

READING, ANALYZING, AND EVALUATING EDUCATIONAL RESEARCH

EDFOUND 780 sec. 01 - 3 credits

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Instructor:

Office Hours:

Course Description

From the catalog: The course provides practicing teachers with background in the processes of reading, analyzing, and evaluating research in the field of education. The emphasis is on development of skills in understanding how educational research is conducted, and on knowledge and skills needed to evaluate research writing in educational journals.

Additional description:

This course engages students in discussion on a variety of current topics related to research (for example, research methods and statistics) and prepares them to read and understand empirical research in education journals. The goal is for students to comprehend and appreciate how inquiry in education is accomplished. The research methods sections will include an overview of the parts of a research study and a comparison of different research methodologies. Assignments will be targeted to assessment practice, to locating and reviewing relevant research, to demonstrating understanding of a variety of research methods, and to developing and clarifying group and individual research questions.

In-person classes will be devoted to lecture, discussion, and small group work. Primarily we will engage in a combination of individual work on quizzes and assignments, and group D2L discussion of readings and assignment questions. See the document "Show Me the Data!" (in this syllabus) for a course rationale.

Required Readings

Patten, M. L. (2005). Understanding research methods (5th ed.). Los Angeles: Pyrczak Publishing.

Lyne, L. S. (2006). A cross-section of educational research (3rd ed.). Los Angeles: Pyrczak Publishing.

Other readings will be posted on D2L, handed out in class, placed on electronic reserve, or obtained independently by students.

Assignments:

1. Lyne book articles – short summaries (5 at 20 points each)	100 points
2. Journal articles - detailed summaries (2 at 50 points each)	100 points
3. “Homework” over text (open-book) (10 at 10 points each)	100 points
4. Individual review of literature	150 points
5. Group research proposal	<u>50 points</u>
TOTAL POSSIBLE POINTS	500 points

Scale: 463-500=A, 438-462=AB, 413-437=B, 388-412=BC, 350-387=C, 300-349=D.

**"Show Me the Data!" or,
Evidence-Based Decision-Making**

How do you know which method of teaching or coaching is most effective for your situation? How can you tell if a school program or a set of curriculum materials is worth the money? One good way of gaining information about effectiveness ("what works," in current federal parlance) is to listen to and observe experienced teachers, coaches, and educational administrators. Another good way of gathering that information is through your own primary and secondary research.

The purpose of this course is to introduce you to the vocabulary, the logic and structure, and the procedures employed in educational research and assessment. It will provide you with the tools to think systematically about the evidence for educational claims. It will give you the skills to be a wise research consumer as you read studies about topics in your interest area (reading other people’s research is sometimes called "secondary research"), and it will give you a deeper understanding of how research questions are really answered as you design a group research project of your own ("primary research," often a type called "action research" when conducted by teachers in graduate programs). You will develop skills that will help you gather systematic data about your own students and programs, and your own teaching or coaching.

This research foundation will be useful in the future as you deal with practical problems in education, such as evaluating claims about innovative methods or materials. In an era of declining public support for education and schools, we all need to spend our professional time and money efficiently and effectively. The next time you are asked to make a major investment of time or funding, it will probably be worthwhile to say "Show me the data!"

Of course, we also need to be able to defend our own programs and materials with evidence of their effectiveness. What if a school board member asks you "Why should we allocate money for your program? What evidence do you have that it makes a difference?" Would you have any facts and figures to provide to show that it works in your own district? Do you have anything more tangible than your own opinion, or the apparent positive attitude of your students? Show them the data!

Course Objectives and Related Standards and Assessments

(see Wisconsin Standards for Teacher Development and Licensure) (WTS)

Students will:

- understand the vocabulary, logic and structure, and procedures of educational research (WTS #1) (chapter homework, journal summary assignments)
- evaluate their own professional needs in designing a literature search (WTS #9) (initial and revised literature review idea sheets)
- distinguish between major types of educational research designs (journal summary assignments, chapter homework)
- analyze research on learning and teaching in their fields (WTS #1) (literature review)
- develop their skills as research consumers (article summaries, literature review)
- evaluate the quality of educational research using critical analysis (summaries, literature review)
- create a clear and realistic group research proposal to solve a practical educational problem (WTS #6) (project ideas, final group proposal)
- discuss research with colleagues in the class (WTS #10) (any in-person class discussions, online discussions, final presentations)
- demonstrate links between data and practice (group proposal)

College of Education Conceptual Framework

Our conceptual framework, "The Teacher is a Reflective Facilitator," is the underlying structure in our teacher preparation program at UW-Whitewater that gives conceptual meanings through an articulated rationale to our operation. It also provides direction for our licensure programs, courses, teaching, candidate performance, faculty scholarship and service, and unit accountability. In short, our teacher education program is committed to reflection upon practice; to facilitation of creative learning experiences for pupils; to constructivism in that all learners must take an active role in their own learning; to information and technology literacy; to diversity; and to inquiry (research/scholarship) and assessment. Therefore, all syllabi pertaining to courses required for licensure reflect commitment to these underlying principles.

The Conceptual Framework ideas are reflected in this course in several ways.

- (1) Students are asked to reflect on their own experiences as students and as teachers, and to "process" the readings in terms of how they might use the information as professional educators.*
- (2) Students in this course will actively investigate an area of personal and professional interest to them and report their findings to their fellow students.*
- (3) Students will analyze and reflect on their practical school-based experiences, clarify a problem that needs investigation, and construct a realistic group research proposal.*
- (4) The main goals and activities in the course are oriented toward information and technology literacy (the course can be offered mostly online and is based on independent research) and to inquiry (students learn the tools of educational inquiry and apply them to their own teaching field).*

Course and University Policies

[reference to the standard university policies]

... Incompletes. Final course grades of “Incomplete” will be given only in the extremely rare circumstances that are congruent with University policy. Please consult the catalog.

[For any hybrid or online version of this course] **WARNING:** a few people every semester, especially those who are new to online courses, find it extremely difficult to keep up with the course. This is not a valid reason for requesting a grade of “Incomplete.” The instructor will initiate weekly contact and discussion, but you should assess your own ability and preferences with regard to working independently and online.

Additional Information...

Portfolios

If you are, or will be, working toward a DPI teaching or administrative license, it is recommended that you save all of your completed assignments from this course for potential inclusion in a portfolio geared toward the ten Wisconsin teaching standards. See "Course Objectives" section above in order to match assignments to standards.

Capstone Projects and Professional Activities

One of the purposes of this course is to begin your preparation for the completion of the "culminating experience" in your Master's program. Whatever the nature of your final capstone project, this course can help you start to delve into the research related to it, and can help you begin to think about how to design that project. Many students will choose an action research project related to a particular curriculum or program "try-out," but there is a wide range of options for the capstone. If you are applying for a grant or evaluating a program in your workplace, this course and the capstone can be adapted to fit that professional need. Please consult with the instructor as early as possible in the course if you wish to develop a project for professional use in the near future.

Wisconsin Standards for Teacher Development and Licensure

The standards are presented here as an aid in designing two of your assignments: you may wish to design an assessment plan and a research proposal that fit one or more of the standards for use in a future teaching license portfolio (see PI34)....

[list the 10 standards]

Brief Bibliography for EDFOUND 780

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- Auger, W., & Wideman, R. (2000). Using action research to open the door to life-long professional learning. *Education*, 121(1), 120.
- Bogdan, R. & Biklen, S. K. (2006). *Qualitative research for education: An introduction to theories and methods (5th ed.)*. Boston: Allyn & Bacon.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education*. London: Routledge Falmer.
- Galvan, J. L. (2006). *Writing literature reviews: A guide for students of the social and behavioral sciences*. Glendale, CA : Pyrczak Publishing
- Gall, M., Gall, J., & Borg, W (2007) *Educational research: An introduction (8th Ed.)* Boston: Allyn and Bacon
- Harris, R. A. (2005). *Using sources effectively (2nd Ed.)*. Glendale, CA: Pyrczak Publishing
- Loughran, J. (Ed.). (1999). *Researching teaching: Methodologies and practices for understanding pedagogy*. London: Falmer Press.
- McMillan, J. & Schumacher, S. (2006). *Research in education: Evidence based inquiry (6th Ed.)*. Boston: Allyn & Bacon
- Mcnamara, O. (Ed.). (2002). *Becoming an evidence-based practitioner: A framework for teacher-researchers*. London: Routledge/Falmer.
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