

Teaching Philosophy

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People should be lifelong learners, not because they have to be, but because they wish to be.

Learning is a Sisyphean task. Regardless of how much one knows, there is always new knowledge to be gained. Philosophers have expressed this idea for millennia, with my favorite iteration coming from Chaucer: “The life so short, the craft so long to learn.” But although it is impossible to learn everything, it is still exciting to try. The quest for knowledge brings joy, and the mastery of a subject brings satisfaction. Throughout my life, my greatest ambition has been to share the delight and fulfillment of learning with others through teaching. Yet to teach well requires that a teacher be more than just knowledgeable; they must be organized, enthusiastic, and empathetic. Moreover, in my experience the best teachers are those who are students themselves; those who listen to their pupils in order to better engage with them. With these ideals I plan to design and lead courses that are both enlightening and inspiring.

There are many types of teachers, but in my experience some are better than others. Excellent educators make learning entertaining and gratifying. Having had the honor of learning from some amazing instructors myself, I have witnessed concrete methods of successful teaching. Furthermore, by augmenting these practical teaching skills with my own study of pedagogical research, I have collected tactics for productive and engaging instruction. I have had many chances to apply these strategies in the classroom, as a peer tutor, teaching assistant, and instructor for college computer programming courses, and can confirm that they work. These following techniques are what constitute my teaching philosophy, and as a professor I will continue to develop, employ, and perfect them.

I start with concrete learning objectives. Effective teaching begins with effective planning. Preparing specific learning outcomes first leads to a solid course structure, on top of enabling students to easily check their progress towards course goals. When I am choosing learning objectives, I prefer to use the revised version of Bloom’s Taxonomy [1] as a guide. This not only helps me select tasks that test various levels of student comprehension, but also create varied assignments to keep students engaged.

I strive to engage students. Students engage with content they can relate to. To connect with my students, I begin my lectures with something familiar, and gradually move towards the unknown. Besides making course material more interesting, this technique facilitates learning by easing students into new information. For instance, when I teach students the virtues of cautious software development, I begin with the familiar fable of the tortoise and the hare. Students already know the fable, and so the message becomes intuitive: expedience leads to failure; prudence begets success. Establishing this message first eases my way in to giving students specific examples of careful programming practices.

I teach with worked examples. Humans excel at recognizing patterns, and as such we are hardwired to learn by example. Moreover, people become more invested in a skill when they can see it in action, or better yet, apply it themselves. This is why I encourage students to follow along as I live-code solutions to programming problems, either on their own devices, or by asking questions. Solving problems one-step-at-a-time enables students to grow their knowledge at a comfortable pace, while also enjoying the small thrill that comes with unlocking new skills.

I foster a positive course climate. I actively support students with a safe, respectful, welcoming, and supportive atmosphere. Students who feel included are more excited to learn, and more comfortable to engage with the material in unique and creative ways. I cultivate student creativity with class discussions, and by giving students the chance to receive extra credit by proposing and implementing their own project ideas. Seeing these ideas helps me discover what truly excites my students, which in turn helps me to continue connecting with them through teaching.

References

- [1] A. LW *et al.*, *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. 2001, p. .