



Gordon T. & Ellen West College of Education
EDUC 5053.X11: Introduction to Educational Research
Keith Lamb, Ph.D.
Fall 2024
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Required Text

Locke, L.F., Silverman, S.J., & Spirduso, W.W. (2010). *Reading and understanding research*. (3rd ed.). Los Angeles: Sage.

Recommended Text

American Psychological Association (2020). *Publication manual of the American Psychological Association* (7th ed.). Washington, DC: American Psychological Association.

Recommended Resources

You will need access to a computer with a high-speed Internet connection and the following software: Microsoft PowerPoint (will use audio) and Microsoft Word.

Graduate Catalog Description of Course

Fosters an understanding of the role of research in education and acquaints students with research methodologies appropriate to education while preparing them to understand, analyze, synthesize, and critically evaluate contemporary educational research. This course should be taken in the first or second semester of the program.

Instructor Availability

You may always contact me via phone, email, or at my office.

Goal of the Course

To provide students the knowledge, skills, and dispositions necessary to (1) read, analyze, and understand research, (2) identify a research question with an independent and dependent variable, and (3) write a mini-literature review based upon synthesis of existing literature. The mini-literature review should be 5-7 pages in length.

Objectives

By the end of this course, the student will be able to:

1. Understand the rationale, purpose and ethical implications of research in educational settings. (CACREP Standards a, e and f)

2. Identify types of data and associated appropriate measures of central tendency and descriptive statistics. (CACREP Standards b, c and d)
3. Describe null and directional hypothesis and interpret both from research questions. (CACREP Standards b, c and d)
4. Describe the differing types of reliability and validity and analyze the value of each in research articles. (CACREP Standards b, c and d)
5. Analyze inferences from bivariate correlation statistics (both parametric and non-parametric). (CACREP Standards b, c and d).
6. Interpret written results of parametric tests including; t-tests, ANOVA, and post hoc tests. (CACREP Standards b, c and d)
7. Interpret written results of nonparametric tests including Mann Whitney U, Kruskal Wallis, Chi Square, Fischer, and Wilcoxon.
8. Interpret results of qualitative research including single case, case study, focus groups, ethnography, and content analysis of written documents. (CACREP Standards a and e)
9. Analyze quantitative, qualitative, and mixed methods research (CACREP Standard b)
10. Use information from critical analysis of previous research to create a literature review synthesizing multiple resources and contrasting differing points of view.

Course Structure

This is a structured course with weekly lectures delivered via Microsoft PowerPoint. There is a learning module in Desire2Learn for each week of the course (Monday – Sunday). The module for each week will appear on your course homepage. Within each module, you will find the PowerPoint lecture and any other items for that week. Similarly, the “content” function in Desire2Learn contains an outline of the course, and each week will appear when the content is ready.

Week 1 (August 26 – September 1)

Course introduction

1. Introduction of literature review assignment

Week 2 (September 2 – September 8)

The Research Report

Staying Organized When Reading Research Reviews

Literature Reviews

1. Text: chapters 1 and 13
2. Introduction of synthesizing literature assignment

Week 3 (September 9 – 15)

When to Believe What You Read: The Sources of Credibility

Sampling

Descriptive Statistics

Measures of Central Tendency

1. Text: chapter 2 and Appendix B (Descriptive Statistics, pg. 269-270)
2. Research topic and questions due (part of literature review assignment)

Week 4 (September 16 – 22)

How to Select and Read Research Reports
Correlation

1. Text: chapter 3 and Appendix B (Association Statistics and Correlation, pg. 275-278)

Week 5 (September 23 – 29)

The Use, Misuse, and Misunderstanding of Research

1. Text: chapter 4
2. Synthesizing Literature assignment due

Week 6 (September 30 – October 6)

Types of Research
Reliability and Validity

1. Text: chapter 5

Week 7 (October 7 - 13)

Inferential Statistics

1. Text: chapter 6 and Appendix B

Week 8 (October 14 - 20)

Staying Organized When Reading a Quantitative Report

1. Text: chapter 7

Week 9 (October 21 - 27)

Explaining as a Tool for Learning to Read Reports

1. Text: chapter 8
2. Article Review #1 due

Week 10 (October 28 – November 3)

Reading Reports of Quantitative Research
Hypothesis Testing

1. Text: chapter 9
2. Literature review assignment – draft I due

Week 11 (November 4 - 10)

The Paradigms for Qualitative Research

1. Text: chapter 10

Week 12 (November 11 - 17)

Staying Organized When Reading a Qualitative Report

1. Text: chapter 11

Week 13 (November 18 - 24)

Reading Reports of Qualitative Research - Critically

1. Text: chapter 12
2. Article Review #2 due

Week 14 (November 25 – December 1)

1. Work on Literature Review

Week 15 (December 3 - 8)

1. Final copy of literature review due

Assignments (See appropriate module or content tab in Desire2Learn)

1. Article Reviews
 - a. Article Review #1 (**due by October 27**)
 - b. Article Review #2 (**due by November 24**)
2. Literature Review
 - a. Research topic and questions (**due by September 15**)
 - b. Synthesizing Literature (**due by September 29**)
 - c. Draft 1 (**due by November 3**)
 - d. Final Literature Review (**due by December 8**)

Grades

1. Article Reviews (2 @ 20% each = 40%)
2. Literature Review
 - a. Research Topic (5%)
 - b. Synthesizing Literature (15%)
 - c. Literature review draft (15%)
 - d. Final Literature review (25%)

Methods of Instruction

This course will be presented in a manner that allows you to learn independently, from each other, and from interaction with the instructor. While you may work to some degree at your own pace, the course does provide structure. As such, please adjust your schedule accordingly to allow for adherence to posted due dates. Specifically, this course will utilize lectures delivered via PowerPoint, discussion board postings, email, assignments, and exams.

Internet courses are a convenient and effective method of learning; however, they require as much work and attention as traditional instruction. Please consider the following recommendations to ensure your success in this course:

1. Schedule at least 6 to 8 hours a week for this course.
2. Please adhere to posted due dates. You may turn-in assignments early.
3. Please read the assigned text for the week before viewing/listening to the PowerPoint lecture.
4. Please seek clarification for any questions, and do so in a timely manner! You may ask me directly or you may post a question to the discussion board. At my option, I will post course-material questions received via email to the discussion board. I will not identify the originator of the question, though.

Attendance Policy

As this is an online course, attendance is analogous to participation.

My Expectations

My expectations of the students are really simple: actively participate in class, adhere to all due dates, give maximum effort, ask questions, and please let me know if there is something I can do to serve you better.