

Evaluation of Our Courses

Were I to ask you whether your college or university has course evaluation, you would likely say, “Of course we do!” I might come back with “Of course, you don’t!” How could we have opposite responses to the same simple question? How can students say such opposite things about the same instructor in the end-of-semester surveys? So often, it’s a difference of expectations. My expectation is that course evaluation should evaluate all important aspects of the course. But the surveys cannot do that.

Originally, the surveys were devised by students to give feedback to instructors. Later, the results were often published in a campus magazine. That’s okay. (Admittedly, the course guide was commonly used to locate easy courses and ones offering high grades.) By now, the whole process has likely come under the scrutiny of administrations. This is okay, too; a university *can* be held liable for libelous reviews in a course guide published under its auspices.

What is not okay is that administrations started to use the surveys to provide data to support personnel decisions, viz., hiring, promotion, and salary increments. I’ve heard it at my university (JHU). It then became wise to have the questions selected and worded carefully, to maximize the reliability of the surveys. With the help of consultants, ambiguous questions were made clear; ones that students could not accurately answer were removed. When a consultant came to JHU, I had gone over our survey, feeling that half the questions were defective. Not-so-obvious ones are prompts like, “I learned a lot in this course,” and “The lectures helped me to learn the material.” The consultant confirmed that students lack means to judge how much they learned. What can *partial* learning mean to them?

The surveys provide information only about certain things. Yet some administrators still insist on the importance of further improving the surveys. They do have a point; there is no easier way to get data about instructors than polling the students at the end of the semester. Even the idea of asking the students later, when they might have some perspective, is reasonably dismissed as impractical. But that does not justify inflating the significance of the survey outcomes.

Most annoying is the use of outcomes from freshmen and sophomores in “service” courses. These students often have a foot, or even their head, in high school; they tend to view the instructor as the primary source of their learning, like a high school teacher. The instructor might well aspire to get them used to the idea of the textbook as source. Bowing to student wishes, he or she might instead do the following: a) try to ensure that the students “get” the basic points in the classroom; b) give lectures that can be followed without preparation, building the subject slowly from the bottom up; c) give lots of examples in class; d) drop topics from the syllabus when convenient; e) give light homework assignments

and use the assigned problems as models for the exams; f) give practice exams that are similar to the actual exams. (Does this sound familiar?) I point out that the preceding is somewhat antithetical to the ideals of education in college; the *Hopkins Freshman Planner* (p. 7) contains a formulation. My own: the student is to 1) gain the ability to use what has been learned in new situations; 2) accept that most of the learning takes place outside of class. Thus the student is responsible for learning the material.

I think that the instructor’s main responsibility is to promote actual learning. (I still have ideals.) The former JHU president once asserted that there is too much emphasis on teaching and not enough on learning. The surveys cannot provide reliable information about how much the students learn. They just reflect student impressions of us as teachers.

The surveys are slanted, asking students to judge the instructor with *students’* models of education, e.g., (a)–(f) above, as paradigm.¹ Student performance is largely independent of instructors’ ratings under such a model. If following it does not improve learning, why are we so beholden to the model? Is it now a crime to make students learn some easier things largely on their own, so as to increase self-reliance and the level of learning? *It’s okay if you rate well!* Would it be okay if we succeed? We mustn’t disappoint our “clients” in the sciences and engineering, who want ideal #1 upheld.

These are times when inadequate learning of mathematics is widespread. Possible misuse of the survey outcomes, as assessment of our effectiveness in education, encourages us to demote the importance of the ideals, to seek short-term profits in the form of good ratings.² Ask your untenured colleagues. From one of mine, a postdoc, “It is fine for you to teach for the mathematics; I have to teach for the evaluations.”

In sum, the way the surveys (may) get used pushes us to dumb down our courses. This idea is neither novel nor mine. The surveys cannot assess the most fundamental aspect of a course, namely learning. Thus, whenever they bear the name “Course Evaluation”, the surveys carry the fraudulent claim of evaluating the course.

P.S. True course evaluation is very difficult, I admit. The reader is invited to look through

<http://www.math.jhu.edu/~sz/Education/Orient/>

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¹Item (a) is all right; item (c) relieves the student of using the book to provide examples. The others reduce aspirations.

²A general tenet of mine applies here: A system is encouraging the behavior it is seen to reward.