

**Syllabus**  
**Proseminar in Education II: Research in Learning, Cognition, Instruction**  
**and Development**  
**Spring 2012**  
**Tuesday, 4:50- 7:30**

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Office Hours: Tuesday and Wednesday 3:30-4:30 or by arrangement.

### **Overall Course Goals**

The purpose of this course is to learn about research in the areas of Learning, Cognition, Instruction, and Development: how it is conducted, how it is communicated, and how it evolves. Like most scholarly fields, education has its traditions, its norms and standards, and its methods of operation. There are some overarching themes, questions, and approaches to research that we will explore.

### **Specific Course Goals**

There are three primary goals in this course and a number of secondary goals. The primary goals are these:

1. To understand the kinds of questions asked by researchers in LCID.
2. To understand how research is conducted in LCID fields to address those questions.
3. To learn how to read the research literature in LCID.
4. To learn what the current important topics are in the field of LCID, and to gain an idea of the research base that underlies current opinion.
5. To develop the habits of mind of a critical researcher,

The secondary goals involve a number of skills and sets of knowledge that are requisite to becoming an active member of the educational research community. These include:

1. Reading the literature in the field, what are different kinds of articles one might encounter, how to be skeptical without being cynical, how to read technical sections of a research article, and how to glean from an article that which is important to you.

2. Writing for scholarly publication, including appropriate style conventions such as APA, MLA, or University of Chicago style.
3. Understanding how different research perspectives and disciplinary lenses can be focused on the same issue.
4. Becoming part of a research community
5. Preparing a research poster presentation

### **Course Readings:**

1. Required text: Green, J. L., Camilli, G., & Elmore, P. (2006). Handbook of Complementary Methods in Education Research
2. Style guide for your discipline (e.g., APA manual)
3. Additional readings available online at sakai.rutgers.edu

Note that this list is tentative and once I see who is in the class, these will be revised, so please do not print any readings beyond Sept 22.

### **Course Requirements**

The requirements in the course are directly related to the course goals. The following activities are required for the course:

#### Major Activity

The first set of activities all revolves around one scholarly activity. Each student will choose a topic that is currently important in his or her field of study and develop expertise in that field. You will collect the pertinent literature in the field and express your command of it in two different modes. These modes are:

1. A written summary. This will be a 20-30 page summary of the most important research studies and other scholarship on a topic relevant to LCID. This summary should strictly follow the publication format that is most widely used in your field. Five percent of this grade will be associated with turning in your outline and tentative reference list by 11/9/2010/ **30% of final grade**
2. Development of a poster for a poster session of your findings. This would be similar to what one would see at a poster session at a conference. **10% of final grade**

You may do this individually or in groups of two or three. You need to discuss your topic with me and get it approved. The assignment is the same regardless of group size however, you should be aware that a more substantial literature review would be expected for a larger group.

#### Secondary Activities

The remaining requirements for the course involve or are related to activities that researchers in education engage in on a fairly regular basis. These requirements are:

1. Passing the Institutional Review Board test for use of human subjects. **5%**
2. Determining the major journals in an LCID area, what they publish, and how they differ from one another. **5%**
3. Lead class discussion **10%**
4. Keep a Sakai blog of your reflections on the course readings each week. Respond to at least two of your fellow classmates blogs. You may of course respond to more, but try to vary who you comment on. These are due by 8:00 pm on the Monday before class. The grade will be based on both quality of posts as well as timeliness **10%**
  - a. As you read each article/ chapter, read it with a critical eye. Try to determine what you can take away that is valuable as well as the flaws. Try to think about how you can take something from another perspective and make it relevant.
  - b. In your reflections be sure to note at least 3 strengths about the readings, 3 weaknesses, and anything that you found provocative or at least interesting.
5. Read and reflect (in your sakai Blog) on two additional chapters from the *Handbook* and consider what issue or question in LCID this chapter might address. **10%**
6. Participation in discussions. Note that to participate, you must be in class. **10%**
7. Participate in the intellectual life of the university. Attend at least two colloquia at the university. These may include departmental brown bags, invited speakers, and/or dissertation defenses. Use your blog to document what you learned from the colloquium (no more than 1 page) **10%**

All course requirements must be completed by April 28, 2011. Any exceptions must be discussed with CHS or KW individually with a set time for completion of course requirements that must be documented in writing.

Date	Activity	Reading	Assignment
Jan 17	Course Introduction, Research Ethics	Green, Camilli, & Elmore (GCE), Chapter 3 and Intro for students	Introduce yourself by creating a blog profile in Sakai
Jan 24	<i>Learning Theories Overview</i>	Greeno, Collins, & Resnick (1996), GCE Chapter 45	Blog: What kinds of questions can one ask about learning?
Jan 31	<i>How does understanding develop?</i>	Rittle-Johnson et al. GCE Chapter 12, Chapter 33	
Feb 7	<i>How can we understand what people learn?</i>	Smith, Maclin, Grosslight, & Davis (1997)  GCE 31, 32	Blog: Reflectons on readings, coments on other blogs (due each week)
Feb 14	<i>Understanding Learning, continued</i>	Moje et al (2004)  GCE 16, 21	Major journals
Feb 21	<i>Provocative Topics 1: The direct instruction vs. inquiry debate: Arguments using literature reviews</i>	Kirschner, Sweller, & Clark (2006), and responses (EP : Schmidt, Loyens, Van Gog, & Paas (2007), Hmelo-Silver, Duncan, & Chinn (2007), Kuhn (2007), Sweller, Kirschner, & Clark (2007)	
Feb 28	<i>How can one measure learning?</i>	Mohan, Chen, & Anderson (2009), Wilson (2009) , <b>Gitomer???</b> <b>Pellegrino?</b>  GCE 22	
Mar 6	<i>What does it mean to become an expert?</i>	Hmelo-Silver, Marathe, & Liu (2007), Wineburg (1991)  <b>Add KEITH's paper here?</b>	Paper topics due
Mar 13	<i>How can we understand learning processes and collaboration?</i>	Herrenkohl & Guerra (1998) GCE 13	IRB due
Mar 20	<i>How do people learn in informal settings?</i>	Crowley et al (2001), Barron, (2006),  GCE 10	Paper outline and tentative reference list due

Mar 27	<i>How do youth form their identities? How do learners take on epistemic agency?</i>  Room 347	Rubin (2008), Damsa et al. (2010)  GCE 6,17	
Apr 3	<i>How do we design appropriate conditions for learning? How can technology support teaching and learning?</i>  Room 124	Zhang et al, (2009), Boling (2008)  GCE 11	
Apr 10	<i>How can we support the development of disciplinary reasoning?</i>	Etkina et al., (2008), Chinn & Malhotra (2002), Engle & Conant (2002)	
Apr 17	<i>How can we understand teachers and teaching?</i>	Francisco & Maher, (2010), Goldin, 2000  GCE 46	
Apr 21	Provocative Topics 2	TBD	
Apr 28	<i>Posters</i>  124		

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