Educational Studies 350:
Teaching and Learning

Trinity College Fall 2007 Final version
F 1:15-3:55pm LSC 138-139
http://www.trincoll.edu/depts/educ

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Office Hours: Tues 2-4pm and Wed 10am-Noon

Description: This upper-level undergraduate seminar will explore theoretical, policy, and practical issues of teaching and learning. Some of our fundamental questions are:

-- How do students learn? And how do they learn in different ways? What are the philosophies behind different pedagogical approaches, and how do some claim to promote more learning than others? Are these claims justified?

-- What should be taught in the curriculum, and why? How do different interest groups shape these decisions?

-- How can we tell when learning is really happening? What are different assessment strategies, and what are their strengths and weaknesses in telling us about the quality of student learning?

-- Who should teach in public schools? What kind of preparation is necessary? Do traditional and alternate route teaching preparation programs make good policy?

-- How can schools be designed to enhance more meaningful learning? Does the recent charter school movement represent hope -- or hype?

-- How do debates on all of these questions influence the nature of teachers' work and classroom life?

For the community-learning component, teams of students will propose, design, and teach inquiry-based science curriculum units for 5th graders, in partnership with three Hartford public elementary schools. Science will be incorporated into the 5th grade Connecticut Mastery Test (CMT) in spring 2008, which creates an opportunity for us to understand the connections (and disconnections) between educational policy and classroom practice, while also helping students to learn more science.
Prerequisite: Ed 200 or juniors/seniors from any major with permission of instructor.

Reading to acquire:
-- Bruce Fuller, ed. *Inside Charter Schools: The Paradox of Radical Decentralization* (Harvard University Press, 2000). Available in paperback.
-- Additional readings will be made available in seminar.

Assessment:

Response paper to readings	(2 x 10 each)	20
Curriculum proposal		comments only
Curriculum project		20
Classroom learning observation exercise		15
Teaching & learning self-evaluation paper		15
Charter school design project		20
Overall contribution to the seminar (peer evaluation)		10
TOTAL		100

Be advised that adequate work earns a C, good work earns a B, and outstanding work earns an A in this class. Students are expected to engage in academic honesty in all forms of work for this course. If this is unclear to you, ask me for clarification.

The penalty for overdue assignments will be 10% for every 12-hour period beyond the deadline, with exceptions granted only for documented medical or family emergencies.

Please notify me during the first week if you require any special accommodations.

Your classmates and I expect your regular and prompt attendance at every session, since we rely upon our collective efforts to succeed in this team-based seminar.

NOTE about seminar schedule:
Since this seminar involves real-world situations, the instructor reserves the right to modify the syllabus schedule at any time.

Sept 7th
Syllabus introduction; Inquiry-based science learning model: electricity and circuits
Organize teams for science curriculum projects;
Response papers on next week's readings assigned; DUE Wed September 12th at 9pm

Sept 14th
Read: M. Suzanne Donovan and John D. Bransford, eds. *How Students Learn: History, Mathematics, and Science in the Classroom.* (Washington, DC: National Academies Press, 2005).

- "Introduction" (by Donovan and Bransford)
- Chapter 10, "Teaching to Promote the Development of Scientific Knowledge and Reasoning about Light at the Elementary School Level" (Magnusson & Palincsar)

Read: "Go With the Flow -- Teacher Manual," Curriculum Embedded Performance Task, Elementary School Science (Content standard 4.4). CT Department of Education, undated. < http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=320890>

Read on-line: "2004 Science Framework" (aka "Core Science Curriculum Framework," Connecticut Department of Education, adopted October 2004.
< http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=320890>
-- focus on "Core Science for Grades 3-5," pp. 13-16

In seminar: Response papers; Curriculum proposal assigned, DUE Wed Sept 19th 9pm

Sept 21st
Read: "K-5 Science, Grade-Level Learning Expectations," CT State Department of Education. (Draft, September 2007).

Read: "Gearing Up for K-8 Science" [PowerPoint] and "CMT Blueprints" [Format of Elementary Science CMT], CSDE, Fall 2007. [**Located on our Blackboard site]

Read on-line: "Connecticut Mastery Test (CMT) Fourth Generation Language Arts Handbook," (2006), CT Department of Education.
<http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=320866>
-- Introduction
-- Part II - Reading Comprehension
-- Part IV - Editing and Revising
-- Part V - Direct Assessment of Writing

Read on-line: "Connecticut Mastery Test (CMT) 4th generation Mathematics Handbook," (2006), CT Department of Education.
<http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=320872>
-- General information
-- Grade 4 (or Grade 5) -- Sample Items

Read: Sean Cavanaugh, "Evolution Loses and Wins, All in One Day," *Education Week*, November 15, 2005.
<http://www.edweek.org/ew/articles/2005/11/16/12evolution.h25.html>
username _____; password _____

In seminar: Science curriculum design assigned; DUE Friday Oct 5th in seminar

Sept 28th
Read these sample assessments and evaluate whether they address CT GLEs:
www.nces.ed.gov/nationsreportcard/ITMRLS
- see NAEP 4th grade conductor open response; 4th grade soil erosion open response

TIMSS Released Items
timss.bc.edu/timss2003i/released.html
- see TIMSS 2003 4th grade science questions
  page 17 (earth processes - conceptual understanding - river, mountain, ocean)
  page 31 (forces & motion - reasoning & analysis - mass of brick on scale)
  page 48 (magnetism - conceptual understanding - polarity)
  page 53 (earth's structures - conceptual understanding - rocks and rivers)
  page 60 (electricity - conceptual understanding - building a circuit)
  page 69 (earth in solar system - factual knowledge - lunar cycle)
  page 72 (ecosystems - factual knowledge - food chain)
  page 73 (earth processes - conceptual understanding - water vapor)
  page 87 (light - conceptual understanding - sun and shadow)

Read: Cory Buxton and Eugene Provenzo, *Teaching Science in Elementary and Middle School*, (Sage Publications, 2007), selected chapters.

In seminar: Refining curriculum project designs; coordinate orders from Arbor Scientific (http://www.arborsci.com) and Edmund Sc

Oct 5th
New location for the first hour -- Library Blume lab, level 1
Curriculum projects due at beginning of seminar

In seminar: Orientation to video recording and downloading footage into hard drives via iMovie (available on Macintosh computers).

In seminar (2:45-3:30): Q&A with Liz Buttner, K-8 Science Consultant, CSDE

Oct 12th
In seminar: Refining curriculum project designs and preparing to teach

Orientations to meet teachers at our three partner schools scheduled with each team this week

Oct 19th and 26th - no regular class sessions - see below

In place of the two class sessions above, each team teaches its science curriculum project, while being videotaped, during two Friday afternoons at designated school
Dwight Elementary School _____
Mary Hooker Environmental Studies Magnet School _____
Maria Sanchez Elementary School _____

Special event:
Optional, but strongly recommended visit to Jumoke Academy Charter School in Hartford, Nov 2nd, 9:30-10:45am

Nov 2nd
Different location for the first hour -- Library Blume lab, level 1

In seminar: Introduction to digital video editing, using iMovie & iDVD

Ungraded assignment: Create a 5-7 minute video of highlights from your two class sessions, to be presented to seminar on November 9th, and used by other teams in their student learning evaluation papers.

Read: Bruce Fuller, ed. *Inside Charter Schools: The Paradox of Radical Decentralization* (Harvard University Press, 2000), selected chapters.

Teaching & learning self-evaluation paper assigned, DUE Wed Nov 7th at 9pm

Nov 9th
Different location for the first hour -- Library Blume lab, level 1

Teaching and learning evaluation papers discussed in seminar; students show excerpts from their classroom videos

In seminar: *Through Another Set of Eyes: Techniques for Classroom Observation* (ASCD, 1987), selected chapters and video exercises.

Classroom learning observation exercise assigned; DUE Wed Nov 14th at 9pm

Nov 16th
Charter school design project assigned: Goal -- To write a persuasive funding application to the State Board of Education for an elementary charter school, located in Hartford, to open in September 2008 and be evaluated at the conclusion of its third year. To be approved, the plan must demonstrate how your charter school will raise achievement levels beyond current levels for Hartford students.

*This assignment is a *simplified* version of CSDE Charter School Application, 2004. All quotes were drawn directly from this document. See original and additional resources: http://www.csde.state.ct.us/public/der/cmip/charter.htm]

See also CT Statutes on charter schools, Sec. 10-66aa
http://www.cga.ct.gov/2007/pub/titles.htm

Students may work alone or with up to 2 partners, but all subject to same guidelines. Follow the suggested format below. Show preview in seminar on Dec 7th (5 minutes with visuals; comments only), and submit final written document on Monday December 17th at 3pm via Blackboard

Nov 23rd No class - Thanksgiving break

Nov 30th
Read: Negar Azimi, "Why Teach for America?" *New York Times Magazine*, September 30, 2007.

Teach For America "Resources for Researchers" (read TFA's summary of Mathematica 2004 study below); http://www.teachforamerica.org

Paul Decker et al., "The Effects of Teach for America on Students: Findings from a National Evaluation." Mathematica Policy Research report, June 9, 2004, executive summary. **See also full report on TFA website: http://www.teachforamerica.org/research/studies_student_outcomes.htm

Megan Blumenreich and Lori Rhodes, "Lessons from Teach for America Alums." Unpublished journal submission, 2007.

In seminar: Video excerpts from, "Is 'Teach for America' Good Policy for Hartford?" Discussion sponsored by the Ed Studies Program, Trinity College, April 24, 2007.

In seminar: Discussion with two novice Hartford teachers: Kate McEachern (1st grade student teacher at Noah Webster MicroSociety Elementary Magnet) and Carolyn O'Sullivan (5th grade new teacher at Dwight Elementary and TFA Corps member)

Response papers on readings and discussion above DUE Tuesday, December 5th

Dec 7th
In seminar: Student presentations of charter school designs

In lieu of a final exam, the final paper is due on Monday, Dec 17th at 3pm.