

## PROFESSIONAL DEVELOPMENT WORKSHOP · FALL 2005 ASSIGNMENT 2

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### Reasons for writing class notes

I write class notes for several reasons: (1) The students and I will get more out of the class session when I fumble less. I don't want to be up in front of the room deciding what to say — I always want to be either (a) talking to them, (b) letting them think about a question I've just asked, or (c) letting them talk to me. In particular, I prepare examples (more than I need, in case things move more quickly or slowly on any given day). I have the answers I expect. I don't need to always be reading from my notes — in fact, usually I don't. But I can look at my notes to keep myself on course. (2) It would be easy to extemporize — but for me, it is *not* easy to extemporize *and* cover what I want to cover within 50 minutes. For me as a student, 50 minutes can seem like quite a while. For me as an instructor, the 50 minutes *always* whizzes by. By having notes prepared, I know I'll get to everything I want to say that day, instead of spending my time gassing about one item. (3) Having notes reminds me of all those things I might otherwise forget — e.g. collecting the homework, announcing a quiz, etc. At the top of each day's lesson plan, I have a list of things I want to write on the board before class starts. This includes the homework being assigned that day, upcoming events, etc.

### How my class notes should relate to the book

They needn't adhere exactly. My foremost goal is to help my students to pass the final. If they've done that, I believe they'll be well-prepared for their subsequent coursework. Success on the final will be possible if they know how to problem-solve. The homework problems are taken from the text, so I should at the very least be sure to use the same definitions as the text uses. My examples don't always come from the text — in particular I try to give them something not identically from the text. As a student, I become bored when I see an instructor copying the text to the chalkboard. Having said that, what drives the writing of my lesson plan (see also "plan of plans" below) is: (1) Reading the section, finding the main goals. (2) Trolling the text and workbook for examples to use or modify. (3) Selecting and working the homework problems. (4) Asking myself (a) what skills will the students need to be able to solve those problems on their own, and (b) what things are likely to trip them up. (I can only guess on this last part — I don't really know until I grade the homework, and find out where their issues are.)

### What do you hope to accomplish by having your students take tests?

(1) I hope to prepare them for the final. There is a big difference between being able to perform at one's leisure (e.g. homework) vs. being able to perform within a time limit. I

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give quizzes with the same goal in mind. (2) I want to assess their strengths and weaknesses. I give homeworks and quizzes with the same goal in mind, but with quizzes and exams in particular, I want to know what is time-consuming for them. (3) Since this university uses grades, I need to have numbers to use as grades.

### **Describe your process for constructing a test.**

I've constructed one exam so far. To do that, I first went back through the text and made a list of all the key points to be covered: domain, range, zeroes, etc. I then decided approximately how many problems to give. To decide what those particular problems would become, I looked at (1) the test-review section of the workbook, (2) homework problems, (3) the 110 final-preparation document from Spring 2005, (4) exams written by a couple other graduate students. From that point, I verified the exam in a few ways: (1) taking it myself, (2) having my supervisor look at it, (3) giving it to a fellow student.

### **Response to this week's readings**

I enjoyed this week's readings, just as last time. *Teaching First* is a great resource. Among the ideas I gleaned this time were the following:

Rishel's "survivalist tactics" are essentially the way I write my lesson plans. I've extended this since I first read this section of Rishel at the beginning of the semester — I now have a single sheet of paper which is my "plan of plans", which is a list of steps I go through when writing a lesson plan.

I like Rishel's point about taking time for questions. It's not enough just to lecture moving forward — I need to stop and ask for questions about what I've just said. My preferred way is to ask questions at each step — making the entire lecture a dialogue as much as possible. (Although I have slipped into monologue mode sometimes.) Additionally, I split time on each topic into what I say before the homework, and what I say after. The before part is what I want them to know, and what I think they'll use. The after part is based on grading the homework and seeing what actually tripped them up. (I always learn something from grading.)

I also like Rishel's point about varying the difficulty of exam problems. I didn't do much of this for the first exam — my foremost goal was to cover the main topics, while writing something I thought they could do in 50 minutes. As a result, I didn't write any problems which I thought were particularly difficult. For the next exam, though, I'll try to vary the difficulty of problems a bit more.