

Why Are We So Slow to Change the Way We Teach?

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Some thoughts about change—not so much what to change, as the process of change, offered in light of its slow occurrence.

Yes, lecture is a good example. In a recent survey, 275 econ faculty who teach principles courses reported they lectured 70 percent of the class time, led discussion 20 percent of the time, and had students doing activities for 10 percent of the time. The article cites studies in that field from the mid-'90s reporting similar percentages. Maybe some other fields have changed more, but evidence supports a continuing reliance on lecture in many fields.

However, lecture isn't the only example of where we're slow to change. Many aspects of teaching—course design, approaches to testing, assignments, and grading—have also changed little. Granted, some faculty do change, a lot and regularly, but not the majority. The question is, "Why?" Here are some possibilities I've been considering.

Change is harder than we think. We are so vested in our teaching, and, like our students, we are error averse. Try something new, and there's a risk of failure. There's risk with what we do every day, but it feels safer to go with the tried and true. And most of the time, what's new has to be revised, tweaked, and further refined. First time through, it doesn't go as smoothly as what we're used to doing.

The work in cognitive psychology on the use of deliberate practice to develop expertise is relevant here. It's practice with specific characteristics: it involves difficult tasks that require focus and effort to achieve. Developing expertise also involves work on specific components of the task. There is a need for feedback from a coach with the ability to analyze the performance and propose how it can be improved. And the learner must reflect on both the performance and the feedback. As the name implies, deliberate practice means planned, purposeful practice, a consistent and concerted effort to improve.



Faculty tend to underestimate the complexity involved in changing teaching. They approach it with a Nike “just do it” attitude. That can-do attitude is spot-on, but the approach to change is too often piecemeal and reactive. “Oh, that sounds like a good idea. I’ll try that.” Or “Gee, that might be a potential fix,” for whatever problem is occurring. The hodge-podge infusion of new techniques, interesting ideas, and promising strategies circles around effective teaching rather than moving toward it with a map and designated route.

The “just do it” approach implies implementation before consideration of goals—what the change will accomplish and how to figure out whether it does. A range of issues bear on the challenges of assessing change. Many of us have unrealistic expectations for success. We want the change to work perfectly right from the start and be a “top 10” learning experience for every student and in every course. We are noble in our aspirations but unrealistic about outcomes. Instructional changes don’t work perfectly, we discover. But then, how often do we assess the results beyond our view of how it went down? In private we question our ability; in public we pin problems on the approach and/or students.

We make change harder by going it alone. Do we discuss details with anyone beforehand? Do we contemplate the possibility of a coach or mentor? Do we solicit feedback from students? I’m thinking that more often we implement and assess changes in isolation.

Uncomfortable with the implementation and disappointed in the results, we give up on the change, which rounds back to how vulnerable failure makes us feel. Wieman and Gilbert describe a large grant-funded project that involved the implementation of changes in 160 courses. They report that “roughly 100 hours” of practice were needed to switch to using new teaching methods effectively. I’m not sure how that figure was derived, but it makes clear that trying something on the fly once or twice is not likely to have the enduring effects we envision.

How we make changes isn’t the only reason so much of what’s done in the classroom stays the same, but it’s a reason we can do something about.

References: Goffe, W. L., and Kauper, D., (2014). A survey of principles instructors: Why lecture prevails. *Journal of Economic Education*, 45 (4), 360-375.

Wieman, C. and Gilbert, S., (2015). Taking a scientific approach to science education, part II—changing teaching. *Microbe Magazine*, 10 (5), 203-207.

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