Promoting Learning Development Across the Lifespan

George Mason University
College of Education and Human Development
PhD Program

EDRS 810 Section 001
PROBLEMS AND METHODS IN EDUCATION RESEARCH
3 credits Fall 2019
Meeting Day/time: Mondays 4:30 pm-7:10pm
Class Location: Krug 209 Fairfax Campus

Professor:	Anastasia P. Samaras, Ph.D.
Office hours:	email or call 703-489-1663 for apt.
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Course Description
Advanced course 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.

Expanded Course Description:
This is an introductory course that introduces graduate students to various purposes, means, and practices associated with educational and social inquiry. The course is intended for graduate students who are interested in consuming and engaging in educational inquiry, and its aim is to help students understand the language of and conceptualize social research. Students will explore

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generally accepted procedures for generating, analyzing, and interpreting data and will also develop the capacity to engage in dialogue about research using appropriate conceptualizations and vocabulary. A key element of this course is developing the ability to critique and evaluate published studies according to appropriate criteria that will be useful to your research interest.

Course Delivery Method: My Approach
This course utilizes a weekly seminar format that is collaborative, interactive, and dialogic, i.e., sociocultural and designed within my pedagogical design and application of Neo-Vygotskian tenets of interactive learning. Seminars will include professor and student-led discussions, and student presentations that will take place during class meetings. Each class session is designed to encourage dialogue with peers about your developing understanding of research methods. It's less about the quantity of your talk, and more about your sharing of your ongoing, honest, deep and critical analysis of your meaning making with peers and your ability to listen to other's thinking in a respectful and non-judgmental manner, and with an appreciation of the opportunity to learn about your research by participating in your peer's struggles with making sense of qualitative research as well.

Class Exit Questions
At the end of each class, please email me any questions that emerged for you from that class so I might address them. My objective is for you to learn so your questions are important.

Learner Objectives
This course is designed to enable students to:
- 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:
    - Identifying a research problem to study
    - Formulating the purposes of the study
    - Developing a conceptual framework for the study
    - Generating appropriate research questions
    - Planning relevant and feasible methods of sampling, data collection, and analysis
    - Anticipating plausible validity threats, and thinking of ways to deal with these
    - 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 sixth edition of the Publication Manual of the American Psychological Association (APA) for writing term and research papers
- Be able to reflect on their actions and choices and use that reflection to inform practice
- Be able to present written research results clearly and coherently

Required Readings:

Johnson, R. B., & Christensen, L. (2017). *Educational research: Quantitative, qualitative, & mixed approaches* (6th ed.). Los Angeles, CA: Sage.
Note: This text has a Companion Website: edge.sagepub.com/rbjohnson6e with study materials, practice quizzes, and other resources.

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Racines, D., & Samaras, A. P. (2015). Duality of practice and mentorship of an English language instructional coach. In *Polyvocal professional learning through self-study research.* (pp. 111-125). In K. Pithouse-Morgan, K., & A. P. Samaras, A. P. (Eds.). *Polyvocal professional learning through self-study research.* (pp. 1-20). Rotterdam, The Netherlands: Sense Publishers.

Recommended reading for reciprocal interviewing: Meskin, T., Singh, L., & van der Walt, T. (2014). Putting the self in the hot seat: Enacting reflexivity through dramatic strategies. *Educational Research for Social Change (ERSC), 3(*2), 5-20. Retrieved from http://ersc.nmmu.ac.za/view_edition.php?v=3&n=2#

Additional Readings may be assigned.

Class Preparation: Information on course assignments and class lesson guides are available on the course blackboard site. You are expected to participate in class discussions with openness, consideration, and effort to "hear for" and "listen to" others as you also seek to be understood. Your active participation is a major requirement of this course.

Peer Review ~ Embracing Critique
Virtually all research designs go through some type of peer review process in academia, including the dissertation proposal stage, requests for funding, or when a study is reviewed for publication. For this reason, I am having you involved in an iterative peer review process, designed to be supportive as well as constructive and to give you the opportunity to embrace the value of peer critique for improving the quality of your research. You will provide and receive constructive suggestions to assist you in improving your thinking and in looking at something familiar in a new way. Our work will involve mutual support, collaboration, and continuous peer review with "critical friends" which will be explained in class. In a collaborative relationship, you are expected to practice your best professional relationship skills in your discussions. This peer review will provide multiple opportunities for your ongoing professional development after our course has ended. It gives you practice.

Assignments
High quality work (i.e., "A" work) is expected on all assignments and in class participation. Students are expected to submit and post all assignments on time electronically on the Blackboard discussion thread on Bb prior to the beginning of class on the day they are due,

unless otherwise announced. You will see a note of POST on the schedule for the day due. Late assignments will not be accepted without making prior arrangements with the professor.

All written assignments are to be word-processed using Times Roman 12 pt font, double-spaced, and submitted electronically on our Bb Discussion Thread. <u>Title each assignment with your last name and the name of the assignment, e.g., Smith.ResProp.10.21.19.</u> <u>It is required</u> that you save your work in multiple places for safe keeping. Use APA style.

Course Performance Evaluation

Attendance and Participation	20 pts
Readings: Connections and Forum	10 pts
HSRB CITI Training Module Completion	10 pts
Current Practices in Research	10 pts
Quantitative Research Proposal (*Paper or Presentation*)	25 pts
Qualitative Research Proposal (*Paper or Presentation*)	25 pts
Total Points	100 pts

Attendance and Professional Participation and Peer Review (20%)
Students are expected to come to class on time, complete assignments, and participate in class discussions. Please notify professor if you must miss a class.

Peer Review: Critical friends will offer reciprocal mentoring on all drafts posted on the discussion thread along with professor feedback. <u>Please offer and receive at least one critical friend review for each draft. Coordinate that you rotate your peer review and that everyone receives and offers a peer review of each draft.</u>

Reading Connections and Forum (10%)
The readings are carefully aligned with weekly sessions and class discussion and are important.

Connections: First, as you read each chapter or article, consider how the reading prompts your thinking and connection to <u>your research interest, research question, and research design</u> which is a central component of our class. Take notes, map, outline, and make sense of those connections and bring your reflections and insights to class.

Forum: Secondly, each week, one member of each CFT will post one provocative statement about one of the readings for your critical friend team's online dialogue. Each critical friend posts at least one response. Then the discussion leader presents your insights along with the team for fuller class discussion. If more than one reading is assigned for that day, the Discussion Leader gets to choose one as the focus for discussion. Please coordinate and rotate that discussion leadership role within your team. The provocative statements and your critical friend discussion are to be posted in our Readings Discussion Forum.

Current Practices in Research (10%)
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 finding in a narrative report and a brief presentation in class. See a segment of an interview with me by a former student taking this class: **https://www.youtube.com/watch?v=aZ7L1v_SwDQ**

1. Interview someone in your specialization area (or secondary area) who is involved in research. Examples include faculty; grant personnel (PI or co-PI); senior research associates at area research companies. Try to find someone at Mason (Remember: you will be needing to put together a committee!).

2. Do your homework! Read their 'researcher profile' located at https://cehd.gmu.edu/people/faculty/

3. Locate an empirical research article your interviewee has written and read it before you talk with them.

4. The focus of the interview should be on his or her research program:
   a. What is the overarching research question that you hope to answer through your research?
   b. How did you get interested in this area of research?
   c. What are your preferred research methods?
   d. What are your current projects?
   e. What journals do you regularly read? Who are the most prominent scholars in this area of research?
   f. Additional feedback that emerges from the interview.

5. Summarize your findings in a narrative report. The narrative should include a description of how the individual was "recruited" for the interview and the setting. Also briefly describe the interview process (e.g., the use of audio taping, telephone interview, etc.).

   For the write up of the interview, please organize the report using the questions you asked. Under each question, please give the person's response. To save time, you do not need to transcribe a verbatim response. It is acceptable to listen to what they say, then paraphrase their responses. After listening to the interview, please write a one-page summary of what you learned about being a researcher. This in essence is an analytical memo.

6. The narrative report is typically 4-6 pages double spaced and includes your analytical memo. You do not have to transcribe it, but rather capture the essence of your interviewee's responses along with a memo of what you learned.

Important Information:
Please advise your respondent that: (a) this activity is part of your curricular activities in this course; (b) participation is voluntary and its goal is to advance your understanding of the material covered in the lectures; (c) that the respondent can choose to not answer any particular questions or to terminate the exercise at any time explanation or justification and

without any penalty; and (d) that no remuneration or payment will be offered. After your materials are graded for the course, please erase or delete any records of the interview.

HSRB CITI Training Module Completion (10%)
GMU requires a Mandatory Training for Persons Conducting Research Using Human Subjects. Seven learner modules in the Basic Course are required prior to applying to conduct any research at Mason using human subjects. **<u>For this course, you will be required to complete the Basic Course AND one additional 'optional' module related to your area of interest</u>.**

- o This online training module can be accessed at http://www.citiprogram.org. (<u>You must complete the required basic course before the optional modules are available</u>).
- o Specific directions for how to log on can be found at the GMU Office of Research Subject Protection website: http://oria.gmu.edu/research-with-humans-or-animals/institutional-review-board/human-subjects-training/ Turn in a hard copy only (this will be returned to you for your records).

GMU also requires that all researchers (including student researchers) submit a research application to the office of Human Subject Protections 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: http://oria.gmu.edu/irbnet/

Qualitative and Quantitative Research Proposals and Presentation (25 points each):
You may choose to do a written or oral presentation proposal for these but you must do one written and one presentation proposal – you get to choose if the quantitative or qualitative one is written or presented (See details below).

Students will write and present a research proposal (introduction, literature review, and method sections). This proposal should build on existing research and may replicate and extend previous research studies. The proposal will contain relevant sections specific to the research design. For each of the proposals you must include: 1. Introduction and brief literature review (reference and synthesize a minimum of 5 peer-reviewed journal articles), including a statement of purpose and research questions; 2. Methods, including research design, participants, sampling and recruitment procedures; 3. Data sources; 4. Data collection procedures; 5. Data analysis; and 6. Ethical considerations. You should conclude by engaging in a thoughtful discussion around any limitations you see or concerns you might have about your design. All should follow APA style and formatting. <u>Organizational headings may vary depending on your research design and the specifics of your individual study</u>. Be sure to refer to the APA manual as well as similar work in your field to help you determine what is critical to include in your own proposal. Also refer to the APA manual for how to format headings and citations appropriately.

For presentation, please provide a ppt and a one-page handout (overview).

Quantitative Proposal Requirements:
Introduction & Literature Review
- o Brief introduction to the topic and literature review. (If you are replicating and extending a previous study, you should be sure to describe the original work).

- o Statement of purpose and research questions.
  - **Method**
  - o **Research Design**
  - o **Participants** (when applicable, should include setting, subjects, interventionists)
  - o **Measures**
  - o **Intervention** (when applicable, should include control/alternate treatment)
  - o **Procedures** (when applicable, should include study procedures, data collection procedures, scoring procedures, fidelity of treatment procedures)
  - o **Ethical Considerations**
  - o **Validity Issues**
  - o **Limitation Issues**
  - o **Proposed Preliminary Data Analyses**
- **References**

Qualitative Proposal Requirements:
- **Introduction & Literature Review**
  - o Brief introduction to the topic and literature review.
  - o Statement of purpose and research questions.
  - **Method**
  - o **Research design**
  - o **Participants** (should include sampling procedures)
  - o **Data Sources**
  - o **Procedures** (proposed data collection process—this heading is sometimes combined with Data Sources in qualitative research)
  - o **Ethical Considerations**
  - o **Validity Issues**
  - o **Limitation Issues**
  - o **Proposed Preliminary Data Analyses**
- **References**

Assessment Rubrics

Rubric for Participation and Professionalism

- **Exemplary (18-20 points):** The student attends all classes, is on time, completes all weekly readings and brings required materials to class. The student follows outlined procedures in case of absence; the student actively participates and supports the members of the learning group and the members of the class. Student contributes meaningfully to all Blackboard discussion board posts.
- **Adequate (16-17 points):** The student attends all classes, is on time, completes most weekly readings and brings required materials to class. The student follows outlined procedures in case of absence; the student makes active contributions to the learning group and class. Student contributes to Blackboard discussion board posts.
- **Marginal (14-15 points):** The student is on time, completes most weekly readings and brings required materials to class. The student attends all classes and if an absence occurs, notifies the instructor and completes any missed activities or assignments; the student participates in most group and class discussions. Student contributes to most Blackboard discussion board posts.
- **Inadequate (13 or fewer points):** The student is chronically late for class. Absences are not documented by following the procedures outlined in this section of the syllabus. The student is unprepared for class and does not actively participate in in-class and Blackboard discussions. The student may fail to exhibit professional behavior and dispositions. **Excessive absences may result in additional penalties and potential withdrawal from class**

Rubric for Reading Connections and Forum

- **Exemplary (9-10 points):** Outstanding and consistent participation in online discussions and class activities related to readings. Promotes conversation focused on the topic. Comments demonstrate a high level of understanding from assigned readings. Listens actively to peers. Prompts peer feedback, critique, and input. Purposely shares leadership roles in group work.
- **Adequate (6-8 points):** Contributes to online discussions or activities related to readings but not very often. Generally, reveals some thought and reflection and some contribution from assigned readings. Follows rather than leads group activities. Solicits some peer discussion. Somewhat shares leadership roles in group work.
- **Inadequate (5 or fewer points):** Few contributions to online class discussions and class activities related to readings. Little evidence of participation and contribution. Shows little concern for peers' learning or input. Does not share leadership roles in group work.

- **Exemplary (9-10 points):** Meaningful student reflection is evident. Reflective summary includes analysis of what the student learned about research and or their field of research from the interview, as well as some detail learned about the faculty member who they interviewed. Connections to class discussions or readings are made. Reflective summary is submitted to blackboard on time and brought to class for small group discussion.

- **Adequate (6-8 points):** Overall acceptable, but lacking in some criteria for an exemplary rating.

- **Inadequate (5 or fewer points):** Reflective interview summary includes no student reflection.

Rubric for Human Subject online CITI Training

- **Adequate evaluation (10 points):** Successful completion of online BASIC module (related to conducting research in schools OR your research interest area) on time.
- **Marginal evaluation (5 points):** Successful completion of online BASIC module. Verification of CITI Training is submitted after due date.
- **Inadequate (4 or fewer points):** Unsuccessful completion of online BASIC module.

Rubric for Quantitative or Qualitative Research Proposal

- **Exemplary paper (23-25 points):** Appropriate topic, thorough and thoughtful purpose and research questions with appropriate studies referenced, appropriate and clearly described research design, participants, materials, data sources, implementation procedures, and careful brief description of data analyses. Coherent and cogent writing style, free of mechanical or stylistic errors, appropriate use of APA format. Draft was made available for peer and instructor feedback.
- **Adequate paper (20-22 points):** Good overall paper, lacking in one or two of the criteria for an exemplary paper. Not entirely reflective or thoughtful, or minor writing style or APA format errors may be present. Draft was made available for peer and instructor feedback.
- **Marginal paper (17-19 points):** Overall, acceptable but with one or more significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style or APA format, or unclear or inappropriate description of implementation of project. Draft may not have been complete enough for peer and instructor feedback.
- **Inadequate paper (1-16 points):** Paper with substantial problems in important areas such as writing, proposed implementation of intervention, procedures for evaluation of results, or overall thoughtfulness. Contains little or no information of value to field of education. Draft may not have been complete enough for peer or instructor feedback.

- **Unacceptable/no paper (0 points):** Paper with no value whatsoever relative to the assignment, or no paper turned in at all. May describe a project of no value that was not approved for this assignment.

Rubric for Presentation

- **Exemplary presentation (23-25 points):** Keeps within the time limits (10 minutes); reflects poise, clarity, knowledge and interest in the content being presented; reflects a high level of preparation; make effective use of literature, handouts, demonstrations; describes very clearly the treatment(s) under consideration; keeps the audience engaged; provides information of interest and value to audience.
- **Adequate presentation (20-22 points):** Good overall presentation, but may be lacking in one or two of the criteria specified in exemplary response. May seem a little less polished or prepared, may be vague in some place, or may fail to completely engage the audience.
- **Marginal presentation (17-19 points):** Presentation provides relevant information, but demonstrates only a limited understanding of the topic or project. Style, or visual aids may be less than inadequate.
- **Inadequate presentation (1-16 points):** Weak overall presentation that reflects very little knowledge of topic or project. May appear very poorly prepared, or may not have followed directions. Handouts or visual aids may be inadequate or lacking.
- **Unacceptable/no presentation (0 points):** Completely unsatisfactory presentation, with no reasonable reference to topic or project; or no presentation made.

Grading Scale for Course

Grade	Standards	Grading	Grade Points	Graduate Courses
A+	Exceeds Standard	100 +	4+	Satisfactory / Passing
A	Meets Standard	93 – 100	4.00	Satisfactory / Passing
A-	Meets Standard	90 – 92.9	3.67	Satisfactory / Passing
B+	Approaches Standard	88 – 89.9	3.33	Satisfactory/Passing
B	Approaches Standard	83 – 87.9	3.00	Satisfactory / Passing
B-	Approaches Standard	80 – 82.9	2.67	Raises Concern

Class Schedule

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

Week	Topics	Assignments *Postings are due by 4:30pm on post day listed.* *Critical friend responses to drafts are due the week after the post.*	Readings
Week 1 8/26	What does it mean to be a researcher? What is research? Types of research	**Bring to class: Print syllabus and bring to class** **During week 1 post a 3-minute video to introduce yourself and research interest**	Chapter 1
9/2	No Class University Closed Labor Day		
Week 2 9/9	Literature review Library resources *Education Librarian* *Guest Speaker: Anne Melville*	**Bring to class:** List of possible research questions Begin to explore and identify relevant literature and the landscape of your research interest.	Chapters 2 & 4
Week 3 9/16	Design and why it matters Research questions Research Ethics	**Work on Literature Review**	Chapters 5 & 6 APA manual Chapter 1
Week 4 9/23	Sampling and Validity	**Examine:** CITI training info (due Week 7) **POST Draft of Proposal Introduction and Lit Rev**	Chapters 10 & 11
Week 5 9/30	Measurement	**POST and Present** **Current Practices in Research**	Chapters 7
Week 6 10/7	Data Collection	**POST Draft Purpose Statement & RQ**	Chapters 8 & 9

10/14	Columbus Day Recess: **Note: classes meet Tuesday 10/15 this week**		
Week 7 10/15 Tuesday	Quantitative Design *Guest Speaker* *Dr. Marvin Powell*	***Bring hard copy:*** *Verification of Human Subject Online CITI Training certification*	Chapters 12, 13 & 14
Week 8 10/21	Quantitative Design and Inferential Statistics *Guest Speaker* *Dr. Divya Varier*	*Work on proposal drafts*	Chapters 18 & 19
Week 9 10/28	Qualitative Design *Alumna & Faculty Guest Speaker Dr. Courtney Baker*	*Work on proposal drafts*	Chapters 15 & 16
Week 10 11/4	Qualitative Design and Data *Dr. Ronnie Fleming* *Alumni Guest Speaker*	***POST***: ***Draft of Written Research Proposal***	Chapters 20
Week 11 11/11	Mixed Methods *Student Guest Speaker* *Jordon D Goffena* Bricolage Methodological Inventiveness	***POST: Draft*** *of Presentation Proposal* ***In class reciprocal interviews of proposals***	Chapters 17 & 21 Racines & Samaras
Week 12 11/18	Writing Workshop	***In class Peer Review of proposals***	No readings this week
Week 13 11/25	Proposal Roundtables	***POST final proposal***	No readings this week
Week 14 12/2	Proposal Presentations Course Evaluations	***POST final proposal presentation and handout***	No readings this week

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

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 http://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 http://ods.gmu.edu/).

- Students must follow the university policy stating that all sound emitting devices shall be silenced 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 http://coursessupport.gmu.edu/.

- For information on student support resources on campus, see https://ctfe.gmu.edu/teaching/student-support-resources-on-campus

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

Emergency Procedures
You are encouraged to sign up for emergency alerts by visiting the website https://alert.gmu.edu. Further information about emergency procedures exists on http://www.gmu.edu/service/cert