

Throughout my years of teaching a variety of subjects, mostly in the computer science and engineering fields, have given me the time and experience needed to create a solid teaching method. I myself have learned a lot along the way which has allowed my perspective to evolve. The purpose of education for me is to provide students with knowledge they can apply in real life situations, while providing an environment where they feel safe and comfortable to learn. When choosing subject matters to teach, I select topics in which I am confident in and which also peak my interest. I find that when a professor is interested in a topic and knowledgeable enough to speak freely and answer questions as they arise, students absorb the material quicker and show more interest themselves. I also feel a professor needs to be self-aware of their knowledge-base and capabilities.

For students to feel comfortable in any class setting, I prefer to teach in conversation, as opposed to talking over students or in terminology that is hard to understand. Teaching computer courses that range from basic computer concepts up to advanced computer science and computer engineering courses, it is important to know your audience and communicate effectively.

My goal at the end of the day is to teach students how to learn, not just what to learn. I find this boosts curiosity and assists students with the ability to help themselves. They typically will be happier because of a greater sense of accomplishment, knowing they are capable of helping themselves. I find satisfaction as a teacher when a student, comes into class on the first day thinking they know everything, and leave my course knowing so much more than they thought they would learn and now keep an open mind when learning in the future. This goes back to having students understand that the learning process never ends, there is always room for improvement, and there is always room to grow.

Maintaining an open mind has also encouraged student involvement, creativity, inquisitiveness, and confidence, because students will freely ask questions without the fear of judgement. My aspirations are to aid in the learning process regardless of the level of understanding a student starts with. I feel it is important to determine student capabilities on a class by class basis and sometimes on a one by one basis. Not every section is the same and not every student is the same, even when the material is.

I use a variety of teaching and testing modes for each class to attempt to incorporate all student needs, which ultimately helps me to reach teaching my goals. I have found that it helps the learning process to create life experience examples where students can apply what they have learned to real world experiences. I also use an array of simulation exercises and tools based on subject matter and course delivery (eg. on campus or online). Some of these methods include:

- Simulation exercises and tools
- Hands on labs
- Discussion questions relating the course material to real life events (ie. using lecture material with current world events)
- Using real world examples students can relate to in their day-to-day life, which stems from assessing a student in the beginning. (ie. if I have a class full of programming students, I can relate examples to their field)
- Interactive lectures
- Group assignments
- Case studies & research projects

I find that using a variety of these methods, course materials stay fun and interesting. Successful lab simulations and practical assignments, I also find, boosts student confidence levels and ultimately grade averages.

To assess each student's skillset and understanding, I perform student self-assessments on the first day of class in addition to maintaining open communication and student input. I also perform periodic group assessments for group coursework. To maintain continuous assessments throughout the term, I proctor traditional exams and quizzes, along with practical, lab style, exams. I also try to help students understand there is not always one right answer to a question, especially in computer programming and engineering. Programming is like writing a paper, everyone has their own style, while overall function may be the same. I also provide a mid-semester grade checkpoint with a 'what-if' analysis, so students can evaluate their performance. If they are slacking, this provides a good window of opportunity for improvement.

Part of a continuous learning environment is evaluating how I can improve my teaching skills and methods. Student evaluations should be viewed as possible chances for improvement. Maintaining a continuing education in the technology field is essential to stay on top of what's new. I can usually know when I have taught effectively when I can see that 'ah-ha' moment students have when they understand a difficult topic. I maintain a positive relationship with my students and colleagues by simply respecting other's needs; this may include understanding various cultural, professional as well as personal needs. Encourage students to speak freely and comfortably. I also want to ensure they know that there is no silly question, if they want to know something, the question is worth asking.

The most important aspect of teaching for me is to maintain a safe, comfortable environment, while maintaining student happiness and keeping material challenging. The

methods and tools I use to achieve these aspects vary based on course delivery method, either virtual or in-person. I have been both a virtual student as well as in-person and understand how learning methods and student needs are different based on the delivery method. I am also fortunate enough to have not only virtual student experience, but also a virtual professor and administrator and online course creator. I have a unique background of experiences, making me a great candidate for online instruction.

Teaching, for me, is understanding the student experience. Every class is different, every student is different, regardless of major. This understanding, allows me to create a unique learning experience to draw each student in by relatable experiences and references. For me, creating the most efficient classroom possible.