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AUTHOR Centra, John A.  
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ABSTRACT

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**RESEARCH**

**BULLETIN**

THE RELATIONSHIP BETWEEN STUDENT AND ALUMNI  
RATINGS OF TEACHERS

John A. Centra

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Educational Testing Service

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## THE RELATIONSHIP BETWEEN STUDENT AND ALUMNI RATINGS OF TEACHERS

### Abstract

Student and alumni ratings for 23 teachers were found to correlate .75 (somewhat less for teachers rated only by graduates of their department). This substantial agreement between current students and alumni (of five years) regarding who have been effective or ineffective teachers suggests that student ratings are fairly permanent and do, at least in part, reflect overall, long-term effects of instruction.

## THE RELATIONSHIP BETWEEN STUDENT AND ALUMNI RATINGS OF TEACHERS

John A. Centra

Educational Testing Service

One of the complaints frequently voiced about student ratings of instruction is that the ratings, which are generally obtained at the end of a course, do not adequately reflect the long-term effects of instruction. Student immaturity or lack of perspective are reasons often cited for this shortcoming, and it is assumed that later ratings--say when the students are alumni--would be more valid measures of teacher effectiveness.

The research to date, consisting largely of one study conducted over 20 years ago, has not substantiated the temporal quality of student ratings. In that study, Drucker and Remmers (1951) found that the average ratings given to 17 instructors by students and alumni were correlated positively. The correlations ranged from .40 to .68 on 10 teacher traits, such as presentation of subject matter, interest in subject, sympathetic attitude toward students, and fairness in grading.

The purpose of the present study was to investigate further the relationship between student and alumni ratings of instructors. The study differs from the Drucker and Remmers study in several ways: it used an overall assessment of teaching rather than ratings of specific traits; it surveyed alumni within 5 years of graduation rather than those out for 10 or more years; and it investigated ratings separately by graduates within and outside of the teacher's department. Like the Drucker and Remmers study, a cross-sectional design in which different

people provided the ratings of instructors at approximately the same time was employed.

### Procedure

The study was conducted during 1972 at one college where a survey of recent alumni included the request that graduates name the best and worst teachers they had had (a) in the department of their major, and (b) outside the department of their major. Each alumnus, therefore, provided up to four names. Approximately 500 alumni provided these ratings or nominations; this figure represented slightly under a third of all graduates during the most recent five-year period. Except for the two smallest departments, the percentage of alumni responding was similar for each department.

About 75% of the faculty collected student ratings in one of their courses during the last week of the semester. An overall rating of teaching effectiveness was obtained with the following item:

Compared to other instructors you have had (secondary school and college), how effective has the instructor been in this course?

One of the most effective (among the top 10%) (1)	More effective than most (among the top 30%) (2)	About average (3)	Not as effective as most (in the lowest 30%) (4)	One of the least effective (in the lowest 10%) (5)
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The estimated reliability for this item, based on analysis of variance, was more than adequate. Using the Spearman-Brown formula to calculate reliabilities for various numbers of raters, the estimated reliabilities were, for example, .78 for 10 raters, .85 for 15 raters and .90 for 25 raters (Centra, 1972).

Twenty-three teachers who had been at the college during the preceding five-year period and who had collected student ratings comprised the sample for this study. Not all of the teachers had been on the staff during the entire five-year period and thus would have less opportunity to receive either best or worst nominations.

The comparisons between student and alumni ratings are presented in Table 1. The ratings for the 23 teachers vary considerably. Student ratings, for example, ranged from mean scores of 1.25 to 4.21 on a five point scale (the lower rating being the better rating). These mean scores were based on class sizes of between 12 and 36 students, with an average of 24.

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Insert Table 1 about here  
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The alumni ratings include the number of times each teacher was nominated as the best or worst teacher by graduates outside the department and, secondly, within the department. The last column represents a total of the preceding two columns--that is, for each teacher the number of best minus the number of worst ratings they had received by all graduates.

An inspection of the ranking of the student and alumni ratings in Table 1 suggests a great deal of similarity between the two. In particular, there is agreement at the extremes of the distributions: teachers given many "best" teacher nominations tended to receive high student ratings, while those who received many "worst" teacher

nominations received lower student ratings. The rank correlations for the student and alumni responses, using best minus worst totals to determine the alumni ranking and then correlating those rankings with the rank order of the mean student ratings, are presented in Column A of Table 2.

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Insert Table 2 about here  
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These rank correlations, all of which are statistically significant ( $p < .05$ ), indicate considerable agreement between alumni and student ratings of the same teachers. In fact, the relationship is even stronger if, instead of rank-ordered mean student ratings, a quasi best-worst ranking by students is correlated with the alumni rankings. Thus, if student rankings were determined by subtracting the percentage of students that placed the instructor in the bottom 10% from the percentage that placed him in the highest 10%, a procedure that would more nearly correspond to the way alumni rankings were determined, the resulting rank correlations are slightly higher (see Column B in Table 2).

The reasons why ratings by graduates from outside the teachers' departments should correlate somewhat higher with student ratings are not clear. One explanation is that limiting student choices to members within a department restricted their choices to such an extent that there were, in some instances, no clear-cut choices for them to make.

The results of this study, then, clearly indicate that the judgments of teachers by their students at the end of a course are fairly permanent

and mature. The agreement between current students and alumni regarding who have been effective or ineffective teachers is substantial, particularly in identifying teachers at the extremes.

Another point underscored by the data is that, in many instances, a particular teacher was seen as both "good" and "bad." That is, the same teacher was nominated as one of the best teachers by some alumni and as one of the worst by other alumni. Similarly, a teacher may have been rated as "one of the most effective" by some students and as "one of the least effective" (or in the bottom 30%) by others. Obviously some teachers have a special appeal or lack of appeal to specific kinds of students. McKeachie, Lin, and Mann (1971), Witkin (1973) and Dowaliby and Schumer (1973) have all presented evidence indicating that it is not enough to speak just of "good" or "bad" teachers; one must also ask "good" or "bad" for which students. While this admonition would seem justified for several of the teachers in this study, several also appeared to be effective with a wide variety of students, at least as measured by a single overall rating provided by alumni and students.

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Table 1

Comparison of Student and Alumni  
Ratings of Teachers

(N = 23 teachers)

Teacher	Mean <sup>a</sup> Student Rating	Percentage of students who rated instructor in the:				Alumni Ratings <sup>b</sup>				
		Top 10%	Top 30%	Low 30%	Low 10%	By graduates outside of dept.		By graduates from the dept.		All grads, best minus worst totals
						Best	Worst	Best	Worst	
1	1.25	75	25	0	0	44	4	23	2	61
2	1.77	53	20	5	0	4	1	19	4	18
3	1.91	21	63	0	0	2	5	1	2	-4
4	2.00	35	38	8	0	1	0	1	1	1
5	2.06	17	61	0	0	10	1			9
6	2.17	28	39	0	6	2	0	1	0	3
7	2.2	33	29	8	4	16	4	11	0	23
8	2.24	8	60	0	0	1	0	0	0	1
9	2.42	17	42	17	0	5	1	12	8	8
10	2.43	29	14	14	0	6	0	20	0	26
11	2.59	19	22	4	7	7	6	13	6	8
12	2.59	17	31	10	7	4	2			2
13	2.88	4	35	8	12	0	0	2	6	-4
14	2.93	7	24	17	7	0	0	1	0	1
15	3.04	4	26	13	13	2	3			-1
16	3.07	7	21	21	10	0	1			-1
17	3.08	0	29	29	4	0	0	1	1	0
18	3.21	4	17	21	13	1	1	1	9	-8
19	3.43	0	29	14	29	0	7	1	4	-10
20	3.44	0	19	29	14	0	38	0	11	-49
21	3.50	0	7	14	21	0	8	10	9	-7
22	3.61	4	4	48	13	2	19	2	8	-23
23	4.21	0	0	26	47	1	3	0	0	-2

<sup>a</sup>Based on a 5-point scale ranging from 1 = "One of the most effective (among the top 10%)," to 5 = "One of the least effective (in the lowest 10%)."

<sup>b</sup>Four faculty members were in departments which did not have student majors (teachers 5, 12, 15, and 16).

Table 2  
Rank Order Correlations of Student and Alumni Ratings

By Alumni:	Student ratings based on rank-order of:	
	A Mean ratings	B Top 10% minus bottom 10% responses
Outside the department	.76	.82
From the department	.54	.55
Total (all graduates)	.75	.84