# PROFESSIONAL DEVELOPMENT WORKSHOP · FALL 2005 ASSIGNMENT 1

#### JOHN KERL

# Outline of day 1

I did some brief chit-chat of the form "Welcome to the U of A". I asked everyone how they liked the 8:00 a.m. course time, in a successful attempt to get a few smiles. This took just a few minutes.

I handed out a pre-printed questionnaire I had prepared; it took them 5 or 10 minutes to complete. The questionnaire asked for demographic information (name, academic year, major, previous math courses, math courses they expect to take after 110), contact information (e-mail addresses for administrative-drop notification), and a question about expectations. For the latter, I left the question quite vague — I wanted to know what they expected would need to happen in order for them to be successful. Most said things such as "study hard" and "seek help". A few expressed their fear of math. One individual, on the other hand, listed only one expecation: clear instruction. Thus, it is clear that most students see the responsibility for success being largely or entirely in their lap, while at least one believes that his success is solely my job.

I spent a few minutes giving some tips about the differences between high school and college, taken from the TA training manual. Instead of wording this punitively, I told them that (a) 110 students often perceive the material as being easy for the first few weeks, then becoming harder; (b) while the material may be old, the expectations may be new. I phrased this in terms of the fact that 110 isn't a terminal course (as 105 is), so we are building skills for the future, learning not only to do algebraic manipulation but also to see how our answers make sense in context. Since I am someone who spent a dozen years between my undergrad work and my PhD studies, I felt free to talk about how I've seen mistakes propagate through an organization, and become more costly to fix the farther they go undetected. I suggested that while sometimes we get in a hurry and feel we don't have time to check our work, in fact we don't have time not to. (I followed up this rather pompous speech by making two arithmetic mistakes within the hour!)

About 15-20 minutes were taken by discussing the course policy.

I put student A, question 1, of the Boston College handout from TA training up on the board, and asked them how many points (out of 3) they would award. Most said they would give 2 points, and I agreed. Then we came up with a few different ways one could catch such a mistake. This took about 5 minutes.

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I took the last few minutes do discuss some algebra skills, e.g. asking if  $\sqrt{x+y} = \sqrt{x} + \sqrt{y}$  and why or why not. This was an attempt to get them talking. (I started section 1.1 at the beginning of the next class.)

Throughout everything I talked about, no matter how it might have seemed that I was communicating information to them and they needed to receive it, I made a point to ask questions very often. I wanted to set the tone, from day 1, that I'm not just doing chalk-and-talk. There was always some way to do this—e.g. instead of just saying "No extra credit", I first asked "Are you accustomed to having extra credit?"

## What TA training suggestions were helpful

What was *not* helpful? Everything we discussed in TA training was invaluable. Probably the single most invaluable suggestions were (1) to ask form of question — no matter what! — every few sentences. This keeps them involved. (2) The seven-second rule — after asking a question and hearing silence, I found that if I waited a little longer, I'd often get something.

### Things in the reading that might be helpful next semester

I didn't read Rishel's book until after the first day. One thing I will do differently next time is to give an overview of the course. They did get the syllabus information (provided by Scott), but it would have been nice to do it verbally.

#### Surprises

I was surprised by how quickly the time went by! I was also surprised to find that I have an astronomy major and two engineering majors. A student athlete is also the most eager participant in the class. (And, she knows her algebra!) This busts a stereotype.