ED 269: Principles of Learning for Teaching  
Stanford University  
Winter Quarter 2001

Instructors:
Prof. Linda Darling-Hammond  
Prof. Nailah Nasir  
Dr. Karen Hammerness  
310 CERAS  
232 Cubberley  
309 CERAS  
723-3555  
726-0966  
813-1541  
ldh@stanford.edu  
nasir@stanford.edu  
hammerk@stanford.edu

Ira Lit  
Daisy Martin  
Suzanne Orcutt  
109 CERAS  
109 CERAS  
204 CERAS  
365-6429  
831-427-2814  
724-5858  
iralit@stanford.edu  
daisym@stanford.edu  
suzanne.orcutt@stanford.edu

Essential Questions
What is learning? What does it mean to learn?  
What does it mean to understand?  
What do theories about learning and understanding mean for how I teach my students?

Course Description
This course addresses the relationships among three fundamental aspects of the educational process: the subject matter of the curriculum, the diverse capabilities of students, and the teacher's responsibilities to design and implement instruction. We view the challenge of teaching as the creation of bridges between the knowledge embodied in the subject matter, on the one hand, and the minds and motives of students, on the other hand. In various content areas, we will ask: What is learning? What are the general processes of learning and thinking? How are these processes influenced by aspects of student language, culture, prior knowledge, and experience? What counts as knowledge? How does its character vary across or within disciplines? How can teachers transform their subject matter knowledge into representations that help students draw on their own resources to construct and transform knowledge of their own?

These are tough questions, of a sort rarely answered once and for all, no matter how many years one has been teaching. They are tough because they occupy that contested territory between theory and practice, where both perspectives are needed but neither can suffice. They are tough because, at a theoretical level, they demand the contributions of many disciplines, such as psychology, linguistics, anthropology, and philosophy. They are tough because at a practical level no two situations are quite comparable, and the helpful maxim for one setting becomes balderdash for another. Learning to teach thus demands that we weave delicate webs of the general and the particular, finding ways to enrich our personal experiences through studying the experiences of others, seeking theoretical insights that give meaning to what we do, or raise skeptical questions about what we think we know.
In this course we will engage these challenges through readings, demonstrations, discussions, activities, assignments and lectures about broad principles of learning, in addition to reading and discussing cases of teaching. We view the variety of "case methods" as a vehicle for connecting useful theory with accounts of practice and its problems. You will do many things with cases this quarter. You will read, analyze, and discuss cases of teaching written by teachers and researchers who have written analytic accounts of their practice for their own benefits and as a contribution to others. You will also read and discuss cases written by some of your predecessors in STEP, who have left these accounts as a legacy to you, even as they used their case writing as a form of disciplined reflection to learn from their own experiences. You will write cases of your own teaching, and will use those cases as an occasion for examining aspects of your work. You will comment on and critique each other's cases. You too will leave a legacy of cases.

Texts:
The course readings include substantial excerpts from three books:


All of these books are on reserve in the library. There are also 2 volumes of collected readings: including a *casebook* and a *sourcebook*. The casebook sections include a variety of cases of teaching from elementary and secondary classrooms across content areas and diverse contexts of culture and community. The sourcebook includes theoretical, research, and policy papers on teaching, learning, language, culture, and curriculum.

Assignments (detailed instructions for each assignment will be distributed in class):

1) **ANALYSIS OF LEARNING (10%)**

Write a brief (2-3 page) reflection on your own learning. In general, what learning conditions and teaching strategies do you think most enable you to learn effectively? Now think back to a specific time when you tried to learn something but felt you could not deeply understand it or become proficient. What was the nature of the learning situation? What impeded your learning? How did you feel? Can you imagine what would have allowed you to learn more effectively? Now think back to a time when you successfully learned something that was especially challenging. What was the nature of the content or skill that you were trying to learn? What made it difficult? What finally enabled you to succeed in mastering these difficult ideas or skills?

2) **ANALYSIS OF TEACHING (10%)**

Write a brief (2-3 page) analysis of a teaching video that we examine in PLT from the 4 lenses presented in *How People Learn*: learner-centered, knowledge-centered, assessment-centered, community-centered. In what ways does the teacher engage learners’ interests and connect to their prior knowledge, experiences and ideas? organize the knowledge to be acquired so that it is
accessible? assess what the students know and are learning? construct a community in the classroom? Evaluate the way in which the teacher scaffolds the learning process. What specific steps does s/he take to ensure that learners are able to understand the material to be learned?

3) **CASE REPORT OF INSTRUCTION (40%)**

A case is a first person interpretive narrative account of a sequence of events of teaching and learning taken from your own experiences during these first few months of teaching and examined through the lens of research on learning and teaching. The case you write for this course will be a case of subject-matter oriented teaching and student learning, a “curriculum case.” You will also be expected to solicit at least two commentaries to accompany your final draft. One commentary must come from a fellow STEP teacher (which means that you are expected to write one commentary on the case of a colleague). Other commentaries can come from experienced teachers, community members, administrators, or even students. Cases generally run five to ten pages plus appendices (e.g. samples of student work). Commentaries rarely exceed a page or two. Your case and its associated commentaries will become entries in your STEP portfolio. Examples of STEP-written cases and commentaries are in the STEP curriculum library.

4) **COMMENTARY ON A CASE (10%)**

As noted above, your commentary on a colleague’s case will be part of your responsibility as a peer reviewer. In your commentary you will provide an additional perspective on the case from your own vantagepoint as a teacher and a researcher.

5) **REFLECTIVE ESSAY (10%)**

After writing your case and receiving feedback from faculty, STEP colleagues, and others who write commentaries, you will write a brief reflective essay on your case, commentaries, and course readings. This essay will allow you take a metacognitive stance toward your teaching practice and offer the opportunity for you to ask what you have learned from your case and the discussions around it. We will provide the guidelines for the essay in class.

6) **PARTICIPATION (20%)**

Your attendance, timely completion of all assignments, and participation in class discussions and activities, including group projects, class presentations, and case conferences, are an important part of your contribution to class.

**DUE DATES**

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<tr>
<th>Date</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>Jan. 15</td>
<td>Analysis of learning due</td>
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<tr>
<td>Jan. 22</td>
<td>Analysis of teaching due</td>
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<td>Jan. 29</td>
<td>Initial summary of case (1-2 pages) due</td>
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<td>Feb. 12</td>
<td>First draft of case due for peer and instructor review</td>
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<td>Feb. 19</td>
<td>Peer review of case due, using rubric</td>
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<td>March 5</td>
<td>Penultimate draft of case due to instructor</td>
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<tr>
<td>March 12</td>
<td>Case conference</td>
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<tr>
<td>March 20</td>
<td>Final case, two commentaries, and reflective essay due by 5 pm</td>
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POLICY ON GRADING AND COURSE COMPLETION

The course is graded on a letter-grade basis. A’s will be given for outstanding performance on all assignments and active participation in discussion sections. A grade of C represents marginal quality on all assignments. When assignments do not meet the standard to which they aspire, students will be offered the opportunity to revise. INCOMPLETE GRADES WILL NOT BE GIVEN! It has been our sad experience that an incomplete grade given out of kindness in March becomes an open wound as graduation looms near in June. Keep up with the assignments. There will be no exceptions other than those associated with family tragedies or serious illness.

CLASS SCHEDULE

January 8 Overview: How Do People Learn?
[To be read before class]
Darling-Hammond et al. (2002). The Learning Classroom, Chapter 1: “Introduction to learning theories.”

January 15 How Can We Organize for Learning?

Case Reader: Erin Hayes, “A case of teaching pre-designed curriculum” (Social Studies)

Due: Analysis of Learning

January 22 Learning Theories: How Does Learning Happen?

Darling-Hammond et al., The Learning Classroom. Chapter 3: “Cognitive processing.”
*Case Reader*: K. Barriger, “The Learning Web” (Mathematics) K. Gee, “Teaching evolution: A case of overcoming misconception” (Science)  

**Due: Analysis of Teaching**  

**January 29**  
What Does It Mean to Understand?  

Darling-Hammond et al., *The Learning Classroom*, “Transfer”  

**Casebook**: Read the case in your content area –  
T. Chao, “Quick Flash Each Other!” (Foreign Language)  
G. Corti, “Missing the transfer” (Social Studies)  
M. Ellis, “Demystifying pi” (Mathematics)  
L. Giffin, “A Punnett square problem” (Science)  
A. Reilly, “A case of shortened perspective” (English)  

**Due: Brief summary of your case event**  

**February 5**  
How Do We Develop Understanding? Starting with the Learner  


**Casebook**: C. Narez, “Beyond cultural relevance” (Foreign Language)  
M. Tovar, “Not everyone plays the same game” (Social Studies)  

**February 12**  
How Do We Develop Understanding? Building Scaffolds for Performance  

Darling-Hammond et al., *The Learning Classroom*, “Cognitive Apprenticeship”  

Casebook: Read the case in your content area –
R. Brushett, “Buying into ‘the myth’” (Social Studies)
J. Bryan, “Genetic diseases, icebergs, and apprenticeships” (Science)
A. Lee, “Looking beyond the surface” (Math)
J. Lee, “Scaffolding for a divorced part of my curriculum” (English)
M. Linderman, “I want that you learn the subjunctive” (Foreign Language)

February 19 How Do We Develop Understanding? Connecting to the Content

Darling-Hammond et al., The Learning Classroom, “Architecture of Knowledge”
See also Exhibit 4.1 “Joan’s Goal-Setting Form” and “Writing Workshop Unit Goals,” pp. 96-99.
Case Reader: S. Bissell, “Text, lies, and audiotape” (English)
I. Tseng, “Short-circuiting the central nervous system” (Science)
T. Ziegler, “A case of complex instruction” (Social Studies)

Due: First Draft of Curriculum Case

February 26 How Do We (and They) Know What They Know?

Darling-Hammond et al., The Learning Classroom, “Metacognition”
Casebook: C. Maley, “Multiple choice testing” (Social Studies)
S. Herzman, “How do teachers know when students understand vocabulary?” (English)
M. Phillips, “Is ‘same’ treatment ‘fair’ treatment?” (Science)

Due: Peer Review of Curriculum Case
March 5  How Do We Apply This to Teaching?


Due: Penultimate Draft of Curriculum Case

March 12  What Have We Learned? [LAST CLASS]
Case Conference: Presentations and discussions of full case studies

March 20  Due: Final case study, two commentaries, and reflective essay on case and commentaries