

ELPA 725: Research Methods and Procedures in Educational Administration

Fall 2009

Wednesdays, 6:00-8:30 PM

Winther Hall, Room 3010, UW Whitewater Campus.

Instructor

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Course Objectives:

This is an introductory course in research methods and procedures related to education. The main purposes of the class are to: (1) assist students to become better consumers of educational research, (2) prepare students to use key concepts and methods of quantitative and qualitative educational research to carry out strategic data-driven inquiry for educational organizations in which they might work, and (3) begin to prepare students to conduct research as part of their graduate studies. Using recent texts focused on using educational research and data-driven decision making in schools and colleges, web-based resources, and examples from educational research, participants will learn about different ways of measuring education processes, as well as strategies for conducting data-based inquiries within their own institutions or for their own research.

Required Texts:

Bernhardt, V.L. (2004). *Data analysis for continuous school improvement. 2nd Edition* Larchmont, NY: Eye on Education.

McEwan, E.K. & McEwan, P.J. (2003). *Making sense of research: What's good, what's not, and how to tell the difference.* Thousand Oaks, CA: Corwin

Optional Text:

Houghton, P.M. & Houghton, T.J. (2007). *APA: The easy way! A quick and simplified guide to the APA writing style.* Flint, MI: Baker College

Additional required readings will be distributed in class.

Practical Application:

Specifically, as a result of participating in this course, students will learn how to:

- Access, understand, and evaluate educational research;
- Distinguish the characteristics and purposes of different forms of quantitative and qualitative research methods;
- Formulate a hypothesis or question and develop and plan for researching it;
- Prepare a research report
- Use inquiry and research to inform professional decision making and practice.

Students will develop these skills through reading assignments, lectures, class discussions, in-class activities, and assigned projects.

Course Requirements:

1. *Class Participation: (5% of grade)* Attendance and active participation is very important and will be part of your grade. To the greatest extent possible please participate in all class activities, complete all assignments and be prepared to discuss them in class. Class time will be an opportunity to build a learning community focused on the goals of this course.
2. *Submit Five Possible Topics You are Interested in for Possible Research Project Design Paper: (5% of grade)* Five Topics for possible study are to be typewritten (not hand-written) and submitted by email or handed in on or before the beginning of the September 9 class. (2% grade reduction for each day late and no credit for three days late)
3. *Submit Seven Possible Topics You are Interested in for Possible Research Project Design Paper: (5% of grade)* Revise and refine seven possible topics of research from in-class group discussion or based on personal interest for final class paper. These seven topics for possible study are to be typewritten (not hand-written) and submitted by email or handed in on or before the start of the September 16 class and may not include any or all of the previous five topics submitted on September 9. (2% grade reduction for each day late and no credit for three days late)
4. *Submit a Possible topic for Final Class Paper. (5% of grade)* To begin thinking about how to attack the research project design paper you are to submit one possible topic followed by two paragraphs explaining and defining the possible data analysis and data sources that could be used for that topic. This assignment must be type-written (not hand-written) and submitted by email or handed in on or before the start of the September 23 class. You are not limited to this topic for your final paper. (2% grade reduction for each day late and no credit for three days late)
5. *Review and critique an educational research article. (20% of grade)* The critique is to be no longer than four double-spaced, typewritten pages and is to include the complete bibliographic citation of the study (APA format) and any other references used in the critique. Approximately half of the written critique is to be

- devoted to summarizing: (1) the problem being researched; (2) the hypothesis or research questions; (3) the characteristics of the sample or population; (4) the research design used in the study; (5) the procedure for collecting and analyzing the data; and (6) findings and implications. The latter half of the critique is to evaluate the strengths, weaknesses, limitations, and missing elements of items 3-6 (the research design) in addressing items 1-2 (the research problem). The article is to be a published study from peer-review journals. Each study should relate directly or indirectly to the topic you have selected for your research project design paper due on or before 7:00 PM, Wednesday, December 9, 2009. This assignment must be type-written (not hand-written) and submitted by email or handed in on or before the start of the October 21 class. (2% grade reduction for each day late).
6. *Power Point Presentation and Class Discussion Exercise.* (20% of grade) The class will be divided into 9 groups and/or individuals and each group/individual will be required to present a power point presentation to the class. This assignment is to be engaging and interactive to produce class discussion and involvement. This power point must cover the topic or area as a summary of the chapters in the required texts. Creative small group work for engaging the class is to be defined and facilitated before, during and/or after the power point presentation. The entire presentation, including small group discussion or other interaction, is to be a minimum of 90 minutes to receive an A and presented without errors in the power point.
 7. *Research and Project Design Paper.* (40% of grade). Each student will complete *a detailed plan to conduct an original educational research project.* The plan will include: (1) the problem being researched; (2) the hypothesis or research question(s); (3) the characteristics of the sample; (4) the research design used in the study; (5) the procedure for collecting and analyzing the data; (6) potential implications of the study for practice. Items 1 and 2 are to be supported by a literature review that includes articles used in your written critique (assignment 5) and other relevant readings. The Research Project Design Paper must be in APA format (size 12 and either Times New Roman or Courier font) and no less than 10 and no more than 12 double spaced typewritten pages. All Research Project Design Papers are due on or before the start of class on December 9, 2009 by email or handed in at the start of class on December 9, 2009. (5% reduction in grade for each day late)

All % grade reductions are for the % reduced for the entire course and not a % of the grade of the late assignment. A 2% grade reduction is 2% of the 100% total for the ELPA 725 course. A 5% reduction is 5% of the total for the ELPA 725 course. One day late is defined as after the start of class when that assignment is due and each additional day late is in 24 hour increments.

Class Schedule and Topics of ELPA 785

September 2, 2009

Introductions and sharing backgrounds and interest.
Review course syllabus and course requirements.
Group discussion of educational research topics.
Group discussion of specific research topics of interest.
Each student will submit five possible research topics.
Individuals and/or groups will select topics for power point discussion

Assignment for September 9: Read McEwan, Chapters 1&2.
Revise and refine five possible topics of research from in-class group discussion or based on personal interest for final class paper. These five topics for possible study are to be typewritten (not hand-written) and submitted by email or handed in on or before the beginning of the September 9 class.

September 9, 2009 - Overview and Critique of Educational Research

Each student submits five topics of possible research for final class paper.
Individual/group power point discussion of McEwan, Chapters 1&2.
The five essential questions for education research and improvement.
The purposes of research and evidence-driven leadership practice.
Education research stakeholders and perspectives.
Current priorities for education research: Kindergarten through grade twelve, (K-12), Higher, Postsecondary, and Continuing Education, (HPCE).
Educational research critiques: the key features.
Discuss possible research topics for final class paper.

Assignment for September 16: Read Bernhardt, Chapters 1,2&3.
Revise and refine seven possible topics of research from in-class group discussion or based on personal interest for final class paper. These seven topics for possible study are to be typewritten (not hand-written) and submitted by email or handed in on or before the beginning of the September 9 class and may not include any or all of the previous five topics submitted on September 9.

September 16, 2009 - Show Me the Data

Submit seven possible research questions for final class paper.
Individual/group power point discussion of Bernhardt, Chapters 1,2&3.
The importance of data.
Barriers to using data.
Focusing the data.
Getting started questions.
Types of data: demographic, process, context, learning outcomes
Levels of analysis and questions for what data are important.
Discuss possible research topics for final class paper.

Assignment for September 23: Read Bernhardt, Chapters 4&5.

Submit a possible topic for final class paper followed by two paragraphs explaining and defining the possible data analysis and data sources that could be used for that topic.

September 23, 2009 - Sources of Data and Data Analysis

Submit a possible topic for final class paper followed by two paragraphs explaining and defining the possible data analysis and data sources that could be used for that topic.

Individual/group power point discussion of Bernhardt, Chapters 4&5.

How to collect, disaggregate and analyze demographic data.

Perceptions and how perceptions influence and frame the data analysis.

Types of questionnaires and how to "Begin with the End in Mind."

Discuss the two outlines of possible data analysis and data sources for two possible questions for the final paper that were submitted.

Assignment for September 30: Read McEwan, Chapters 3&4.

Begin searching for an educational review article and submit the name of the article and source (APA format) that you will critique on or before October 7. This is to begin preparation for the assignment due October 21.

September 30, 2009 - The Causal Question: Does it Work?

Submit the name of the article and source (APA format) that you will critique and submit on or before October 21. (See Course Requirements)

Individual/group power point discussion of McEwan, Chapters 3&4.

The before and after approach.

The group comparison approach.

Internal validity.

Randomization.

Analyzing experimental results.

Quasi-experiments and approaches.

Correlated studies and "natural experiments."

Assignment for October 7: Read McEwan, Chapters 5&6.

Assignment for October 21: Review and critique an educational research article. The critique is to be no longer than four double-spaced, typewritten pages and is to include the complete bibliographic citation of the study (APA format) and any other references used in the critique. Approximately half of the written critique is to be devoted to summarizing: (1) the problem being researched; (2) the hypothesis or research questions; (3) the characteristics of the sample or population; (4) the research design used in the study; (5) the procedure for collecting and analyzing the data; and (6) findings and implications. The latter half of the critique is to evaluate the strengths, weaknesses, limitations, and missing elements of items 3-6 (the research design) in addressing items 1-2 (the research problem). The article is to be a published study from peer-review journals. Each study should relate directly or indirectly to the topic you have selected for

your research project design paper due on or before 7:00 PM, Wednesday, December 9, 2009.

October 7, 2009 - How does it work and is it worthwhile?

Review and critique of an educational review article is due.
Individual/group power point discussion of McEwan, Chapters 5&6.
The qualities of qualitative research.
Qualitative research methods.
How to get quality from qualitative research.
How to determine if the study is cost-effective.
Discuss the article you critiqued as to how it worked and if it was worthwhile?

Assignment for October 14: Read Bernhardt, Chapters 6&7.

October 14, 2009 - Measuring Student Learning

Individual/group power point discussion of Bernhardt, Chapters 6&7.
Measures of student learning.
Analyzing student learning results.
School and level processes working together.
Assessing school processes.

Assignment for October 21: Read Bernhardt, Chapters 8&9

October 21, 2009 - Analysis and Communicating Results

Submit critical analysis of an educational research study
Individual/group power point discussion of Bernhardt, Chapters 8&9.
Traditional analysis and pulling it all together.
Intersection analysis and the problem-solving cycle.
Communicating data analysis and results.
Different types of graphs.
Interpreting test results.
Explaining demographic results.
Reporting the big picture.

Assignment for October 28: Read McEwan 7&8.

October 28, 2009 - Will it work for Me?

Individual/group power point discussion of McEwan, Chapters 7&8.
Is this study useful and will it work in my setting?
Rules of thumb for making generalizations.
User-driven research.
Asking the right questions.
Defining the problems and refocusing on outcomes.

Assignment for November 4; Read Bernhardt, Chapter 10.

November 4, 2009 - What is a Data Warehouse and How Do I Use One?

Individual/group power point discussion of Bernhardt, Chapter 10.

Selecting a data warehouse.

Planning for a data warehouse for your needs.

Determine the data that exists now and what data you need.

Determine the levels of access to the data and how to obtain the data.

Determine who will do the data analysis and how it works.

November 11, 2009 - The Research Design Paper Topics

Each student will give an update on their topic selected for the final paper and explain the problem being researched and why it is an important contribution to the literature and research in this field of study.

November 18, 2009 - Research Design Paper Hypothesis; Design of the Study.

Each student will give an update on their topic, hypothesis and design of the study for their research project design study final paper.

November 25, 2009 - Characteristics of the Sample; Collecting and Analyzing Data

Each student will give an update on their topic, hypothesis, characteristics of the sample, the research design and procedure for collecting and analyzing the data.

December 2, 2009 - Potential Implications of the Study for Practice

Each student will share the potential implications of their study for practice in the field and what significance it has and why.

December 9, 2009 - The Final Summary of the Study

Each student will share a summary of their study. All Research Project Design Papers are due on or before the beginning of this class on December 9, 2009 by email or handed in at the start of class. (5% reduction in grade for each day late)