My Objectives as a Teacher

As a teacher, my goals are to help students learn more effectively by providing them with the tools to improve their own ability to learn and think critically. This is expanded in the two points below:

Helping Students Learn how to Learn: The most important skill a college student will develop is the ability to learn how to learn. How you best absorb information, how to use educational resources most effectively, and how to teach yourself are the most useful concepts a student will learn. It is my goal as an instructor to facilitate this as best as I can.

"You don't know what you don't know until you know you don't know it": Another goal as a teacher is not only to expand the knowledge of my students but also to provide an environment where students can begin to use their critical thinking skills to learn how to discover more knowledge on their own. It's impossible for students to know that they don't know something until teachers provide the means to expanding their knowledge. I believe this best comes in the form of supplemental material, applied problem solving examples, and introduction to advanced concepts. I would have never dreamed of the ability to derive the equation for the volume of a cone until my physics teacher provided with the tools and knowledge I needed to discover it on my own.

Teaching Methods and Strategies

As an engineering teacher, I believe that there are two critical concepts that need to be emphasized in college courses today: fundamentals and real-word examples. All students have the capacity to learn advanced concepts without a strong background in a subject. However, it is undeniably easier for a student to comprehend material when they posses a strong knowledge in background material. This is why it is imperative that core courses are taught in such a way that students not only understand fundamental concepts, but are also able to apply those concepts to more abstract problems and situations. In engineering especially, real-world examples are critical for students to both understand why they are

learning something as well as to provide situations where students can think critically about, and solve real-world problems. By attempting to apply techniques learned in the classroom, students can find out if they truely have a grasp on the material.

Technology in the Classroom

Technology is more a part of the students' lifestyles that ever before. College students spend on average over 13 hours a week sending text messages. As teachers I believe that it is our job not to shun this potentially burdensome technology but to embrace it. I believe that it is important to use technology ("clickers," laptops, smart phones, etc.) in the classroom because students relate to it and it can be an extrodinary tool if used correctly. For example, instead of asking students to summarize what they have learned at the end of a class period, I would suggest having them compose a 140 character or less Tweet.

Teaching Evaluations and Adaptations

Teachers must be willing and ready to adapt to changes, problems, road-blocks, and feedback throughout courses. One thing that I have found to be very helpful throughout this process is to provide an extra question on tests, quizzes, or assignments. Asking questions like "what would you change about this assignment?" for an inconsequential extra credit opportunity motivates the students to give feedback which in turn provides me with the opportunity to adapt to different classes and learning styles. Another key element of feedback during the course of a class, especially when computers are involved, is the speed at which a problem is completed. By breaking problems/assignments into smaller deliverables I can gauge which students are struggling throughout a single class session and what teaching methods work best for a given group of students.