

Interpreting Educational Research (EDU 6304)

Spring 2014
Wed. 5:15–8:05 p.m.
Dr. Ken Springer

Contact information

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Learning objectives

The purpose of this class is for you to become a more discriminating consumer of educational research. By the end of the semester you should have insight into the following questions:

1. What is educational research, and how can it be distinguished from other sources of information?
2. What are the methodological and statistical foundations of educational research?
3. How should the quality and importance of an educational research report be evaluated, and why is evaluation critical?
4. Where can educational research be found, how is it disseminated, and what role does it play in our educational system?
5. How can educational research benefit me in my role as an educational practitioner?

Required readings

The textbook for this class is *Educational Research: A Contextual Approach* (Springer, 2010). Additional readings will be distributed via e-mail beginning after the first quiz.

Schedule

<u>Date</u>	<u>Topic</u>	<u>Readings</u>	<u>Additional activities</u>
1/22	Introduction		
1/29	Sampling	Chapters 1, 4	
2/5	Measurement	Chapter 5	Quiz 1
2/12	Validity and reliability	Chapter 6	+ article
2/19	Experimental design	Chapter 7 + article	
2/26	Experimental design	Chapter 7	Quiz 2
3/5	Correlational design	Chapter 9 + article	
3/12	No class (Spring Break)		
3/19	Correlational design	Chapter 9 + article	Term paper proposal due
3/26	Causal-comparative design	Chapter 9 + article	
4/2	Descriptive statistics	Chapter 10	
4/9	Inferential statistics	---	Quiz 3
4/16	Ethnographic designs	Chapter 13 + article	
4/23	Other qualitative designs	Chapter 14 + article	
4/30	Mixed-method designs	Chapter 15	Quiz 4
5/4			Term paper due

Grading

Your grade is based on 4 quizzes, 12 homework assignments (one per week through 4/24), one term paper proposal, one term paper, and the overall quality of your participation in class. The breakdown is as follows:

Quizzes	=	32%	(8% each)
Homeworks	=	36%	(3% each)
Term paper proposal	=	2%	
Term paper	=	20%	
Participation	=	10%	
Total	=	100%	

Additional information

- Quizzes are open-book, open-note. Question format will be primarily short answer. Review sessions will be held in class.
- Homework assignments will be e-mailed to you by the Thursday evening immediately following each class. Each assignment will be due, via e-mail, by 3:30 p.m. on the Monday prior to the next class. Homework assignments must be completed independently. Late homework will not be accepted without a documented excuse.
- Please type your homework answers into the body of the e-mails I send and reply without changing the subject line.
- The article you will be using for your term paper must be a report of original research published in a peer-reviewed journal. This article must be approved by me prior to the due date for the term paper proposal.
- The term paper proposal consists of a summary of the design used in your term paper article. Your proposal should be a minimum of 2 pages in length and be e-mailed to me by 5 p.m. on March 19. Further details about term paper proposal requirements will be discussed in class.
- The term paper consists of a critical review of your journal article. The paper should be e-mailed to me by 5 p.m. on May 4. The paper should be a minimum of 10 pages in length, and may include text from your term paper proposal. Both the proposal and the term paper itself must be completed independently. Further details about term paper requirements are attached to this syllabus and will be discussed in class.
- The term paper proposal and term paper must be typed (double-spaced), with 12-point font and 1" margins. Each document should include a cover sheet that provides your name and reference information for your article. APA format is encouraged but not required.
- The participation grade is based on the extent of your engagement in class discussion. Failure to keep up with the readings will negatively impact your participation grade, as will unexcused absences and tardies, as well as unprofessional behavior in class.
- Further details about each component of your grade will be discussed on the first evening of class.
- Students needing academic accommodations for a disability must first contact Ms. Rebecca Marin, Coordinator, Services for

Students with Disabilities (214-768-4557) to verify the disability and establish eligibility for accommodations,. then schedule an appointment with me to make appropriate arrangements. (See University Policy No. 2.4.)

- Religiously observant students wishing to be absent on holidays that require missing class should notify me in writing at the beginning of the semester, and should discuss with me, in advance, acceptable ways of making up any work missed because of the absence. (See University Policy No. 1.9.)
- University policy, including the SMU honor code, governs all activities related to this course.

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Term Paper Guide

The term paper should address each of the following questions about your article:

Introduction: Why was the research conducted? What have other researchers found? What are the key variables? What is/are the research question(s) and/or hypotheses?

Method: Who were the participants? What method(s) of sampling was/were used? What type of design was used? How were the key variables operationalized? What measurements and/or materials were used? How would you characterize the reliability and validity of the measurements/materials? What was the basic procedure? How would you characterize the internal and external validity?

Results: What were the main descriptive statistics? What inferential statistics were used? What did the main statistical analyses explore? What were the main patterns of significance? What effect sizes were reported? What do the results of the main analyses mean? Did the statistical analyses address the research question(s) and/or hypotheses appropriately?

Discussion: What were the main findings of the study? Were the original research question(s) and/or hypotheses addressed? What do the results contribute to scientific knowledge? What is the practical usefulness of the results?

Your grade will be based on the following dimensions:

Responsiveness to instructions (10%)

Accuracy (10%)

Organization (10%)

Clarity (10%)

Analytical insight (10%)

Effort (50%)

In evaluating effort, I look for three things:

1. How specifically do you describe and evaluate the questions listed above?
2. How well do you keep track of the general purpose or theme while discussing the details?
3. How consistently do you translate specific details into plain English?