

# EFFECTIVE COLLEGE TEACHING FROM THE STUDENTS' AND FACULTY'S VIEW: Matched or Mismatched Priorities?

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Thirty-one studies were located in each of which students and faculty specified the instructional characteristics they considered particularly important to good teaching and effective instruction. Students and faculty were generally similar, though not identical, in their views, as indicated by an average correlation of  $+ .71$  between them in their valuation of various aspects of teaching. In those studies with relevant data, the differences that did exist between the two groups showed a pattern of students placing more importance than faculty on teachers being interesting, having good elocutionary skills, and being available and helpful. Students also emphasized the outcomes of instruction more than faculty did. Faculty placed more importance than did students on teachers being intellectually challenging, motivating students and setting high standards for them, and encouraging self-initiated learning. The results of the present analysis were compared with those of an earlier analysis of the importance of various specific aspects of instruction in terms of their correlations with students' overall evaluations of teachers in actual rating situations.

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An earlier synthesis (Feldman, 1976b) analyzed college students' views on teachers and their judgments of the instructional effectiveness of various attitudes, behaviors, and pedagogical practices of instructors. Students' conceptions about good teaching, of course, may or may not match the conceptions of the instructors themselves. To give only one example of a presumed mismatch in preferences, it is sometimes said that students place greater importance on lectures being entertaining or interesting than do faculty. Any such differences in student and faculty views might well contribute to the tensions found in some college classrooms (see, for example, Mann et al., 1970). Moreover, if the faculty and students of a college do not agree as to what constitutes effective teaching, then faculty members may well be leery of

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students' overall ratings of them, believing their students may use different priorities than they themselves would in arriving at overall evaluations. Baum and Brown (1980) explicitly make this point, putting the matter strongly, as follows:

From the very beginning of their use, faculty have expressed reservations about the meaning (validity) of student responses regarding teaching effectiveness. Put simply, faculty have argued that they and students use different criteria in evaluating teaching. Naturally, faculty view their own standards as being more relevant for, or consistent with, the long-run mission of higher education. (p. 234)

The present analysis explores the extent to which students and faculty, in fact, do differ in the criteria each group uses in evaluating teaching. To this end, studies were located in which both students and faculty at the same school or schools were asked to indicate the instructional characteristics they considered important to good teaching. As with the other analyses in the present series on college teaching and students' assessments of it,<sup>1</sup> the research reviewed has been restricted to studies of students and teachers at colleges and universities in the United States and Canada.

## DEGREE OF SIMILARITY BETWEEN FACULTY AND STUDENTS

Thirty-one studies were found in which students and faculty at the same school(s) were asked about the importance of various components of teaching. The most common way in these studies of determining each group's criteria for evaluating teaching was to ask both students and faculty to specify the attitudes, behaviors, and pedagogical practices of teachers that they felt were the most important to "good" teaching or "effective" instruction. (Occasionally, "effective" teaching was more closely specified in terms of student learning.) Sometimes, students and faculty were asked to characterize "best" or "ideal" teachers. Another procedure used was to ask students and faculty to rate various instructional characteristics in terms of their importance in judging a teacher or their importance for inclusion on an evaluation form.

In each study, the differential importance of the various attitudes, behaviors, and practices to effective teaching was determined for both students and faculty. Correlating the results for the two groups indicates the degree of "agreement"—that is, similarity—between students and faculty across the various components of good teaching. In some cases, the relevant correlation is actually given in the study, whereas, in other cases, it had to be calculated from the data that were given. A summary of each study, including the pertinent correlation(s), is given in Table 1.

**TABLE 1. Summary of Studies with Data on the Differential Importance of Various Components of Teaching (from Which the Extent of Similarity Between the Two Groups Can Be Determined)**

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*Baril and Skaggs (1976)*: 1,369 sophomores, juniors, and seniors compared with 418 faculty members at the University of Maine, Orono (year not given) when indicating for each of 156 items "the importance . . . for inclusion on an evaluation form."

$$r = +.89* \text{ (as given on p. 185); } Z = +11.116* \text{ (} p < .001 \text{)}$$

*Baum and Brown (1980)*: 179 students compared with 50 faculty members in the School of Business and Economics at California State University, Northridge (year not given) when weighting each of 10 "common aspects of the teaching process" as to its "relative importance in determining teaching effectiveness."

$$r = +.001* \text{ (as calculated from data given in Table 1, p. 236); } Z = +0.003* \text{ (} p = .998 \text{)}$$

*Blai (1974)*: 411 students compared with 23 faculty members at Harcum Junior College in Bryn Mawr, Pennsylvania (Fall 1973) when responding to 14 forced-choice questions pertaining to the "characteristics of the 'better' junior college teacher."

$$r = +.35* \text{ (as calculated from data given on pp. 1-3); } Z = +1.310* \text{ (} p = .190 \text{)}$$

*Blažek (1974)*: 196 undergraduate students enrolled in the first required secondary course at Northern Illinois University compared with 10 faculty members teaching sections of this course (Spring 1974) when rating each of 37 items as to how important it is "for the measurement of teaching effectiveness in the general instructional situation." [Note: Excluded from consideration for the present analysis is an item for overall evaluation of the course.]

$$r = +.77* \text{ (as calculated from data given in Table 23, p. 81); } Z = +4.684* \text{ (} p < .001 \text{)}$$

*Breed (1927)*: 100 students compared with 56 faculty members at the University of Chicago (year not given) when ranking 34 "qualities desirable in instructors in college courses conducted by the lecture-discussion method."

For 5 items dealing with "knowledge and organization of subject matter,  $r = +.96$  (as calculated from data in Table 1, p. 248) and  $Z = +2.147$ ). For 11 items dealing with "skill in instruction,"  $r = +.95$  (as calculated from data in Table 1, p. 248) and  $Z = +3.151$ . For 10 items dealing with "personal qualities,"  $r = +.97$  (as calculated from data in Table 1, p. 248) and  $Z = +3.067$ .

$$\text{Average } r = +.96*; \text{ average } Z = +2.788* \text{ (} p = .005 \text{)}$$

*Brewer and Brewer (1970)*: 280 freshmen and 92 upperclassmen compared with 54 members of the faculty and administration at De Paul University (year not given) when picking one trait from each of 10 pairs of traits according to "which was more important for good college teaching."

TABLE 1. (Continued)

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When comparing the group of freshmen with the group of faculty/administrators,  $r = +.94$  (as calculated from given in Tables 1 and 3 on pp. 244 and 245) and  $Z = +2.973$ . When comparing the group of upperclassmen with the group of faculty/administrators,  $r = +.93$  (as calculated from data given in Tables 1 and 3 on pp. 244 and 245) and  $Z = +2.941$ .

Average  $r = +.94^*$ ; average  $Z = +2.957^*$  ( $p = .003$ )

*Bridges et al. (1971)*: 741 students compared with 201 faculty members at "a large university" (year not given) when describing the "six outstanding characteristics of the best college teacher" they have known, results of which were classifiable into 24 categories with frequency distributions given.

$r = +.76^*$  (as calculated from data given in Table 2, p. 55);  $Z = +3.723^*$  ( $p < .001$ )

*Crawford and Bradshaw (1968)*: 36 faculty members compared with 158 undergraduate students in four university classes in psychology (school and year not given) when choosing from each of 13 pairs of descriptive statement the one considered "more essential or critical to effective University teaching."

Two groups of professors (associate and full professors; instructors and assistant professors) and six groups of students (high, average and low ranking females; high, average, and low ranking males) produced 12 separate  $r$ 's ranging from  $+ .72$  to  $+ .92$  (as given in Table 4, p. 1084).

Average  $r = +.83^*$ ; average  $Z = +2.990^*$  ( $p = .003$ )

*Delaney and Coons (1976)*: 1,405 undergraduates compared with 369 faculty members at "a large metropolitan university" (year not given) when judging the importance of 4 "criteria of teaching effectiveness."

$r$  (rho) =  $+1.00^*$  (as calculated from data given in Figure 1, p. 5);  $Z = +2.000^*$  ( $p = .045$ )

*Evaluation and Examination Service (1974)*: 1,127 undergraduate and graduate students compared with 1,344 faculty members at the University of Iowa (Spring 1974) when indicating whether each of 111 items was an "important factor" in determining how much students learn in courses.

$r = +.85^*$  (as calculated from data given in Tables 1-3, pp. 7-16;  $Z = +8.955^*$  ( $p < .001$ ))

*Freilich (1983)*: 107 students in a general chemistry courses for freshman engineering students at Purdue University and 106 students in a general chemistry course for liberal arts/science students at California State University Hayward compared with 23 teachers ("several faculty members and a few experienced graduate teaching assistants in a wide variety of disciplines") (year not given) when evaluating 28 questionnaire items in terms of the five most important and the five least important in helping students learn.

TABLE 1. (Continued)

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- $r$  (rho) = +.75\* (as calculated from data given in Table 2, p. 219;  $Z = +3.969^*$  ( $p < .001$ ))
- Hartung (1972)*: students compared with teachers in the junior colleges in North Carolina (year not given) when evaluating each of 67 characteristics in terms of its "importance."
- $r$  (rho) = +.90\* (as given on p. 147);  $Z = +7.367^*$  ( $p < .001$ )
- Hussain and Leestamper (1968)*: 283 students compared with 186 teaching and administrative faculty at New Mexico State University (Fall 1967) when rating 60 "criteria of teaching effectiveness."
- $r = +.94^*$  (as given on p. 12);  $Z = +7.281^*$  ( $p < .001$ )
- Jenkins et al. (n.d.)*: 90 students compared with 27 faculty members at Highland Community College in Freeport, Illinois (year not given) when rating each of 60 teacher behaviors as to its "importance to good instruction."
- $r$  (rho) = +.86\* (as given on p. 19);  $Z = +6.662^*$  ( $p < .001$ )
- Krupka (1970)*: 60 students compared with a group of faculty members at Northampton Area Community College (year not given) when ranking 10 items on the Instructor Rating Questionnaire as to their "importance in judging a teacher." [Note: Excluded from consideration for the present analysis is an item for overall evaluation of the teacher and an item for overall evaluation of the course.]
- $r = +.94^*$  (as calculated from data given in the table on p. 2);  $Z = +2.973^*$  ( $p = .003$ )
- Lovell and Haner (1955)*: junior and senior students compared with faculty members at Grinnell College (Spring 1954) when indicating whether each of 107 items applied as a descriptive item about best, average, or worst professors.
- $r = +.75^*$  (as given on p. 299);  $Z = +7.758^*$  ( $p < .001$ )
- Marques et al. (1979)*: 35 male undergraduates compared with 37 male faculty members (distributed among the academic divisions of engineering, humanities, natural sciences, and social sciences) at Rice University (year not given) when assigning an overall rating of teaching effectiveness to hypothetical instructors whose profiles varied in the values assigned to 7 "quantified cues reflecting instructor performance on dimensions thought to be related to teaching effectiveness."
- $r = +.88^*$  (as calculated from data in Table 1 on p. 844, averaging across data for the four academic divisions);  $Z = +2.328^*$  ( $p = .020$ )
- Murray et al. (1982)*: 602 undergraduates (February 1981) compared with 666 full-time faculty members (December 1980) at the University of Western Ontario when rating 13 factors in terms of their "relative importance as components of university teaching."

**TABLE 1. (Continued)**

- $r = +.74^*$  (as calculated from data given in Table 4, p. 57);  $Z = +2.668^*$  ( $p = .008$ )
- Norr and Crittenden (1975)*: 1,114 students in 52 classes compared with 25 sociology faculty members at the University of Illinois, Chicago Circle (year not given) when rating 5 dimensions of teaching (multi-item scales) in terms of their "importance for good teaching."
- $r$  (rho) =  $-.35^*$  (as calculated from data given in Table 1, p. 341);  $Z = -0.990^*$  ( $p = .322$ )
- Odom (1943)*: 121 undergraduate students compared with 26 faculty members at a "southern liberal arts college" (year not given) when listing "traits that they believed a good college teacher should possess," results of which were classified into 36 categories and then rank ordered.
- $r$  (rho) =  $+.76^*$  (as calculated from data given in Table 1 on p. 111);  $Z = +4.560^*$  ( $p < .001$ )
- Perry (1969)*: a group of students compared with a group of faculty members at the University of Toledo (year not given) when judging each of 60 behaviors as to how warranted it was "for evaluation of effective teaching behavior."
- $r = +.91^*$  (as calculated from data given in the table on p. 18 and continued on p. 22);  $Z = +7.049^*$  ( $p < .001$ )
- Romine (1974)*: 1,237 undergraduate and graduate students compared with 268 faculty members at the University of Colorado (year not given) when rating the significance of 40 items as to their contribution "to an effective instructional climate" (that is, "one in which students are well satisfied with courses and in which they are strongly motivated to study and learn").
- $r = +.65^*$  (as calculated from data given in Table 1 on p. 141);  $Z = +4.111^*$  ( $p < .001$ )
- Romine and Newport (1973)*: 2,058 students compared with 325 faculty members "located in 29 community junior college in 15 states of the North Central Region" (year not given) when rating the significance of 70 attributes in terms of their contribution to an "effective instructional climate in which satisfying and successful teaching and learning occur."
- $r$  (rho) =  $+.84^*$  (as calculated from data given in Table 1 on pp. 18–27);  $Z = +7.028^*$  ( $p < .001$ )
- Rotem (1975)*: students in 36 undergraduate courses compared with the instructors of these courses at the University of California, Santa Barbara (Winter 1975) when rating 8 types of behaviors in terms of how often an "ideal" teacher would engage in them. (Note: This information was gotten *before* 18 of the instructors participated in an experiment to find out the effects of their receiving feedback from their students, early in the semester, on their performance in the classroom.)

TABLE 1. (Continued)

- $r = +.99^*$  (as calculated from data in the tables on pp. 112 and 114, with means on each item being averaged across the experimental and control groups);  $Z = +2.800^*$  ( $p = .005$ )
- Shatz and Best (1986)*: 106 students compared with 45 faculty members at "a four-year midwestern university" (year not given) when identifying which of the 35 items of the Students' Evaluations of Educational Quality (SEEQ) were "important enough to be included in a course evaluation questionnaire" and which of these important items were the "most important."
- $r$  (rho) for "important" items =  $+.71$  (as given on p. 241) and  $Z = +4.200$ ;  $r$  (rho) for the "most important" items =  $+.75$  (as given on p. 241) and  $Z = 4.437$ .
- Average  $r$  (rho) =  $+.73^*$ ; average  $Z = +4.319^*$  ( $p < .001$ )
- Stevens (1978)*: 572 students compared with 226 faculty members "at a College of Business in a southwestern university (year not given) when rating the importance (in terms of student learning) of 10 "teaching traits and behaviors that are commonly exhibited in a classroom situation."
- $r = +.50^*$  (as calculated from data given in Table 1, p. 20);  $Z = +1.581^*$  ( $p = .114$ )
- Stevens and Marquette (1979)*: 135 students enrolled in business courses compared with 55 faculty members in the College of Business at Kent State University (year not given) when judging each of 10 traits as to its "relative importance in determining teaching effectiveness."
- $r = +.43^*$  (as calculated from data given in Table 1, p. 211);  $Z = +1.360^*$  ( $p = .174$ )
- Whitley (1982)*: 112 students compared with 61 full-time instructors at Meridian College (year not given) when ranking 16 "characteristics of good instruction" as to their "perceived importance."
- $r$  (rho) =  $+.67^*$  (as calculated from data given in Table 4, p. 12);  $Z = +2.600^*$  ( $p = .007$ )
- Wittmaier (1975)*: 60 students in an introductory psychology course compared with 23 faculty members at a "small liberal arts college" (year not given) when rating 5 different teaching styles (multi-item scales) in terms of their "importance to good teaching."
- $r = +.92^*$  (as calculated from data given in Table 1 on p. 25);  $Z = +2.057^*$  ( $p = .040$ )
- Wotruba and Wright (1975)*: 350 students compared with a representative sample of 60% of the faculty members in the School of Business Administration at San Diego State University when rating each of 18 items as to its "importance . . . in evaluating faculty." (Note: The exact rank of the last 8 ranked items is not given in the article, so each of these items was considered tied at rank 14.)

TABLE 1. (Continued)

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$r$  (rho) = +.10\* (as calculated from data given in Table 2 on p. 660);  $Z$  = +0.424\* ( $p$  = .672)

*Younglich (1955)*: 101 undergraduate students compared with 35 faculty members at a "university in the Pacific Northwest" (year not given) when listing traits thought to comprise the "ideal teacher" (as subsequently classified by the researcher into 19 categories for which frequency of mention was determined).

$r$  = +.75\* (as calculated from data given in Table 2, p. 60);  $Z$  = +3.269\* ( $p$  < .001)

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*Note.* If a product-moment correlation ( $r$ ) between the students' view and the faculty's view of the importance of various components of teaching was not given explicitly in a study, it was calculated when possible from data that were given. A rank-order correlation (rho)—either as presented in a study or as calculated from data in it—is given only when  $r$  was not given or could not be calculated. Following the suggestion of Glass, McGaw, and Smith (1981, Table 5.8), rho's are treated as  $r$ 's. Multiplying  $r$  by  $\sqrt{N}$  (where  $N$ , in this case, is the number of items in a study that were considered by both students and faculty in terms of importance to good teaching) yields a generally conservative estimate approximation to  $Z$ , the standard normal deviate (see Rosenthal, 1984, p. 107). The  $r$ 's that have been used to calculate the average  $r$ 's given in the text are marked by asterisks in the table, as are the  $Z$ 's that have been used to produce combined  $Z$ 's. The probability levels ( $p$ 's) associated with the  $Z$ 's are two-tailed.

As can be seen in this table, many of the studies showed relatively high correlations between students and faculty with respect to the differential importance each group attached to various components of teaching. Indeed, some 12 of the 31 studies had correlations of at least +.85 (and 9 of these had correlations of +.90 or higher). Across all 31 studies, the average correlation was +.71 (combined  $Z$  = +21.858;  $p$  < .001,<sup>2</sup> which indicates a substantial, though clearly not total, similarity between the criteria students and faculty use in judging effective teaching.

With certain exceptions, to be noted, the results of studies varied little when divided by major type of sample used. Sixteen of the studies<sup>3</sup> each sampled student and faculty across departments or academic fields at a university or four-year college. For these studies, the average correlation between students and faculty across the instructional characteristics considered important to good teaching was +.84 (combined  $Z$  = +19.421;  $p$  < .001), not much different from the average correlation of +.76 (combined  $Z$  = +11.406;  $p$  < .001) for the six studies<sup>4</sup> using (presumably) schoolwide samples of students and faculty at junior or community colleges.

The remaining studies were done with students (and sometimes faculty also) in particular classes or within academic divisions. Again, results for a study (Blazek, 1974) of students in sections of a secondary education course and



teachers of these sections ( $r = +.77$ ) and for the two studies (Crawford and Bradshaw, 1968; Wittmaier, 1975) of students in psychology classes and of teachers more widely selected from the school as a whole (average  $r = +.88$ ) were fairly similar to each other as well as to the studies already noted that used a wider sampling of students at the schools under study. Likewise, in the research by Freilich (1983), whose student data came from freshman engineering students and from students in a general chemistry course but whose faculty data came from instructors "in a wide variety of disciplines," the correlation in question was also high ( $\rho = +.75$ ).

There are some exceptions to these high correlations. Using data from Table 1 in Marques, Lane, and Dorfman (1979), it can be shown that whereas the student-faculty correlations are high (and statistically significant) for the academic divisions of the social sciences ( $r = +.88$ ), the humanities ( $r = +.85$ ), and engineering ( $r = +.80$ ) at the school under study, the pertinent correlation for the natural sciences is only  $+0.16$  (and is statistically insignificant). Moreover, for the four different studies of faculty members in business schools and students in their classes (Baum and Brown, 1980; Stevens, 1978; Stevens and Marquette, 1979; Wotruba and Wright, 1975), none of the correlations was statistically significant, although each was positive. The average correlation across these studies is  $+0.26$ , whose combined  $Z$  of  $+1.684$  also is not statistically significant ( $p = .092$ ). Finally, the research by Norr and Crittenden (1975), based on data from 25 faculty members in a sociology department and 1,114 students in 52 classes, produced a statistically insignificant inverse correlation ( $\rho$ ) of  $-.35$ . It is not clear from the report of the investigators whether the classes involved were only sociology classes or were more widely spread across the particular college.<sup>5</sup>

## THE NATURE OF STUDENT-FACULTY DISSIMILARITY

The average correlation between students and teachers, while high, is not so large as to preclude some dissimilarity between them in the exact importance each group places on any particular instructional characteristic. To see whether any patterns could be found with respect to whether students were more likely to emphasize certain components of teaching and faculty other components, the exact rank order of various instructional characteristics were compared across studies. The intent was to find out whether there were any *consistencies* across these studies in terms of specific instructional characteristics students felt to be more important than did teachers, and vice versa. Because the procedures used to accomplish this objective involved the systematic comparison of the differential importance of various instructional characteristics to students and faculty, only those studies could be used that gave sufficient information to

allow the instructional characteristics in the study to be coded into the categories of the present analysis and to be rank-ordered in terms of their importance to students and to faculty. Consequently, nine studies were eliminated at this point,<sup>6</sup> leaving 22 studies for further consideration. These 22 studies included the four studies that sampled teachers in business schools and the students enrolled in business courses. Because the relative importance placed by these students on various instructional characteristics was essentially unrelated to that of these faculty members, as noted earlier, the results of these four studies, for the most part, are considered separately throughout the present analysis. This leaves 18 studies as the *core* set of studies for consideration.

The instructional characteristics in these studies have been coded into a set of categories whose names and contents can be found in the Appendix. Nineteen of these coding categories are those that have been used previously in this series (in Feldman, 1976b, 1983, 1984, 1987) and are given as Instructional Dimensions Nos. 1–19 in the Appendix. Three additional categories were added for the present analysis so that more of the instructional characteristics investigated in the studies could be coded and used (see Instructional Dimensions Nos. 20–22 in the Appendix). As a consequence, most of the pedagogical attitudes, behaviors, and practices found in the studies under consideration could be coded into one of these 22 instructional dimensions.

In each of the studies under consideration, either the instructional characteristics in them were originally rank-ordered in importance (for students and for faculty separately) or data are presented in them from which such rankings can be derived. In order to establish comparability among these studies, the rank of each instructional characteristic in a study has been standardized by dividing that rank by the number of characteristics in the study. For an instructional characteristic, say teacher enthusiasm, to rank fourth in importance out of 60 characteristics is hardly the same as ranking fourth out of 10 such characteristics, as the standardized ranks would show: .07 vs. .40 (i.e., 4/60 vs. 4/10). Note that the smaller the fraction, the greater the rank-ordered importance of the characteristic.

The Appendix gives the standardized ranks in the form of fractions for students and for faculty of each instructional characteristic (in each study) that was codable into one of the 22 general instructional dimensions under consideration. Table 2 is based on (and, in part, is a condensation of) the fuller array of data presented in the Appendix. This table shows the standardized rank in decimal form (for students and faculty) for each general instructional dimension for each study that had at least one instructional characteristic codable into that dimension. If more than one of the instructional characteristics in a particular study was coded into the same general instructional dimension, the individual standardized ranks were averaged to produce the standardized rank for that study for that particular instructional dimension. For each study with data relevant to a particular instructional dimension, the

*difference* between the standardized rank for students and that for faculty is also given. (A positive difference between standardized ranks indicates that students place more importance on the instructional dimension than does the faculty, whereas a negative difference indicates that the faculty places more importance on the dimension than do students.) Finally, for each of the general instructional dimensions, the table gives the *average* standardized rank (across the relevant studies) for students and for faculty as well as the average differences between these two average standardized ranks (henceforth called the average standardized difference).

To give some idea of the scale or "meaning" of the standardized differences (either as individual cases or as averages), it should be noted that a standardized difference of  $-.10$  or  $+.10$  is equivalent to a difference of one rank if 10 characteristics are being ranked, or a difference of two ranks if 20 characteristics are being ranked, or a difference of three ranks if 30 characteristics are being ranked, and so forth. Likewise, an average standardized difference of  $-.15$  or  $+.15$  is equivalent to a difference of three ranks were 30 characteristics being ranked, or a difference of six ranks were 40 characteristics being ranked, and so on.

The average standardized differences shown in Table 2 for the core set of studies under consideration are not very large, as would be expected since the importance placed by students and by teachers on various instructional characteristics is fairly similar (indicated by the sizable correlation across studies discussed previously). The largest average standardized differences are  $+.22$  for Instructional Dimension No. 1 (students place more importance than do faculty on teachers stimulating students' interest),  $-.24$  for Instructional Dimension No. 21 (students place less importance than do faculty on teachers encouraging self-initiated learning on the part of students), and  $-.18$  for Instructional Dimension No. 17 (students place less importance than do faculty on teachers challenging students intellectually and encouraging their independent thought).

Also shown in Table 2 are smaller differences of  $-.13$  for Instructional Dimension No. 20 (students place less importance than do faculty on teachers motivating students to do their best and setting high standards of performance for them),  $+.10$  for Dimension No. 7 (students place more importance than do faculty on teachers' elocutionary skills), and  $+.10$  for Dimension No. 19 (students place more importance than do faculty on teachers' availability and helpfulness to students) as well as the even smaller differences of  $+.08$  for Dimension No. 12 (students place more importance than do faculty on the perceived outcome or impact of instruction),  $+.08$  for Dimension No. 18 (students place more importance than do faculty on teachers being concerned about students, showing respect for them, and being friendly), and  $-.08$  for Dimension No. 2 (students place less importance than do faculty on teachers' enthusiasm for the subject or for teaching). On the remaining dimensions, students and faculty differ less, if at all, in their preferences.

**TABLE 2. Importance (Standardized Ranks) of Various Instructional Dimensions for Students and Faculty (Individual Studies and Averages)**

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Difference
<b>No. 1. Teacher's Stimulatioin of Interest in the Course and Its Subject Matter</b>			
Blazek (1974)	.54	.70	+ .16
Brewer and Brewer (1970)	.10	.20	+ .10
Bridges et al. (1971)	.08	.21	+ .13
Evaluation and Examination Services (1974)	.14	.26	+ .12
Krupka (1970)	.20	.20	.00
Marques et al. (1979)	.29	.29	.00
Odom (1943)	.58	.92	+ .34
Romine (1974)	.33	.75	+ .32
Romine and Newport (1973)	.27	.46	+ .19
Youglich (1955)	.26	.97	+ .71
Average	.28	.50	+ .22
<b>No. 2. Teacher's Enthusiasm (for Subject or for Teaching)</b>			
Blazek (1974)	.27	.26	- .01
Brewer and Brewer (1970)	.40	.40	.00
Bridges et al. (1971)	.21	.17	- .04
Evaluation and Examination Services (1974)	.16	.13	- .03
Murray et al. (1982)	.62	.46	- .16
Odom (1943)	.78	.44	- .34
Romine (1974)	.09	.10	+ .01
Romine and Newport (1973)	.13	.05	- .08
Whitley (1982)	.25	.13	- .12
Average	.32	.24	- .08
<b>No. 3. Teacher's Knowledge of the Subject</b>			
Blazek (1974)	.43	.53	+ .10
Brewer and Brewer (1970)	.20	.30	+ .10
Bridges et al. (1971)	.44	.25	- .19
Delaney and Coons (1976)	.25	.25	.00
Evaluation and Examination Service (1974)	.49	.43	- .06
Freilich (1983)	.14	.05	- .09
Hussain and Leestamper (1968)	.23	.32	+ .09
Jenkins et al. (n.d.)	.48	.10	- .38
Krupka (1970)	.10	.10	.00
Marques et al. (1979)	.57	.43	- .14

TABLE 2. (Continued)

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Difference
Murray et al. (1982)	.15	.19	+ .04
Odom (1943)	.03	.03	.00
Perry (1969)	.33	.18	- .15
Romine (1974)	.13	.08	- .05
Romine and Newport (1973)	.34	.32	- .02
Whitley (1982)	.06	.06	.00
Yourglich (1955)	.32	.26	- .06
Average	.28	.23	- .05
No. 4. Teacher's Intellectual Expansiveness (and Intelligence)			
Bridges et al. (1971)	.50	.29	- .21
Evaluation and Examination Service			
(1974)	.32	.43	+ .11
Hussain and Leestamper (1968)	.69	.60	- .09
Jenkins et al. (n.d.)	.74	.67	- .07
Odom (1943)	.58	.48	- .10
Perry (1969)	.68	.49	- .19
Romine (1974)	.48	.64	+ .16
Romine and Newport (1973)	.54	.54	.00
Yourglich (1955)	.54	.32	- .22
Average	.56	.50	- .06
No. 5. Teacher's Preparation; Organization of the Course			
Blazek (1974)	.30	.57	+ .27
Bridges et al. (1971)	.56	.59	+ .03
Evaluation and Examination Service (1970)			
Freilich (1983)	.28	.26	- .02
Hussain and Leestamper (1968)	.05	.10	+ .05
Jenkins et al. (n.d.)	.15	.14	- .01
Krupka (1970)	.30	.40	+ .10
Perry (1969)	.08	.10	+ .02
Romine (1974)	.03	.03	.00
Romine and Newport (1973)	.07	.03	- .04
Whitley (1982)	.50	.31	- .19
Yourglich (1955)	.87	.74	- .13
Average	.27	.28	+ .01

TABLE 2. (Continued)

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Difference
No. 6. Clarity and Understandableness			
Blazek (1974)	.26	.31	+ .05
Bridges et al. (1971)	1.00	1.00	.00
Evaluation and Examination Service (1974)	.21	.19	-.02
Freilich (1983)	.07	.36	+ .29
Murray et al. (1982)	.08	.19	+ .11
Romine (1974)	.50	.54	+ .04
Romine and Newport (1973)	.38	.31	-.07
Younglich (1955)	.11	.18	+ .07
Average	.33	.39	+ .06
No. 7. Teacher's Elocutionary Skills			
Bridges et al. (1971)	.63	.50	-.13
Evaluation and Examination Service (1974)	.60	.69	+ .09
Hussain and Leestamper (1968)	.38	.43	+ .05
Jenkins et al. (n.d.)	.27	.70	+ .43
Krupka (1970)	.80	.90	+ .10
Murray et al. (1982)	.69	.92	+ .23
Perry (1969)	.45	.43	-.02
Romine (1974)	.23	.33	+ .10
Romine and Newport (1973)	.16	.26	+ .10
Average	.47	.57	+ .10
No. 8. Teacher's Sensitivity to, and Concern with, Class Level and Progress			
Bridges et al. (1971)	.33	.54	+ .21
Evaluation and Examination Service (1974)	.37	.50	+ .13
Hussain and Leestamper (1968)	.12	.08	-.04
Jenkins et al. (n.d.)	.03	.13	+ .10
Perry (1969)	.10	.13	+ .03
Romine (1974)	.25	.28	+ .03
Romine and Newport (1973)	.36	.20	-.16
Average	.22	.27	+ .05
No. 9. Clarity of Course Objectives and Requirements			
Blazek (1974)	.27	.26	-.01
Delaney and Coons (1976)	.75	.75	.00
Evaluation and Examination Service (1974)	.42	.38	-.04

TABLE 2. (Continued)

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Difference
Freilich (1983)	.46	.38	-.08
Krupka (1970)	.70	.50	-.20
Marques et al. (1979)	1.00	1.00	.00
Romine (1974)	.80	.43	-.37
Romine and Newport (1973)	.34	.16	-.18
Whitley (1982)	.56	.69	+.13
Wittmaier (1975)	1.00	1.00	.00
Average	.63	.56	-.07
No. 10. Nature and Value of the Course Material (Including Its Usefulness and Relevance)			
Blazek (1974)	.91	.88	-.03
Evaluation and Examination Service (1974)	.40	.52	+.12
Freilich (1983)	.59	.52	-.07
Hussain and Leestamper (1968)	.16	.35	+.19
Jenkins et al. (n.d.)	.24	.20	-.04
Murray et al. (1982)	.38	.31	-.07
Perry (1969)	.22	.28	+.06
Romine (1974)	.32	.44	+.12
Romine and Newport (1973)	.28	.29	+.01
Whitley (1982)	.94	.75	-.19
Wittmaier (1975)	.67	.67	.00
Average	.46	.47	+.01
No. 11. Nature and Usefulness of Supplementary Materials and Teaching Aids			
Blazek (1974)	.54	.47	-.07
Bridges et al. (1971)	.77	.60	-.17
Evaluation and Examination Service (1974)	.18	.40	+.22
Freilich (1983)	.44	.59	+.15
Hussain and Leestamper (1968)	.78	.74	-.04
Jenkins et al. (n.d.)	.62	.65	+.03
Murray et al. (1982)	.38	.31	-.07
Perry (1969)	.77	.81	+.04
Romine (1974)	.68	.90	+.22
Romine and Newport (1973)	.21	.29	+.08
Average	.54	.58	+.04

TABLE 2. (Continued)

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Difference
No. 12. Perceived Outcome or Impact of Instruction			
Blazek (1974)	.70	.57	-.13
Evaluation and Examination Service (1974)	.65	.51	-.14
Romine (1974)	.18	.60	+.42
Romine and Newport (1973)	.19	.37	+.18
Average	.43	.51	+.08
No. 13. Instructor's Fairness; Impartiality of Evaluation of Students; Quality of Examinations			
Blazek (1974)	.03	.39	+.36
Brewer and Brewer (1970)	.30	.10	-.20
Bridges et al. (1971)	.13	.38	+.25
Evaluation and Examination Service (1974)	.46	.47	+.01
Freilich (1983)	.93	.89	-.04
Hussain and Leestamper (1968)	.37	.44	+.07
Jenkins et al. (n.d.)	.41	.39	-.02
Krupka (1970)	.60	.70	+.10
Murray et al. (1982)	.38	.23	-.15
Odom (1943)	.08	.33	+.25
Perry (1969)	.38	.49	+.11
Romine (1974)	.95	.51	-.44
Romine and Newport (1973)	.55	.39	-.16
Whitley (1982)	.69	.63	-.06
Average	.45	.45	.00
No. 14. Personality Characteristics ("Personality") of the Instructor			
Brewer and Brewer (1970)	.90	.80	-.10
Bridges et al. (1971)	.59	.55	-.04
Freilich (1983)	1.00	1.00	.00
Hussain and Leestamper (1968)	.63	.58	-.05
Jenkins et al. (n.d.)	.57	.65	+.08
Krupka (1970)	.60	1.00	+.40
Odom (1943)	.48	.50	+.02
Perry (1969)	.62	.66	+.04
Romine (1974)	.60	.80	+.20
Romine and Newport (1973)	.26	.41	+.15
Whitley (1982)	.88	1.00	+.12
Younglich (1955)	.50	.42	-.08
Average	.64	.70	+.06



TABLE 2. (Continued)

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Difference
No. 15. Nature, Quality, and Frequency of Feedback from the Teacher to Students			
Blazek (1974)	.46	.49	+ .03
Evaluation and Examination Service (1974)	.55	.58	+ .03
Freilich (1983)	.14	.11	- .03
Hussain and Leestamper (1968)	.42	.51	+ .09
Jenkins et al. (n.d.)	.43	.57	+ .14
Perry (1969)	.43	.61	+ .18
Romine (1974)	.65	.68	+ .03
Romine and Newport (1973)	.34	.25	- .09
Whitley (1982)	1.00	.94	- .06
Average	.49	.53	+ .04
No. 16. Teacher's Encouragement of Questions and Discussion, and Openness to Opinions of Others			
Blazek (1974)	.26	.12	- .14
Brewer and Brewer (1970)	.55	.55	.00
Bridges et al. (1971)	.31	.56	+ .25
Delaney and Coons (1976)	.50	.50	.00
Evaluation and Examination Service (1974)	.61	.46	- .15
Freilich (1983)	.67	.77	+ .10
Hussain and Leestamper (1968)	.34	.29	- .05
Jenkins et al. (n.d.)	.24	.27	+ .03
Murray et al. (1982)	.85	.77	- .08
Odom (1943)	.19	.26	+ .07
Perry (1969)	.30	.28	- .02
Romine (1974)	.93	.50	- .43
Romine and Newport (1973)	.57	.50	- .07
Whitley (1982)	.59	.66	+ .07
Wittmaier (1975)	.67	.67	.00
Average	.51	.48	- .03
No. 17. Intellectual Challenge and Encouragement of Independent Thought (by the Teacher and the Course)			
Bridges et al. (1971)	.54	.60	+ .06
Evaluation and Examination Service (1974)	.82	.76	- .06
Hussain and Leestamper (1968)	.46	.38	- .08
Jenkins et al. (n.d.)	.49	.35	- .14

TABLE 2. (Continued)

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Difference
Marques et al. (1979)	.86	.71	-.15
Murray et al. (1982)	.31	.08	-.23
Perry (1969)	.47	.28	-.19
Romine (1974)	.48	.13	-.35
Romine and Newport (1973)	.57	.30	-.27
Whitley (1982)	.81	.38	-.43
Average	.58	.40	-.18
No. 18. Teacher's Concern and Respect for Students; Friendliness of the Teacher			
Blazek (1974)	.20	.36	+.16
Brewer and Brewer (1970)	.70	.70	.00
Bridges et al. (1971)	.04	.04	.00
Evaluation and Examination Service (1974)	.69	.61	-.08
Freilich (1983)	.46	.20	-.26
Hussain and Leestamper (1968)	.39	.31	-.08
Jenkins et al. (n.d.)	.23	.25	+.02
Marques et al. (1979)	.71	.86	+.15
Murray et al. (1982)	.46	.62	+.16
Odom (1943)	.50	.78	+.28
Perry (1969)	.38	.31	-.07
Romine (1974)	.45	.51	+.06
Romine and Newport (1973)	.17	.34	+.17
Whitley (1982)	.28	.53	+.25
Wittmaier (1975)	.17	.50	+.33
Younglich (1955)	.37	.58	+.21
Average	.39	.47	+.08
No. 19. Teacher's Availability and Helpfulness			
Evaluation and Examination Service (1974)	.17	.07	-.10
Hussain and Leestamper (1968)	.26	.29	+.03
Jenkins et al. (n.d.)	.12	.24	+.12
Krupka (1970)	.50	.60	+.10
Murray et al. (1982)	.46	.62	+.16
Perry (1969)	.25	.36	+.11
Romine (1974)	.50	.78	+.28
Romine and Newport (1973)	.55	.46	-.09
Whitley (1982)	.31	.56	+.25
Younglich (1955)	.53	.68	+.15
Average	.37	.47	+.10

TABLE 2. (Continued)

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Difference
<b>No. 20. Teacher Motivates Students to Do Their Best; High Standards of Performance Required</b>			
Blazek (1974)	.59	.58	-.01
Bridges et al. (1971)	.83	.67	-.16
Hussain and Leestamper (1968)	.34	.17	-.17
Jenkins et al. (n.d.)	.44	.32	-.15
Perry (1969)	.31	.18	-.15
Romine and Newport (1973)	.93	.76	-.17
Whitley (1982)	.63	.44	-.19
Average	.58	.45	-.13
<b>No. 21. Teacher's Encouragement of Self-initiated Learning</b>			
Evaluation and Examination Service (1974)	.72	.34	-.38
Freilich (1983)	.71	.60	-.11
Romine (1974)	.84	.38	-.46
Romine and Newport (1973)	.72	.70	-.02
Average	.75	.51	-.24
<b>No. 22. Teacher's Productivity in Research and Related Activities</b>			
Brewer and Brewer (1970)	.90	.80	-.10
Hussain and Leestamper (1968)	.95	.91	-.04
Jenkins et al. (n.d.)	.98	.98	.00
Perry (1969)	.97	.88	-.09
Romine and Newport (1973)	.76	.85	+.09
Average	.91	.88	-.03

*Note.* This table shows the individual and average standardized ranks (as explained in the text) for students and faculty (and the differences between them) for each of the instructional dimensions under consideration, and it is based on data in the Appendix for the 18 "core" studies. Had the four studies of business school instructors and students in business courses been included, results for some of the instructional dimensions (namely No.'s 7, 8, 10, 11, 12, 14, 21, and 22) would not be affected because none of the instructional characteristics considered in these four studies were coded into these dimensions. For the remaining dimensions, the average standardized ranks for students and for faculty, and the corresponding average standardized differences between them, would be the following: No. 1 (.35, .61, +.26); No. 2 (.33, .28, -.05); No. 3 (.26, .23, -.03); No. 4 (.59, .52, -.07); No. 5 (.29, .41, +.12); No. 6 (.38, .38, .00); No. 9 (.60, .58, -.02); No. 13 (.40, .51, +.11); No. 15 (.52, .55, +.03); No. 16 (.53, .47, -.06); No. 17 (.65, .38, -.27); No. 18 (.39, .46, +.07); No. 19 (.38, .46, +.08); No. 20 (.67, .50, -.17). The average standardized difference for each dimension (either including the four studies done at business schools or excluding them) has been gotten by subtracting the average standardized ranks for students from the average standardized rank for faculty. Averaging the individual differences between the standardized ranks for students and for faculty should produce exactly the same result, although occasionally the average standardized difference figured this way (not shown in the table) is off by .01 due to rounding error.

To consider the four studies of business school instructors and students adds a certain amount of information to the analysis, but not as much as might be expected because they present no information for several of the pertinent instructional dimensions. Moreover, for others of the dimensions, only one of the studies has relevant data, and for none of the dimensions is there information from two of the studies. However, as seen in the Appendix, six of the dimensions do have data from either three or all four of the studies, and most of these show large differences between students and faculty. Reviewing the average standardized ranks involved, as calculated from the data presented in the Appendix, it is clear that these studies show that students in business courses place much less emphasis than do faculty members of business schools on instructors intellectually challenging students and encouraging independent thought (Dimension No. 17: .83 vs. .33) and (to a smaller extent) on teachers setting high standards of performance and motivating students to do their best (No. 20: .83 vs. .60). At the same time, these students place much more importance than faculty on an instructor's fairness and impartiality of evaluation (No. 13: .24 vs. .69), preparation and organization (No. 5: .37 vs. .80), and stimulation of students' interest (No. 1: .53 vs. .90). No difference exists on average between the two regarding the importance of the teacher's friendliness as well as concern and respect for students (No. 18: .43 vs. .43).<sup>7</sup>

Student and faculty judgments of importance can also be compared by examining the rank order of the average standardized ranks of the instructional dimensions for students and for faculty in the core group of studies, as shown in Table 3. This table is based on Table 2 and repeats the average standardized ranks of that table. In this case, however, these average standardized ranks are themselves ranked from 1 (high) to 22 (low) for students and faculty separately. The instructional dimensions in Table 3 have been reordered so that they are listed from highest to lowest in importance to students. The rank-order correlation ( $\rho$ ) between the rank ordering of the dimensions of students and that for faculty is  $+ .69$  ( $p < .001$ ), and the correlation coefficient ( $r$ ) between the average standardized ranks for the students and the faculty is  $+ .80$  ( $p < .001$ ).

Some of the differences between students and faculty in the importance they attach to various instructional dimensions appear more striking when using this second method of comparison. It can be seen from Table 3 that the largest differences between students and faculty in the rank order of their preferences are for Instructional Dimensions No. 17, intellectual challenge (rank 17.5 for students vs. rank 6 for faculty); No. 1, stimulation of interest (rank 3.5 for students vs. rank 13.5 for faculty); and No. 20, motivating students and setting high standards (rank 17.5 for students vs. rank 7.5 for faculty). More modest

**TABLE 3. Importance (Average Standardized Ranks and Their Rank Ordering) of Various Instructional Dimensions for Students and Faculty**

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty
No. 8. Teacher's Sensitivity to, and Concern with, Class Level and Progress	.22 (1)	.27 (3)
No. 5. Teacher's Preparation; Organization of the Course	.27 (2)	.28 (4)
No. 3. Teacher's Knowledge of the Subject	.28 (3.5)	.23 (1)
No. 1. Teacher's Stimulation of Interest in the Course and Its Subject Matter	.28 (3.5)	.50 (13.5)
No. 2. Teacher's Enthusiasm (for Subject or for Teaching)	.32 (5)	.24 (2)
No. 6. Clarity and Understandableness	.33 (6)	.39 (5)
No. 19. Teacher's Availability and Helpfulness	.37 (7)	.47 (10)
No. 18. Teacher's Concern and Respect for Students; Friendliness of the Teacher	.39 (8)	.47 (10)
No. 12. Perceived Outcome or Impact of Instruction	.43 (9)	.51 (15.5)
No. 13. Instructor's Fairness; Impartiality of Evaluation of Students; Quality of Examinations	.45 (10)	.45 (7.5)
No. 10. Nature and Value of the Course Material (Including Its Usefulness and Relevance)	.46 (11)	.47 (10)
No. 7. Teacher's Elocutionary Skills	.47 (12)	.57 (19)
No. 15. Nature, Quality, and Frequency of Feedback from the Teacher to Students	.49 (13)	.53 (17)
No. 16. Teacher's Encouragement of Questions and Discussion, and Openness to Opinions of Others	.51 (14)	.48 (12)
No. 11. Nature and Usefulness of Supplementary Materials and Teaching Aids	.54 (15)	.58 (20)
No. 4. Teacher's Intellectual Expansiveness (and Intelligence)	.56 (16)	.50 (13.5)
No. 17. Intellectual Challenge and Encouragement of Independent Thought (by the Teacher and the Course)	.58 (17.5)	.40 (6)
No. 20. Teacher Motivates Students to Do Their Best; High Standards of Performance Required	.58 (17.5)	.45 (7.5)

*(Continued)*

TABLE 3. (Continued)

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty
No. 9. Clarity of Course Objectives and Requirements	.63 (19)	.56 (18)
No. 14. Personality Characteristics ("Personality") of the Instructor	.64 (20)	.70 (21)
No. 21. Teacher's Encouragement of Self-Initiated Learning	.75 (21)	.51 (15.5)
No. 22. Teacher's Productivity in Research and Related Activities	.91 (22)	.88 (22)

*Note.* The average standardized ranks given in this table are taken directly from Table 2 and have themselves been ranked from 1 (high) to 22 (low) for students and faculty. These ranks are given in parentheses. In addition, the instructional dimensions have been reordered so that they are listed from highest to lowest in importance to students. As in Table 2, the data presented are based on 18 "core" studies. When the four studies of faculty and students in business schools are included, the ranks of the average standardized ranks (see note to Table 2) for the 22 instructional dimensions are the following: Instructional Dimension No. 8 (rank 1 for students, rank 2 for faculty); No. 3 (2, 1); No. 5 (3, 6); No. 2 (4, 3); No. 1 (5, 20); No. 6 (6.5, 4.5); No. 19 (6.5, 7.5); No. 18 (8, 7.5); No. 13 (9, 13); No. 12 (10, 13); No. 10 (11, 19.5); No. 7 (12, 17); No. 15 (13, 16); No. 16 (14, 9.5); No. 11 (15, 18.5); No. 4 (16, 15); No. 9 (17, 18.5); No. 14 (18, 21); No. 17 (19, 4.5); No. 20 (20, 11); No. 21 (21, 13); No. 22 (22, 22).

differences are found for Dimension No. 7, elocutionary skills (rank 12 for students vs. rank 19 for faculty); No. 12, perceived outcome of instruction (rank 9 for students vs. rank 15.5 for faculty); No. 21, encouragement of self-initiated learning (rank 21 for students vs. rank 15.5 for faculty); and No. 11, usefulness of supplementary materials (rank 15 for students vs. rank 20 for faculty). Still smaller, or "borderline," differences are found for Dimension No. 15, feedback to students (rank 13 for students vs. rank 17 for faculty); No. 19, availability and helpfulness (rank 7 for students vs. rank 10 for faculty); and No. 2, enthusiasm (rank 5 for students vs. rank 2 for faculty). Students and faculty preferences show little if any differences in the rank placement of the remaining dimensions.<sup>8</sup>

Thus, for the group of studies, the two methods of comparison give similar though not identical results. Both methods produce relatively large differences for Instructional Dimensions No. 1 and No. 17 (students placing greater emphasis than faculty on teachers being interesting or stimulating and lesser emphasis on their being intellectually challenging). Instructional Dimensions No. 20 and No. 21 show relatively large differences using one of the two methods, but more modest differences using the other (students placing less emphasis than faculty on teachers motivating students, setting high standards for

them, and encouraging self-initiated learning). Both methods found moderate or small differences for Instructional Dimensions No. 7 (students placing greater emphasis than faculty on the teacher's elocutionary skills), No. 12 (students placing greater emphasis than faculty on perceived outcome or impact of instruction), No. 19 (students placing greater emphasis than faculty on teachers being available and helpful), and No. 2 (students placing less emphasis than faculty on teachers being enthusiastic). Instructional Dimensions No.'s 11, 15, and 18 show differences for only one of the two methods and not for the other (and for the last of these three dimensions, even the differences that are found are relatively small).<sup>9</sup>

Considering results for *both* methods of comparison as well as for *both* sets of studies (i.e., the set excluding the four studies of faculty and students at business schools and the set including them), the most consistent and largest student-faculty differences are those showing that students place more importance than do faculty on teachers being interesting and having good elocutionary skills and that faculty place more importance than do students on teachers being intellectually challenging, motivating and setting high standards for students, and encouraging self-initiated learning (Dimensions Nos. 1, 7, 17, 20, and 21). To a lesser extent students give greater emphasis than faculty to the outcomes of instruction (No. 12), and to a still smaller extent (and somewhat inconsistently across methods and sets of studies), they view the availability and helpfulness of teachers (No. 19) as more important to good teaching than faculty do.

Certain differences, all small, were dependent on the method or set of studies used. For both sets of studies, students felt it slightly more important than did faculty for teachers to be friendly, concerned, and respectful of students (No. 18) when the comparison was in terms of average standardized differences but not when these average standardized differences themselves were ranked and compared. Moreover, for both sets of studies, students placed somewhat more importance than did faculty on the nature and usefulness of supplementary materials and teaching aids (No. 11) and on the nature, quality, and frequency of feedback (No. 15) when this latter, but not the former, method of comparison was used. For both methods of comparison, students placing slightly less emphasis than faculty on teachers' enthusiasm (No. 2) showed up only when the four studies of business teachers and students in business courses were excluded, whereas students placing slightly greater emphasis than faculty on teachers' organization and preparation (No. 5) and on their impartiality and fairness (No. 13) showed up only when business teachers and students were included.

Focusing on differences overlooks the many dimensions on which students and faculty are more or less similar in their views. Thus it is important to note that across sets of studies and methods, students and faculty alike place high

importance<sup>10</sup> on teachers being knowledgeable about the subject matter of the course, clear and understandable, and sensitive to (and concerned with) class level and progress (Instructional Dimensions Nos. 3, 6, and 8). Compared to these instructional dimensions, both groups feel it of either moderate or moderate-to-low importance for teachers to be intellectually expansive and intelligent, and open to student questions, class discussion, and the opinions of others (Dimension Nos. 4 and 16) and for the course material to be valuable, useful, and relevant (No. 10). Of clearly low importance to students and faculty, relative to the other dimensions, is the clarity of course objectives and requirements, the overall "personality" of the instructor, and the extent of the teacher's research activities (Nos. 9, 14, and 22). Moreover, some of the differences discussed earlier that varied by the set of studies or the method of comparison used not only were inconsistent but also were so small that students and faculty were in fact more similar than different across the sets of studies and methods. Thus both students and faculty essentially placed high importance on enthusiasm (No. 2) and preparation and organization (No. 5) of instructors, and moderate importance on the instructor's impartiality and fairness (No. 13) as well as on the friendliness of the instructor and the concern or respect he or she shows for students (No. 18).

### INSTRUCTIONAL CHARACTERISTICS IMPORTANT TO OVERALL EVALUATION OF ACTUAL TEACHERS

Asking students for their opinions on the characteristics important to effective teaching is not the same as asking them to evaluate specific teachers (or their courses) in actuality, although their general views on good teaching presumably are a critical influence on such evaluations. If it is assumed that each student's overall evaluation of an instructor is an additive combination of the student's evaluation of specific aspects of the teacher and his or her instruction, weighted by the student's estimation of the relative importance of these aspects to good teaching, then it would be expected that students' overall assessment of instructors would be more highly associated with instructional characteristics that students generally consider to be more important to good teaching than with those they consider to be less important (cf. Crittenden and Norr, 1973). If so, then a rank ordering of various specific instructional characteristics that is based on how strongly students' evaluation of actual teachers on these characteristics correlate with the students' overall assessment of these same teachers should be highly similar, if not identical, to the rank ordering of these characteristics when students "merely" indicate the degree of importance of these characteristics to good teaching.

There are factors that might come into play that would reduce the similarity of



these two rank orderings, however. For one, the differential weights of various specific instructional characteristics that students imply they use (or will use) in evaluating their teachers—determined by asking them about their ideal or best teachers or about the importance of various instructional characteristics to good teaching—are not necessarily the weights they actually use, in practice, when they form and report an overall impression of each of their current teachers (see, especially, Permut, 1973). For another, it is altogether possible that a characteristic considered by students to be highly important to good teaching does not particularly differentiate the better from the poorer teachers in actual teacher-rating situations. For example, excellent knowledge of the **subject** matter, already shown to be seen by students as important to good teaching, may indeed be a characteristic of teachers who receive high global ratings from students. But this does not automatically or necessarily mean that less globally effective teachers are any less knowledgeable. These lower-rated teachers, too, may be highly expert in their subject. If so, this would be a case where the instructional dimension of subject-matter knowledge simply does not discriminate (or, perhaps, discriminates only weakly) among teachers with respect to their overall ratings on teacher evaluation forms.

Correlational analysis between specific and overall student evaluations of teachers, then, offers *prima facie* evidence of the importance of various specific instructional characteristics in discriminating among students' global assessment of teachers. Presumably it also supplies information about the "weights" students attach to these characteristics in terms of their importance to effective teaching, although the extent to which this is the case has not yet been determined by research. At any rate, it is of some worth to compare the importance of various instructional characteristics to good teaching as determined by the views students have directly expressed on the matter (as well as by faculty views) with their "importance" as determined by the strength of their correlation with actual overall ratings of teachers. Ideally, actual ratings of teachers would be available from exactly the same students whose views about good teaching were sought. Barring this, ratings from students at the same schools made at about the same time would be a reasonable substitute. Unfortunately, as far as can be determined, neither set of data is currently available. None of the studies asking students about the components of good teaching (on which Tables 2 and 3 are based) also obtained specific and overall ratings of the teachers at the schools under consideration.

An alternative procedure is available, but it is less satisfactory, and any analysis based on it is exploratory. The earlier article (Feldman, 1976b), mentioned at the outset of the present report, located some 23 studies containing correlations between students' overall evaluations of their instructors and their ratings of various specific attitudinal and behavioral characteristics of these instructors. In this earlier investigation, average standardized ranks were

calculated for various instructional dimensions, including 18 of the dimensions used in the present analysis (Nos. 1–13, 15–19, as given in Table 2 and footnote 5 of the earlier article). It is these average standardized ranks that can be compared to those of the present study. Note that this alternative procedure introduces yet another source of variation, and thereby an additional complexity, into the analysis. To an unknown extent, any differences found in the importance of specific instructional characteristics may be due to the use of different students and schools rather than to the fact that importance is being determined by analyzing actual student ratings of teachers.

Shown in Table 4 are the average standardized ranks for the 18 instructional dimensions (and their rank ordering) based on the correlations between students' specific evaluations of teachers on these instructional dimensions and their overall evaluations of these same teachers. Repeated in this table (from Table 3), for purposes of comparison, are the average standardized ranks for these particular 18 dimensions, based on the extent to which students and faculty saw them as being of importance to effective teaching. The ranks of these average standardized rankings are again given (this time running from 1 to 18).

The association between the importance of these eighteen dimensions to effective teaching as viewed by students and by faculty is still high ( $\rho = +.66, p < .01$ ;  $r = +.71, p < .01$ ), although a little lower than when all 22 dimensions were used. However, neither the student nor the faculty indications of the importance of the instructional dimensions are significantly related to importance of these dimensions in terms of discriminating among students' overall evaluation of teachers in actual rating situations. For the student-student comparison,  $\rho$  is  $+.34 (p > .05)$  and  $r$  is  $+.36 (p > .05)$ ; for the faculty-student comparison,  $\rho$  is  $+.28 (p > .05)$  and  $r$  is  $+.31 (p > .05)$ . It thus becomes of particular interest to see where, and exactly how, the three indicators of importance differ as well as where they might be similar. In order not to put too fine a point on the comparisons, given the several methodological and interpretive difficulties discussed, comparisons are made in terms of high (1–6), medium (7–12), and low (13–18) ranks.

The teacher's preparation and organization, clarity and understandableness, and sensitivity to, and concern with, class level and progress (Instructional Dimension Nos. 5, 6, and 8) are of especial importance in all three ways. That is, students and faculty view them as highly important when asked about the components of good teaching, and they are of high importance in discriminating among the global ratings received by teachers from their students. The teacher's enthusiasm and his or her knowledge of the subject (Dimensions No. 2 and No. 3) are also of high importance in the views of students and faculty, but they are of only moderate importance in differentiating among students' actual overall assessment of teachers. Being able to stimulate their interest (No. 1) is highly important to students, both when they express their views about good teaching

**TABLE 4. Importance (Average Standardized Ranks and Their Rank Ordering) of Various Instructional Dimensions for Students (Two Indicators) and Faculty (One Indicator)**

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Importance Shown by Correlation with Overall Evaluations
No. 8 Teacher's Sensitivity to, and Concern with, Class Level and Progress	.22 (1)	.27 (3)	.40 (5)
No. 5. Teacher's Preparation; Organization of the Course	.27 (2)	.28 (4)	.41 (6)
No. 3. Teacher's Knowledge of the Subject	.28 (3.5)	.23 (1)	.48 (9)
No. 1. Teacher's Stimulation of Interest in the Course and Its Subject Matter	.28 (3.5)	.50 (12.5)	.20 (1)
No. 2. Teacher's Enthusiasm (for Subject or for Teaching)	.32 (5)	.24 (2)	.46 (8)
No. 6. Clarity and Understandableness	.33 (6)	.39 (5)	.25 (2)
No. 19. Teacher's Availability and Helpfulness	.37 (7)	.47 (9)	.74 (17)
No. 18. Teacher's Concern and Respect for Students; Friendliness of the Teacher	.39 (8)	.47 (9)	.65 (13)
No. 12. Perceived Outcome or Impact of Instruction	.43 (9)	.51 (14)	.28 (3)
No. 13. Instructor's Fairness; Impartiality of Evaluation of Students; Quality of Examinations	.45 (10)	.45 (7)	.72 (15.5)
No. 10. Nature and Value of the Course Material (Including Its Usefulness and Relevance)	.46 (11)	.47 (9)	.70 (14)
No. 7. Teacher's Elocutionary Skills	.47 (12)	.57 (17)	.49 (10)
No. 15. Nature, Quality, and Frequency of Feedback from the Teacher to Students	.49 (13)	.53 (15)	.87 (18)

(Continued)

TABLE 4. (Continued)

Instructional Dimension	Importance Stated by Students	Importance Stated by Faculty	Importance Shown by Correlation with Overall Evaluations
No. 16. Teacher's Encouragement of Questions and Discussion, and Openness to Opinions of Others	.51 (14)	.48 (11)	.60 (12)
No. 11. Nature and Usefulness of Supplementary Materials and Teaching Aids	.54 (15)	.58 (18)	.72 (15.5)
No. 4. Teacher's Intellectual Expansiveness (and Intelligence)	.56 (16)	.50 (12.5)	.54 (11)
No. 17. Intellectual Challenge and Encouragement of Independent Thought (by the Teacher and the Course)	.58 (17)	.40 (6)	.39 (4)
No. 9. Clarity of Course Objectives and Requirements	.63 (18)	.56 (16)	.45 (7)

*Note.* The average standardized ranks given in the first two columns for the 18 dimensions under consideration are taken from Table 3 and have been (re)ranked from 1 to 18 (with the ranks shown in parentheses). The average standardized ranks given to Column 3 come from Feldman (1976b, see Table 2 and footnote 5); they, too, have been ranked from 1 to 18 (with the ranks given in parentheses).

and when they actually rate teachers; however, faculty regard this dimension as moderate to low in importance.

No one dimension is of moderate importance in all three ways, although Dimension No. 16 (the teacher's openness to question, discussion, and the opinion of others) is of moderate-to-low importance for all three. In the eyes of both students and faculty, the nature and value of the course material and the instructor's fairness, concern and respect for students, friendliness, availability, and helpfulness (Dimension Nos. 10, 13, 18, and 19) are of moderate importance as components of good teaching, although they are only of low importance in discriminating among teachers' overall ratings. Students place moderate emphasis on the teacher's elocutionary skills (No. 7), both in their expressed views and when actually rating teachers, but the faculty themselves do not see this instructional characteristic as particularly important to good teaching. No matter the indicator used, the nature and usefulness of supplementary material and teaching aids, as well as the nature, quality, and

frequency of feedback from the teacher to students (Nos. 11 and 15) register low in importance relative to the other dimensions.

The four remaining dimensions show particularly interesting discrepancies. The clarity of course objectives and requirements (No. 9) are said by both students and faculty to be of low importance to effective teaching, yet this dimension ranks in seventh place (just short of being in the top third) in correlating with overall ratings of teachers. Based on the views they express, the outcome of instruction (No. 12) is moderately important to students and of less importance than to faculty, but this dimension is highly correlated with the overall student assessment of teachers in actual rating situations. The teacher's intelligence and intellectual expansiveness (No. 4) are moderately important to faculty and also to students when they actually discriminate among the overall performances of teachers, but this aspect of instruction is of less importance to student when they express their views on good teaching. Finally, intellectual challenge and encouragement of independent thought (No. 17) are highly important to good teaching say the faculty, although students see them of low importance; yet when students actually assess their teachers, this dimension turns out to be highly important in discriminating among teachers.

#### SUMMARY, COMMENTS, AND SUGGESTIONS FOR ADDITIONAL RESEARCH

College teachers have been known to voice concern that students and faculty have different ideas about what is important to good teaching and effective instruction. One of the arguments brought up against the use of students' evaluations of teachers, in fact, is that students do not always use appropriate criteria in evaluating their teachers. Indeed, the chief premise behind the so-called Dr. Fox effect, accounting in part for the great interest in the presumed phenomenon, is that students value authoritative style, showmanship, wit, and other forms of teachers' expressiveness at the expense of substance, meaning, and course content (see, *inter alia*, Abrami, Leventhal, and Perry, 1982; Marsh, 1984; Naftulin, Ware, and Donnelly, 1973). The purpose of the present analysis was to draw together what is known about the similarities and dissimilarities between faculty and students in their views on effective college teaching, so that a consideration of these various concerns and issues would be better grounded empirically.

As it happens, extant evidence shows faculty members not to be much different from students in their views on good teaching—at least in terms of the expressed importance the two groups place on various components of teaching. Across the 31 relevant studies reviewed here, the average correlation between students and faculty in their valuation of these components is  $+ .71$ . From the

studies at hand, the strength of this association is about the same, on average, for universities and four-year colleges as it is for community colleges. It is possible, of course, that future multischool studies, using more finely grained categories of schools, might show that there are certain specific types of universities or colleges where these associations are likely to be particularly strong and others where they are likely to be weak or nonexistent.

The strength of the association in question may vary within colleges, of course. Thus it was found that, for each of the four studies of teachers and students at business schools within colleges, the association between faculty and students was not sufficiently large to be statistically significant. Because each of these studies was done at a different college, results would seem to have some generalizability, although further replication at still other colleges would be desirable. Assuming that the lack of association between students and faculty at business schools is not an ungeneralizable fluke, it would be worth pursuing what there is about such settings, or about the teachers and students in them, that creates this lack of similarity in their views. There may also be other divisions, programs, or academic fields within colleges where associations between faculty and student views on good teaching are low, and perhaps some where they are particularly high, but what they are cannot be told from the few existing pieces of research that have focussed on faculty and students within particular subdivisions or subfields in colleges.

Research is also needed on whether there are certain types of students who are either much more or much less likely to have views similar to those of faculty in general. For example, are students who are academically successful more similar to faculty in their views as to what contributes to effective instruction than are students who are not particularly successful academically? Do male and female students, or students at different class levels in college, differ in the extent to which their views are similar to those of faculty? Crawford and Bradshaw (1968) and Younglich (1955) have done some research in this area, but their work offers only the beginnings of what might be done. College teachers are not an undifferentiated lot, of course, so they, too, could be divided into subtypes before comparing them with students. Here, one would want to explore the extent of similarity between the opinions of certain types of teachers with those of students in general as well with certain types of students in particular.

If the average correlation of  $+ .71$  indicates a general similarity between students and faculty in their views of good teaching, its size nevertheless leaves room for some particular differences between them. One interest of the present investigation was whether there were any consistencies across studies in the ways that students and faculty in fact were dissimilar (as well as similar). The responses gathered from students and faculty about the components of good teaching were coded into 22 instructional dimensions. The average standardized

ranks for students and for faculty on these dimensions were compared, as were the ranks of these average standardized ranks, for a "core" set of 18 studies that excluded the four studies done at business schools as well as for an expanded set of studies that included them. In addition, these results were compared with those given in an earlier analysis of studies showing the correlations between students' actual ratings of teachers on 18 of these 22 dimensions and the students' overall ratings of these teachers.

Across the various sets of studies and methods of comparison, it is clear that students and faculty were similar in placing high importance on teachers being prepared and organized, clear and understandable, and sensitive to class level and progress; and both groups generally placed moderate importance on teachers being open to class discussion and the opinions of others. Moreover, each of these pedagogical aspects was of a corresponding level of importance in students' actual overall assessment of their teachers in rating situations (as shown by the relative sizes of the correlations between specific and overall evaluations).

Students and faculty were also generally similar in their views about the importance of certain other instructional components, but in each of these instances, the components were not of a corresponding level of importance with respect to discriminating among students' overall ratings of instructors. Thus, faculty and students were similar in attributing high importance to the instructor's enthusiasm and his or her knowledge of the subject matter, but in actual rating situations, these two aspects of instruction were only moderately important in their "contribution" to the overall rating of teachers. Likewise, faculty and students were similar in placing moderate importance on the instructor's fairness and impartiality of evaluation, his or her friendliness as well as concern and respect for students, and the nature and value of the course material, but in actual ratings situations these instructional dimensions were low in importance. Faculty and students both felt that teachers being intellectually expansive was of moderate to low importance, but this aspect of instruction was unequivocally moderate in importance in discriminating among teachers' overall evaluations by students. Finally, faculty and students alike said that the clarity of course objectives and requirements was of low importance to good teaching or effective instruction, although in actuality this pedagogical aspect turned out to be of moderate, if not high, significance in discriminating among the overall quality or effectiveness of teachers when they were evaluated by students.

It might also be noted that faculty and students were similar in believing the "personality" of the instructor and his or her productivity in research and related activities to be relatively unimportant to good teaching, but it is unknown from the sources used for the present analysis whether these two dimensions were also of low importance in rating situations. For the dimension of the nature, quality, and frequency of feedback from teachers to students and that of the

nature and usefulness of supplementary material and teaching aids, results varied enough across different methods and sets of studies to create some ambiguity about the similarity (or lack of it) between students and faculty. It is not clear whether students placed moderate or low emphasis on these two aspects of instruction, although it is clear in both cases that faculty thought them to be of low importance (and both were of low importance in discriminating among the overall instructional performance of teachers as perceived by students).

All told then, students and faculty were clearly similar in their views about the importance of 13 of the 22 instructional dimensions under study (although the importance of the dimensions in actual rating situations did not always match), and for two other dimensions results were somewhat inconsistent across sets of studies and methods of comparison. For the remaining seven instructional dimensions, students and faculty showed consistent differences in terms of the views they expressed about the importance of each. Students strongly emphasized the importance of the teacher stimulating their interest in the course and in its subject matter (and this dimension was highly important in its contribution to the overall assessment of actual teachers), but faculty considered this dimension to be of moderate or even low importance (depending on the particular set of studies reviewed). The dimension of instructor availability and helpfulness showed a smaller difference between students and faculty. Students felt this dimension to be of moderate-to-high importance, whereas faculty thought it to be more unequivocally moderate in importance (and, in practice, the dimension was only of low importance in discriminating among the overall ratings of teachers). Students clearly felt the outcome or impact of instruction to be of moderate importance (and this dimension was highly associated with students' overall ratings of teachers); faculty, however, viewed this particular aspect as having lesser (moderate-to-low) importance. Although students placed moderate importance on teachers' elocutionary skills (and this dimension was also a moderate contributor to the overall assessment of teachers), faculty felt this instructional aspect to be of low importance. Students placed low importance, but faculty high importance, on teachers intellectually challenging students and encouraging their independent thought; yet this dimension was a strong correlate of students' overall ratings of teachers, suggesting it was of high importance to students when they actually discriminated among teachers as to their overall performances. Students also placed low importance on teachers setting high standards of performance and motivating students to do their best as well as on encouraging self-initiated learning, whereas faculty saw these aspects of teaching as moderate in importance; no information was available in the sources used for the present analysis regarding the significance of these two dimensions in discriminating among teachers' overall ratings.



The fact that certain similarities and differences in the criteria students and faculty use in determining good teaching can be found across studies creates some confidence in their existence. Nevertheless, it would be of interest to see if the similarities and differences that have been found hold up as more studies are done. It would be of even greater interest if future studies could discover how these similarities and differences are affected by type of school, type of academic division and field within schools, and type of student and teacher.

It should be emphasized that comparing the importance of various components of teaching (from either the student or faculty view) with the importance of these components in actual rating situation was done exploratory in this analysis. Any generalizations based on these particular comparisons are tentative, at best. This is mainly so because data for actual ratings involved a different set of studies—with different students and faculty at different schools—from the set of studies used to obtain students and faculty views. An obvious need thus exists for future research in which the data on the views of students and faculty and the data on the actual specific and overall student ratings of faculty are collected from matching samples.

Even with such data, there are at least two different explanations for any differences that are found between the importance of pedagogical components when measured by students' stated views and the importance of these components when determined by the size of their associations with the overall evaluations of teachers. The differential weights for the various pedagogical characteristics that students, in effect, say they use (or will use) in evaluating their teachers—determined by asking them about the importance of various characteristics to good teaching (or about their "ideal" or "best" teachers)—may not necessarily be the weights they actually use, in practice, when forming an overall impression of each of their teachers and globally evaluating them. Quite apart from the question of the correspondence of these weights, moreover, traits that students consider to be important to good teaching may not of necessity be exactly the same traits that actually discriminate among teachers in terms of the overall evaluations they receive. Teachers receiving high overall ratings from students may be higher than other teachers on some, but not all, of the specific components considered by students to be highly important to good teaching. Conversely, teachers receiving low overall ratings are not necessarily lower than other teachers on every trait seen as highly important to good teaching.

Another consideration needs mentioning at this point. The present analysis has avoided couching its argument in terms of the "agreement" or "disagreement" between students and faculty about the components of effective teaching. At least by one sense of these words, to say that faculty agree (or disagree) with students and that students agree (or disagree) with faculty implies that the similarity (or dissimilarity) is explicit and known to both groups. The

implication is that the groups are mutually aware of their similarities and differences. This may or may not be true, which suggests another area of research. Students could be asked whether they thought faculty would agree or disagree with the importance they place on various components of teaching. Similarly, faculty members, having expressed their own preferences, could be asked whether they thought students would agree or disagree. Each group could even be instructed to rate the importance of various components as they thought the other groups would rate them. The degree of mutual awareness of similarity and dissimilarity in views between the two groups could thus be established.

Finally, it is important to recognize that discovering the similarities and dissimilarities between faculty and students in the importance they place on various components of teaching (including the extent of their mutual awareness of these similarities and dissimilarities) is merely the beginning of a research agenda. What really needs to be known is how such similarities or dissimilarities come into play in the actual interaction between students and teachers in the classroom. Moreover, do these similarities and dissimilarities affect how well instructors actually teach or how much students learn, and what are the exact mechanisms at work? Empirical answers to questions such as these should prove especially beneficial to the study and practice of higher education.

## NOTES

1. See Feldman (1976a,b, 1977, 1978, 1979, 1983, 1984, 1986, 1987).
2. Rosenthal (1978, 1984) discusses several methods of combining independent probabilities (from different studies) to get an overall estimate of the probability that the separate  $p$  levels would have been obtained were the null hypothesis true in each of the cases. Adding up the separate  $Z$ 's dividing the resultant sum by the square root of the number of studies perhaps is the simplest and most routinely applicable of the methods, and it is the one used in the present analysis.
3. Baril and Skaggs (1976); Breed (1927); Brewer and Brewer (1970); Bridges et al. (1971); Delaney and Coons (1976); Evaluation and Examination Service (1974); Hussain and Leestamper (1968); Lovell and Haner (1955); Marques et al. (1979); Murray et al. (1982); Odum (1943); Perry (1969); Romine (1974); Rotem (1975); Shatz and Best (1986); and Yourglich (1955).
4. Blai (1974); Hartung (1972); Jenkins et al. (n.d.); Krupka (1970); Romine and Newport (1973); and Whitley (1982).
5. The degree of student-faculty similarity may also vary for different subgroups of students and faculty. Crawford and Bradshaw (1968) calculated correlations between subgroups of students (male, female; high, average, and low ranking students, as based on grade-point averages) and subgroups of faculty members (associate and full professors; instructors and assistant professors). Student-faculty correlations varied across the various combination of subgroups from a high of .92 to a low of .72 (all of which are statistically significant), as follows: high ranking male students  $\times$  instructors/assistant professors ( $r = +.92$ ); high ranking female students  $\times$  instructors/assistant professors ( $r = +.90$ ); high ranking male students  $\times$  associate and full professors ( $r = +.89$ ); average ranking female students  $\times$  instructors/assistant professors ( $r = +.88$ ); average ranking male students  $\times$  instructors/assistant professors ( $r = +.85$ ); average

- ranking male students  $\times$  associate and full professors ( $r = +.85$ ); low ranking female students  $\times$  associate and full professors ( $r = +.83$ ); average ranking female students  $\times$  associate and full professors ( $r = +.81$ ); high ranking female students  $\times$  associate and full professors ( $r = +.80$ ); low ranking male students  $\times$  associate and full professors ( $r = +.76$ ); low ranking female students  $\times$  instructors and assistant professors ( $r = +.74$ ); low ranking male students  $\times$  instructors and assistant professors ( $r = +.72$ ). Data given in Tables 2 and 4 in Yourglich (1955) can be used to calculate the rank-order correlation between the preferences of faculty as a whole and those of each of the four class levels of students. The lowest rank-order correlation is for the comparison between faculty and freshmen ( $\rho = +.41$ ) and is not statistically significant. The rank-order correlations for the comparisons involving sophomores ( $+.65$ ), juniors ( $+.60$ ), and seniors ( $+.57$ ) not only are higher but also are statistically significant.
6. Each of the following studies gave the general correlation between students' and faculty's judgments of the importance of various instructional characteristics, as reported in Table 1 of the present analysis, but none of these studies gave specific information about the importance of *each* characteristic: Crawford and Bradshaw (1968); Hartung (1972); Lovell and Haner (1955); and Rotem (1975). Breed (1927) did present the ranks of various instructional characteristics, but separately within certain subdivisions of these characteristics rather than across them; thus a single overall rank ordering for students and one for faculty cannot be obtained from the data presented. From data in Norr and Crittendon (1975) and Shatz and Best (1986), the ranking of multi-item scales measuring various instructional components can be obtained, but the rank of separate items within the scales cannot. The kind of questionnaire items about instruction found in Blai (1974) and the format of the questionnaire itself do not lend themselves to the coding scheme and data analysis of the present investigation; and thus this study, too, has been excluded from further consideration.
  7. The note to Table 2 shows the results when data from the four studies of faculty and students in business schools *are added* to the results from the core set of studies (including those cases where only one of the four studies had data relevant for a particular dimension). Considering the nine instructional dimensions that showed the largest average standardized differences (even if small) between faculty and students for the core set of studies, five show the same or highly similar differences when the fuller set of studies is used (Dimension Nos. 7, 13, 18, 19, and 21), whereas three dimensions now show larger differences (Dimension Nos. 1, 17, and 20). The previously small average standardized difference for Dimension No. 2 becomes even smaller, to the point where it is insignificant as a difference between students and faculty. In addition, the expanded group of studies now show "new" (albeit relatively small) average standardized differences for Dimensions No. 5 ( $+.12$ ) and No. 13 ( $+.11$ ).
  8. When the results from the four studies done at business schools are added to the results from the core set of studies (see the note to Table 3), Instructional Dimensions No. 1, No. 17, and No. 21 show larger differences between the student and faculty rankings. The differences in ranks for the other seven dimensions originally showing such differences (Nos. 2, 7, 11, 12, 15, 19, and 20) become somewhat smaller. Because the differences for two of these particular dimensions (Nos. 2 and 19) were very small to begin with, the decrease means that faculty and students no longer show meaningful differences in the importance they place on them. Finally, for four instructional dimensions, the fuller set of studies show small differences not found using only the core set of studies: Dimension No. 16 (rank 14 for students vs. rank 9.5 for faculty), No. 13 (rank 9 for students vs. rank 13 for faculty), No. 5 (rank 3 for students vs. rank 6 for faculty), and No. 14 (rank 18 for students vs. rank 21 for faculty). Incidentally, adding the four studies lowers  $\rho$  and  $r$  somewhat (to  $+.60$  and  $+.72$ , respectively).
  9. Comparing methods produces somewhat different results when the four studies of faculty and students at business schools are added to the core set of studies. The following four dimensions show large or fairly large differences between students and faculty for both methods: Nos. 1, 17,

- 20, and 21. Moderate or small differences are found for Dimension Nos. 5, 7, 12, and 13 for both methods. Dimension Nos. 11, 14, 15, 16, and 19 show differences (relatively small ones) for only one of the two methods and not the other.
10. For purposes of general comparison, a rank between 1 and 7 is considered as placing high importance on the particular instructional dimension, whereas ranks 8–15 and ranks 16–22 are considered to indicate moderate and low importance, respectively.

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## APPENDIX

This appendix presents results of studies that have data for both students and faculty on the perceived importance of various possible components of effective teaching. Short descriptions of the 22 studies that make up this appendix can be found in Table 1 in the text. The four studies of teachers and students in business schools have been kept separate from the other 18 studies; for each dimension, pertinent results from one or more of these four studies are given *after* the results from any of the other 18 studies with data relevant to the dimension, separated from them by an extra space.

Each of the instructional characteristics given in a study has been ranked and, then, if possible, coded into one of the 22 categories of "instructional dimensions" used in the present analysis. In some cases, the researchers already had done the ranking and nothing more needed to be done. In other cases, the ranking of items was based, in a straightforward way, on the indicators of importance of the items given in the study. For the study by Marques et al. (1979), indicators of importance were given separately for

four different academic divisions, and so these indicators had to be averaged together (for students and faculty separately) before the ranks of the items could be established.

For each dimension, for each relevant study, all items codable in the dimension are presented in this appendix. (In a very few instances, the results for the same item in a study were coded in two different dimensions; this duplicate coding was so rare that no special weighting procedure was used to take account of it.) Presented in parentheses for each item is the rank of the item for students relative to the number of items in the study, followed by the rank of the item for faculty, again relative to the number of items in the study. This procedure produces two fractions, one for students and one for faculty. It is these fractions, put in decimal form, and averaged together when more than one item in a study was coded into the same instructional dimension, that produce the standardized ranks given in Table 2 in the text.

To take an example, consider the first study (Blazek, 1974) given under the first instructional dimension below ("Teacher's Stimulation of Interest in the Course and Its Subject Matter"). Two items from this study were coded in this dimension. The first ("instructor 'presents material in an interesting and informative manner' ") ranked 13 out of 37 items for students and 30 out of 37 items for faculty. The second (" 'class activities and assignments interest student' ") ranked 27 out of 37 items for students and 21.5 (there was a tie for 21st place) out of 37 items for faculty. These fractions, when put in decimal form, and averaged appropriately, produce the standardized ranks of .54 (for students) and .70 (for faculty) found in the very first line of results presented in Table 2 in the text.

## PERCEIVED IMPORTANCE OF VARIOUS COMPONENTS OF EFFECTIVE TEACHING

### Instructional Dimension No. 1: Teacher's Stimulation of Interest in the Course and Its Subject Matter

*Blazek (1974)*: Instructor "presents material in an interesting and informative manner" (13/37–30/37); "class activities and assignments interest student" (27/37–21.5/37)

*Brewer and Brewer (1970)*: "Interesting presentation of subject matter" by instructor (1/10–2/10)

*Bridges et al. (1971)*: "Presentation" (see Table 1 for expanded description) (2/24–5/24)

*Evaluation and Examination Service (1974)*: "The instructor presents the material in an interesting and challenging manner" (4/111–14/111); "the subject matter is intellectually stimulating" to student (5.5/111–10.5/111); "the course content is intellectually stimulating" to student (19.5/111–30/111); "the instructor moves the discussion into interesting new ideas" (34/111–60/111)

*Krupka (1970)*: Instructor's "ability to arouse interest" (2/10–2/10)

*Marques et al. (1979)*: "Arousal of student interest" (2/7–2/7)

*Odom (1943)*: Instructor's "ability to make course interesting" (21/36–33/36)

*Romine (1974)*: "Instructors have an interesting style of classroom presentation" (13/40–30/40)