

Brent Yorgey
Statement of teaching philosophy
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My teaching philosophy revolves around a single premise: people don't remember facts; they remember beautiful ideas that help them make sense of the world.

This comes across in my classroom in several ways. First, I try to illustrate topics in fun and creative ways: with an appropriate picture or diagram, with props, with audience participation. I have taught middle school students about finite automata using magic markers and giant sheets of paper on the floor for them to walk around on. I've taught recursion to high schoolers with a bowl full of marbles and a ball of twine. I use slides when necessary but keep them as simple as possible, with very little text and lots of illustrations. In short, I try to stimulate many different modes of learning, and help students develop intuition for big ideas, rather than getting lost in a maze of dry facts.

Second, I emphasize self-discovery. Students remember ideas they discover for themselves, because they understand the motivation and how the idea fits into a larger context. I didn't tell the middle school students that they were learning about finite automata—I just let them play! The sorts of content-driven, lecture-based courses I teach can make this difficult, but I try my best to engage students' faculties of discovery by assigning open-ended projects, encouraging questions, and interspersing lectures with small-group or individual problem solving sessions. When I taught AP Computer Science, I would often introduce new topics in the form of a challenging problem to be solved, then sit back and watch the students hash out a solution among themselves. Their ten minutes of false starts, arguments, insights, and eventual triumph was worth more than ten hours of lecturing.

In an environment emphasizing creativity, exploration, and self-discovery, failure is an unavoidable—even necessary—concomitant. I therefore gravitate towards non-traditional methods of assessment that encourage and allow for both failure and unhurried reflection, such as take-home, open-book tests; interactive, oral examinations; and group projects. I also recognize my own constant failings as a teacher, as I explore subjects along with my students and discover (sometimes successfully and sometimes less so) how best to guide them. This recognition informs how I strive to interact with students experiencing failure of one sort or another, from a missed question to a missed semester: fairly, not shying away from the failure or its consequences, but with compassion, grace, and second chances.

Above all, I try to convey an appreciation for beautiful ideas, not to receptacles of knowledge but to human beings. A student will almost certainly forget all the details of a proof or definition or technique. But if they remember the beautiful nugget of insight it represents, and where it fits within the larger context of the subject—then I will have truly taught them something.