Week 4. Section planning: board use and interactions
One of a teacher's most useful tools is 'chalk tech.' We will briefly discuss aspects of board planning and then break up into pairs to "workshop" each other's plans. Some of you will demo-teach with your board plan, followed by a discussion of intent versus execution in terms of student learning.

Goals for this week:
- To better make use of board planning as a tool for structuring a lesson, both to aid your delivery and to enhance student learning.
- To plan boards that will hang together and make sense for students after section.
- To develop an analytical framework for lesson planning so as to be able to plan a lesson that incorporates board use, oral communication, and interactions to enhance student learning.

Group exercise
In pairs, exchange your board plans. Take 5-10 minutes to look over each other's plan silently. As you do, answer the following questions:

1. Note particular choices you think the teacher made in planning out the lesson. Is the lesson structured in a particular way? (e.g., general principle followed by example)

2. Does the blackboard plan hang together by itself? Can you understand it without any additional aids? Describe specific aspects of the plan that help it hang together. At what points does the plan not hang together by itself? Mark these points on the plan.

3. Think about how you would structure interaction around this lesson plan. Jot down particular points and some questions to ask.

Once you have all looked over each other's plans and answered the above questions, discuss each plan in turn. Go question by question, **always** letting the person who wrote the plan to answer first about his or her own plan. Come up with a list of points that will help improve each other's plan, and write these down.

Specifics tips for improving the plan:

Blackboard teaching
As you watch each teacher, think about and jot down comments on the following:
1. Describe some of the choices the teacher made in his or her use of the blackboard.
2. Describe how the teacher combined board use, oral communication, and interactions. What was the intent? How about the execution?
3. Does the board hang together by itself? Why or why not?
4. Note anything you would consider doing differently.

Reflection questions (for your own benefit)

1. How did the blackboard planning exercise go for you? Which aspects were difficult?

2. How did the blackboard plan inform your presentation and organization of the material?

3. How have you structured student interactions in conjunction with the blackboard plan? Are there particular patterns to where you have planned interactions?

CS 365: SEAS Teaching Practicum
Assignment 4 – due Feb 21, 2011

Please complete all parts of this assignment. If you have any questions, please don't hesitate to contact the course staff.

Part 1. [Student types] Read pages 51-59 in the *Torch or the Firehose* on different student types (from 'Invisible Students' to `Problem students and students with problems'). Also read the section "Styles of Learning" in the review article handout out in class -- we encourage you to read the rest as well, or at least skim it, as it will be relevant when we deal more fully with student cognition. (You can ignore the bits in the last two paragraphs that are specific to veterinary medicine; the rest of the article is of general applicability.)

Part 2. [Teaching to all types of students] Here are some stereotypes of students you may have: *invisible students, international students, loud-mouth students, silent students, dependent students,* and *`know-it-all' students*. For at least 3 of these student types, or others you come up with, think about a particular student-driven situation that can arise (e.g., the dependent student asks you to go over a concept that everyone else in the class already understands). For each of these *situations*, come up with a possible approach that is *not* given in the Torch. Please email your situations and approaches (e.g. a short paragraph for each) to cs365-staff@hcs.harvard.edu along with Part 3 by Monday evening.

Part 3. [Interactive lesson] Prepare a highly interactive 5-minute lesson with plenty of opportunities for student/teacher communication; we'll use these in our role playing next week. Think about some difficult *classroom* situations (as opposed to the above student-driven situations) you may face as a teacher, e.g., students are talking amongst each other, you forget what you were going to say, a fire alarm goes off, etc. For two of these situations, write down a possible strategy and email them to us as in Part 2.