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EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Phone: 202-387-7171. Cable: *Advancesci*. Washington. Copies of "Instructions for Contributors" can be obtained from the editorial office. ADVERTISING CORRESPONDENCE: Rm. 1740, 11 W. 42 St., New York, N.Y. 10036. Phone: 212-PE 6-1858.

Good Teaching

The growing emphasis on research, the availability to academic personnel of external grants which support a wide variety of activities other than teaching, the lure of "freedom from routine duties" (although teaching should never deteriorate into a routine duty), and the use by some institutions of criteria for advancement that seem to overemphasize research or even that superficial evidence, publication—all of these factors have of late tended to underemphasize the role of good teaching.

But what is a good teacher? Is he the popular teacher? Is he the one who gives flashy and spectacular lectures? Is he the one whose students average highest on departmental exams? Is he the one whose presentations are so tidy that note-taking is easy? Is he the good fellow with the best jokes? Is he a disciplinarian, or is he lax about standards and performance? Does he trouble the stupid but inspire the really able?

The answers all depend on the orientation of the one who replies. By all odds the most popular physics teacher I have ever known was a sweet gentleman who just could not bring himself to fail the letters and arts students who flocked to his sections to work off their science requirements. One of the most popular lecturers in a social science subject I have met with was a man whose smoothly presented lectures were almost as well organized as the textbook. He was famous for finishing every lecture with a polished phrase exactly as the bell rang.

On the other hand, one of my own great teachers in high school was an exceedingly strict Latin teacher. Perhaps he was not loved, but he certainly was respected—and 55 years later I can still scan Vergil.

My very greatest university teacher stopped one day, in the middle of a long and complex proof of a fundamental theorem in potential theory, looked at the confused and badly written mess he had put on the blackboard, said "Well, boys, something is wrong"—and walked out, leaving us to save ourselves.

So before you decide whether a teacher is good, ask, good for what? The purposes should vary greatly, from the broad intent of survey courses and the exploratory excitement of introductory courses to the stimulating depth of graduate courses. Is the criterion of goodness the mechanical success with which information is transmitted, the sympathy and warmth with which a young mind is led to unfold—or the influence a great character can have on the whole life of a student?

I do not think a teacher can be judged by weighing publications, but I also think no teacher can be successful unless he is alert to the new knowledge in his field. In many instances it is absurd to expect a teacher to be a scholarly producer of original research; but it is fatal not to require him to be alive to his subject.

I am sure that some evaluations of teachers by students have been made with serious purpose, but I profoundly disbelieve the results. It will not even work to ask alumni—presumably wiser, surely older, and hopefully more eclectic—which teachers they remember with greatest admiration.

I think the only useful judgment concerning university teachers comes from their immediate working colleagues. The administrators should be aware of student opinion, of course, and in some cases it may be useful. But fellow teachers, through their skillful and intimately informed judgments, will come nearest to recognizing good teaching. The immediate colleagues of a teacher will know what the students really think, for they will have obtained this information in effective informal ways, will have available the evidence of student records, will be aware of the general community opinion, and will have put all this information through the sieve of their own competence.

—WARREN WEAVER, *Alfred P. Sloan Foundation, New York*

Science

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Warren Weaver

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