

SOME CHARACTERISTICS OF TEACHING EFFECTIVENESS
AS DETERMINED BY STUDENT EVALUATORS USING
A MODIFIED CRITICAL INCIDENT TECHNIQUE

A Thesis

Presented to

the Faculty of the Department of Psychology

University of Houston

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

By

Michael T. Matteson

August, 1968

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ABSTRACT

The primary purpose of this study was to determine the effect of different instructions on student evaluator's responses of critically effective and ineffective instructor behavior. Of secondary concern was an attempt to determine the frequency and magnitude of student interaction with instructors outside the formal class meeting, as well as the relationship between such student-instructor interaction and the reporting of it as being critical.

Two different sets of instructions were randomly distributed to 154 university undergraduates. 78 students in this sample received instructions written to provide a broader frame of reference for reporting examples of critical instructor behavior than the instructions the remaining 76 students received. In addition, all 154 students in the sample completed a three item questionnaire measuring specific aspects of student-instructor interaction.

The obtained incidents were content analyzed according to a pre-existing classification system. Comparison was made between the results obtained from different sets of instructions in the present study, as well as between the present study and an earlier one. The distribution of responses to questionnaire items which indicated the level of importance assigned student-teacher interaction across certain subgroupings within the sample was computed.

The following conclusions were made: (1) Instructions which provided a broader frame of reference elicited more behaviors concerning outside of class student-instructor interaction than did more specifically worded instructions. (2) A majority of students report student-instructor interaction outside of class to be desirable, while only a minority actually engage in such interaction. (3) Students who interact with instructors outside of class more frequently than the average are more likely to view such behavior as critical.

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CHAPTER I

INTRODUCTION

In view of the continuing and ever increasing emphasis which is being placed on the necessity of a college education in this country today, there is nothing enigmatic about the fact that higher education has been the focus of much thought and research of late. Sanford, writing in 1962, made note of this fact. He writes that

an increasing number of specialists in the psychological sciences have joined forces with established educational researchers...in bringing to bear upon the processes of education in college the most recent findings and conceptions of their disciplines (Sanford, 1962, p. 1).

Varying interests and emphasis of these disciplines and of the investigators who operate within their framework contribute to the diverse character of much of this research. Nevertheless, there does seem to be a common concern regardless of what specific aspect of the college is being studied; this communality involves the changing nature of today's colleges. The proliferation of knowledge of all kinds has dramatically reshaped both the physical and the intellectual environment of the country. The genesis of this knowledge, in large part, can be traced to research initiated at colleges and universities. Thus, colleges, in a very real sense, are effecting changes; concurrently, colleges are being forced to

adapt in order to cope with the very changes for which they are at least partly responsible.

This matter of adaptation is crucial. If, in a very general sense, the responsibility of the college is to prepare the student for a changing future, it (the college) must also be prepared to change. A static institution in a dynamic and fluid environment can not possibly progress or grow, and any cessation of growth is eventually fatal; thus, change is imperative. Change, operationally defined, involves growth and development. For the American college this is not a spontaneous, random process; it can be brought to fruition only through the implementation of systematic programs for development.

The nature of these programs is not of concern here. What is of more immediate concern is the fact that a prerequisite for any program addressing itself to issues of growth and development is a clear understanding of the present state of the organization or institution. It is axiomatic that no enterprise can move forward, in a profitable manner, if it does not first ascertain from where it is moving. That is, performance in any area can not be improved until the nature of present performance is known and understood.

Thus, the college, in order to develop or move forward must first be aware of its present condition. The fact of the matter is that the college's present condition is not at all satisfactory. Consider what Sanford says in this regard:

One does not need any fixed conceptions of educational goals in order to be convinced that American colleges are failing rather badly. They fail to achieve their own stated purposes; and they fail by other reasonable standards of accomplishment (Sanford, 1962, p. 2).

If Sanford's remarks are justified, it would seem appropriate for colleges to undertake a self examination of their policies, procedures and goals-- indeed, of the entire spectrum of their activities. Such a critical evaluation, objectively planned and carried out, could lead to the identification of specific aspects of the college's activities that might be altered or developed in some way which would facilitate the more effective accomplishment of the institution's overall goals.

Central to any college or university is its faculty; and central to any evaluation of the college is an evaluation of the faculty. The need to delineate the functions of the professor is paramount. In the regard Knapp writes:

If the lack of adequate studies of the college professor is apparent, the need for them is equally evident. No one in the early 1960's can doubt that our society is changing at an ever increasing rate....If these challenges of the future are to be met they will, in the final analysis, be met by college professors. It clearly behooves us to study this profession more thoroughly and more extensively if clear and effective answers are to be found to the problems that confront us now and will confront us still more forcibly in the future (Knapp, 1962, pp. 306-307).

The role of the college professor is certainly multidimensional. Knapp reviews many functions which, historically, the professor has been called upon to perform. He concludes by saying that:

...when all of these have been reviewed, it appears to me that they can be reduced to three focal functions...the research function, the informational function, and the character developing function...(Knapp, 1962, p. 291).

Assuming that this breakdown of functions is a valid one, and further assuming that an evaluation of the professor's performance of these functions is both necessary and legitimate, the question arises of who should do the evaluating. The logical answer would seem to be those who are in some way responsible for or effected by the professor's performance. This is quite a large population including the general public, the students, the university administrators and the faculty members themselves. Some of these groups are in a better position to judge overall performance than are others; some are in a better position to judge specific aspects of the professor's overall function, e.g., research as opposed to character building. In the final analysis a well developed evaluation program would include all the relevant functions of the professor as seen by all the relevant populations.

One segment of any such program would involve student evaluation of professors. Certainly there are aspects of the professor's role which the student would have little or no basis upon which to render an evaluation, e.g., the research function. On the other hand, the student is in a better position to evaluate other aspects, e.g., the informational function, than perhaps any other relevant population. That is, since the student population is the only one which normally interacts with the professor in an instructional situa-

tion, it should follow that it is the student who can best determine those significant dimensions of behavior of the college professor which contribute to the satisfactory performance of his informational function. That students do evaluate instructors is commented on by Katz, who writes:

The members of the class will have common concerns about a teacher, with obvious variations in intensities: How is he going to grade? Is he going to work the class hard or not? How is he going to present his material, and what learning effort is he going to call forth from his students? A student's evaluation of his teacher is continuous (Katz, 1962, p. 384).

There is of course nothing systematic about these individual evaluations which are probably universal in their occurrence. The fact that they do exist, however, makes the next step of systematically organizing these evaluations an easier process.

Numerous studies along these lines have been reported in the literature; the more salient and immediately relevant of these will be reviewed in the following chapter.

The concern of the present study is focused in this area. Namely, what are the significant dimensions of instructor behavior which, from the viewpoint of the student, are critical to the judgment that the instructor was either effective or ineffective. The method employed to elicit this kind of evaluational data will be a modified critical incident technique. The essentials of this technique will be discussed in some detail in the following two chapters.

An unpublished study by Owen (1967) serves as a precursor to the present research. Owen's study involved two phases, only the first of which is of concern here. Using a modified critical incident technique he collected incidents from over 200 students at the University of Houston reporting critical teaching behavior of instructors. He then classified these behaviors according to the nature of the reported incident and as a result evolved six major classes of behavior:

1. Presentation--Content Structure and Scope
2. Presentation--Student Participation
3. Presentation--Instructor's Style
4. Teacher-Student Rapport and Class Interaction
5. Evaluation of Students
6. Requirements of Students

As stated, Owen used a modified critical incident technique which involved a set of written instructions which (1) described the kind of behavior of which he was interested in obtaining descriptions and (2) provided the student with space on which to record his responses. The wording of Owen's instructions is of paramount importance to the present study. He used two slightly different sets of instructions. In one form the instructions read as follows:

You probably have attended classes at the University in which the instruction was more effective than in others. Think of an instructor or professor who was very effective. Now think of something that he or she did that made for particularly successful instruction. This should be a specific thing (among the many things that may have been done) that contributed to the difference between very effective and ineffective teaching....Now think of an instructor or profes-

sor who was less effective. Think of something that he or she did that made for particularly unsuccessful instruction. This should be a specific thing (among the many things that may have been done) that contributed to the difference between very ineffective and effective teaching (pp. 168-69).

The instructions in the second form employed by Owen were as follows:

You probably have taken courses (at the University) which were better than others. We would like examples of specific things that instructors do that make the difference between a superior course and an unsatisfactory one.

1. Think of an outstandingly good course. What did the instructor do that made it superior? Your example should be one specific thing (among the many things that may have been done) that was important to making it a superior course....
2. Now think of a course that was not satisfactory. What did the instructor do that made it unsatisfactory? Again your example should be one specific thing that was important to making it an unsatisfactory course (p. 170).

While the second set of instructions provides a somewhat broader frame of reference, it is clear that both sets aim at eliciting descriptions of classroom behavior. The first set of Owen's instructions asks specifically for incidents bearing on class instruction. The second set asks the students to use as a frame of reference a specific course - good or bad - and report instructor behavior that was critical in making the course what it was.

This brings into focus an all important question: Would other significant dimensions of college instruction emerge if an even broader frame of reference were to be provided for the student making the evaluation? The question is essen-

tially one of specificity versus generality of instructions. It would appear to be a legitimate question to raise for this reason: Any attempt to identify the relevant dimensions of effective college teaching in order to utilize the so identified dimensions as a base for teacher evaluation should take great care to uncover all possible factors which may operate in contributing to effectiveness or ineffectiveness. If any dimensions identified are incomplete, then any evaluation procedure based on these dimensions must also be incomplete. It would seem imperative, therefore, to provide the student evaluator with the broadest possible frame of reference. Whether or not such an expanded frame of reference would result in different behaviors being reported is the primary question asked by this study.

CHAPTER II

REVIEW OF THE LITERATURE

A review of the relevant literature for this study encompasses two general topics: Use of the critical incident technique, and teacher evaluation.

The Critical Incident Technique

The critical incident technique method is associated with John C. Flanagan who developed this approach of determining critical behaviors while directing a research team in the United States Air Force during World War II. The name Critical Incident Technique was apparently not bestowed upon this approach until 1947 when Flanagan so named it while he was at the American Institute for Research. Flanagan describes the technique as

...consisting of a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles.

By an incident is meant any observable human activity that is sufficiently complete in itself to permit predictions to be made about the person performing the act (Flanagan, 1954, p. 327).

Briefly, the five main steps of the critical incident technique, described in detail by Flanagan (1954), consist of:

1. defining the general aims, which involves specifying clearly what the activity is expected to accomplish.

2. developing plans and specifications, which includes a general statement of the objectives of the study, specifying observers and giving instructions.
3. collecting the data, which is accomplished by whatever procedures have been agreed upon (interviews, direct observation, questionnaires).
4. analyzing the data, which includes content analysis of the reported behavior into meaningful classifications, categories, sub-categories, etc.
5. interpreting and reporting, which calls for drawing inferences which may be appropriate based on the preceding four steps.

While these five steps provide a general set of guidelines, variations may be introduced in light of differing requirements in different situations. In this regard, Flanagan notes that:

It should be emphasized that the critical incident technique does not consist of a single rigid set of rules governing data collection. Rather it should be thought of as a flexible set of principles which must be modified and adapted to meet the specific situation at hand (Flanagan, 1954, p. 335).

A series of studies initiated in 1944 represented the first systematic use of this technique. In one of these, several thousand combat veterans were asked to report incidents of effective and ineffective behavior which led to the accomplishment of assigned missions. The resulting set of descriptions was labeled the "critical requirements" of combat leadership (Wickert, 1947). This and other work in the military during World War II, using a critical incident technique, resulted in the judgement that this approach was a

more effective one for studying job requirements than the former methods which consisted primarily of intuitively deciding what traits might be required for particular jobs (Dennis, 1949, pp. 32-54).

Subsequently many studies using this method to determine the critical requirements of widely diverse jobs have appeared in the literature. Many of these are cited by Flanagan in his 1954 report and include the behavior of airline pilots (Gordon, 1947); psychologists (Hobbs, 1948); Air Force officers (Preston, 1948); air route traffic controllers (Nagay, 1949); shoe sales personnel in a department store (Folley, 1953); accounting and budget personnel in the Department of Agriculture (Mayeske, 1965) and other diverse applications of this method.

4 Teacher Evaluation

Some work has been done using critical incidents reported by students to evaluate teaching procedures. Before turning to this, however, it will be worthwhile to look briefly at what has transpired in the area of teacher evaluation utilizing evaluative techniques other than critical incidents and evaluators other than students.

As was pointed out in the previous chapter, evaluation of college professors should ideally involve all relevant populations. One such population is comprised of faculty and administrators. It is not unusual for this group to be called upon to perform such evaluations, as is pointed out by

several authors (Eckert, 1950; Guthrie, 1949; Morton, 1961). If, however, the primary purpose is the evaluation of teaching effectiveness, i.e., actual instruction, serious questions can be raised concerning the validity of information gained from this population. A 1944 University of Washington questionnaire asking of faculty members the question "Do you believe that administrative officers have adequate information concerning teaching efficiency", received the response of 70% of the University's faculty. While 14% answered "yes" practically all others expressed doubt with 55% reporting "Emphatically no" (Eckert, 1950, pp. 65-66).

Along these same lines, the substantually low correlations between student and faculty ratings of teaching effectiveness has been noted. Guthrie points out that:

One obvious source of this difference is that the students, when called upon to judge a teacher, have sat through from ten to fifty hours of his course, at least one-half of it's total. The faculty are dependent on student hearsey, on the observation of the presumed effects of other men's instruction on their own student's, and on inferences from their personal acquaintance with men and their academic records (Guthrie, 1949, p. 113).

When the student population has been called upon to make evaluations the usual approach has been that of developing a questionnaire. The Purdue Rating Scale for Instructors is one example. Developed at Purdue University after much research this instrument can be administered in about five minutes (Remmers, 1950). A somewhat similiar device is the University

of Washington classroom questionnaire on instructor's clarity, interest in class, and enthusiasm (Voeks & French, 1960).

Two separate reviewers (Owen, 1967; Farrar, 1968) have extensively covered the literature dealing with teacher evaluation. From the studies they report on, several conclusions can be drawn:

1. There is an increasing awareness of and interest in the problem of teacher evaluation.
2. What the relevant criteria for such evaluations should be is subject to considerable debate.
3. Attempts at objective evaluation of teaching effectiveness are hopeless without direct observation.
4. Many methodologies have been used to evaluate teaching effectiveness, often prior to attempts to describe the job itself.
5. Evaluation of college teaching is most often made by students and/or faculty.
6. Much of the current work in this area is random, haphazard and unsystematic.

The Critical Incident Technique in Education

Several studies utilizing the critical incident technique in education may be found in the literature. Barnhart (1952) collected critical incidents for the purpose of establishing the critical requirements for school board membership; Truax (1956) used a critical incident approach in studying requirements for small school counselors; Corbally (1956) studied critical behaviors of school board members in relations with certain segments of the community; Ryans (1960) in a study of elementary and secondary school teacher characteristics employ-

ing a critical incident procedure points out that the critical incident technique represents an effort to "objectify descriptions of teacher behavior, and to provide an operational frame of references for the assessment of teacher behavior" (Ryans, 1960, p. 83).

Mayhew (1956) describes research involving collecting critical incidents from students regarding critical analysis and judgment in the humanities. In reporting this, and other research, Mayhew writes that the use of critical incidents in educational settings has proved satisfactory, although he reports at least two difficulties: First, students and teachers both demonstrated a tendency to report more incidents of ineffective than effective behavior; second, both groups were more inclined to write evaluations of behavior than descriptions of behavior. In spite of these difficulties Mayhew concludes by saying:

...the critical incident technique, which has been used extensively in personnel selection and prediction, appears to have important possibilities in educational measurement. It's significance lies chiefly in providing empirically derived classifications of behavior which can then be used either as a framework for subsequent measurement or as the material out of which evaluation instruments can be developed (p. 598).

The current study is not the first attempt to address a critical incident approach to the problems of teacher evaluation. Smit (1952) conducted a study to determine the critical behaviors for instructors of general psychology courses at the University of Pittsburgh. What was perhaps her most signifi-

cant finding was the fact that the pattern of reported critical incidents differed significantly for students and faculty. While the faculty reported a larger percentage of effective behaviors involving such things as giving demonstrations or experiments, using discussion techniques and ascertaining students ideas and opinions, the students reported as effective behavior reviewing examinations, giving and explaining grades, using visual aids and helping students after class and during class recess. This latter behavior is particularly interesting in light of the present study. Virtually no incidents of this kind were obtained by Owen (1967).

Flanagan (1954) has reviewed several studies which applied a critical incident technique to the problem of evaluation. The totality of findings from these reviewed studies would suggest the following conclusions concerning the efficacy of the critical incident method as an approach to teacher evaluation by students:

1. The critical incident technique deals with direct reports of observed behavior rather than with opinions, hunches, interpretations or ratings based, at best, on impressions.
2. The collection of these incidents facilitate formulation of the critical requirements of teaching as seen by the population most directly involved--the students.
3. The procedure involves reports of only extreme behavior which can be more accurately identified and recalled than can more "average" behaviors.

One of the primary advantages to evaluation of instructor effectiveness by students is that the student population, and

only the student population, directly observes instructor teaching behavior; additionally it is the primary, if not sole, group effected directly and immediately by it. It should follow, therefore, that student reports of effective and ineffective instructor behavior, objectively obtained, could provide a sound basis for evaluation.

That the critical incident approach is useful for the general problem of student evaluation of faculty is indicated by the fact that Owen's 1967 study produced much more specific factors than had been revealed by previous techniques. Owen, for example, was able to define several specific instructor skill factors and thereby breaking down what in most earlier studies had been a more general, and less useful, global factor.

As reported, Owen made use of student reports of critical instructor classroom behavior. It seems reasonable to suggest that perhaps there are critical behaviors exhibited by the instructor outside the actual classroom situation which could potentially have a bearing on the instructor's overall effectiveness or ineffectiveness as a teacher. Furthermore, some aspects of this behavior--if it indeed exists--might be amenable to student evaluation, e.g., help with problems after class or availability for office consultations. A partial analysis of Owen's data reveals that for the portion of his data being considered in the present study a total of 424 incidents were collected. Of these, only seven (less than 2.0%)

deal with critical incidents outside the classroom. In the only one of his six major categories which deals with teacher-student interaction, these seven incidents comprise less than nine percent of the total. It is the contention of this writer that reports of this kind of instructor behavior could not have been readily obtained by Owen due to the more specific nature of his instructions to the students reporting the behaviors. If such critical behaviors exist and if Owen's instructions did indeed preclude their being reported, then a more general set of instructions providing the student with a broader frame of reference might well elicit them. The purpose of this study is to test the validity of this assumption.

CHAPTER III

PROCEDURES

Critical incidents may be collected in individual interviews or in group situations. For the purpose of maximum utilization of time, as well as in an attempt to follow Owen's (1967) procedures as closely as possible, the latter approach was used.

In asking for reports of critical incidents, two different sets of instructions were utilized. One set (designated Set A) was a duplication of the instructions employed by Owen in sampling classes in a junior level course in Industrial Psychology (see Appendix B).

A second set of instructions (Set B) was used in an effort to provide the student evaluators with a broader frame of reference and designed to elicit responses dealing with critical instructor behavior outside the classroom as well as within (see Appendix B).

Using a third set of instructions asking students specifically to report only incidents of outside the class behavior was at one time contemplated, but eventually discarded for fear that students in attempting to respond in the desired manner might list behaviors that at best were not critical and at worst, mythical.

In addition to the critical incident instructions each student was asked to complete a questionnaire designed to determine the degree of contact which he (she) had had with instructors outside of a formal classroom meeting (see Appendix B). These data were then used as an aid in interpretation of the results of the critical incident data.

The students were also asked to supply the following information: major subject, grade classification and age. This was in keeping with the information obtained by Owen and facilitated comparisons of the populations sampled in the two studies.

There seemed to be some cause for feeling that perhaps the wording of the Set B instructions might cause a bias in responding to them in favor of reporting outside the class behavior even though such behaviors might not really be deemed critical by the student. To ascertain whether this was indeed the case and to make changes if necessary, the Set B instructions were pretested using 19 students in a class in Engineering Psychology. None of these students responded to the instructions with critical incidents of instructor behavior outside the classroom. On this basis it was decided to use the instructions as originally worded.

Data Collection

Students enrolled in Industrial Psychology classes at the University of Houston were used as subjects. This was essen-

tially the same class population sampled by Owen in 1967. In each class the two sets of instructions were randomly distributed so that each set was completed by approximately one-half of the class. A total of five sections were used, resulting in a total $N=154$, with responses to Set A contributing 76 of this total and responses to Set B, 78.

A brief explanation of the critical incident technique was given to each class, as well as several examples of critical incidents. In giving these examples, care was taken to use non-academic situations in order to avoid biasing student responses in any way. The students were given as much time as they desired to complete the critical incident forms with the majority finishing within 15-20 minutes. The students were not told that there were alternate forms of the instructions.

After all students had completed the critical incident forms they were asked to complete the previously mentioned questionnaire which was then distributed. Completion of the questionnaire after the critical incidents had been obtained insured questionnaire items and responses did not bias incident responses. The questionnaires were generally completed in 3-5 minutes, although more time was allowed if needed.

Data Analysis

Following Owen's procedure, the collected incidents were separated into major content classifications, with subclasses and categories being established within each major classifi-

cation. Since the primary purpose of the present study was to establish whether or not different instructions would elicit different kinds of incidents, Owen's classification system was used to the extent that reported incidents fit his various classes, subclasses and categories. This permitted comparisons between the two sets of instructions in the present study and Owen's instructions, as well as within the present sets of instructions themselves.

The primary concern in the data analysis was to determine (1) whether or not new classes, subclasses and/or categories were generated with different instructions, (2) whether or not already existing classes, subclasses and/or categories contributed different proportions of incidents with different instructions, (3) to what degree outside of class contact with instructors occurred in the population sampled, and (4) what relationship existed between degree of contact and the reporting of this contact as being critical.

CHAPTER IV

RESULTS

A total of 405 critical incidents were identified from the responses of both samples combined ($N=154$). This results in an average of 2.6 incidents per subject, slightly more than the two requested. Receiving more incidents than had been requested was a phenomenon experienced by both Owen (1967) and Farrar (1968), and is a reflection of the difficulty some subjects have in reporting only one specific positive behavior and one specific negative behavior as was requested. A few more negative incidents (208) than positive incidents (197) were received. This would have been predicted based on the findings of Mayhew (1956), cited earlier (see page 14, this report).

Some responses were not classifiable as incidents either because they referred to (1) general rather than specific behavior (Ex: "he lectured well") or, (2) effects and not actual behavior (Ex: "everybody in the class liked him"). Two subjects declined to give positive incidents, indicating on their forms that they had never encountered any examples of what they could consider positive instructor behavior.

The obtained incidents were coded on the basis of Owen's (1967) previously developed classification system. The degree of detail of Owen's original classification facilitated

proper coding of the current incidents. In only a very few cases was there any question regarding the appropriate category in which to place an incident. In the majority of cases the wording of the obtained incident was identical to Owen's category descriptions. Appendix A contains exhibits of Owen's classification system. Exhibit I, taken directly from Owen's study, is a general description of the content of each of the six major classes which includes examples of the behaviors related to these classes. Exhibit II shows the complete system, with class, sub-class and category descriptions. In some instances the positive or negative behavior description in a particular category was omitted by Owen because it did not occur in his data. For the sake of completeness, and where logically consistent, these have been added in Exhibit II. Thus, for example, positive behavior Ia2 reads "briefly reviewed previous lecture each class." The negative behavior Ia2 which reads "did not review previous lecture each class" was never reported in Owen's study and thus was not included in his category description.

The first analysis made, after the incidents were categorized, involved comparing the three samples (Owen's 1967 sample and the two samples in the present study) on the basis of available information. Table 1 displays the distribution of subjects' grade classification across the three samples, showing both the number of subjects at each grade level for each sample and the percentage of the total sample at that

level. Table 2 indicates the same kind of frequency and percentage breakdown, this time by major subject area. Differences between the samples which are apparent from this table will be discussed in detail in the following chapter.

It should be noted that in these tables, and in the ones to follow, the sample referred to as Owen (1967) does not constitute Owen's entire sample. His study, being somewhat larger in scope than the present one, involved several different samples of the student population. Since only a portion of his study is of concern here only the data bearing on that portion was utilized.

In an effort to determine whether the pattern of obtained incidents in the six major content areas was similar across the three samples, chi-squares were computed for the distribution of positive, negative, and positive and negative incidents combined for all possible combinations of the samples. Table 3 displays the obtained values.

Table 4 displays frequencies of behaviors within categories, both positive and negative, for all three samples. It can be seen from this table that while there were some categories in which Owen had incidents, at least one sample in the present study did not, i.e., "instructor's knowledge of subject matter" (Ig, 1968B). No new categories were generated from the data of either of the two samples in the current study.

TABLE 1

GRADE CLASSIFICATION DISTRIBUTION
ACROSS THE THREE SAMPLES

| Grade Classification | 1967 | | 1968A | | 1968B | |
|-------------------------|----------|----------|----------|----------|----------|----------|
| | N | % | N | % | N | % |
| Seniors | 43 | 36 | 34 | 45 | 34 | 44 |
| Juniors | 46 | 38 | 29 | 38 | 30 | 38 |
| Sophomores | 31 | 26 | 10 | 13 | 9 | 12 |
| Freshmen | <u>0</u> | <u>0</u> | <u>3</u> | <u>4</u> | <u>5</u> | <u>6</u> |
| TOTALS | 120 | 100 | 76 | 100 | 78 | 100 |

TABLE 2

MAJOR SUBJECT DISTRIBUTION
ACROSS THE THREE SAMPLES

| Major | 1967 | | 1968A | | 1968B | |
|--------------|----------|----------|----------|----------|----------|----------|
| | N | % | N | % | N | % |
| A.&S. | 66 | 55 | 34 | 45 | 31 | 40 |
| Business | 30 | 25 | 33 | 43 | 38 | 49 |
| Engineering | 15 | 13 | 4 | 5 | 4 | 5 |
| Education | 2 | 2 | 4 | 5 | 0 | 0 |
| Technology | 3 | 3 | 0 | 0 | 2 | 2 |
| Architecture | 1 | 1 | 0 | 0 | 1 | 1 |
| Other | <u>3</u> | <u>3</u> | <u>1</u> | <u>1</u> | <u>2</u> | <u>2</u> |
| TOTALS | 120 | 102 | 76 | 99 | 78 | 99 |

TABLE 3

CHI-SQUARE VALUES FOR DISTRIBUTION OF
POSITIVE AND NEGATIVE INCIDENTS WITHIN
THE SIX MAJOR CLASSES ACROSS ALL
THREE SAMPLES

| Samples | Positive Incidents | Negative Incidents | Positive & Negative Incidents |
|------------------------|-----------------------|-----------------------|-------------------------------------|
| 1967 with 1968A | 9.92 | 15.25* | 22.61** |
| 1967 with 1968B | 8.41 | 8.33 | 15.13* |
| 1968A with 1968B | 4.11 | 6.26 | 9.39 |

*p less than .01

**p less than .001

Table 4

FREQUENCY OF BEHAVIORS WITHIN CATEGORIES
ACROSS ALL THREE SAMPLES

| Item | 1967 | | 1968A | | 1968B | |
|---------------------------------------|------|------|-------|------|-------|------|
| | Pos. | Neg. | Pos. | Neg. | Pos. | Neg. |
| I. Present. of material content | | | | | | |
| a. organiz. | | | | | | |
| 1 | 17 | 15 | 3 | 6 | 7 | 10 |
| 2 | 0 | 0 | 2 | 0 | 1 | 0 |
| b. explana- tions | | | | | | |
| 1 | 15 | 1 | 4 | 0 | 2 | 0 |
| 2 | 16 | 6 | 4 | 5 | 4 | 2 |
| 3 | 9 | 1 | 4 | 1 | 4 | 1 |
| 4 | 3 | 6 | 1 | 4 | 2 | 6 |
| 5 | 0 | 1 | 1 | 0 | 1 | 0 |
| c. irrele- vancies | 2 | 19 | 1 | 11 | 1 | 4 |
| d. self- respect | 7 | 10 | 2 | 0 | 3 | 0 |
| e. diff. 1 | 5 | 10 | 3 | 3 | 1 | 3 |
| level 2 | 1 | 1 | 0 | 0 | 0 | 1 |
| f. instr. preparation | 7 | 3 | 2 | 2 | 3 | 4 |
| g. subject knowledge | 2 | 5 | 1 | 0 | 0 | 0 |
| h. misc. | 0 | 1 | 0 | 0 | 0 | 0 |
| CLASS I TOTAL | 84 | 79 | 28 | 32 | 29 | 31 |

TABLE 4 (Continued)

| Item | 1967 | | 1968A | | 1968B | |
|---|------|------|-------|------|-------|------|
| | Pos. | Neg. | Pos. | Neg. | Pos. | Neg. |
| <u>II. Present.</u> <u>of material</u> <u>participation</u> | | | | | | |
| a. lect. vs | | | | | | |
| disc. 1 | 28 | 4 | 14 | 8 | 11 | 3 |
| 2 | 0 | 6 | 0 | 5 | 0 | 5 |
| 3 | 1 | 1 | 0 | 1 | 0 | 0 |
| b. student | | | | | | |
| present. 1 | 0 | 0 | 2 | 0 | 1 | 1 |
| 2 | 1 | 1 | 3 | 3 | 0 | 0 |
| CLASS II TOT. | 30 | 12 | 19 | 17 | 12 | 9 |
| <u>III. Present.</u> <u>of material</u> <u>inst. style</u> | | | | | | |
| a. use of | | | | | | |
| humor | 8 | 2 | 10 | 1 | 10 | 1 |
| b. physical | | | | | | |
| animation | | | | | | |
| 1,2,3 | 3 | 7 | 0 | 0 | 0 | 3 |
| c. speech | | | | | | |
| charact. | | | | | | |
| 1,2,3 | 2 | 6 | 5 | 11 | 3 | 7 |
| d. reading | | | | | | |
| to class | 0 | 5 | 2 | 8 | 2 | 10 |
| e. visual | | | | | | |
| aids 1, 2 | 9 | 2 | 3 | 0 | 3 | 0 |
| f. interest | | | | | | |
| level 1,2 | 11 | 4 | 6 | 7 | 8 | 4 |
| g. present. | | | | | | |
| speed 1,2 | 3 | 6 | 1 | 1 | 2 | 1 |
| h. misc. | 2 | 4 | 2 | 0 | 0 | 0 |
| CLASS III TOT | 38 | 36 | 26 | 28 | 29 | 28 |

TABLE 4 (Continued)

| Item | 1967 | | 1968A | | 1968B | |
|-----------------|------|------|-------|------|-------|------|
| | Pos. | Neg. | Pos. | Neg. | Pos. | Neg. |
| IV. Teacher | | | | | | |
| Stud. rap- | | | | | | |
| port | | | | | | |
| a. soc. clim. | | | | | | |
| 1 | 3 | 14 | 1 | 7 | 0 | 6 |
| support. | 5 | 8 | 0 | 4 | 1 | 1 |
| 2 | | | | | | |
| vs. | 9 | 1 | 3 | 1 | 3 | 0 |
| 3 | | | | | | |
| authorit. | 5 | 0 | 0 | 0 | 0 | 1 |
| 4 | | | | | | |
| 5,6,7 | 3 | 1 | 7 | 2 | 1 | 2 |
| b. help to | | | | | | |
| students | 6 | 1 | 0 | 0 | 6 | 5 |
| c. interest | | | | | | |
| in stud. | 7 | 1 | 8 | 0 | 3 | 3 |
| d. concern | | | | | | |
| for stu. lrn. | 2 | 4 | 1 | 0 | 2 | 2 |
| e. misc. | 2 | 9 | 0 | 4 | 5 | 3 |
| CLASS IV TOTAL | 42 | 39 | 20 | 18 | 21 | 23 |
| V. Evaluation | | | | | | |
| of students | | | | | | |
| a. test prep. | | | | | | |
| 1,2,3 | 4 | 11 | 0 | 0 | 4 | 1 |
| b. clarity & | | | | | | |
| freq. 1,2,3 | 4 | 5 | 1 | 3 | 1 | 4 |
| c. grad. sys | | | | | | |
| 1,2,3,4,5 | 6 | 9 | 0 | 0 | 1 | 1 |
| d. misc. | 3 | 0 | 1 | 2 | 0 | 3 |
| CLASS V TOTAL | 17 | 25 | 2 | 5 | 6 | 9 |
| VI. Require. | | | | | | |
| of students | | | | | | |
| a. clarity | 6 | 2 | 2 | 2 | 2 | 0 |
| b. quantity | 3 | 8 | 1 | 4 | 0 | 2 |
| c. misc. | 1 | 2 | 0 | 0 | 0 | 0 |
| CLASS VI TOTALS | 10 | 12 | 3 | 6 | 2 | 2 |

Of specific interest is category IVb, "availability for help with individual problems outside of class." Table 5 reveals the comparison between the number of incidents in this category and the remaining number of incidents in the larger classification, "teacher-student rapport and class interaction", in the two samples in the present study. A chi-square test applied to this table indicated a significant difference between the two sets of data. Other chi-squares were computed for similar breakdowns in the remaining 24 categories. Out of these remaining categories one was found to be statistically significant. This will be discussed in more detail in the following chapter.

Finally, Table 6 displays a distribution of responses to the three questionnaire items. The first distribution in the table is based on responses given by every subject in the study excluding those 11 individuals who responded to the critical incident forms with a IVb incident. These 11 subjects' questionnaire responses comprise the second distribution in the table.

TABLE 5

COMPARISON OF OCCURANCE OF IVb INCIDENTS
WITH REMAINING INCIDENTS IN CLASSIFICATION IV
WITH DIFFERENT SETS OF INSTRUCTIONS

| Sample | No. of IVb incidents | No. remain. incidents in class IV | Total no. class IV incidents |
|--------|----------------------|-----------------------------------|------------------------------|
| 1968A | 0 | 38 | 38 |
| 1968B | 11 | 33 | 44 |
| TOTAL | 11 | 71 | 82 |

Note.-Chi-square (df=1) = 11.71; significant at .001.

TABLE 6

DISTRIBUTION OF QUESTIONNAIRE RESPONSES

| Item | Total sample minus Ss reporting IVb incidents | | Ss reporting IVb incident | |
|---|---|----|------------------------------|----|
| | F | % | F | % |
| Contact with instr. outside class; % of classes less than 10 | 84 | 59 | 4 | 36 |
| 10-50 | 46 | 32 | 5 | 46 |
| 51-90 | 12 | 9 | 1 | 9 |
| more than 90 | 1 | 1 | 1 | 9 |
| Ave. no. contacts in any one course. | | | | |
| no contact | 11 | 8 | 0 | 0 |
| 1-2 | 66 | 46 | 4 | 36 |
| 3-4 | 40 | 28 | 5 | 46 |
| 5 or more | 26 | 18 | 2 | 18 |
| Advantages of such outside contact | | | | |
| very advantageous | 44 | 31 | 5 | 46 |
| some what advantageous | 64 | 45 | 6 | 54 |
| of no part. advantage | 31 | 22 | 0 | 0 |
| some what disadvantageous | 3 | 2 | 0 | 0 |
| very disadvantageous | 1 | 1 | 0 | 0 |

CHAPTER V

DISCUSSION OF RESULTS

SAMPLE COMPARABILITY

One of the original intentions of this study was to sample, insofar as possible, a comparable segment of the university population tapped by Owen (1967). Indications were that this effort was not entirely successful. Although, as can be seen from Table I, there were no significant differences among these samples from the standpoint of grade classification, there were other significant differences. Table 2 reveals at least three major shifts between the 1967 study and the two samples of the present study. The majority of the subjects in Owen's study were Arts and Sciences majors; in both samples of the present study Arts and Sciences majors comprised less than a majority. A more dramatic shift can be found among Business majors, comprising only one-quarter of Owen's subjects but close to one-half of the subjects in this study. A third shift occurs among Engineering majors which, on a percentage basis, contribute two and one-half times more subjects in Owen's data than in the present study. No substantial differences were found, however, between the 1968A and 1968B subjects on this variable.

Further indications that the data in the two studies are not comparable can be seen from shifts in the pattern of

collected incidents. Chi-square values (Table 3) showed significant differences in the pattern of negative incidents and positive and negative incidents combined between Owen's sample and the two current samples. As can be seen from the table, two of three comparisons between the 1967 and 1968A data were significant, while one of three comparisons between 1967 and 1968B data was significant. Further inspection of this table reveals that no statistically significant differences were found in the pattern of reported incidents between 1968A and 1968B data.

Based primarily on the evidence in Table 3 it was concluded that Owen's data and the data in the present study were not similar enough to warrant making comparisons. There are at least three possible explanations for this lack of comparability. It is possible that the substantial shift in major subject area among the subjects contributed to this. It may be, for example, that Business majors taking a great many courses and instructors which Arts and Sciences majors do not take place different emphasis on what is deemed critical instructor behavior.

A second possible explanation involves a recency effect. While the subjects were instructed to think of any instructor or course which they had had, the extent to which they used as a frame of reference the course they were presently attending is unknown. To the extent to which this did occur, some outstanding positive or negative characteristic unique to the

current instructor could account for the different pattern of incidents which were obtained.

A third possibility is the elapsed time between the two studies in the collection of incidents. It may be that over time, with changing college faculty and different students, different expectations and/or standards arise concerning the role of the instructor and what constitutes effective and ineffective behavior. All of these explanations must at this time, of course, remain speculative. Since comparability was not achieved it was decided to restrict further comparisons to the two samples in the present study.

CRITICAL INCIDENT DATA

One of the primary questions asked by this study was whether or not new classes, sub-classes and/or categories would be generated with different instructions. While some of the already existing categories contained incidents from one of the current samples and not the other, no new categories were formed. It is possible, however, that with larger samples some of the unique incidents presently falling in a miscellaneous category would be duplicated and new divisions formed.

A second question this study attempted to answer was whether already existing classes or categories contributed different proportions of incidents with different instructions. Of specific interest was Class IVb, "availability for help with individual problems outside of class: helped students with problems outside of class and was available for indi-

vidual conferences, counseling or suggestions; was not available." Set B instructions elicited a larger number of behaviors falling into this category than did Set A instructions. A chi-square between Set A and Set B data using as cell entries the total number of incidents in Class IVb for one pair of cells, and all remaining incidents in Class IV for the second pair of cells, was significant at .001 level of significance. The interpretation was that the Set B instructions prompted more responses of teacher-student rapport and interaction outside of a formal class meeting than did Set A instructions. That is, since the student had the option of responding with an incident concerning in class behavior and elected not to, the implication was that student evaluators did not feel they had that option with Set A instructions.

One may, of course, argue that in any event the number of times such behavior was mentioned, while it was statistically significantly more than in the 1968A sample, was still too infrequent to be of any practical significance. This point will be pursued later in the chapter.

One other breakdown yielded a significant chi-square. This, significant at .01 level, was category a in Class IV. This category deals with the social climate of the classroom: supportive versus authoritarian. There is no reason to believe that the differences in instructions would have had any effect on this category; neither is there any known

difference in the composition of the two samples that would explain it. The difference might be due in part to subjects in the 1968B sample who, responding in Class IVb might have with different instructions, responded instead in Class IVa. The difference might also be attributed to chance. Why the difference occurred can only be speculated upon; in any event it is not the result of some planned systematic variation.

QUESTIONNAIRE DATA

Responses to the Student Questionnaire helped provide answers to two questions of concern in this study.

First, to what extent do students have contact outside of class with instructors? Table 6 indicated very clearly that such behavior is not very frequent (item #1). Collapsing the two sample breakdowns in this table indicated that a majority of students respond that this occurs less than 10% of the time. While this is low, item #2 shows that only seven percent of the total sample in this study have never had this kind of contact. It might be concluded from this that behavior of this type is not valued by students in this sample. However, responses to item #3 would seem to contradict such a conclusion. Again collapsing the two breakdowns in Table 6, one finds that one-third of the students feel this kind of contact is very much to their advantage, almost four-fifths feel it is of some advantage, and less than 3% feel it disadvantageous.

There seems to exist, then, a paradox. On the one hand, students report outside of class contact with instructors is very important; at the same time they report very little of this kind of behavior actually taking place. This is perhaps not a particularly unexpected conclusion, but one that merits attention. It may be that typically the instructor is not available or at least is not perceived by the students as being available.

A question was raised earlier bearing on the practical significance of the finding that with more general instructions a statistically more significant number of "outside" behaviors were reported. Since the actual number of times this occurred was small, the question of how meaningful this is might be asked. Some interesting differences were found in questionnaire responses between those who reported such behavior and those who did not. Table 6 indicated that there were differences in the distribution of responses to the questionnaire items between these two groups. That is, those responding with "outside" incidents indicated having this kind of contact in a higher percentage of classes, more of the time, and felt it was more desirable than those who did not indicate such behavior. The degree of overlap between these two distributions is, however, quite large. A tentative conclusion would be that if the perceived opportunities for interacting with instructors in this manner were greater, a far larger percentage of the student population would take

advantage of it. Viewed in this manner, the relatively small number of these incidents reported is a function not of the unimportance of this kind of contact, but of the lack of perceived opportunities.

CHAPTER VI

SUMMARY AND RECOMMENDATIONS

SUMMARY

The main purpose of this study was to determine the effect on student evaluators' responses of critically effective and ineffective instructor behavior of a set of instructions designed to provide a broader frame of reference than was provided in the study (Owen, 1967) which served as a precursor to the present one. Of secondary concern was an attempt to determine the frequency and magnitude of student interaction with instructors outside the formal class meeting, as well as the relationship between such student-instructor interaction and the reporting of it as being critical.

A sample of 154 University of Houston undergraduates reported a total of 405 critical incidents which served as the basic data of the study. In addition, all participating students completed a three item questionnaire measuring student-instructor interaction.

The incidents were content analyzed according to a pre-existing classification system. Comparison was made between the results obtained from different sets of instructions in the present study, as well as between the present study and Owen (1967).

The distribution of responses to questionnaire items which indicated the level of importance assigned student-teacher interaction across certain sub-groupings within the sample was computed.

It was concluded that instructions which provide a broader frame of reference elicited more behaviors concerning outside of class student-instructor interaction than did more specifically worded instructions.

RECOMMENDATIONS

The composition of the sample used in this study places limitations on the degree to which these findings can be generalized. One might expect to find differences between undergraduate and graduate classes, small size classes and large classes (Owen, 1967). Variations between universities might also be expected as a function of size, location, student body composition, and curriculum. Perceptions of what constitutes effective and ineffective instructor behavior may vary in these different situations. Certainly this is fertile ground for future research.

In looking at the broad area of instructor effectiveness, students comprise only one of many relevant populations. A critical incident technique has been shown to be of value in looking at this population both here and in other studies (Smit, 1952; Owen, 1967). Additionally it has proved effective in use with other populations, namely college faculty (Farrar, 1968). There is no reason to suspect that it would be of any

less value in determining dimensions of instructor effectiveness or ineffectiveness as perceived by still other populations. One recommendation would be to apply this approach to a variety of these populations, e.g., administrators, alumni, community leaders, representatives of business and industry.

Evaluation of job dimensions is not the same as, but is a prerequisite to, evaluation of performance. To define an individual's job is one matter; to evaluate him once his job is defined is quite another. The purpose of this study was primarily to identify some of the relevant dimensions of an instructor's job. Once this has been accomplished, from the perspective of all relevant populations, evaluation is the next logical step. Future research concentrating on actual evaluation techniques and procedures is most certainly desirable.

Research designed to explore in more depth the extent and importance of student-instructor interaction outside of formal classroom situations should prove beneficial. The results might possibly serve not only to define the instructor's job for evaluation purposes, but, perhaps more importantly, provide some guidelines for instructors concerning the desirability of encouraging and implementing opportunities for such interaction.

The immediate, intermediate and ultimate goals of the higher education process can be effectively attained only when those variables that contribute to their attainment are fully

recognized and understood. More research which properly investigates the nature of these variables is most surely needed.

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APPENDIX A

CRITICAL INCIDENT CLASSIFICATION SYSTEM
DESCRIPTIONS OF THE SIX MAJOR BEHAVIOR CLASSES

I. PRESENTATION OF MATERIAL - CONTENT STRUCTURE AND SCOPE

Behaviors related primarily to the structuring of the content. These include the organization, planning, selection and preparation of content; use of supplementary references and illustrations; use of practical examples including personal experiences; thoroughness of explanations and level of difficulty of presentation; apparent knowledge of subject, etc.

II. PRESENTATION OF MATERIAL - STUDENT PARTICIPATION

Behaviors related primarily to student involvement in presentation of material. These include instructors' relative emphasis on lecture and/or class participation; student involvement in organizing and presenting material (e.g., team and committee activities) and assignments to students which specifically relate to the presentation of material, etc.

III. PRESENTATION OF MATERIAL - INSTRUCTOR'S STYLE

Behaviors related primarily to the instructor's individual style and choice of techniques of presentation. These include level of enthusiasm for the subject and its presentation; animation; use of humor; speech characteristics; rate of presentation; use of visual aids; individual presentation techniques and traits, etc.

IV. TEACHER-STUDENT RAPPORT AND CLASS INTERACTION

Behaviors related more to affective components of instructor and student interaction than to subject oriented student participation. These include the instructor's approach to formality of class; social distance between teacher and student; permissive versus authoritarian style; personal interest in and involvement with students and their problems; personality characteristics to which students react; control and discipline in class, etc. (Not included are student participation in or assignment to the presentation of material.)

V. EVALUATION OF STUDENTS

Behaviors related primarily to the processes surrounding the appraisal of student's progress. These include the adequacy of defining test requirements; practices and procedures in grading; type, frequency and content of tests, etc.

VI. REQUIREMENTS OF STUDENTS

Behaviors related primarily to what is expected of students but excluding those having to do with assignments to present material. These include adequacy of defining course requirements; responsibilities given to, demands made of, outside assignments given to, and expectations of students, etc. (Not included are assignments for presentation of material.)

CRITICAL INCIDENT CLASSIFICATION SYSTEM
CLASS, SUB-CLASS, AND CATEGORY DESCRIPTIONS

I PRESENTATION OF MATERIAL - CONTENT STRUCTURE AND SCOPE

| | <u>Positive</u> | <u>Negative</u> |
|-----|---|---|
| Ia. | <u>ORGANIZATION (e.g. PATTERN, CONTINUITY, OUTLINE) OF MATERIAL</u> | |
| | 1. showed organization (had continuity, followed a pattern, used outline) | 1. showed lack of organization (did not have continuity, follow a pattern, use outline) |
| | 2. briefly reviewed previous lecture each class | 2. did not review previous lecture each class |
| Ib. | <u>EXPLANATION OF CONTENT, USE OF SUPPLEMENTARY REFERENCES, ILLUSTRATIONS OR EXAMPLES</u> | |
| | 1. used examples to clarify, enrich and elaborate material | 1. used poor or unnecessary examples |
| | 2. made full and clear explanations, repeating where necessary | 2. did not make satisfactory explanations of material |
| | 3. related course material to every day experiences or familiar and practical situations | 3. did not relate course material to practical situations |
| | 4. supplemented and interpreted the text material in lectures | 4. followed text too closely - did not use supplementary material |
| | 5. brought outside reference material to class | 5. did not bring supplementary material to class |
| Ic. | <u>ADHERENCE TO SUBJECT MATTER AND/OR INCLUSION OF IRRELEVANT CONTENT</u> | |
| | 1. stuck to subject and did not stray to irrelevancies | 1. did not adhere to subject and included irrelevant content |

Id. REFERENCES TO SELF OR TO PERSONAL EXPERIENCES

- | | |
|---|--|
| 1. generally presented the material at a level that even the slower students could understand | 1. generally presented material and used vocabulary at a level above the students' understanding |
| 2. explained difficult text material | 2. geared teaching at too low a level |

If. PREPARATION FOR CLASS

- | | |
|---------------------------|-----------------------------|
| 1. came to class prepared | 1. came to class unprepared |
|---------------------------|-----------------------------|

Ig. KNOWLEDGE OF SUBJECT

- | | |
|---------------------------------------|---|
| 1. showed knowledge of subject matter | 1. showed lack of knowledge of subject matter |
|---------------------------------------|---|

Ih. MISCELLANEOUS

- | | |
|----|----|
| 1. | 1. |
|----|----|

II PRESENTATION OF MATERIAL - STUDENT PARTICIPATION

IIa. APPROACH TO LECTURE AND/OR CLASS PARTICIPATION

- | | |
|---|--|
| 1. allowed and encouraged class participation and discussion; asked and answered questions in class | 1. used lecture only; questions, class participation and discussion prohibited |
| 2. ----- | 2. discouraged discussion minimized questions emphasized lecture |
| 3. allowed little discussion but lectured in a superior manner | 3. allowed unproductive student discussion |

IIb. APPROACH TO STUDENT INVOLVEMENT IN ORGANIZING
AND PRESENTING MATERIAL

- | | |
|---|--|
| 1. divided class into committees, small groups or teams for reports and panel discussions | 1. assigned committees for reports and did not teach |
| 2. had students lead discussion - take over much of the work of teaching | 2. allowed students to do the teaching and run the class without enough teacher guidance |

III PRESENTATION OF MATERIAL - INSTRUCTOR'S STYLE

IIIa. USE OF HUMOR

- | | |
|---|--|
| 1. showed sense of humor and injected humor into lectures | 1. showed no sense of humor and did not inject humor into lectures |
|---|--|

IIIb. PHYSICAL ANIMATION

- | | |
|-----------------------------|---------------------------------|
| 1. moved around the room | 1. stood or sat in one position |
| 2. did not pace to and fro | 2. paced to and fro |
| 3. no misc. annoying habits | 3. misc. annoying habits |

IIIc. SPEECH CHARACTERISTICS

- | | |
|--|---|
| 1. spoke distinctly with sufficient volume | 1. did not speak distinctly or with sufficient volume |
| 2. did not talk in a monotone | 2. talked in a monotone |
| 3. no misc. annoying vocal characteristics | 3. misc. annoying vocal characteristics |

IIId. READING TO CLASS

- | | |
|---|---|
| 1. did not read to class from text, articles or other materials | 1. read to class from text, articles or other materials |
|---|---|

IIIe. USE OF VISUAL AIDS

- | | |
|---|---|
| 1. used films, projectors, models, maps and other physical objects for demonstrations | 1. used projector and pointer with charts |
| 2. used blackboard for outlines, maps, graphs, etc. | 2. did not use blackboard |

IIIIf. LEVEL OF ENTHUSIASM AND INTEREST

- | | |
|---|---|
| 1. showed generally enthusiastic, positive, interested or cheerful attitude or approach | 1. showed generally apathetic, bored, negative or critical attitude |
| 2. showed enthusiasm for and interest in his subject | 2. showed lack of enthusiasm for or interest in the subject |

IIIg. RATE OF PRESENTING MATERIAL

- | | |
|---|-------------------------|
| 1. lectured slowly in a relaxed and easy to follow manner | 1. lectured too rapidly |
| 2. lectured at a moderately fast to a rapid rate | 2. lectured slowly |

IIIh. MISCELLANEOUS

- | | |
|----|----|
| 1. | 1. |
|----|----|

IV TEACHER-STUDENT RAPPORT AND CLASS INTERACTION

IVa. APPROACH TO SOCIAL DISTANCE FROM, SUPPORTIVE BEHAVIOR TOWARD, AND CONTROL OVER STUDENTS

- | | |
|---|--|
| 1. did not display threatening or belittling behavior toward students | 1. displayed insulting, degrading, belittling, or sarcastic behavior toward students and students' performance |
|---|--|

- | | |
|---|--|
| 2. did not treat students like children and related to students more nearly as equals | 2. behaved in authoritarian manner or treated students like children and talked down to them |
| 3. promoted permissive atmosphere and friendly, informal interaction with students | 3. did not have personal or informal interaction with students |
| 4. maintained desired control and discipline | 4. discipline was poor |
| 5. showed respect for and open mind to students' point of view | 5. showed intolerance for student opinion and thinking |
| 6. promoted exchange of personal opinions, attitudes and feelings between students | 6. ----- |
| 7. ----- | 7. exchange of personal information a waste of time |

IVb. AVAILABILITY FOR HELP WITH INDIVIDUAL PROBLEMS OUTSIDE OF CLASS

- | | |
|--|---|
| 1. helped students with problems outside class and was available for individual conferences, counseling or suggestions | 1. was not available for help with student problems |
|--|---|

IVc. INTEREST IN STUDENTS (GENERALLY AND AS INDIVIDUALS)

- | | |
|--|--|
| 1. showed a general interest in students | 1. took no general personal interest in the students |
| 2. showed personal interest in students as individuals | 2. showed no interest in students as individuals |
| 3. made a point of knowing students' names | 3. did not know the names of any students |

IVd. CONCERN FOR STUDENTS' LEARNING

1. showed desire for students to learn, emphasized importance of learning over grades

1. showed a lack of interest in whether students learned or not

IVe. MISCELLANEOUS

- 1.

- 1.

V. EVALUATION OF STUDENTSVa. COVERAGE OF, DEFINITION OF, AND REVIEW OF MATERIAL FOR TESTS

1. made up tests from material which had been covered

1. made up tests from material which had not been adequately covered

2. told what type of test to expect and what would be covered

2. did not give clear idea of what would be covered on the tests

3. gave review before tests

3. gave tests without proper preparation

Vb. APPROACH TO TEST FREQUENCY & CLARITY OF TEST QUESTIONS

1. made test questions clear

1. made test questions too complicated, detailed, and covering irrelevant material

2. gave regular and frequent tests

2. gave few or no tests

3. gave no exams

3. gave daily tests

Vc. GRADING SYSTEM PROCEDURES AND PRACTICES

1. used fair grading system (with various acceptable criteria)

1. used questionable (unfair, biased) grading practices with non-objective criteria

- | | |
|--|--|
| 2. showed no personal favoritism in grading | 2. showed personal favoritism in grading |
| 3. did not grade off for grammar | 3. graded off for grammar |
| 4. explained grading system | 4. did not explain grading system |
| 5. gave immediate feedback on student standing | 5. did not give satisfactory feedback on graded material |

Vd. MISCELLANEOUS

1.

1.

VI REQUIREMENTS OF STUDENTS

Via. DEFINITION OF COURSE REQUIREMENTS

- | | |
|---|---|
| 1. gave clear and definite idea of course requirements, assignments and class activity expected | 1. did not give clear idea of course requirements and class activities to be expected |
|---|---|

Vib. QUANTITY OF WORK REQUIRED

- | | |
|--|--|
| 1. reduced mandatory outside assignments | 1. required too much work in reading, research, detail, etc. |
|--|--|

Vic. MISCELLANEOUS

1.

1.

APPENDIX B

You are invited to take part in a study of college teaching. In the incidents you describe below please do not name an instructor, as this is not an evaluation of individuals.

Your name and other indicated data are requested for purposes of statistical analysis, but such information will be kept confidential.

Your name _____ Major subject _____
 (last) (first)

Classification (circle) Fr. So. Jr. Sr. Age _____

INSTRUCTIONS

You probably have taken courses (at the University) which were better than others. We would like examples of specific things that instructors do that make the difference between a superior course and an unsatisfactory one.

1. Think of an outstandingly good course. What did the instructor do that made it superior? Your example should be one specific thing (among the many things that may have been done) that was important to making it a superior course.
 - a. Briefly describe what the teacher did.
 - b. Explain why it made the course superior.

2. Now think of a course that was not satisfactory. What did the instructor do that made it unsatisfactory? Again your example should be one specific thing that was important to making it an unsatisfactory course.

- a. Briefly describe what the teacher did.

- b. Explain why it made the course unsatisfactory.

You are invited to take part in a study of college teaching. In the incidents you describe below please do not name an instructor, as this is not an evaluation of individuals.

Your name and other indicated data are requested for purposes of statistical analysis, but such information will be kept confidential.

Your name _____ Major subject _____
 (last) (first)

Classification (circle) Fr. So. Jr. Sr. Age _____

INSTRUCTIONS

You probably have had instructors (at the University) who were better than others. We would like examples of specific things that instructors do that make the difference between a very satisfactory instructor and an unsatisfactory one.

1. Think of an outstandingly good instructor. Now think of something that he or she did that made him (her) outstanding. This should be one specific thing which may have taken place either in or outside the classroom (among the many things that may have been done) that contributed to making him (her) a very satisfactory instructor.

a. Briefly describe what the teacher did.

b. Explain why it made him outstanding.

2. Now think of an instructor who was very poor or inadequate. Think of something that he or she did that made him (her) very poor or inadequate. Again your example should be one specific thing which may have taken place either in or outside the classroom (among the many things that may have been done) that contributed to making him (her) a very unsatisfactory instructor.

- a. Briefly describe what the teacher did.

- b. Explain why it made him unsatisfactory.

STUDENT QUESTIONNAIRE

We would appreciate the following information from you concerning your degree of contact with instructors outside of class. Having this information will facilitate interpretation of group responses to the forms you have just completed. Please answer all three of the following questions; if you are not certain as to the correct response for your case, use your judgment to estimate as accurately as possible the response which best applies to you.

1. I have had contact with the instructor outside of class (includes office visitations, informal bull sessions after class, etc.)
 - in less than 10% of my classes_____
 - in between 10 and 50% of my classes_____
 - in between 50 and 90% of my classes_____
 - in over 90% of my classes_____

2. In all the courses in which you have had contact with the instructor outside of class, how often, on the average, did this occur in any one course?
 - I've never had contact with instructors outside of class_____
 - 1-2 times during a course_____
 - 3-4 times during a course_____
 - 5 or more times during a course_____

3. Do you feel it is generally to your advantage to have contact with your instructor outside of the class?
 - very much to my advantage_____
 - somewhat to my advantage_____
 - of no particular advantage_____
 - somewhat to my disadvantage_____
 - very much to my disadvantage_____