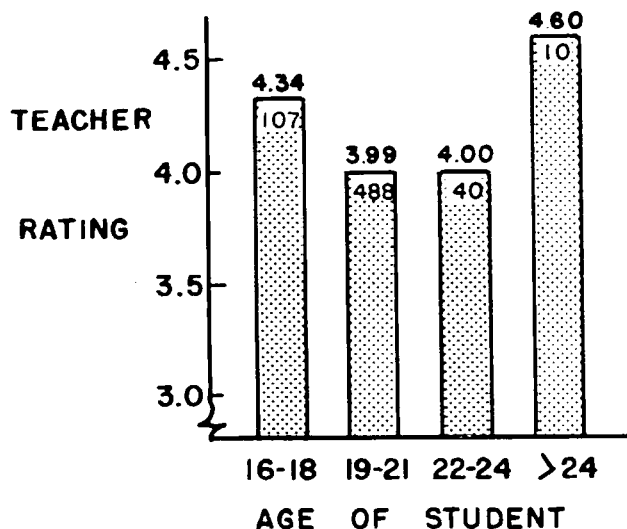


Fig. 6 The Association of Crop Science Teacher Rating with the Age of the Student. (The decimaled and associated non-decimaled numbers are the rating and respective numbers of students.)



teacher by an administrator should reflect recognition by the latter that such ratings are significantly influenced by various attributes of the enrollees as follows:

- (1) Agronomy majors rate the course and teacher significantly higher than do Agricultural Engineering or Animal Science majors; and the latter two groups are a large component of the total enrollment in the course.
- (2) Students required to take Crop Science rate the course lower than those who elect the course for credit. The implication is that an instructor's rating with a high component of students taking the course as required might not be justifiably compared with the instruc-

tor rating of another course which has a high component of elective students.

- (3) Freshmen rate the teacher and the Crop Science course higher than juniors and seniors.
- (4) The Crop Science teacher rating is associated with class attendance — students with high attendance rated the course highest.
- (5) The Crop Science teacher and course rating were highly associated with each other.
- (6) The use of administrators of generalized overall university teacher and course ratings per se to compare the teacher and instructional performances of the teachers directly with each other, without careful and discriminatory guidelines based on the attributes of the students in their classes and the specific rating profile and place a given course has in the program of study, is certainly discouraged and perhaps even very unjust.

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INVITATIONAL PAPER

What Price Evaluation?

Max S. Marshall

Many years ago a medical student, president of his class, finished our course with a carefully computed rating of D. The rank was obviously in error, as wild a price mark as some of those at the nearest grocery. The mark did not match the man. With all its biases, immediate human judgment was a certain improvement on the mechanized alleged value.

The next time around we shifted gears. On the opening day we agreed to guarantee a B for everybody, adding

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that the bottom might fall out for anyone who did not make a reasonable effort, and to discard price marks entirely, none on work done, on our records, and so far as possible none in our heads. The results were startlingly pleasing, and in 1931 this was a novel idea. No longer turned in to be stamped with price marks, notebooks seen at benchside were genuine and improved. Examinations had been dropped, but students wanted them back to test themselves, read for comments, not code marks.

Despite pressures, we chose never to go back to those estimates of value. They were not needed for transferring students, probations, dismissals, scholarships,

promotions of faculty members, honors, or any of those other matters in which the almighty price mark is unfortunately often the focus of interest. Today the concept of evaluation has become a fetish. The word appears more often than even such hackneyed words as "relevant," "involvement," or "distinguished professor." Is our conclusion that this fetish, evaluation, is a mistake itself, an error? Facing a new class today, I would still drop all indices of relative value.

Meaning of Evaluation

Evaluation means to put a value on something. Values, however, which seem so detached and precise when one looks at the price marks, are about the most flexible things in the world. A glass of water is invaluable in the desert, modest in value if one is thirsty here, and of no value in putting out a good fire. Variations in mark-ups, seasonal values, all values change over a wide range as people and circumstances vary. The flexible and complex prices put on cotton or wheat are simple compared to putting a value on a neighbor. No two persons will agree on the value of a congressman, a curriculum, or a salary.

In education there are three main elements: students, teachers, and subjects. The subjects in agriculture are fairly clear, despite the wild fantasies of curriculum committees. The other two elements are people. A person is a hopelessly complicated piece of machinery from birth to death encased exclusively within his own hide. Unable ever to escape, he is destined to be subjective all that time. True, he can examine a bale of hay, an object, but all basic appraisals or thoughts of it will remain subjective. The so-called value put on the hay depends entirely on its value to the person concerned, at the moment and with his point of view. If the value of hay is purely personal and widely flexible, think how complex the price mark becomes when considering a person. For example, is everyone you know competent in his or her job? Or is the Peter Principle a better guide, that no one is competent because everybody rises a rank above his limit of competence? What price evaluation?

We lack time to discuss the virtues of tests and examinations in teaching. They can have many such, some discoverable only when all thought of using them as appraisals is discarded. Concentration on appraisals has brought about the so-called objective examinations, the true/false and multiple choice types so widely used today. Not only do these deviate from the goal, teaching, but they are far from objective. Who makes the choice of questions, decides how they shall be worded and interpreted, and chooses the preferred answers? The results provide neat, precise, and reproducible figures, proof that $2 + 2 = 5$. Why do some careful users discard a few questions proved by the results to have been open to doubtful interpretations? Do students acknowledge that a false idea thought to be true is more serious than the recognized ignorance which produces blank answers? Not while the guessing game is as good as it is with such

questions. Puzzles like this start debates, but the point is that aspects of value, that fetish of evaluation, turn thoughts away from learning and teaching.

Because we have to make a number of decisions every day we get in the habit of setting values, personally. We have to make choices from when to get up to when to turn in at night, thereby setting relative values which pertain to us personally at the moment. There is nothing absolute about the decisions, except that we have to decide or just sit still. On campuses and elsewhere, the habit of evaluation has attained a most dubious glory, especially when putting price marks on teachers, students, and teaching. The reason such vague words as "excellent," "good," "better than," and so on get by is that when someone uses them we translate them. The words say only "I like it." Your "good" I think of as my "good," but they are two different things. Convert that "good" into words that say something and immediately the fact that values are personal, circumstantial, and notably different becomes apparent.

Positive Points to Consider

Let me end this brief summary of many years spent in developing a growing antipathy to excesses in evaluation on a positive note. It takes time and conscious effort to eliminate, as far as possible, thinking in terms of values, but it is well worth the effort. The secret is to try to think descriptively, avoiding terms which involve personal appeal.

First, unequivocally students and teachers are individuals, forever consigned to their own private lives. One person may shear more sheep in an hour than another, yes, but that is a specific statement. One learns to say specifically what one means when speaking of people, using description rather than codes or words



which try to signify relative values as personally viewed. Maybe the fellow who shears fewer sheep does a better job or is more reliable. Or maybe he is slower of movement, makes less effort, or has poor clippers.

Second, preserve and develop human judgment and use it only when needed. However fallible and precarious it may be, it can admit its inevitable biases and try to avoid fallibility. In trying to control judgment one moves in the direction of unreachable objectivity. On the other hand, most so-called evaluations, with their neat tables and alleged but false probabilities of accuracy, simply mask a subjectivity which is less guarded than frank human judgment. Your own judgment, for instance, will tell each of you that the teacher you recall with pleasure is likely not to be the one your associates would recall. That teacher matched you, two individuals, and your judgment reflects that fact. As a teacher he or she was as sure to be unique as were you as a student. This teacher was not "good"; he or she was forceful, kind, or had some named qualities which impressed you.

INVITATIONAL PAPER

Meeting Demands For Accountability in Teaching

Robert R. Shrode

Increasing demands for accountability are being imposed upon colleges and universities both from within the institutions and from the society at large which colleges and universities are designed to serve. In the area of teaching, these demands are especially difficult to meet, because the evaluation of teaching is such a complex problem for which no one has yet proposed a solution which is universally or even widely approved. Nevertheless, we must evaluate teaching, even though many who have tried to do so, and many more who have not tried, vehemently contend that the task is an impossible one.

No one is more conscious than teachers themselves of the highly subjective nature of teaching. Input units (dollars) can be known, but output defies any such objective measurement. Impressively large numbers of student credit hours are being generated, but critics of education (critics who may be uneducated but quite influential) are inclined to scoff at such numbers, contending that they do not meaningfully reflect productivity. Since the product of teaching cannot be measured or weighed objectively, we have no choice but to make continued effort to use as well as we can the only measurement available in most situations, opinion. The fact that most, if not all, of the information we can obtain concerning the effectiveness of teaching is subjective infor-

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Third and, time considered, last, our responsibilities or jobs belong center stage. The job of the student is to learn and understand, not to appraise his teachers. The job of a teacher is to help along this learning and understanding, not to arrive at a battery of ranking code marks. Do you realize that the seemingly simple task of arranging 10 students in order of alleged merit requires a choice of exactly 3,628,800 possibilities, and 11 times that many if we add one more student? It is time to draw a line between the kind of problems which have realistic answers and those which can produce no more than illusions of values, generalities which lack any real meaning.

The old saying has it that "there is so much bad in the best of us, and so much good in the worst of us, that it hardly behooves any of us to talk about the rest of us." If students and teachers will forget one another and both concentrate on the tasks in front of them, a number of those problems now suffering the illusions of evaluation would find both answers and relief.

mation does not mean that we cannot be objective in our efforts to assess that information. Fortunately, the methodology for such objectivity is available to us.

Initiation of organized, systematic efforts to evaluate teaching is something that we, as teachers, should want to undertake, the first and most important reason being that such efforts will contribute to improvement of teaching. Secondly, public knowledge of such efforts and of the fact that they are serious, deliberate, and organized is likely to satisfy and quiet many of our critics who are very general rather than specific or precise in their criticism. Most open-minded people tend to be

