

ED 022 450

JC 680 322

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EVALUATING COLLEGE TEACHING.

San Jose State Coll., Calif.

Pub Date Dec 61

Note-8p.

Journal Cit-Curriculum Reporter Supplement; n1 December 1961

EDRS Price MF-\$0.25 HC-\$0.40

Descriptors-COLLEGE TEACHERS, *EFFECTIVE TEACHING, EVALUATION TECHNIQUES, *INSTRUCTIONAL IMPROVEMENT, *JUNIOR COLLEGES, *STUDENT OPINION, TEACHER EVALUATION, TEACHER IMPROVEMENT, *TEACHER RATING, TEACHING METHODS, TEACHING TECHNIQUES

Evaluating the effectiveness of college instruction is necessary and valuable in order to know which teaching practices should be continued. Although teachers usually are reluctant to be evaluated, some voluntarily seek methods of determining their classroom effectiveness. Four objective means of measurement are (1) introspection (questioning one's own teaching techniques), (2) classroom observation (inviting outsiders to observe one's class, or using tape recorders or other devices to monitor class), (3) product examination (studying changes produced in students), and (4) student evaluation (administering opinionnaires). Opinionnaires may be open-ended scales devised by teachers or specially prepared teacher-rating scales such as the Tau Beta Pi Instructor Rating Questionnaire. Factors involved in good teaching include, among others, (1) classroom atmosphere conducive to student ease, (2) a tolerant and approachable instructor who is competent and energetic, and (3) a course which has clearly defined objectives. In devising appraisal forms, allowances should be made for suggestions toward improvement rather than merely the recording of opinions. The forms should be distributed, monitored, and collected by students--not the teacher--and should not be read until final course marks have been submitted. (DG)

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CURRICULUM
REPORTER
SUPPLEMENT 1



evaluating college teaching

Evaluating college teaching effectiveness is a subject which has not received the critical attention it deserves--or needs. Much lip service is paid to the importance of the good teacher, but few criteria for appraising the quality of teaching have ever been established. A recent study prepared for the American Council on Education admits surprise at "the extent and depth of the chaos" found in faculty evaluation (4:17). One reason for the dearth of research and study is that it is difficult to find out very much about what goes on in the college teacher's classroom; traditionally that place has been sacrosanct and what transpires there exclusively the teacher's business. As Gage laments, what the education world needs is a "Kinsey" (3:22).

Generally, college teachers bristle and balk at the idea of class visitations either from administrators or expert judges of teachers; and, though they may be legitimately useful tools for determining promotions, merit pay increases and the like, such appraisals can be fraught with dangers. As Gage points out, "when the teacher knows he is being watched by someone whose opinion will determine his promotion or salary, his performance may depend more on his nerve than on his teaching skill" (3:19). An occasional visit smacks of inadequate time-sampling, and staffing sufficient numbers of trained and competent persons to appraise is a real problem, let alone handling the many intangibles not easily subject to evaluation.

REASONS FOR EVALUATING

Most teachers agree, however, that there must be some sort of administrative evaluation of the inexperienced and probationary faculty member, and some experienced faculty members welcome and encourage visitations around promotion time. But the desirability or undesirability of administratively inspired evaluations is not the subject of this essay; *discussion will be limited to voluntary and personal appraisals which serve as guides to improvement.* There are many reasons why such evaluations are necessary and valuable. For one, they provide suggestions for determining which teaching practices deserve to be continued or improved. For another, they provide the psychological security which comes from knowing when one is doing his best. And they have a certain therapeutic value for evaluatee as well as evaluator.

METHODS OF EVALUATING

Various means of evaluating teaching effectiveness are open to the college instructor; each must be approached with caution and with full recognition of its limitations. The instructor may seek some direct evaluation--by asking colleagues or students to give "frank appraisals" of his particular strengths and weaknesses, for example. It is obvious, however, that such appraisals may be seriously invalidated by the understandable unwillingness of his respondents to state, *vis-a-vis*,

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what he needs most to hear. The popularity of one's classes as indicated by the size of enrollments is equally limited as a measure of teaching effectiveness since it is possible that students may enroll in a given course because it is required or because of the reputation of the teacher for providing high grades without commensurate effort.

More objective means of measuring one's effectiveness as a college teacher are suggested by the following:

- *Analyzing by introspection.* The instructor may be helped to discern his effectiveness by pondering at length about his teaching practices and techniques. He may ask: "Am I satisfied with results? Do I find myself in a rut? Am I as enthusiastic as I should be in my presentations and in my contacts with students? Do I meet my obligations to students? Have I revised my notes recently? Have I attempted to state course objectives clearly and to measure the degree to which they are being achieved? Am I up to date on new materials applicable to the course?" Negative replies should inspire ameliorative action.

- *Mirroring one's teaching practices.* One invites colleagues whose judgment he respects to sit in on his classes and to provide critiques of procedures and relationships observed. Recording class sessions is also a fruitful undertaking; tapes preserve the "audio" content for later private study and analysis. Allport (1:42-43) suggests various analyses which may be made in such cases: (a) the extent of student participation--the number and frequency of different student responses; (b) the quality of comments made and questions asked; (c) the incidence of student restlessness or hostility; (d) the types of instructor contributions to the class period; and (e) the quality and quantity of instructor contributions. Tape recordings also highlight faults of voice, pace, and diction and point up instances of incorrect English, thus motivating the instructor to seek means of achieving greater flexibility, force and clarity in his teaching.

- *Studying the educational product.* The teaching-learning process is also appraised by the changes it produces in students; the teacher evaluates how he is doing by looking at how his students do. Of course, not everything students know, appreciate or are able to do can be attributed to the work they do in one's classes. The factors of aptitude and previous achievement in the course area (as measured by the number and scope of courses completed and the grades earned) must be considered. But pre-testing is a valuable means of identifying beginning levels of accomplishment and providing bench-marks against which to measure end-of-semester achievement. Course tests and other factors should measure more than absorption and regurgitation of facts and information; they should force the student to give evidence of thoughtfulness and creativity in applying the knowledge he possesses in new and varied ways.

- *Studying reactions of students.* In spite of a somewhat cynical opinion among some teachers that very little value can be placed on student judgment, greater attention is now being given to student ratings than ever before. Guthrie, of the University of Washington, who has done the most extensive research in faculty ratings by students, argues that student evaluations, when carefully and properly handled, provide the best criterion of quality of instruction (2:348-55). The instructor can hardly remain indifferent to the influence of students in establishing his "reputation."

STUDENT OPINIONNAIRE

Although some instructors appoint student committees whose responsibility it is to observe class sessions and report reactions and recommend improvements periodically, the most common method of eliciting student reaction is the opinionnaire. A recent survey conducted by Stecklein (8:287) indicated that out of 800 colleges reporting, nearly 40 per cent used student ratings regularly and another 32 per cent were considering using them. These per-

centages do not admit of the thousands of teachers who use them individually.

Recent research in the area of student rating has yielded other significant findings. Guthrie affirms that with as many as 25 students, results are stable and reliable (2:348-55). Stecklein finds little support for the rather widespread contention that student ratings are related to grades received, class size, class level or sex (8:287). Riley and associates conclude that ratings given college teachers by their students are consistent with those made by trained, experienced observers and that the quality of work done by a student in a course did not affect significantly his subsequent rating of the instructor (7). Guthrie finds that teachers with highest ratings were also substance teachers, not merely or mainly entertaining (2:348-55). Research has also shown that there is only moderate correlation of student judgments of interest and value, that is, students are not rating the same thing when rating what is of value to them and what is of interest to them. Generally, too, the judgments of undergraduate students, alumni and colleagues correlate closely (2:348-55).

On the other hand, in support of his thesis that administrators must be careful lest they penalize an instructor whose low ratings by students may be due to factors in a teaching situation over which he has no control, Gage suggests that there is likely to be some difference in the average rating received by teachers according to whether they teach elective or required courses, undergraduate or graduate courses, or small as against large classes. He cites as evidence a study conducted at the University of Illinois in which consistently lower ratings were received by lower-ranked teachers of required elementary courses (3:17).

"Role concept" is undoubtedly influential; each student makes an evaluation in terms of his "image" of what a teacher should be. For example, if the "model" is that of an author-

itative lecturer, the teacher who is an excellent discussion leader may be rated low and vice versa. Also, the beginning student whose experience is limited will naturally be comparing professors who teach elementary courses. These factors are operative and should be considered, but it is doubtful whether they really influence the validity of results.

TYPES OF OPINIONNAIRES

There are many different kinds of student opinionnaires, and a survey of the types in use at San Jose State College may be helpful. Dr. Wallar of the Psychology Department uses a type called "open-ended." A student is directed to complete, in the manner of free association and with as much detail as he feels necessary in order to reflect his opinion, such thoughtful phrases as "My interest in this class...", "The text we have used...", "I would recommend that this course..." and the like.

For several years Dr. Girdler of the English Department has achieved good results by dictating at the top of a blank sheet a paragraph something like the following:

In the large, inviting space below, type or print your opinions of the textbooks, methods, content, and teacher of this course. Suggestions toward improvement will be especially welcome. Sign your name if you like; but I would prefer that you do not. These sheets will be collected at the final examination, but I shall not read them until after I turn in semester grades.

A very simple appraisal form long used at the college is "The Worm Turns." It consists of 8 items covering such broad categories as objectives, organization, value of the course, effectiveness of instructor, and the like. There is ample space for student comment.

Another scale in use at the college is the Tau Beta Pi Instructor Rating Questionnaire. This form consists of 20 items which range over such topics as the instructor's mastery of subject-matter, tests, texts, and the like. The student marks a scale which ranges from zero to 4, corresponding to poor through ex-

DIRECTIONS TO STUDENTS: In order to secure information which may lead to the improvement of instruction, make an (X) at the place which seems to you most appropriate for the instructor you are rating. The highest rating you give, note the three descriptions for each item, one at the left for the best rating, one at the right for the lowest rating.

DO NOT SIGN YOUR NAME BUT PLEASE

1. OBJECTIVES CLARIFIED BY INSTRUCTOR										
10	9	8	7	6	5	4	3	2	1	0
Objectives clearly defined.				Objectives somewhat vague or indefinite.			Objectives very vague or given no attention.			
2. ORGANIZATION OF COURSE										
10	9	8	7	6	5	4	3	2	1	0
Course exceptionally well organized; subject matter in agreement with course objectives.				Course satisfactorily organized; subject matter fairly well suited to objectives.			Organization very poor; subject matter frequently unrelated to objectives.			
3. KNOWLEDGE OF SUBJECT										
10	9	8	7	6	5	4	3	2	1	0
Knowledge of subject broad, accurate, up-to-date.				Knowledge of subject somewhat limited and at times not up-to-date.			Knowledge of subject seriously deficient and frequently inaccurate and out-of-date.			
4. RANGE OF INTERESTS AND CULTURE										
10	9	8	7	6	5	4	3	2	1	0
Instructor has very broad interests and culture; frequently relates course to other fields and to present day problems.				Instructor has fair breadth of interests and culture; occasionally relates subject to other fields and to present day problems.			Instructor is narrow in his interests and culture; seldom relates subject to other fields or to present day problems.			
5. VARIETY IN CLASSROOM TECHNIQUES										
10	9	8	7	6	5	4	3	2	1	0
Effective and varied use of classroom methods and techniques: lecture, discussion, demonstration, visual aids.				Occasionally changes method from straight lecture or discussion.			Uses one method almost exclusively; all class hours seem alike.			
6. ASSIGNMENTS										
10	9	8	7	6	5	4	3	2	1	0
Clear, reasonable, coordinated with class work.				Occasionally indefinite and unrelated to class work.			Confused, often made late, with no relation to work of course.			
7. ABILITY TO AROUSE INTEREST										
10	9	8	7	6	5	4	3	2	1	0
Interest among students usually runs high.				Students seem only mildly interested.			Majority of students inattentive most of the time.			
8. SKILL IN GUIDING THE LEARNING PROCESS										
10	9	8	7	6	5	4	3	2	1	0
Gives student opportunity to think and learn independently, critically, and creatively.				Gives student some opportunity to develop his academic resources on his own initiative.			Little or no attention to student ideas; ignores or discourages original and independent effort.			
9. MANNERISMS										
10	9	8	7	6	5	4	3	2	1	0
Manner pleasing; free from annoying mannerisms.				Mannerisms not seriously objectionable.			Constantly exhibits annoying mannerisms.			

ction in this college, you are asked to rate your instructor on *EACH* of the items listed. On each line
 st possible rating for an item is 10, the lowest is 0, with nine gradations between. To aid you in mak-
 ght for the poorest rating, and one in the middle for the average rating.

EASE RATE EACH ITEM HONESTLY

- | | | | | | | | | | | | | | |
|-----|---|----|---|---|---|---|---|--|---|---|---|---|---|
| 10. | FAIRNESS IN GRADING | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| | Fair and impartial; grades based on several evidences of achievement. | | | | | | | Partial at times; grades based on a few evidences of achievement. | | | | | Frequently shows partiality; grades based on very limited evidences of achievement. |
| 11. | WILLINGNESS TO HELP | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| | Instructor exceptionally friendly; usually willing to help students even if busy. | | | | | | | Instructor moderately friendly; usually willing to help students. | | | | | Instructor aloof or sarcastic and pre-occupied; unwilling to help students. |
| 12. | PERSONAL ATTENTION TO STUDENT PRODUCT | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| | Gives close personal attention to and recognition of student's product: examination, term-paper, theme, notebook. | | | | | | | Reads his own papers but does not comment very generously or helpfully. | | | | | Invariably pushes reading and judgments onto reader or assistant; reads student's work superficially. |
| 13. | RECOGNITION OF OWN LIMITATIONS | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| | Welcomes differences of opinion; honest in admitting when he does not know. | | | | | | | Moderately tolerant of different viewpoints; usually willing to admit when he does not know. | | | | | Displeased by opposite viewpoints; dogmatic and argumentative even when clearly wrong. |
| 14. | SPEECH AND ENUNCIATION | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| | Speaks clearly and distinctly. | | | | | | | Words sometimes indistinct and hard to hear. | | | | | Words very indistinct; often impossible to hear. |
| 15. | SENSE OF HUMOR | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| | Enjoys a good joke (even when it is on himself); yet knows when to be serious. | | | | | | | Unpredictable; sometimes pleasant and happy; at other times downcast. | | | | | Poor sport; never sees the humorous side of any situation. |
| 16. | GENERAL ESTIMATE OF TEACHER | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| | Very superior teacher. | | | | | | | Average teacher. | | | | | Very poor teacher. |
| 17. | GENERAL ESTIMATE OF THE COURSE | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | |
| | One of the most interesting, informative, useful, personally helpful courses. | | | | | | | About average in interest, usefulness, etc. | | | | | One of the least interesting, informative, useful, personally helpful courses. |
| 18. | ADDITIONAL COMMENTS: | | | | | | | | | | | | |

cellent. Some variation is achieved through items which are best answered by indicating that the mean is preferable to either extreme.

In the spring of 1961 the Committee on Improvement of Instruction made a study of various rating scales with a view to selecting and making available to all instructors one which offered the best combination of brevity and adequate coverage. The Committee decided on a form originally devised at Chico State College, but modified it to meet the special needs of San Jose State College. Single-sided, multilithed copies were made available in reasonable quantities to all instructors who requested them.

Timed to coincide with the ending of the spring semester, about 20,000 copies were distributed. Names of instructors who used the form were collected, so that a follow-up study of the scale's use and effectiveness could be conducted. In response to a follow-up the fall of 1961, 50 usable replies were received. Although many individual items were questioned, opinion was overwhelmingly favorable; less than 5 per cent of the respondents denied the instrument's validity or effectiveness.

The scale attempts to rate the *teacher* only. Critique of the *course* itself occurs only obliquely. The rationale for separate types is the fact that course evaluation forms must be individualized for each course to be really meaningful. The form itself includes 18 items, 17 of which require student judgment on a scale ranging from zero to 10 and a final item which is designed for whatever use the instructor wishes. Many instructors used item 18 and the reverse side for reactions to items specifically related to the course--tests, texts and the like. The scale is available each college term through individual departments directly from Secretarial Services under number M22.

Other teaching appraisal forms may be obtained at minimal cost. For example, Oregon

State College publishes an excellent form which may be ordered for 1¢ a copy. This form rates from poor through excellent a number of specific items under the general headings: Class Atmosphere, Class Procedures, Scholarship. For instructors who prefer an essay type, as more finely differentiating thoughtful analysis from careless appraisal. Mr. Hatch of the Art Department recommends an instrument in use at Antioch College, Yellow Springs, Ohio.

FACTORS IN GOOD TEACHING

There is, of course, no common agreement on *all* factors involved in good teaching and there exist many intangible virtues not easily subject to evaluation. But experience has shown that certain procedures and factors promote learning. The instructor who would devise his own instrument, then, would do well to include items relating to the following:

Classroom atmosphere--a "climate" conducive to student ease, where students feel they have the respect of their instructor and classmates, where they are challenged by their work, where they are confident they can succeed, and where they experience gratifying success.

Instructor--a person who is tolerant, reasonable, approachable, who possesses mastery of field and understanding interest and enthusiasm for the subject, who is thoroughly prepared for each class, and who conducts each class efficiently without annoyances or mannerisms which divert attention.

Course--one which has clearly defined objectives and standards which must be attained, which utilizes methods and material adapted to specific needs of the student but allows for individual differences, in which there is student participation, reviews at regular intervals, fair tests returned promptly, in which the interrelatedness of knowledge and relation to daily life are stressed, and in which students are apprised periodically of the quality of their progress (6).

INTERPRETING RESULTS

Many other things must be taken into consideration when devising and actually using an appraisal form. The trouble with many scales is that they allow for vent of opinion but not for suggestions toward improvement. Although it is difficult to get some students to be specific, the scale should have ample space for comments and the instructor should encourage students to make specific points about what is good or what needs improvement. If the student is compelled to support and illuminate his numerical rating, he might avoid fewer superficial judgments. One technique is to have students make simple numerical ratings at first. When the results are tabulated, the instructor can conduct a follow-up in which he asks for detailed and specific comments on areas of notable strength or weakness. Such evaluation must be given prior to the last day of class, of course.

Another factor which must be considered by the instructor who devises or uses a scale is the possibility of a "halo effect" arising from the fact that all items are marked on a similar scale and the teacher's personality may overpower or compensate for many other factors. To prevent this carry-over, it might be a good idea to vary the scale somewhat, although there is some question as to how influential this effect really is. More significant may be an individual "set," where some students feel that on a scale of "good" which ranges from 7 to 10, for example, a "7" is a good mark, whereas other students assign a "9" to the same performance characteristically. That is why a good deal of attention must be paid to relative pattern or "scatter," profiles being more meaningful than absolute scorings. When a distribution is run and the median found, those ratings which are out of line are easily identifiable and compensated for. Some scales are so constructed that similar but differently worded and contradictory items are thrown in at strategic places so that the user can determine whether the student is evaluating carefully and honestly.

Too, if valid results are to be obtained, particular attention must be paid to motivating students before they fill out the forms. For one thing, the instructor should indicate that the college administration is not making the inquiry; he is seeking information voluntarily for his own personal guidance. Otherwise, some students are likely to imagine that dire things may result from unfavorable ratings and tend to be overly generous. Implicit here is a reason for disassociating student evaluation and identity. Such disassociation can be achieved by having students type or print comments, having the forms distributed, monitored and collected by students themselves while the instructor is out of the room or having them completed at home, and by having the results sealed to be opened only after final grades are turned in. One drawback is that the value in distinguishing the reactions of the good versus the poor students is lost. Finally, proper introduction is necessary to make certain that students define the terms in the same way as the instructor. If care has been exercised in composing, so that items are neither too general to be useful nor too difficult to identify in practice, this should not be an issue.

DEVELOPING NORMS

It is also desirable, of course, for the instructor to have norms which show how other college teachers have been rated as a guide to interpreting the results of his profile. However, unless the instrument has been used widely by an institution over a number of years, it is unlikely that norms will have been arrived at or achieved a modicum of stability. The motivated or ingenious teacher will overcome this difficulty by building up his own set of norms over the years. Some sources of bias may still operate; but if the instructor interprets the ratings for himself with reference only to himself, he can obtain valid information (3:19).

In reading what literature on evaluation exists, one is impressed by the fact that there

is no "authority" on the subject who denies that, at least in many specific instances, students are indeed the *best* judges of teaching effectiveness. Besides, there is probably no more palatable way for a teacher to accept criticism sensibly than through exposing himself to the reactions of his students and colleagues. Even when they only verify what he has long believed or been aware of, willingness to sample opinion has considerable merit. Who of us is so perfect that he can't profit from criticism?

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Instructors interested in perusing the books and articles listed in the bibliography or the appraisal forms mentioned in the essay proper will find them in the Reserve Book Room of the Library.

The Instructor Rating Scale is available again through individual departments directly from Secretarial Services under number M22.

A New Series

This No. 1 issue of CURRICULUM REPORTER SUPPLEMENT begins a series of leaflets dealing with facets of college teaching as developed with the participation of members of the San Jose State College Committee for the Improvement of Instruction. This first number, authored principally by John Banister (with contributions by Jack Sutherland and James W. Brown), focuses attention upon the evaluation of college teaching.

It is anticipated that future issues will be concerned with: (a) the preparation and rating of objective and essay tests (in cooperation with the Testing Office), (b) uses of library resources and services (in cooperation with the Library Staff and the College Library Committee), (c) and (d) applications of tape recordings in college teaching and the analysis of instructional objectives (in cooperation with the Audio-Visual Center), (e) research on aspects of college teaching at this institution (in cooperation with the College Research Office), (f) significant counseling problems of San Jose State College students (in cooperation with the College counseling staff), and (g) a summary of the opinions of honor students concerning teaching practices at San Jose State College.

Membership of the College Committee for the Improvement of Instruction includes: John Banister, *Office of the Dean of the College*; John P. Britz, *English*; Frank Gale, *Natural Science*; Harold Hailer, *Secondary Education*; Jerrold Kemp, *A-V Center*; Harold P. Miller, *English*; Mildred Nelson, *Library*; William R. Siddoway, *Research Office*; Curt Stafford, *Testing Office*; Jack Sutherland, *Secondary Education*; Mary S. Wiley, *Recreation*; Dudley Moorhead, *Dean of Humanities and the Arts, ex officio*; and James W. Brown, *Dean of the Graduate Division* (chairman).

CURRICULUM REPORTER SUPPLEMENT #1, SAN JOSE STATE COLLEGE, DECEMBER 1961
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