

EDUC 555- Educational Research

“Wise Leaders for Our Schools”

A. Contact Information

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B. Textbook and Readings

McMillan, J. H. (2016). Fundamentals of Educational Research (7th ed.). Boston: Pearson Education.

The core part of the course will be reading and analyzing educational research articles. You may choose the content area and grade level of the studies based on your educational interests.

C. Course Description and Goals

This course is designed to help candidates develop an understanding of quantitative and qualitative research methods and designs, including teacher action-research, focusing on interpretation of research and relating it to school improvement.

The primary goal of this course is to facilitate candidates' development as consumers of educational research. Candidates will develop strategies for identifying research relevant to their concerns, reading published research, and examining the credibility and limitations of the conclusions the authors reach. Assessments and class activities are designed to address NBPTS core propositions IV and V, Indiana School Leaders Standard 2, and INTASC principles 1, 2, and 9.

D. Course Topics

Educational Research

- Identify the purpose of research as it impacts decision-making and educational practices.
- Examine various approaches to conducting educational research.
- Examine the elements that differentiate qualitative from quantitative research.
- Analyze various sources for research ideas.

APA Editorial Format

- Recognize the APA editorial format as it relates to writing a formal research proposal.

Literature Reviews

- Examine scholarly literature to document research problems and solutions.
- Differentiate between primary and secondary literature sources.
- Identify the elements of an effective literature review.

Action Research

- Analyze the elements of an effective problem statement.
- Examine alternative purposes for an Action Research Project.
- Identify the basic steps in developing an action research plan.
- Examine methods of collecting, analyzing, and organizing data.

Organizing, Analyzing, and Interpreting Data

- Distinguish among the various types of scores that are used in educational research. • Compare methods for collecting different types of data.
- Explain how elements of research can affect validity and reliability.
- Analyze the importance of sampling methods.
- Evaluate methods for analyzing data in qualitative research.

Descriptive Statistics

- Analyze the purpose of descriptive statistics.
- Identify appropriate uses for measures of central tendency.
- Analyze the elements of effective graphs and charts for data presentation.
- Compare methods for organizing different types of data.
- Examine the purpose of standard deviation in data analysis.

- Examine the use of correlational statistics in educational research.
- Examine uses for frequency distributions in data collection and analysis.

Inferential Statistics

- Examine the purposes of tests of statistical significance in educational research.
- Identify the rationale for using null and alternate hypotheses.
- Determine when a variety of statistical procedures are appropriate for different research purposes.

Ethical Issues Related to Research

- Analyze examples of research situations involving legal, ethical, or human relation issues.
- Examine the elements of the American Psychological Association's (APA) written
- Outline guidelines for conducting research using human subjects.
- Examine the ethical issues that can arise when publishing reports of a research study.
- Define ethics and the need for them in the current information society.
- Apply methods for analyzing ethical issues in research and technology.
- Analyze the impact of technology on individual and social behaviors.

Communicating Research Findings

- Identify various methods for communicating results.
- Identify several audiences for reporting research results and the appropriate form of communication to use with each.

E. Course Objectives – You should be able to evaluate your success in this course by considering whether you:

1. Have gained knowledge of aspects of educational research that will permit evidence-based decision making concerning curriculum methods and administration in light of the diversity in educational settings.

Assessed by: class activities especially discussions, quizzes and article reviews.

2. Are able to read professional journal articles and evaluate the reliability of the methodology employed and the validity of the conclusions reached by the authors.

Assessed by: class activities, quizzes and article reviews.

3. Are able to identify research as qualitative or quantitative, experimental or nonexperimental, and when each is most appropriate for research problems.

Assessed by: class activities especially discussions, quizzes and article reviews.

F. Diversity Standard

We will openly explore diversity as we journey through this class together. Successful teachers welcome, include, and even search for diversity in issues and perspectives.

G. Technology Standards

We will use Canvas for this course. Students will also use computer word processing and the internet for this course.

H. Course Policies

1. Late Work: Assignments should be turned in on time. Quizzes will close at the due time given. If something occurs that will make getting the article analysis assignments in on time, please let me know as soon as possible.

2. Academic Honesty: Academic honesty is highly valued at Bethel College. You must always submit work that represents your original words or ideas. If any words or ideas used in a class posting or assignment submission do not represent your original words or ideas, you must cite all relevant sources. Words or ideas that require citation include, but are not limited to, all hard copy or electronic publications, whether copyrighted or not, and all verbal or visual communication when the content of such communication clearly originates from an identifiable source.

We will follow the policy regarding plagiarism and academic dishonesty of the Bethel College Office of Graduate Studies.

“Any act of deceit, falsehood or stealing by unethically copying or using someone else’s work in an academic situation is strictly prohibited. A student found guilty of plagiarism or cheating will receive an “F”(zero) for that particular paper, assignment or exam. Should this occur, the professor will have an interview (may be an electronic discussion) with the

student and will submit a written report of the incident to the academic dean. If a second offense should occur, the student will be asked to appear before the professor, the academic dean and the vice president for student development. The student should realize that at this point continuation in a course and even his/her academic career may be in jeopardy.”

3. Disabilities: The Americans with Disabilities Act (ADA) is a law that provides civil rights protection for people with disabilities. Bethel College, in compliance with equal access laws, requests students with disabilities seeking accommodations to make an appointment with the Center for Academic Success – Disability Services office at (574) 807-7460.

G. Course Requirements

1. Assignments, Quizzes, Discussions: (90 points) Each week there will be assigned readings. (The accompanying PowerPoints will also be posted.) You are expected to answer selected questions from the readings. There will also be quizzes based on the assigned readings. But perhaps the most important avenue for learning will be our weekly discussions. I encourage you to actively participate in them! We will learn from each other through these discussions.

2. Written responses to research articles: (15 points each = 45 pts.) Using key elements of educational research, you will answer questions related to three primary research articles you select.

3. Research Study Analysis: (45 points) As a culminating activity, you will do an in-depth analysis of a research study approved by your professor.

H. Grading Scale

A 94-100%	B+ 87-<90%	C+ 77-<80%	D+ 67-<70%	F-<60%
A- 90-<94%	B 84-<87%	C 74-<77%	D 64-<67%	
	B- 80-<84%	C- 70-<74%	D- 60-<64%	

“A” Work	Exceeds requirements, is clear, insightful and reflective, demonstrates depth and breadth of understanding.
“B” Work	Meets requirements, coherent with minor flaws, misses some opportunity for insight, shows some evidence of depth and breadth of understanding
“C” Work	Minimally addresses requirements, contains flaws and shortcomings, lacks clarity, depth, or breadth of understanding.

I. Weighted Grades

Grades will be weighted as follows:

Discussions 10%

Papers 50%

Quizzes 20%

Reading Questions 20%