Syllabus
EDUC 695 Research and Educational Practice
WinterTerm 2014, Ed Studies Cohort

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Course Objectives
The purpose of this course is to allow you to develop into a thoughtful, critical consumer of education research. At the conclusion of this course you should be able to:

1. Read peer-reviewed educational research with a critical eye and offer insightful criticism that can be substantiated with relevant argument, as well as offer suggestions for improvement and further research.
2. Use educational research in a professional manner, both in speech and in writing, to support assertions for the need for further research or the development of intervention to support teaching and learning.
3. Discuss educational research in a professional manner and comfortably use the language of the profession.
4. Perform online searches using educational research databases in order to compile and review current, high quality research on a relevant topic of your choosing.

Resources
1. CTools: https://ctools.umich.edu/portal
   Our CTools site is named EDUC 695 TFA W14. Please post all assignments to our CTools site. Do not email assignments to me unless you are turning in an assignment late. Use the URL above and log in using your umich uniqname and password. You should see a tab for the site. If you need instruction on how to post assignments to CTools, please let me know.

   All of the required reading for the class will be posted on CTools, in the folder labeled “Resources.” Unless otherwise specified, it is up to you to decide whether you want to use an electronic copy or print a paper copy. Whichever you choose, you should have access to the appropriate reading material during each class session.

2. APA style
   APA style is REQUIRED for all papers. I will present a brief overview of APA style, but it is up to you to learn the important components and use them correctly. Please consult the APA style URL for examples: http://www.apastyle.org/ There is a good tutorial available on that site. Two other sources of APA information are:
   
   • The educational research guide written by Marija Freeland, former Education/Kinesiology Librarian, Hatcher Graduate Library; URL http://guides.lib.umich.edu/education

Attendance Policy
You have one “free” absence for a good reason (illness, prior commitment, etc.), but you must notify me in advance or as quickly as possible after your absence. You are responsible for any work done
in class that day or any assignments that are due. For every additional absence, your final grade will be lowered ½ grade (e.g., an A will become an A-).

Policy on Incompletes (“I” grades)
In general, you should avoid incompletes in any course. However, there is a situation for which I will award an incomplete. Specifically, you have a medical excuse signed by a physician AND you have completed all assignments up to the point of requesting the incomplete. There are no other reasons for me to award an “I” grade.

Before granting the incomplete, I must meet with you about a **FIRM** timeline for completing the course requirements. If I agree to award you an “I” grade, the highest grade you can earn in this course is a B+ no matter how good the work is prior to or after the point of issuing the “I” grade.

Course accommodations
The University of Michigan abides by Section 504 of the Rehabilitation Act of 1973, which mandates reasonable accommodations to qualified students with disabilities. If you have a disability and may require some type of accommodation for instructional delivery or course requirements, please contact me as soon as possible so that I can provide or facilitate in providing accommodations you may need. If you have not already done so, you will need to register with the Office of Services for Students with Disabilities (G-664 Haven Hall 505 South State Street, 734-763-3000). I look forward to talking with you soon to learn how I may be helpful in enhancing your academic success in this course.

Course requirements and percentages

- **Assignments (45%)** — see Appendix A in syllabus for requirements
- **Final Project and Presentation (40%)** — see Appendix A for Final Project requirements; late submissions may be graded down. Presentation instructions will be given in class and credit will be assessed on a “credit/no credit” basis.
- **Participation (15%)**—includes class discussion, attendance, and actively assisting your group with leading discussion on one of the class sessions (#8-#11).

Discussion Leaders
Each student will be assigned to a group which will be responsible for leading discussion (approximately ½ hour) related to the paper assigned for one of the class sessions #8-#11. I will explain this assignment more thoroughly in class.

<table>
<thead>
<tr>
<th>Due Date **</th>
<th>Assignment (Post on Ctools in the appropriately labelled folder.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/29/2014</td>
<td>GA1 Project Proposal</td>
</tr>
<tr>
<td>2/19/2014</td>
<td>GA2 Summary of Quantitative research article (Mangen, et al., 2013)</td>
</tr>
<tr>
<td>3/19/2014</td>
<td>GA3 Summary of research article of your choice</td>
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<tr>
<td>4/18/2014</td>
<td>Final Project</td>
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**All assignments are due by 11:55 pm on the date indicated.
# Topics and Assignments

<table>
<thead>
<tr>
<th>#1 Jan 10</th>
<th>Introductions and course requirements. Review syllabus. Read Creswell chapt. 1.</th>
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</thead>
<tbody>
<tr>
<td>#2 Jan 17</td>
<td>Quantitative and Qualitative research. Read 2 articles that follow Creswell chapt 1 (Deslandes &amp; Betrand and Shelden, et al.). Training on use of on-line search tools. <strong>Class will be held in the Instructional Center on the 4th floor of the Shapiro Undergraduate Library (room 4059).</strong></td>
</tr>
<tr>
<td>#3 Jan 24</td>
<td>No class. Please use this time to work on your online searching. I will be available via email.</td>
</tr>
<tr>
<td></td>
<td><strong>Graded Assignment #1 (GA1) Project proposal due Wednesday, Jan 29th.</strong></td>
</tr>
<tr>
<td>#4 Jan 31</td>
<td>Quantitative data gathering and analysis. Read Creswell chapts. 5 &amp; 6. Re-read Deslandes &amp; Bertrand (2005) article and prepare answers to as many reading guide questions in appendix B1 as you can.</td>
</tr>
<tr>
<td>#6 Feb 14</td>
<td>Introduction to international, national, and state level assessments. Read Vogt chapt. 16, Hong (2012) and Koretz &amp; Jennings (2010).</td>
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<tr>
<td></td>
<td><strong>Graded Assignment #2 (GA2) Summary of Mangen, et al. (2013) due Wednesday, Feb 19th.</strong></td>
</tr>
<tr>
<td>#8 Feb 28</td>
<td>Grounded Theory. In-class activity on grounded theory. Read Freeman (pages 96-103, DO NOT do the included exercises) bring paper copies of pages 219, 220 &amp; 221, BUT DO NOT READ THEM BEFORE CLASS! Read Polleck (2011).</td>
</tr>
<tr>
<td># March 7</td>
<td><strong>No class--Spring break</strong></td>
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## Research Designs and Data Analysis

|            | **Graded Assignment #3 (GA3) Summary of article of your choice due Wednesday, March 19th.** |
| #10 March 21 | Logistical Regression. Read Vogt chapt. 11 (only pages 197-211) and Wallace, et al. (2008). Office hours for final projects. |
| #11 March 28 | Case study and Ethnography. Read Farmer-Hinton (2011) or new article. |
| #12 April 4 | Presentations |
| #13 April 11 | Presentations |

**Final Project due Friday, April 18th**
Appendix A—Assignments

Graded Assignment GA-1

Project Proposal

Due no later than January 29th, 11:55 pm
Posted on CTools in the Assignment Section Folder Labeled
GA-1 Project Proposal

For the PROPOSAL, here is what you need to include (see below). Please remember to include a header with your name and number the pages.

The file should be saved as Lastname_Assignment1. doc

1. DESCRIPTION OF RESEARCH ISSUE

Choose an issue or topic that is relevant to teaching and learning. Write a brief explanation of why this interests you and what you hope to gain or understand better through learning more on this topic. Try not to exceed one paragraph.

2. PLAN FOR GATHERING INFORMATION

How will you find and select the articles? In other words, provide details of how you will proceed, including relevant search terms for the online search)

3. Based on your database searching thus far, is there any specific assistance that you might need from me.

4. One reference citation in APA format. This does not need to be an article that you plan to use for your assignments or final project.
Graded Assignment GA-2


Due no later than February 19th, 11:55pm

Posted on CTools in the Assignment Section Folder Labeled
Summary of Assigned Article

Write a paper that summarizes the important components of the quantitative research article assigned (Mangen, et al., (2013)).

The paper MUST include the following categories (HINT: using them as side headings is a good organizational technique):

1) Research Problem
2) Review of Literature
3) Specifying a Purpose for the Research
4) Data Collection
5) Data Analysis and Interpretation.
   While you should discuss all the important results that the authors mention, you
   MUST pay particular attention to the results found in Table 2. Specifically, I expect
   you to explain the meaning of the Beta coefficients listed for the final model (3) with
   regard to their relationship to the outcome variable (reading comprehension)
   including information about statistical significance, if any.
6) Conclusions, Limitation, Suggestions for Further Research
7) Commentary

The paper can be as long as it takes for you to address the important components of a
quantitative research study. All in-text citations must be in APA style, and the bibliographic
information for the article should be included in a final section labeled Reference.

Again: The paper must be single-spaced and in 11-point type. Your paper must include a header
with your name and page numbers. The file should be saved as: Lastname_Assignment2.doc
Graded Assignment GA-3

Summary of Research Article of Your Choice

Due no later than March 19th, 11:55pm
Posted on CTools in the Assignment Section Folder Labeled Summary of Your Choice of Article

Write a paper that analyzes the important components of your research article. Using the Guide in Appendix B1/B2 is optional.

The paper MUST include the following categories (HINT: using them as side headings is a good organizational technique):

1) Research Problem
2) Review of Literature
3) Specifying a Purpose for the Research
4) Data Collection
5) Data Analysis and Interpretation
6) Conclusion, Limitations, Suggestions for Further Research
7) Commentary

The paper can be as long as it takes for you to address the important components of a quantitative or qualitative research study. All in-text citations must be in APA style, and the bibliographic information for the article should be included in a final section labeled Reference.

Again: The paper must be single-spaced and in 11-point type. Your paper must include a header with your name and page numbers. The file should be saved as: Lastname_Assignment3.doc

Please put a copy of the article in your Drop Box on CTools.
FINAL PROJECT REQUIREMENTS
[40% of your grade]
Due no later than April 18th, 11:55pm
Posted on CTools in folder “Final Project”

The Will and Belinda Yates Foundation has announced a request for proposals for grants to support teaching and learning. These grants will be small in size and awarded to individuals who express a desire to improve teaching and learning in schools. You will use the information you have gathered from your review of the scholarly literature to write the narrative portion of a grant proposal for an aspect of effective teaching and learning that you wish to explore further.

1) Your proposal should be divided into THREE SECTIONS – two short sections with a rather large section in between them. Total page length should not exceed 7 pages. Grant reviewers are busy people, so the more direct your writing, the better.

   a) **Section 1, Introduction:** Please include a description of topic you have selected and why you believe it’s important. This should take up no more than one page, but could be shorter depending on the succinctness of your writing.

   b) **Section 2, Review of the Research:** This is in essence a short literature review. You should incorporate the substance of the article that you have already summarized. However, you must also address at least four (4) other works, from reputable or peer-review journals (books are also acceptable) in order to clearly frame your topic and explain why it is important. Put the research in context and relate it back to your question or topic. Tell me what they author(s) did (sample, location), what the results were, and what they conclusions they drew. This section should take up five to six pages.

   c) **Section 3, Conclusion:** What sorts of barriers or difficulties do you think you might anticipate in the implementation of this program/reform, or how will the research/implementation be limited? Reiterate why it’s important. Any other comments?

   d) **Section 4, References:** This should include all the references cited in your grant proposal, in APA form. (This does not count toward your page limit.)

As always:

The paper MUST have a header with your name.
The paper MUST be paginated and single-spaced with 11-point type.
The file MUST be named: Lastname_FinalProject.doc
Appendix B

B-1
Guide to Reading and Analyzing a Quantitative Research Article  (This is a GUIDE. Not every article will address every question in this document. This is meant to help the reader zero in on the main ideas/points. If you aren’t finding it helpful, try simply outlining.)

1) Research Problem

a. What is the broad issue studied in the article?

b. What is the research problem that follows from the broader issue?

c. How does the author justify the importance of the research problem?

2) Review of Literature

a. How does the literature reviewed support the importance of the research problem? Give specific examples from this section of the article.

b. What are some of the major studies that the author summarizes? Is there any indication of “big names” in this field (e.g., is one author cited multiple times)?

c. How will the research reported in this article add to the body of knowledge about the research problem?

d. How does the author use past research to claim deficiencies in the current body of knowledge about the research problem?

3) Specifying a Purpose for the Research

a. What is the purpose of the research?

b. What are the research questions? If the author does not present them as questions, try writing them as questions.

4) Data Collection

NOTE: Some of the questions below apply more to studies that involve human subjects than those that utilize other sources for the data such as textbook, etc.

a) Describe the population from which the sample was drawn.

b) What kind of sampling was used? Does the author justify the sampling design? If so, how?

c) What were the variables of interest in the study? They may already have been identified in the previous section [Research Questions/Hypotheses].
d) How did the author measure each variable?

e) If existing instruments (e.g., tests, attitude measures) were used, did the author report the reliability? If so, what were the reliability data?

f) If the author created the instrument (e.g. survey, test), were the reliabilities reported?

g) How were the instruments administered? And when (if at multiple times)?

5) Data Analysis and Interpretation

Note: This section might be difficult for you to summarize. The categories below are suggestions.

a) What kinds of descriptive statistics does the author include? For example, means, standard deviations, percentages, correlations?

b) Taking one of the research questions (hypotheses), how does the author provide answers through the use of inferential statistics (e.g., t-test, ANOVA, ANCOVA, MANCOVA, correlation, regression)?

c) Focusing on one of the tables or figures, how does the author interprets the data in the table or in the figure?

d) For all other research questions, provide a summary of what the authors found.

6) Conclusions, Limitations, Recommendations for Further Research

a) What were the major results of the study?

b) Does the author admit to any limitations to the study? If so, what were they? If not, what do you think some limitations might be?

c) How generalizable are the results from this study? What does the author say? What do you think?

d) What suggestions does the author have for further research?

7) Commentary

Looking back over ALL of the parts of your quantitative research article, comment on the quality of the research and its potential contribution to your area of interest. What could have made the study better?
Guide to Reading and Analyzing a Qualitative Research Article (This is a GUIDE. Not every article will address every question in this document. This is meant to help the reader zero in on the main ideas/points. If you aren’t finding it helpful, try simply outlining.)

1) Research Problem
   a) What is the broad issue studied in the article?
   b) What is the research problem that follows from the broader issue?
   c) How does the author justify the importance of the research problem?

2) Review of Literature
   a) How does the literature reviewed support the importance of the research problem? Give specific examples from this section of the article.
   b) How will the research reported in this article add to the body of knowledge about the research problem?
   c) How does the author use past research to claim deficiencies in the current body of knowledge about the research problem?

3) Specifying a Purpose for the Research
   a) What is the purpose of the research? Or what is the central phenomenon to be investigated?
   b) How does the author handle the idea of research as an “emerging process” that is common in qualitative investigations?
   c) What is the overarching question to be explored?
   d) Are there any subquestions posed? If so, what are they and how do they related to the overarching question/central phenomenon?

4) Data Collection
   a) Describe the sample of interest to the study, and try to determine what kind of sample it is.
   b) Where did the author(s) collect the information?
   c) What information was collected and in what form (observations, interviews, documents, media). For each kind of information, provide a brief summary of how the author collected it. For example, if the information came from interviews were they group interviews, one-one-one, etc?
d) How were the data recorded?

5) Data Analysis and Interpretation

a) How did the authors organize and analyze the data they collected? For example, how did they code the data in order to explore for possible themes? If they did not provide sufficient detail, then it is fine to say this.

b) If the article is built around “themes,” then identify each theme and describe how the theme is substantiated by evidence from the data. If there are multiple themes (say, more than 5), then pick at least two themes and focus on a detailed presentation of each theme.

c) How does the author interpret the themes; that is, how does the author “step back and form a larger meaning about the phenomenon”.

d) Does the author tie the results to the research literature? If so, provide examples.

e) What suggestions does the author offer for further research?

f) Does the author admit to any limitations to the study? If so, what were they? If not, what do you think some limitations might be?

6) Conclusions, Limitations, Recommendations for Further Research

a. What were the major results of the study?

b. Does the author admit to any limitations to the study? If so, what were they? If not, what do you think some limitations might be?

c. What suggestions does the author have for further research?

7) Commentary

Looking back over ALL of the parts of your qualitative research article, comment on the quality of the research and its potential contribution to your area of interest. What could have made the study better?
B-3
Generic Article Summary Template

Author and Title, APA format

Overview and Purpose of the Research

Argument (What is the main claim the author is making about the relationship s/he is investigating?)

Background

Research Methods

Guiding Questions

Findings/Results  (Organized around the main questions the author is asking, the questions that guide the analysis. These are set out in the research methods or "what we are trying to find?" section.)

Conclusions