

Eric Stade Statement on teaching

My teaching philosophy is simple, and is as follows. Good teaching comprises three main elements: hard work; communication; enthusiasm.

The first of these is, I believe, as relevant to successful teaching as it is to success at anything else. Perceptions that there is some kind of *mystique* to being a good teacher ignore, in my opinion, the importance of hard work.

It might take all day to prepare a particular Calculus I lecture. It might require hours in the library to research a historical reference that is only tangentially related to, but could help illuminate, a Fourier analysis lecture. It might necessitate an afternoon visit to the Municipal building, to pick up a copy of the “Modal Shifts in the Boulder Valley” survey, for use in an Intro Stats course. It might mean extra office hours when difficult material is being covered. It might mean *grading homework!* But my own successes at teaching (I submit that I have had some; I hope that this dossier attests to that), as well as the observations I’ve made of teachers I have admired, all indicate to me that hard work is an *essential* component of good teaching.

The next element, communication, is so obviously important to good teaching that it is, I think, often taken for granted. Specifically: a good teacher should not forget that *speaking what’s on your mind* is not, by a long shot, the same as *conveying those thoughts to other minds*. I make a *strong effort* to always consider the following: others will not understand what I say with the clarity that I (usually) do, unless I make a *strong effort*, before I speak, to anticipate how others will interpret what I say.

The “hard work” element comes into play here as well. I don’t consider it a waste of time if I have to rewrite the same sentence, or proof, a dozen times, or even have to work on it, in my mind, over the course of a couple of days, before it becomes part of my lecture notes.

Ideally this attention to communication should, to an extent, actually *obscure* itself. That is: the lectures that result should flow in a natural way that suggests the ideas are really not so hard to communicate. I strive to make my lectures flow in this way.

I stress to my students that they too need to consider the importance of communication. For example, after grading a set of homework in which their ideas are not so well expressed, I often lead them through a thought experiment. Imagine, I ask them, strolling down Pearl Street and seeing, in front of the beatnik bookstore, the person of your dreams – the light of your life, the yin to your yang, the garam to your masala. Naturally, you wish to profess to this person your undying affection, everlasting devotion, and most groovy kind of love. But when you speak, it is in poorly formed half-sentences; you dangle your modifiers; you stutter; you say what’s on *your* mind but don’t convey it to the other person’s. The result is that this person, in spite of your most glorious and wonderful intentions, thinks you want a quarter for a cup of coffee. (Oh yes, this is Pearl Street. Let’s say \$3.25 for a decaf skinny caramel mocha macchiato.)

My students don’t think it’s funny either, but they *do* get the point. In fact, I *always* notice an improvement in the presentation of their subsequent assignments. (This usually lasts for a few weeks, after which I need to tell some other silly story with the same message.)

Regarding the third element—enthusiasm—listed above, my opinion is not simply that it’s impossible to make material interesting without it. Rather, I take the somewhat more

positive (and, logically speaking, the converse) view: namely, enthusiasm *is* contagious. In other words, if you are (sufficiently) excited about what you are teaching, then the students *will* be more excited about what they are learning.

I do not hesitate to raise my voice, to bang on the board and say “THAT is cool!” when what’s on the board *is*; to pause halfway through a long, detailed proof to say “*man*, this is fun,” and so on. I also make sure, before giving a lecture, that I am “stoked” by the material. In this way I can be confident that my presentation will encourage the students to be stoked as well.

Again, there’s hard work involved here too. If I write a lecture—or, for that matter, an assignment or exam—that doesn’t stimulate me, I tear it up, literally, and start again. (I am perhaps sometimes deluded, but not so much as to believe that my students will find my exam problems as stimulating as I do. I DO believe, though, that they will learn more from questions that are thoughtful and thought-provoking.)

But it’s not *all* work, and no play. To the contrary, the efforts I make to be *interested in*, and therefore *interesting with*, what I teach, keep me amused. I can’t imagine becoming jaded, or blasé, or frustrated, even if I teach first semester calculus (for example; this is not a request of any kind) every year for the rest of my career. This is because I couldn’t *stand* being this way. I would rather spend the time to learn new things to say (there are *always* new things to say) about the material, than to become BORED. The latter is to be avoided at all costs.

I hope I’ve had some success at helping my students avoid it. I hope this dossier indicates how I’ve done so. I hope it’s not too boring.