview; How do we know? Epistemology; What is research? Alternative philosophies of research; Research Approaches	Creswell & Creswell: Chapter 1 Research Methods Knowledge Base: The Qualitative-Quantitative Debate: https://conjointly.com/kb/qualitative-debate/ Allison & Pomeroy (2000): https://www.researchgate.net/publication/236896569_How_Shall_We_Know_Epistemological_Concerns_in_Research_in_Experiential_Education	In-Class: Introductions; discussion of research background, experience, and interests as a collective
Week 2 9/1/22	Selecting research topics; Reviewing and Auditing the Literature; Mapping; Formulating research questions; Scientific Racism	Creswell & Creswell: Chapter 2 APA 7 th edition (review) Skibba (2019): https://www.smithsonianmag.com/science-nature/disturbing-resilience-scientific-racism-180972243/	In-Class: 1) Discussion of Research Topics and Scientific Racism; 2) Interview Prep for Assignment C: Interview protocol
Week 3 9/8//22	Conceptualizing the research process; Theoretical underpinnings; Critical perspectives; Conceptualization to Operationalization	Creswell & Creswell: Chapter 3 Cross et al., 2022	DUE 9/8: Critique/Peer-Review #1 Cross et al., 2022 Provide a discussion related to frameworks and meaning making

Week 4 9/15/22	Proposal Writing— Building your Qualitative, Quantitative, or Mixed Methods proposal; Critical Perspectives; Ethical considerations	Creswell & Creswell: Chapter 4	DUE 9/15: Assignment A: CITI Training
Week 5 9/22/22	Study Purpose and Research Questions/ Hypotheses/Variables How does it feel to be a problem? (Anti-deficit research)	Creswell & Creswell: Chapters 5-7 Watch: https://www.youtube.com/ watch?v=z04KVyhZM5g	Due 9/22: Assignment B: Positionality Statement
Week 6 9/29/22	Collecting Data: Quantitative and Qualitative Methods; Sampling/ participant selection	Creswell & Creswell: Chapters 8, 9	DUE 9/29: Assignment C: Interview Insights In-Class: Report out 2 key findings from interview
Week 7 10/6/22	Collecting Data (Cont'd); Reliability and Validity	Reybold et al., 2012 (BB) Malesic, 2021 (CHE) Check out: https://chicagobeyond.org/wp- content/uploads/2019/05/Chic agoBeyond_2019Guidebook.p df	Due 10/6: Peer-Review #2 (Select a QUANT research article of your choosing and discuss: Approach, Rationale, research question/hypotheses; sampling; validity)
Week 8 10/13/22	Collecting Data (Cont'd); Reliability and Validity		DUE 10/20: Peer-Review #3 Select a QUAL article of your choosing, discuss: Approach; Sampling; Validity/Trustworthiness; Positionality

<p>Week 9 10/20/22</p>	<p>Interpretation and Analysis -- Quantitative Data; Descriptive and Inferential #QuantCrit</p>	<p>Alvis et al., 2022</p> <p>Garcia, N.M., López, N., & Vélez, V.N. (2018). QuantCrit: rectifying quantitative methods through critical race theory. <i>Race Ethnicity and Education</i>, 21(2), 149-157</p> <p>Gillborn, Warmington & Demack (2018)</p> <p>Curtis & Boe (2021)</p> <p>Guest Speaker: Dr. Jung Yeon Park</p>	<p>DUE 10/20: Peer-Review #4 Select an article of your choosing and provide a critique of its methods, validity</p>
<p>Week 10 10/27/22</p>	<p>Interpretation and Analysis -- Qualitative Data; Community coding</p>	<p>Vesely et al. (2018)</p> <p>Creswell & Miller (2000) https://www.tandfonline.com/doi/abs/10.1207/s15430421tip3903_2</p> <p>Maxwell (2012).</p> <p>Guest Speaker: TBD</p>	<p>DUE 10/27: Final Paper Outline with at least 5 References using APA format</p>
<p>Week 11 11/3/22</p>	<p>Mixed Methods</p>	<p>Creswell & Creswell: Chapter 10</p> <p>Burke Johnson & Onwuegbuzie (2004). https://journals.sagepub.com/doi/10.3102/0013189X033007014</p> <p>Guest Speaker: TBD</p>	
<p>Week 12 11/10/22</p>	<p>Critical Antiracist Research Approaches; PAR; Other contemporary approaches</p>	<p>Hill Collins (2019)</p> <p>Leticcq (2022)</p> <p>Leticcq (in press)</p>	<p>[Optional Final Paper Draft deadline 11/10]</p>

Week 13 11/17/22	Evaluation Research (Letiecq: NCFR)	Hopson (2018) Other Readings TBD Guest Speaker: TBD	
Week 14 11/24/22	Thanksgiving Recess University Closed 11/23-11/27	No Class	
Week 15 12/1/22	Presentations and Course Wrap-Up		In-Class: Panel 1 Presentation Due 12/1: Final Paper
Week 16 12/8/22	Presentations and Course Wrap-Up		In-Class: Panel 2 Presentation

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Core Values Commitment

The College of Education and 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/>.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing (see <https://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason 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.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:

As a faculty member, I am designated as a “Responsible Employee,” and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

Safe Return to Campus Statement

- All students taking courses with a face-to-face component are required to follow the university’s public health and safety precautions and procedures outlined on the university Safe Return to Campus webpage (<https://www2.gmu.edu/safe-return-campus>). Similarly, all students in face-to-face and hybrid courses must also complete the Mason COVID Health Check daily, seven days a week. The COVID Health Check system uses a color code system and **students will receive either a Green, Yellow, Red, or Blue email response**. Only students who receive a “green” notification are permitted to attend courses with a face-to-face component. **If you suspect that you are sick or have been directed to self-isolate, please quarantine or get testing. Faculty are allowed to ask you to show them that you have received a Green email and are thereby permitted to be in class.**
- Students are required to follow Mason's current policy about facemask-wearing. As of August 11, 2021, all community members are required to wear a facemask in all indoor settings, including classrooms. An [appropriate facemask](#) must cover your nose and mouth at all times in our classroom. If this policy changes, you will be informed; however, students who prefer to wear masks will always be welcome in the classroom.

For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .

Selected and Optional Reading List:

- Allison, Pete and Eva Pomeroy. 2000. “How Shall We ‘Know’? Epistemological Concerns in Research in Experiential Education.” *Journal of Experiential Education* 23(2): 91-98.
<https://journals.sagepub.com/doi/10.1177/105382590002300207>
- Banks, James. 1998. The lives and values of researchers: Implications for educating citizens in a multicultural society. *Educational Researcher* 27(7): 4-17.

- Burke Johnson, R. & Onwuegbuzie, A. J. 2004. Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7): 14-26.
<https://journals.sagepub.com/doi/10.3102/0013189X033007014>
- Carspecken, Phil Francis. 1996. *Critical Ethnography in Educational Research*. New York and London: Routledge.(Chapter 4: Validity Claims and Three Ontological Claims)
- Creswell, J W, and D. L. Miller. 2000. "Determining Validity in Qualitative Inquiry." *Theory Into Practice* 39(3): 124-130.
- Fraenkel, J. & Wallen, N. 1993. *How to Design and Evaluate Research in Education*. New York: McGraw Hill.
- Galasinski, Dariusz, & Olga Kozłowska. 2010. "Questionnaires and Lived Experience: Strategies of Coping with the Quantitative Frame." *Qualitative Inquiry* 16(4): 271-284.
- Grix, Jonathan. 2002. "Introducing Students to the Generic Terminology of Social Research." *Politics* 22(3): 175-186.
- Golafshani, Nahid. 2003. "Understanding Reliability and Validity in Qualitative Research." *The Qualitative Report* 8(4): 597-607.
- Hopson, R. (2018). Apples do not fall far from trees and other interesting revelations as I come to age in evaluation. In D. D. Williams (Ed.), *Twenty-Nine Evaluation Lives. New Directions for Evaluation*, 157, 113–116.
- Hostetler, Karl. (August/September 2005). What is "Good" Education Research? *Educational Researcher*. 34(6): 16-21.
- Lehrer, Jonah. 2010. "The Truth Wears Off: Is There Something Wrong with the Scientific Method?" *The New Yorker*, December 13.
- Polkinghorne, Donald E. 2005. "Language and Meaning: Data Collection in Qualitative Research." *Journal of Counseling Psychology* 52(2): 137-145.
- Robson, C. 2002. *Real World Research*. Malden, MA: Blackwell Publishing.