

Lessons Learned from Teaching -- Edward Sobiesk, May 2006

I have four semesters of teaching experience in each of the below areas:

- an introduction to computing course (IT105)
- an intermediate level Information Technology course (IT305)
- a combined experience involving three different upper level Computer Science courses

The most important lessons I have learned from these experiences are:

1. **Less is more.** This applies to learning objectives, course content, and the amount of material scheduled for each lesson. In order to truly affect someone's mind, you have to repeat lesson material, often in different ways and on multiple graded events. When teaching, you need to have the flexibility to modify your lesson based on the student's reaction to the material.
2. **Create inspiring homework.** If you get a student engaged in the course material, there is no telling how much learning might occur. Ensure you structure the lessons and graded events based on what outcomes you want the students to achieve. Make it clear to your students what you want them to learn/accomplish in the course. Use Bloom's Taxonomy to develop goals at various learning levels.
3. **Teacher influence is a paradox.** I believe that the single greatest influence on a student's impression of a course is the instructor. And yet, I think the performance of a student in a course is based almost entirely on the student. So it is important to realize as an instructor what you can and cannot affect. In the end, you are facilitating the student's journey – and if you can make it a journey that continues beyond the end of your course, you have really accomplished something.
4. **Think like a student.** Look at course material from the perspective of a student – i.e. is something going to be perceived as fair, meaningful, and leading to learning, or is it just busy work that checks a block without any real learning. Time yourself on all graded events, both in-class and out-of-class – assume it will take a student twice to three times as long as you to accomplish something. Thinking like a student will lead to student buy-in on the relevance of the course material and the fairness of the evaluation methods, which will lead to increased learning.
5. **Teaching is not an additional duty.** We express our priorities by how we spend our time. Spend yours preparing to be the best teacher possible. Master the lesson material so well that you can present it in several ways and are also capable of deviating from it.
6. **Lead by example.** I feel we most strongly influence people by the day-to-day example we set: the climate we create in a class or meeting, the standards we expect and enforce, and the individual contact we make both in and outside the classroom. I encourage people to think about the instructors they admired most and to try to achieve something similar.
7. **Love your students and value the opportunity to teach to them.** Learn cadets' first names, activities, and learning styles. In the end, teaching is an affair of the heart.