

George Mason University

Graduate School of Education

Program: Special Education

EDSE 590 (Section 618): Research Methods in Special Education

Instructor: C. Yvonne Balfour, Ph.D.
 Time: Tuesdays 4:30-8:30-Time change to be announced
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Course Description

This course is designed to help students develop skills, insights, and understanding basic to performing educational research, with emphasis on interpretation and application of research results.

Instructional materials will describe fundamental concepts and practices in educational research. Specific applications of educational research methods to problems in special education will be covered. Emphasis will be on reviewing and critiquing special education research and applied classroom research for teachers.

Student Outcomes

Upon completion of this course, students will be able to:

- Identify and understand different models of educational research suitable for different research purposes in special education.
- Describe and discuss methods of quantitative experimental and quasi-experimental research in special education.
- Describe and discuss methods of survey research in special education.
- Describe and discuss methods of single-subject research in special education.
- Develop a research proposal using a quantitative design.
- Describe, discuss, and implement methods of qualitative research in special education
- Describe teacher applications of classroom research to address problems in special education

Relationship of Course to Program Goals

EDSE 590 is part of the George Mason University, Graduate School of Education, and Special Education Masters Degree Program

Nature of Course Delivery

Learning activities include the following:

1. Class lecture, discussion, and participation.
2. Study, independent research, and internet work.
3. Application activities
4. Class presentations of papers and research projects.

Required Texts, Readings, and websites

Creswell, J.W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd Edition). Upper Saddle River, NJ: Pearson Education, Inc.

Course materials, lecture notes, and assignment due dates are posted on <http://blackboard.gmu.edu>

Other readings relevant to special education research may be assigned.

Recommended

American Psychological Association (2001). *Publication manual* (5th ed.). Washington, DC: Author.

NOTE:

- This syllabus may change according to class needs.
- If you have emergency medical information or special circumstances to share **please call and/or make an appointment with me as soon as possible.**
- Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See www.gmu.edu/student/drc or call 703-993-2474 to access the DRC.

THE GRADUATE SCHOOL OF EDUCATION (GSE) EXPECTS THAT ALL STUDENTS ABIDE BY THE FOLLOWING:

- Students are expected to exhibit professional behavior and dispositions. See gse.gmu.edu for a listing of these dispositions.
- Students must follow the guidelines of the University Honor Code. See http://www.gmu.edu/catalog/apolicies/#TOC_H12 for the full honor code.
- Students must agree to abide by the university policy for Responsible Use of Computing. See <http://mail.gmu.edu> and click on Responsible Use of Computing at the bottom of the screen.

Evaluation Points by Activity

Students will be evaluated on the following:

1. Class attendance and participation (10 points). **Excessive absences and tardiness to class could result in loss of class participation points and potential withdrawal from class.**
2. **Written research proposal.** (35 points).*
3. **Written qualitative research project.** (35 points).*
4. Open Book **Final Exam** based on chapter readings (20 points).

* Late papers may be penalized

Grading Criteria

A = 94 - 100%	C = 70 - 80%
A- = 87 - 93%	F = <70%
B = 81 - 87%	

ASSIGNMENTS

It is recommended that students retain copies of all course products to document their progress through the GSE program. Products from this class can become part of your individual professional portfolio that documents your satisfactory progress through the GSE program and the CEC performance based standards.

1. Research Proposal (35 points)

The research proposal is designed to provide experience in designing a research application project in special education. Most of the quantitative research designs covered in class are appropriate. Be sure to have your research question and design approved by me. Write the paper using the American Psychological Association *Publication Manual* (5th edition) as a guide to style and have the following sections in your paper:

Title Page

Abstract (write this last-200 words or less)

Introduction: discuss general problem/curiosity

Literature Review: search procedures and terms, introduction, summary of findings, and a summation that will guide your proposal

Purpose of Study: purpose statement, research question(s), definition of terms, and proposed design

Discussion & Importance

References

1. Title Page

2. Abstract: within 200 words describe research curiosity/topic, literature review, research design, anticipated results, and importance of study.

3. Introduction: Discuss the overall problem or curiosity that helped launch your research proposal.

4. Literature Review: Describe your search procedures. To do so:

- a. Complete a literature search of ERIC, Psych Info, or other relevant databases. Explain your search procedures (i.e., search terms, databases, etc).
- b. Obtain and read at least 6 original RESEARCH articles and 2 OVERVIEW articles.
- c. Write a brief introduction of your research findings.
- d. Summarize the information from your articles.
- e. Provide a brief summation of the literature and tell how it will guide your research proposal (in other words justify your research).

5. Purpose of Study

- a. Write a purpose statement.
- b. Write at least one research question* that pertains to your broad problem and literature review and can be answered by your proposed research.

**Sample Questions: Do students classified as specific learning disabled (SLD) recall more facts with an activities-based approach to instruction or a textbook approach? Does the use of social stories with children with autism reduce inappropriate behaviors?*

- c. Define the terms in your purpose statement and research question(s).
- d. Propose a research design that will answer your research questions.

**Sample design for an intervention study: Two groups of students with SLD will participate in instruction. One group will be taught information using the activities-oriented approach*

and the other group will be taught the same information using the textbook approach. Time-on-task will be held equivalent across the teaching methods and all students will be given the same pre and post-tests.

- e. Describe your sample using the following makers as appropriate (think of external validity).

School _____ (elementary, middle, or high) School Size _____

School Setting _____ (urban, suburban, metropolitan, rural)

Special education classification(s) of students _____

Grade in school _____

Gender of students in proposal _____

Race/ethnicity: Caucasian, African-American, Hispanic-American, Asian-American, other.

Socioeconomic status: (free lunch, reduced lunch, neither) _____ (high, medium, low)

Years classified as special education student _____

Amount of time per day in special education setting _____

Classes mainstreamed or inclusive instruction _____

Ability Level: IQ Full scale IQ _____, Verbal IQ _____, Performance IQ _____

Achievement scores: (specify test name and try to obtain standard scores, but report whether grade equivalents, percentiles, or other)

Behavioral indices-Test name

Teacher report of study skills and classroom behavior-using what tool.

- f. Describe the adults involved in the study-their roles in the interventions, positions, etc.
- g. Describe the materials and methods you will use for your various conditions (independent variables): Carefully describe all of the materials that you propose to use in the conditions of your study, including any teacher materials and student materials. Carefully describe what you propose to do in each condition.
- h. Describe testing materials (perhaps dependent variable(s)): Carefully describe all of the testing instruments that you propose to use. Describe how you propose that the tests would be administered (i.e., were directions read aloud to the class while the students worked independently, or were students given the exams individually, etc) and scored (i.e., are the tests multiple choice or will you use a rubric to score written responses?).

5. Discussion & Importance

Provide a discussion of what your findings could be based on what you learned in your literature review. Explain why this proposed study is important to the field of special education and who would benefit from your findings (consider external validity).

6. References

Provide a list of the references you used in your proposal (remember at least 6 RESEARCH studies and 2 OVERVIEW articles). Use the correct APA format.

2. Qualitative Project (35 points)

1. Select a topic that is appropriate for qualitative inquiry (have it approved).
2. Conduct two separate interviews that are at least 30 minutes in length.
3. Transcribe your interviews (be prepared to turn these in with your final paper).
4. Code your transcriptions.
5. Write a paper with the following parts:
 - **Section I: Introduction:** Statement of the problem/issue under study, explanation of why you chose this project, and a discussion of your assumptions around the topic.
 - **Section II: Data Collection:** Tell where the data was collected (i.e., setting, participants, and how permission was granted).

- **Section III: Data Analysis:** Describe how you handled the interviews, the transcription, the analysis/organization of data, and the coding.
- **Section IV: Conclusions:** Tell what themes emerged (have at least 3), and describe what you learned about your topic and about qualitative research.

TENTATIVE COURSE SCHEDULE

Class	Topic	Assignment
Week 1 9/13/05	Class Introduction; Overview of research in special education; research ethics; textbook, website, & blackboard discussion; discuss & decide on preliminary research topic; sign up for presentations.	For next class: Chs. 1 & 2 in Creswell; skim and be prepared to discuss the organization (not content) of two quantitative studies in your text book-pgs. 16-26 and 316-323. You do not have to review the qualitative study on pgs. 27-37; conduct a preliminary search of literature related to your topic. Bring in one research article related to your preliminary topic and be prepared to discuss the organization of this study.
Week 2 9/20/05	Literature searches & reviews; understanding the differences between research problems & questions; review quantitative samples and quantitative research paper requirements & rubric.	For next class: Chs. 3, 4, & 5 (pgs 115-132) in Creswell; review quantitative project samples posted on blackboard.
Week 3 9/27/05	Research designs and issues (experimental, quasi-experimental, correlational research and survey); variables; specifying a research purpose and writing hypotheses.	For next class: Chs. 6 & 7; submit research proposal to cbalfour@gmu.edu by 9/16/05 at 8:00 pm using the format in Figure 3.1 of Creswell (pg. 62).
Week 4 10/11/05	Selecting participants; sampling; validity; quantitative data collection single-subject research; data analysis.	For next class: Chs. 11 & 12 in Creswell.
Week 5 10/4/05	Independent research and writing.	For next class: Ch. 13 in Creswell
Week 6 10/18/05	Writing up proposals; peer review of research proposals; APA format.	For tonight-bring in a draft of your research proposal. For next class: review Ch. 10 as to reporting research; review pgs. 106-111 as to use of style manual;
Week 7 10/25/05	Begin Qualitative Research-discuss & decide on research topics.	For next class: Review Qualitative samples for organization (not content) in Creswell pgs 27-37, 419-434, 459-472, & 492-508 and on Blackboard.
Week 8 11/1/05	Research proposal presentations; qualitative research-data collection; review qualitative samples and qualitative Project requirements & rubric.	Research Proposal due tonight. For next class: Ch. 8, 9, & 10 (pgs 132-143).
Week 9 11/8/05	Qualitative Research-coding.	For next class: Chs. 14 & 15; submit qualitative topic to cbalfour@gmu.edu by 11/4/05 at 8:00 pm using the sample script on pg. 136 of Creswell.
Week 10 11/15/05	Independent research and writing.	For next class: Ch. 16 in Creswell.
Week 11 11/22/05	Discuss qualitative samples.	For next class: Ch. 17 in Creswell.
Week 12 11/29/05	Peer review of coding & final draft; action research; exam review.	For next class Chs. 18 in Creswell.
Week 13 12/6/05	No class.	
Week 14 12/13/05	Final Exam; qualitative project presentations.	Qualitative Project due tonight.