## EFFECTS OF COMMUNICATION RESPONSIVENESS

UPON INSTRUCTOR JUDGMENT GRADING
AND STUDENT COGNITIVE LEARNING:
AN EXPLORATORY STUDY

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## PREFACE

This study investigated the influence of communication responsiveness on the outcomes in a basic speech communication course. The primary objective was to discover if the interaction between teacher and student communication responsiveness significantly affected the awarding of judgment grades by the teachers and cognitive learning by the students. The independent variables used were the communication responsiveness of the teachers and the communication responsiveness of the students. The dependent variables were the judgment grades and the cognitive grades earned in a basic speech communication course. Analyses of variance were used to determine significant effects.

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## CHAPTER I

## STATEMENT OF THE PROBLEM

## Overview

This study investigated the impact of communication responsiveness on the grades earned in a basic speech course. The multi-sectioned course used in this study was Introduction to Speech Communication, offered by Oklahoma State University and staffed primarily by graduate teaching assistants. A total of 3,548 students and twenty-seven graduate teaching assistants were used in this investigation.

This first chapter is organized into six basic sections. The present section is an overview of the study and indicates the organization of the first chapter. The second section, "Emergence of the Problem," discusses the considerations underlying the development of the research. "Importance of the Study" comprises the third section. After the need for such an investigation is developed, the fourth section, "Specific Statement of the Problem," presents the formal statement of the question. "General Method," the fifth portion, briefly explicates the procedure followed in the exploration of the question. The last section of this chapter outlines the chapter sequence in this report.

Emergence of the Problem

The administration of any multi-sectioned course presents the course director with a number of problems. This is especially true if it is important that all students get the same instruction and are evaluated in the same manner across all sections. A great deal of uniformity can be imposed on a multi-sectioned course if all sections use the same text, follow the same syllabus, do the same projects, and take the same tests. However, not all courses lend themselves to totally objective methods of evaluation. This is the case in a speech course where performance presentations must be evaluated. Even the development of set criteria for the evaluation of performance work does not guarantee that the criteria will be applied evenly across all sections, or even that a given instructor will apply them equally to all students.

This situation existed in the course that was used as the basis for this study. In an effort to solve the problem of uniform application of performance work criteria, the course director conducted comparative grading exercises with the graduate teaching assistants during the week-long presemester workshop. But how well this training carried over into the classroom was uncertain. On occasion after receiving their semester grades, students would come to the course director complaining, "I would have gotten a better grade if I had just had another teacher."

While such a statement could be the rationalization of a dissatisfied student, it could also well be true. Finding competent graduate teaching assistants and training them well might not be
enough. An examination of the literature concerning the concept of homophily offers some suggestions of what else might be involved in the interaction between instructor and students.

McCroskey and Wheeless (1976, p. 109) defined homophily succinctly: "Homophily . . . refers to the degree of similarity between communicators on any given attribute or group of attributes." Rogers and Shoemaker (1971, p. 14) stated that "more effective communication occurs when source and receiver are homophilous." This posits the possibility that a teacher possessing a particular communication attribute would be more attracted to or receive more favorably the communication performance of students who posses similar communication attributes. Further, such a similarity might affect a teacher's subjective evaluation of performance work. McCroskey and Wheeless (1976) asserted an additional interaction:

Homophily has a major impact in communication, particularly on affinity, information acquisition, and influence outcomes. Simply put, we tend to be more attracted to people similar to us than to others; we tend to learn more from such people, and they are a great influence on us [italics added] (p. 109). Perhaps students learn more from instructors who have communication attributes similar to their own.

## Importance of the Study

If homophily or any other interaction among communication attributes in a communication course was found to have a significant impact on instructors' evaluations of student work and/or the students' ability to learn from a teacher, the finding would be important in the administration of multi-sectioned courses. If a department were sincere about providing the best education possible for its students,
such a finding would suggest matching students and teachers to provide the best fit for the most efficacious instruction.

Student/teacher matching, while not impossible, would not be easy. Such an undertaking should not be implemented unless there was good reason to believe that the results would be worth the effort.

Specific Statement of the Problem

In order to assess the need for teacher/student matching, the following question was asked: Does the communication responsiveness of the teacher and student influence the awarding of judgment grades and the attaining of cognitive grades in a speech communication course?

This study attempted to provide a partial answer to this question by examining a single hypothesis. Judgment grades and cognitive grades are in part a function of the interaction between instructor and student communication responsiveness.

To clarify the description of the study, several terms must be defined. "Communication responsiveness" refers to the preferred way that an individual responds to others in a communication setting. This study assigned three types of communication responsiveness: mastery responsiveness, flexible responsiveness, and neutral responsiveness. "Judgment grades" refers to grades that were grounded in the instructor's subjective judgment of student work. "Cognitive grades" refers to grades that were earned on standardized objectively-scored tests. Of special interest was the difference--expressed as either a gain or a loss-between the standardized midterm test and the standardized final test.

Consequently, this study used two independent variables: the communication responsiveness of the instructors and the communication
responsiveness of the students. Each independent variable was expressed in three types of responsiveness: mastery, flexible, and neutral. Two dependent variables were used: the grades on work which required the instructor's subjective judgment and the grades on standardized objectively-scored tests.

## General Method

This investigation was an ex post facto study. The independent variables were attribute variables--mastery, flexible, and neutral responsiveness, depending on how the subjects responded to a communication self-report inventory. The dependent variables, the two types of grades, were continuous since they could range in point value from 29 to 0.

The investigative method proceeded in the following manner. The twenty-seven graduate teaching assistants were divided into three equal groups according to their preferred communication responsiveness modes. The students of each instructor group were likewise divided into three groups according to their preferred communication responsiveness modes. This design produced nine cells. After standardizing all the grades given on all assignments in the course during the three year period from the fall of 1980 to the spring of 1983, the grades were partitioned into two groups: 1) all the grades that depended upon some degree of instructor judgment and 2) the two test grades that were objectively given and were not subject to instructor judgment. Although the research design was post test only, it should be noted that the post test data were produced by the individual project and test grades and were not produced by the terminal course grade.

Each group of grades was subjected to an analysis of variance. Significant results produced by both ANOVAs were further analyzed with the Duncan New Multiple Range Test to determine between which groups the significance lay.

## Chapter Sequence

Chapter I presents an overview of the study from the emergence of the problem through the methods used to investigate it. Chapter II reviews the literature regarding the evaluation of students and the earning of cognitive grades. Chapter III, "Methods and Procedure," explicates in detail the means by which the hypothesis was explored. The results of this study are presented and discussed in Chapter IV. Chapter V draws conclusions and suggests the implications of the investigation on the administration of a multi-sectioned speech course. Finally Appendix A displays the instrument that was used to assess communication responsiveness of both the instructors and their students.

## CHAPTER II

## REVIEW OF THE LITERATURE

Overview of the Chapter

This chapter is divided into five main sections. The present section provides a preview of the chapter. Then, in order to provide a framework for a discussion of teacher evaluation of student work and students' ability to learn cognitively from teachers, this chapter next examines general attitudes toward grading or evaluation. After this general background is presented, the third portion of the review of the literature focuses on influences on judgment grades, and the fourth portion deals with influences on cognitive grades. The chapter concludes with a brief discussion of how the current study fits into the literature.

## General Orientations Toward Grading

Generally and broadly, there are three orientations toward grading or evaluation. Thorndike and Hagen (1969, p. 575) note that "marking practices are expressions of individual and group value systems as much as they are dispassionate reports of student behavior." These value systems can be categorized into three general frames of reference that teachers use on which to ground their grading:

1. performance in relation to perfection, a mastery-based model,
2. performance in relation to potential, an individual-based model, and
3. performance in relation to peers, a group-based model. These three basic orientations appear to be fundamental. Other scholars may elaborate on them, but they use the same three and add no others.

Terwilliger (1977), for example, attempted to flesh out these categories by giving a little better picture of the teacher attitude implied in each. The mastery or criteria-based teacher he called the Behaviorist. He asserted that such a person is interested only in the degree to which a student has fulfilled the criteria and thus has demonstrated his/her mastery of the material. Such a teacher is not interested in differences in the quality of work among students. The second orientation to grading he called the Humanist. A Humanist is the person who is concerned about each student as an individual and, therefore, uses a self or individual-referenced approach to grading. These teachers are relaxed, informal, and are more concerned with student affect than with student grades, which they see as dehumanizing and impersonal. Terwilliger referred to the third category, the group or norm-referenced teacher, as the Pragmatist. These teachers believe that students will be in constant competition with others, and therefore they grade according to the strengths and weaknesses of the student in relationship to others in the group. They see grades as a way of helping people make choices. Each grading orientation is an expression of the value system of the teacher, just as Thorndike and Hagen (1969) asserted.

While grading orientations are discussed in terms of the teacher, student influence on the grades awarded is a given. The major portion
of variance in grades depends on student intelligence, motivation, and study habits. However the literature reports numerous studies that focus on the teachers' role in grading, treating the student as the stimulus, as it were, the thing reacted to.

Influences on Judgment Grades

In the examination of what is involved in making judgments about students' work, student influence has not been much considered. Judgment grading is viewed as a function of the teacher. Little attention has been given to the interaction between teacher and student, although Broadfoot (1979) has called attention to this mutual influence:

There is a continuing interpersonal state of affairs in existence between pupils and teacher, based on the orientations of each party to the other. The individual's knowledge, perceptions and evaluations of the other, including their common knowledge of their interactions, all influence current interactions and behavior (pp. 5-6).

Despite this observation, discussions of judging student work have been approached from the teachers' perspective. The teachers' grading orientations are said to be expressions of their value systems. In the application of these value systems, a number of variables come into play for the teacher. These variables range from one's sensitivity and empathy to a number of types of judgment tendencies or constant rating errors.

## Sensitivity and Empathy

Smith (1966, p. 19), in his discussion of sensitivity to people, noted that observation plays an essential role in the judgments we make because "what we hear a person say and see him do has much to do with
the inferences we make about him." Judgments of a person are further influenced by the past judgments we have made of the group to which he belongs; in other words, we stereotype a person on the basis of this past influence. If we judge that person's feelings, thoughts, and behaviors to be like our own, we feel empathy for him. Sometimes this similarity between people, either real or perceived, is called homophily. As was seen in Chapter I, McCroskey and Wheeless (1976, p. 109) asserted that "we tend to be more attracted to people similar to us than to others." This, of course, is homophily, the impetus for the current study.

## Level and Spread of Judgments

Smith (1966) said that our judgments are expressed in terms of level and spread. Level refers to a person's "general tendency to rate others as low, average, or high; as poor, fair, or superior; as possessing few, some, or many desirable traits; or as deserving an $F$, C, or A grade" (p. 17). Spread refers to a person's "general tendency to rate himself and others over a narrow or wide range" (p. 18).

Kerlinger (1973) referred to these tendencies as different types of constant rating error. In considering level, he found two types of errors: the error of severity, "the general tendency to rate all individuals too low on all characteristics" (p. 549) and the error of leniency, "the tendency to rate too high" (p. 549). He noted that the spread available is often affected by the error of central tendency, which is "the general tendency to avoid extreme judgments and rate right down the middle of a rating scale" (p. 549). Kerlinger went on to discuss the halo effect which is produced by stereotyping as "the
tendency to rate an object in the constant direction of a general impression of the object" (p. 548).

Bock (1970), in his work with rating and rating errors, gave particular attention to another type of error--trait error, which is a tendency to rate too severely or too leniently on some particular item or trait such as organization or eye contact, for example. Bock and Bock (1977) have developed what they call a theory of rating error which they contend is made up of three interrelated constructs.

First, the act of evaluation is affected by the source, the message, the channel, the receiver, feedback, and the environment in which the rating takes place. Second, the major contribution to rating errors is found in the receiver component of the model. Third, the underlying basis of rating depends on the demand characteristics of the situation (p. 299).

The fact that the receiver, the teacher, is the major contributor to rating error has been well examined by Murray (1938). Murray attempted to account for this rater influence with the error of similarity and the error of contrast. According to the error of similarity, we will rate higher those people possessing traits we believe we have, and we will rate lower people we perceive are different from us. According to the error of contrast, we will rate higher people we perceive as differing from us, and we will rate lower people we see like ourselves. His study weakly supported the error of contrast notion. Investigations of Judgment Grading

Geisinger and Rabinowitz (1980) reviewed the literature and concluded that little research has been conducted on individual differences in grading behavior. In an attempt to rectify this omission, they studied grades from the perspective of the faculty members who gave
them. They found that highly norm-referenced faculty members generally were somewhat low graders. Individual-referenced faculty members gave higher grades. Criterion-referenced faculty members were neither generally lower nor generally higher graders. They further noted that faculty members seem to choose a method of student evaluation consistent with their own philosophical view of grading. For example, higher normreferenced faculty members gave grades on the basis of tests and quizzes. Faculty members who used other methods of appraisal--reports, discussion, and so forth--were more self-referenced and, consequently, were relatively easy graders.

McKeachie, Lin, Moffett, and Daugherty (1978) ventured into this area of instructor attitude accidentally when they conducted a study to see what sort of teacher got students to enroll in other psychology classes. They used Mann's categories--facilitator-person, in-between, and expert-authority--to classify the instructors they were studying. They found that the facilitator-person instructor gave higher grades than did the instructors in the other groups.

Geisinger (1980) examined the grades given by 176 faculty members of a large university and discovered that there were no differences in grading related to the instructor's educational attainment, rank, teaching experience, research productivity, age, or sex. However, there were differences, and these were related to their attitude toward grading and to class size. The higher grades came from those who taught smaller classes.

There are at least two reasons why Geisinger found higher grades given in smaller classes. Stockford and Bissell (1949-1950) noted that the error of leniency (higher grades) occurs when the rater had to
confront the ratee with the rating--a situation more likely to happen in a small class than in a large one. Second, both Henrikson (1940) and Barker (1969) found that the better known the students are to the rater the higher they are judged. An instructor in a smaller class has a greater opportunity to get to know the students than does the instructor of a larger class. This finding bore out a study conducted long ago by Knower (1929) in which he discovered that instructors in a public speaking course tended to rate their own students higher than they rated the students of other instructors.

## Summary of Influences on Judgment Grades

A teacher's subjective judgment of student work is affected by his own sensitivity and empathy coupled with his personal inclinations in the use of the level and spread of grading. Grade level and spread are expressed in constant rating errors of severity, leniency, central tendency, halo effect, trait, and/or similarity. Studies show that individual-referenced teachers are easier graders, norm-referenced teachers are harder graders, and criterion-referenced teachers grade between the two extremes. Class size also seems to affect grades as does the amount of familiarity with the student. Higher grades are given to those in smaller classes and to those the teacher knows.

## Influences on Cognitive Grades

More attention in the literature has been given to studies designed to determine what teacher behaviors effect the greatest learning. Since teaching is communication, these studies tend to focus on some particular communication behavior to examine its impact on student
learning. Student learning is often subdivided into three types: affective, behavioral, and cognitive.

Rosenshine and Furst (1973) examined over fifty studies dealing with the relationship between teaching behaviors and various types of student achievement. They found that nine variables have yielded the most significant and/or consistent results in student growth in these studies. They listed the nine in order of importance:

1. clarity -- organization and coherence,
2. variability -- flexibility and adaptability,
3. enthusiasm -- stimulation, excitement, vigor, and power,
4. task oriented and/or business-like -- achievement oriented,
5. criticism -- mild and directional,
6. teacher indirectness -- praise and use of student's ideas,
7. student opportunity to learn criteria material -- what he/she will be graded on,
8. use of structuring comments -- previews and summaries, and
9. multiple levels of questions on cognitive discourse -- factual versus "higher level."

Rosenshine and Furst (1973) were quick to point out that most of the studies they surveyed dealt with affective growth not cognitive growth. They also reported their own attempts to investigate higher level cognitive growth, learning which transcends just recognition and comprehension. They conducted six studies in which teachers were trained to use praise and other positive communication behaviors and to decrease their use of criticism and negative communication behaviors. They wanted to determine if the more positive behaviors helped students do more than just increase their ability to state facts. They wanted
to see if it would help them achieve higher level cognitive interaction. Only one of the six studies produced significantly higher cognitive achievement with the experimental group than was attained by the control group.

In fact, many studies which explicitly set out to find a connection between aspects of communication and cognitive learning fail to demonstrate significant results. This was foreshadowed in a lengthy study conducted by Jayne (1945) in which relationships between teaching procedures and education outcomes were investigated. Jayne concluded by saying that teaching activities must be appropriate to the objectives set up because there is no single, specific, observable teacher act--such as the amount the teacher talks or the students talk or the types of questions or the types of teacher comments--that is always good and produces greater student gain.

In 1964 Travers, VanWagenen, Haygood, and McCormick seemed to have set about to test Jayne's findings concerning specific types of teacher responses. Using 288 grade school children studying German, they set up four different types of feedback conditions, each of which differed in the amount of redundancy involved. They concluded that the more redundant the message was, the better the student learned it. Not only did students perform better on the items they interacted with the instructor on, they also performed better on items they had learned only through observation. "The data suggest the interpretation that the direct interaction procedure raises the level of arousal of the direct subjects which, in turn, influences acquisition on the items which they learn by observation" (p. 173).

The findings of Travers, VanWagenen, Haygood, and McCormick with
grade school students seem to relate to those of Solomon, Rosenberg, and Bezdek, whose study with college students was also conducted in 1964. They found that student comprehension gains were highest from teachers who were moderate on a Permissiveness-Control continuum and from those showing "energy" and "flamboyance." They suggested that active teachers stimulate excitement in the students which gets them more involved in the course work while the more moderate control teachers achieve a similar effect in another way. They get greater student interaction, and students learn better what they have participated in. Factual material is better retained if it is presented clearly and expressively in a more lecture-type manner.

Meier and Feldhusen (1979) found a similar effect. Students preferred an expressive lecturer who was vocally and physically animated and who told humorous stories. In addition to preferring such instructors, Meier and Feldhusen asserted that students may learn better from them too. One should note, however, that cognitive learning achievement is only suggested and is not demonstrated.

The Solomon, Rosenberg, and Bezdek (1964) study concluded with the reminder that both types of teachers--the active ones and the interactive ones--must be careful not to be too extreme in their communication behaviors. Too much stimulation reduces the amount of information communicated; too much control stifles participation and too little control doesn't develop the topic enough to be remembered. Too much clarity and presentation reduces student involvement and student comprehension.

This all seems to harken back to Jayne (1945) nineteen years earlier, who said no single, specific, observable teacher act always
produces learning. Teachers need to talk with energy and flamboyance but not with too much energy and flamboyance. Teachers need to lecture with clarity and expression, but they should not lecture too much or with too much clarity and expression. Students need to talk, but they shouldn't talk too much.

In 1977, Power was finding much the same thing. His work involved 139 eighth grade science students and their four teachers. In his conclusions he said:

At the classroom level, the teacher who neither allows unusually high levels of student talk nor dominates to the point that students rarely are directly involved can be expected to produce the highest gains. At the individual level, a higher level of interaction appears to maximize the achievement of students (p. 272).

It is the wording of the last sentence that requires special attention-"appears to maximize the achievement of students." A close reading of the study reveals that the number of student/teacher interactions was significantly related to attitude toward science and only approached significance for the knowledge-of-science scores. The achievement is attitudinal rather than cognitive. Here one begins to see what will become more evident in later studies--that teachers' communication behaviors relate more to student affective achievement than they do to cognitive achievement.

But liking the class and/or teacher does not guarantee greater cognitive learning, despite Bryson's (1974) assertion to the contrary. Bryson correlated the scores of college students' evaluations of their algebra teachers with the scores those students made on the standardized post course Cooperative Intermediate Algebra Test. She found that all the items on the evaluation were positively related to the amount
learned. One could argue that a student might perceive favorably the teacher of a class the student excels in but that there is not necessarily a causal relationship between liking and learning.

Kosinski (1978) argued that there is no causal relationship between what a teacher does and what a student learns. He stated that the teacher plays his important role only in the affective domain. He arrived at these conclusions after studying 750 general biology students at Rutgers College. Basically he was trying to find what variables had a significant influence on the standardized test scores of the students. After subjecting the midterm and final grades to an analysis of variance and the laboratory, recitation, midterm and final grades to a correlation analysis, he concluded that as far as the exams were concerned, the quality of teaching made no difference. At Rutgers, the students taught themselves, if rote memory could be called teaching. "The most important determinant of success on a standardized exam is a knack for taking those exams, irrespective of the material covered in class" (p. 29)

But despite Kosinski's study, most teachers do not like to feel that, as far as cognitive learning is concerned, they are a supernumerary in the learning process. Therefore the search goes on for those elusive variables which will effect cognitive learning.

## Investigations of Communicator Style

Recently much attention has been given to the construct of communicator style as it relates to the classroom teacher. Norton (1977) laid the groundwork for this construct in his article "Teacher Effectiveness as a Function of Communicator Style." According to Norton, communicator
style meant "the way one verbally and paraverbally interacts to signal how literal meaning should be taken, interpreted, filtered, or understood" (p. 527). The construct of communicator style was operationally defined by eleven independent variables--dominant, dramatic, animated, open, contentious, relaxed, friendly, attentive, impression-leaving, precise, and voice--and one dependent variable, communicator image. Norton's (1977) study, which used 69 professors and 596 students at the University of Michigan, found that teacher effectiveness was embedded in the construct of communicator style. An effective teacher was perceived as a good communicator. Both faculty and students saw the effective teacher as one who is attentive and leaves a good impression. Such a teacher is empathic (warm and genuine), tolerant, caring, and person-oriented. Students also indicated that an effective teacher is relaxed, dominant, friendly, and precise.

It should be noted, however, that teacher effectiveness was operationalized as the scores earned on six affective items, items which dealt with how subjects felt about the teacher. Nothing in this study related to cognitive learning as such. However, later research has taken the notion of communicator style or components of that construct and eventually attempted to relate them to cognitive learning.

Dramatic and Relaxed Styles. For example, Norton and Nussbaum (1980) have collaborated on the variable of dramatic behavior, which is the second variable that Norton (1977) listed in the communicator style construct. They found that teacher effectiveness, which again was an affective measure, covaried with nine of ten dramatic behaviors. The teacher's use of voice for dramatic effect produced a negative
correlation. Behaviors that produced positive correlations at the . 10 level were the teacher's ability to get people to laugh and his ability to catch people up in his stories. Behaviors that produced significant positive correlations at the . 05 level were the perception that the teacher was very entertaining and his doing a lot of "double-takes" for dramatic effect. They concluded by saying "the good teachers seem to be doing something qualitatively different than the poor teachers in terms of communication" (p. 578): they were more entertaining, and they did more double-takes.

Nussbaum (1982) continued to work with the dramatic variable and coupled it with another variable from the communicator style construct-that of being relaxed. He maintained that an instructor's relaxed behavior, dramatic behavior, and his effectiveness rating influence the instructor's overall communicative style. In this study dramatic style was a function of the teacher's sex and amount of teaching experience in the course. The more dramatic teacher was male and had less experience. The explanation given for the latter finding was that perhaps with the passage of time, teachers get bored presenting the same material and are no longer as dramatic. Relaxed style was a function of marital status only. Married teachers were seen as more relaxed teachers. Teaching effectiveness was a function of three things:

1) having a positive overall style of communication, 2) being older, and 3) being male. But once again, one needs to note that teaching effectiveness was assessed with an instrument which measured student affect. And once more it should be noted that liking and learning are not necessarily the same thing.

Self-Disclosure. Another variable in communicator style that has been singled out for study is that of openness. Norton (1977, p. 529) illustrated this variable in the following manner: "The open communicator readily reveals personal things about the self, easily expresses feelings and emotions, and tends to be unsecretive, unreserved, and somewhat frank." A more common name for such behavior is self-disclosure.

Nussbaum and Scott (1979) studied the relationship between an instructor's communication behaviors, one of which was the instructor's self-disclosiveness, and classroom learning. The subjects for this study were 323 students in an introductory interpersonal communication course and their ten graduate assistant instructors. Classroom learning was divided into three types: affective, behavioral, and cognitive learning. Affective learning was measured with eight evaluative semantic differential scales. Behavioral learning was operationalized as behavioral intent and was assessed with four evaluative semantic differential scales. Cognitive learning was measured using the scores from a 50 -item multiple choice test, which was the second of three tests given in that interpersonal communication course. A combination of communication style and self-disclosiveness was found to be positively and significantly associated with student affect and behavioral intent. Those variables were also significantly associated with cognitive learning, but it was a significant negative relationship.

In 1981 and apparently using the same data set, Scott and Nussbaum examined the role of self-disclosure in student perceptions of instructors' communication behaviors. From the students' perspective, competence in instructor communication style and honesty in selfdisclosure are significantly related to the evaluation of overall
classroom performance of the teacher. They further stated, "In terms of perceptions of teacher effectiveness, consequently, perceived honesty of self-disclosure enhances even those dimensions of perception which earlier were demonstrated as most associated with cognitive learning" (Scott \& Nussbaum, 1981, p. 52). This latter assertion is not clearly evident in their table, but it does demonstrate the researchers' desire to relate communication to cognitive learning.

Teacher Immediacy and Interpersonal Solidarity. Andersen (1979) made a point of distinguishing between immediacy and interpersonal solidarity. She viewed immediacy as a more restricted concept than solidarity by defining it as "the nonverbal behavior manifestation of high affect," while she viewed solidarity as "the internal affective state that is both derived from and a cause of immediacy behaviors" (p. 545). In somewhat simpler language, she described teacher immediacy as "those nonverbal behaviors that reduce physical and/or psychological distance between teachers and students" (p. 543). The types of nonverbal behaviors that were referred to on her Behavioral Indicants of Immediacy Scale are similar to the behavior Norton (1977) listed under his animated, relaxed, and voice variables of communicator style.

Using 205 students in an introductory interpersonal communication course and their thirteen instructors, Andersen examined teaching effectiveness in terms of the teacher's ability to produce student affective, behavioral, and cognitive learning. Her multiple regression model showed that teacher immediacy predicted $46 \%$ of the variance in student affect toward the instructor, $20 \%$ of the variance in student affect toward the course content, and $18 \%$ of the variance in student
behavioral intent. But teacher immediacy did not significantly predict cognitive learning as it was measured by the scores on a 50 -question multiple-choice exam.

Andersen's (1979) four interpretations for the failure to find any cognitive results can be summarized in the following manner:

1. There is the possibility that cognitive achievement is not related to student affect and behavioral commitment. Perhaps student study habits, motivation, and ability are such a major contributor to student cognitive learning that teacher immediacy can make no impact.
2. Possibly the test came too early for teacher immediacy to have had an effect.
3. Perhaps the mastery nature of the course reduced the variance because of the use of grade distributions.
4. It is also possible that high affect for the teacher interferes with cognitive learning.

Nussbaum and Scott (1979), in a study cited above, also used interpersonal solidarity as a possible factor in classroom learning. They defined interpersonal solidarity as psychological or physical closeness between people. Interpersonal solidarity would seem to relate to the attentive, open, friendly variables in Norton's (1977) communicator style construct. Nussbaum and Scott hypothesized that interpersonal solidarity would significantly enhance the relationship between communicator style and self-disclosiveness and cognitive, affective, and behavioral student learning. But this hypothesis was not confirmed at the 0.05 level.

Nussbaum and Scott (1980) gave interpersonal solidarity another try. Apparently still using the same data set from 1979, they attempted
to assess the relationship between student learning and varying levels of teacher-student solidarity. They were also interested in the relationship between these varying levels of solidarity and an instructor's communicator style.

Interpersonal solidarity was divided into three groups: high, moderate, and low. Learning was divided into three groups also: affective, behavioral, and cognitive. Nussbaum and Scott found that both high and moderate levels of solidarity produced similar positive correlations with the affective and behavioral intent measures. However, it was only moderate solidarity that produced a statistically significant difference on the cognitive measure used (scores on a 50 -question multiple-choice exam). Therefore, they posit that teachers should strive for a moderate level of solidarity if they want to have "a desirable effect on overall classroom learning" (Nussbaum \& Scott, 1980, p. 558).

In the 1981 Scott and Nussbaum study cited above, the impact of self-disclosure and communicator style on the instructors' evaluations was examined. They found a significant relationship among these variables; however, when they added interpersonal solidarity to the equation, it raised the cannonical correlation but not to a significant degree.

Homophily. Homophily was defined by Elliot (1979, p. 587) as "the degree to which pairs of individuals who interact are similar in certain attributes such as beliefs, attitudes, values, education, and social status." Homophily would seem to be a natural extension of the concepts of interpersonal solidarity, which is the psychological or physical closeness of people. As such, homophily would be another manifestation of Norton's (1977) communicator style variables. One would feel closer
to someone who he perceived was like himself. This, of course, is what the concept of homophily asserts (Rogers \& Shoemaker, 1971; McCroskey \& Wheeless, 1976).

Elliot (1979) investigated homophily in a classroom setting by hypothesizing that degrees of perceived homophily between student and teacher in attitude, background, and competence would affect cognitive, behavioral, and affective learning. His analysis confirmed a relationship between homophily and the measures of affective and behavioral intent learning. However, the cognitive measure was not related to affective or behavioral intent learning nor was it related to any level of homophily to a significant degree.

Summary of Communicator Style Investigations. Under the rubric of communicator style, a number of constructs have been pitted against classroom learning outcome variables. Communicator style as a whole, as well as dramatic and relaxed style, self-disclosure, immediacy, interpersonal solidarity, and homophily have all been singled out for special study. All of these variables have been shown to impact upon affective learning; the last four have been shown to affect behavioral learning; but relationships with cognitive learning have been a good deal more tenuous. Self-disclosure did produce a significant negative relationship with cognitive learning, although later a positive one was implied. Moderate interpersonal solidarity was said to have a significant relationship with cognitive learning.

## Investigations of Communication Responsiveness

The construct of communication responsiveness is currently being studied by Hughey, Harper, and Harper (1982), Hughey and Harper (1983a),
and Harper and Hughey (1983). Basically the notion of communication responsiveness maintains that people in a communication encounter can react in one of three major modes of responsiveness: mastery responsive (an assertive mode), flexible responsive (a supportive/adaptive mode), and neutral responsive (a communication-avoidance mode). An individual's style is determined by the weight with which he ranks these three modes. For example, an M/F/N responsiveness pattern would mean that an individual prefers to respond assertively; his backup strategy is to be supportive and adaptive; and he is least likely to avoid communicating. One's communication responsiveness is measured on each of six dimensions: how one handles purpose, communicative climate, transmission, reception, sequencing, and problem-management.

Earlier work with communication responsiveness (Hughey, Harper, \& Harper, 1982) focused on its relationship with affective measures in a multi-sectioned hybrid speech course. While no one particular mode of responsiveness produced significant results on every item of the students' evaluation of teacher and course (the affective measure), it was clear that students preferred responsive to nonresponsive instructors.

Harper and Hughey (1983) compared the patterns of communication responsiveness with an affective measure--the instructor/course evaluation by the students--and with a cognitive measure--the test scores on the final examination, a standardized 100-question multiplechoice test. On the affective measure, twice a mastery pattern was significantly a positive factor in higher course evaluations because of the manner in which these instructors sent and received messages. Six times a neutral pattern was significantly a negative factor in lower
instructor evaluations because of the manner in which the more nonresponsive instructors handled communicative climate, coherence, and problem-management. No mode of communication responsiveness impacted significantly either positively or negatively on the students' cognitive achievement.

To get a truer picture of cognitive achievement, Hughey and Harper (1983a) took as their measure the difference in scores between the midterm test and the final examination. The students' evaluations of the instructor and course were still used as the affective measure. When the composite responsiveness patterns of the twenty-four instructors were compared to the cognitive and affective measures in a multiple regression analysis, all of the significant results were in the affective area. A neutral pattern again was the greatest liability to teacher ratings producing four significant negative correlations. A mastery pattern seemed to be the best overall responsiveness pattern. It produced no negative correlations on any item on the student evaluation, and six of these correlations were significantly positive.

As far as the cognitive outcomes were concerned no composite responsiveness pattern produced results that were either significantly higher or lower than those produced by other patterns. However, although none were significant, the more responsive patterns did produce eight positive correlations out of a possible nine, while the less responsive patterns produced all negative correlations.

Since all significant findings in this study were affective, Hughey and Harper (1983a) further explored that area of communication responsiveness that focuses on the creation of feeling--the climate-making dimension of responsiveness--to see if this subscale might impact on
cognitive achievement. To do this, a discriminant analysis was employed which compared the affective and cognitive variables to the climatemaking subscale. As before, the involved, competitive climate-making pattern was rated the highest by the students on the instructor/course evaluation. The uninvolved, nonresponsive climate-making pattern was evaluated the lowest by the students. But here, for the first time, there are some differences with the cognitive scores.

Students of competitive climate-making instructors did better on the mid-term test than they did on the final. These students ended the semester with a z score cognitive loss of 1.02 points. The reverse was true for students who have supportive climate-making instructors. These students ended the semester with a z score cognitive gain of 1.52 points. Students with uninvolved climate-making instructors also showed a z score cognitive gain of 0.26 point, which, while it was a gain, was not nearly as great as that made by the students of supportive climate-making instructors. Therefore, Hughey and Harper (1983a) suggested that the type of climate created by the instructor was related to cognitive gains.

## Summary of Influences of Cognitive Grades

In summary, many connections have been made between a teacher's communication behavior and affective and behavioral intent variables. But when it comes to demonstrating a connection between how teachers communicate and student cognitive learning, all that can be found are a few positive correlations involving praise, direct interaction, a moderate amount of interpersonal solidarity, and a supportive mode of responsiveness. It would be easy to say that Kosinski (1978) was right and that cognitive learning is too student-bound for the teacher to
make much of an impression. Yet, most teachers would not like to think that they make no difference in the learning that goes on, A recent study by Hughey and Harper (1983b) suggested that the final grade in a course is not totally dependent upon the student. They subjected the final course grades of 1,578 students in a basic hybrid speech course to a discriminant analysis and learned that $15.76 \%$ of the final course grade depended on the instructor-bound variables of judging habits, communication responsiveness, and stereotypic knowledge. Therefore, since a grade was not totally dependent upon the student, another examination of the teacher's influence on grading is in order.

The Current Study

The current study examined the impact of communication responsiveness upon the teacher's subjective judgment of the student and on the student's ability to learn cognitively from the teacher. This examination evolved from the concept of homophily and sought to test if the nature of teacher/student communication responsiveness affected course outcomes.

To review briefly, McCroskey and Wheeless (1976, p. 109) defined homophily as "the degree of similarity between communicators on any given attribute or group of attributes." According to the concept of homophily, "more effective communication occurs when source and receiver are homophilous" (Rogers \& Shoemaker, 1971, p. 14). Therefore, one might well expect a teacher to rate more favorably a presentation of a student whose communication behavior was similar to his/her own. Such students would receive higher grades when the grade is determined by the teacher's subjective evaluation. The concept further asserts that
a person learns more from a homophilous source. "Homophily has a major impact . . . on . . . information acquisition. . . . we tend to learn more from such people" (McCroskey \& Wheeless, 1976, p. 109). Therefore, a student should learn more from a teacher whose communication responsiveness is similar to his/her own.

This study examined communication responsiveness as a potential contributor to rating error in order to gain insight into the grading tendencies and cognitive impact of the teacher. Geisinger and Rabinowitz (1980) have suggested that teacher plan the methods of evaluation they will use with their students in accordance with their own philosophical orientations. In this study, however, individual teacher preference in the planning of the course was omitted. The instructors used were those graduate teaching assistants who staffed a large multi-sectioned hybrid speech course that was planned by a basic course director. In an effort to make this course as uniform as possible across all sections, deliberate attempts were made to reduce individual instructor variance. All graduate instructors attended a week-long pre-semester workshop in which they were trained to use specific criteria in the evaluation of student work. However, this study attempted to determine if the influence of one's communication responsiveness is so pervasive that it still influences the manner in which one rates students, despite attempts to standardize instructor judgment of student work. According to the notion of homophily, when like meets like, communication is more effective. Therefore, instructors would subjectively judge students like themselves more positively, and students would learn more if they were similar to their instructors.

Therefore, this study examined differences in grading by looking
at the interaction between the communication responsiveness of instructors and their students as it was exhibited in the judgment grades awarded by the instructors and in the cognitive grades earned by the students.

## CHAPTER III

## METHOD AND PROCEDURE

Overview of the Chapter

The hypothesis that judgment grades and cognitive grades are in part a function of the interaction between instructor and student communication responsiveness was examined using the data and methods described in this chapter. This chapter is divided into four major partitions. First, a description of the population is presented; next the measures used are discussed. Third, the methodology employed is outlined, and finally, the statistical analysis method is identified.

The Population

## Total Subject Population

The data used for the examination of the hypothesis were generated by the teaching staff and their students of the basic speech communication course at Oklahoma State University from the fall of 1980 through the spring of 1983. The teaching staff was composed of four faculty members and twenty-nine graduate teaching assistants who were working on a two-year masters degree program. During this three-year period, the thirty-three person staff taught 4,210 students, most of whom were undergraduate non-majors who needed this course as a requirement for their degree programs.

## Sample Subject Population

In an effort to make the instructor subjects as homogeneous as possible in age and amount of teaching experience, the four faculty members were removed. These subjects were further narrowed, in the manner which will be described below, in an effort to form three groups which expressed types of communication responsiveness.

Therefore, the sample population used in this study consisted of twenty-seven graduate teaching assistants--fourteen females and thirteen males, all but two in their twenties. Their teaching experience at the time they entered the study ranged from zero to two semesters. The number of semesters that a teaching assistant remained in the study ranged from one to five semesters: one taught five semesters, seven taught four, four taught three, nine taught two, and six taught one semester. During this three-year period, these twenty-seven teaching assistants taught 162 sections of the basic speech communication course to 3,548 students.

## Measures

Two measures were used in this study:

1. The subjects' communication responsiveness patterns as determined by the Conversation Self-Report Inventory.
2. The grades that the students received on each of the projects and the tests in the course (as opposed to the terminal course grade).

## Communication Responsiveness Measure

Communication responsiveness for both instructors and students was assessed with an instrument devised by Jim Hughey called the Conversation Self-Report Inventory. This instrument has undergone seven revisions since its creation in 1969. The most recent revision--Form 980AB--was the form used in the current study. The validity and reliability of the CSRI has been tested repeatedly since its inception.

## Validity and Reliability of the Communication Responsiveness

 Measure. Early forms of the CSRI measured only the degree of communication sensitivity. Neal (1970) reported high concurrent validity for the instrument after comparing it to a demographic questionnaire, a test of nonverbal perception using photographs of facial expressions, and three personality inventories: the California Psychology Inventory, the Survey of Interpersonal Values, and the Diplomacy Test of Empathic Ability. Neal hypothesized 33 relationships and found 23 of them significant at the 0.05 level or beyond. The instrument correlated with 11 of the 18 items on the CPI and with two of the six items on the SIV. The total demographic index was positively related to communication sensitivity at the 0.01 level. Construct validity was established when the null hypothesis was rejected at the 0.001 level. Neal cited three studies conducted in 1969 which, he contended, established the predictive validity of the instrument. In the 1969 research, the instrument was able to distinguish between high and low insight subjects; it correlated high communication sensitivity with better nonverbal perception; and it correlated communication sensitivity with greater satisfaction in interviews. Finally, Neal reported reliability estimatesof the instrument to range from 0.75 to 0.83 using the Kuder-Richardson20. The split-half results were 0.73 , and the test-retest results were 0.77 , values which were significant at the 0.001 level.

In addition, Neal found that there appeared to be two types of less sensitive communicator: apathetic and persuasive. Leesavan (1977) used the CSRI in her research which examined the communication sensitivity behaviors of American and Thai students. She referred to the two types of insensitivity identified by Neal as "insensitive indifference" and "insensitive aggression." Leesavan reported a Kuder-Richardson-20 reliability estimate for the CSRI of 0.80 with 625 O.S.U. students. According to her research, the CSRI was able to distinguish between American and Thai students on 15 of 52 factors.

Lyzenga (1978) used form 977AB of the CSRI. His Kuder-Richardson20 reliability estimates ranged from 0.50 to 0.79 . His work with the instrument established that the CSRI weakly but significantly correlated the communication sensitivity of the judge to the correct prediction of similarities in zero-history dyads.

Neal and Hughey (1979) examined the personality correlates of communication sensitivity and general sensitivity. They summarized the concurrent validity work and further established construct validity by comparing the CSRI to scales from the California Psychological Inventory and Gordon's Survey of Interpersonal Values. Profiles of high communication sensitivity subjects and high general sensitivity subjects were similar in most respects. Communication sensitivity correlated at significance levels between 0.001 and 0.05 for 11 of the 18 scales on the CPI and at significance levels between 0.001 and 0.01 for two of the six scales on the SIV.

Steele (1983) used the current form of the CSRI, Form 980AB, which develops the difference between the two types of insensitivity mentioned above and, thus, identifies three types of communication responsiveness: Flexible Responsiveness (the communication sensitivity of the earlier forms), Mastery Responsiveness (formerly "insensitive aggression"), and Neutral Responsiveness (formerly "insensitive indifference"). Steele was particularly interested in the neutral (indifferent) scale in his study which established the validity of a telephone apprehension measure. Steele found that his telephone apprehension measure was significantly and positively correlated with communication apprehension, receiver apprehension, speech anxiety, and the Neutral Responsive scale of the CSRI. He found a Pearson product-moment correlation significant at the 0.006 level between telephone apprehension and the Neutral Responsiveness scale.

The other "half" of the old insensitive scale, Mastery Responsiveness, was found by Hughey and Harper (1983a) to predict instructors in a speech course who got higher teacher/course evaluations from their students. They reported reliability coefficients of 0.86 for the Mastery scale, 0.75 for the Flexible scale, and 0.88 for the Neutral scale. This was based on an $\underline{n}$ of 2,305 .

Most recently the CSRI has been used in a study dealing with interview satisfaction and commitment (Evans \& Hughey, 1984). Flexible Responsive interviewers created greater satisfaction in interview situations than did Mastery Responsive interviewers. This finding was significant at the 0.01 level.

Description of the Communication Responsiveness Measure. In its current form, the CSRI allows the respondent to identify the nature of
communication responsiveness he/she exhibits by making a forced choice among the three ways that each of the sixty items can be completed. A plus sign on the answer sheet indicates the completion of the statement that the respondent believes is most true of him/herself; a minus sign indicates the completion the respondent believes is least like him/herself; the choice left blank, of course, occupies some midpoint between agreement and disagreement.

The sixty items are divided into six ten-item groups. These six groups concern 1) the way the person views the purpose of communication, 2) the communicative climate he/she creates, 3) the way he/she transmits information, 4) the way he/she receives information, 5) the way he/she sequences messages, and 6) the way he/she copes with communication barriers.

Communication Responsiveness Scales. The sorts of choices respondents make indicate the type of communication responsiveness they believe is characteristic of themselves. Each choice indicates either a Mastery Responsive, a Flexible Responsive, or a Neutral Responsive attitude, value, or behavior.

With the Mastery Responsive (MR) mode, a person chooses to impose his/her will on the conversation. The person opts to influence others, to generate a competitive climate, and to speak in a verbal-dynamic way. Listening is restricted to that information that will help him/her formulate responses and rebuttals that advance his/her views. The person achieves coherence by getting others to adopt his/her ways of organizing messages. The person handles problems in conversations once they come to a head but does little to prevent problematic situations
from occurring.
For the Flexible Responsive (FR) mode, a person chooses to respond by adapting or harmonizing him/herself with the conversation. The communicator focuses on understanding others, generating a supportive climate, speaking in an adaptive way with an emphasis on nonverbal output, and listening to anything a person has to say. The person adapts to the organizational patterns of others and is a problem preventor.

With the Neutral Responsive (NR) mode, a person chooses to detach him/herself from the conversation. This person appears to be aimless and uninvolved in conversations. The person seldom speaks, listens to very little, fails to follow the drift of the conversation, and avoids coping with problems that arise in conversations.

Scoring the Communication Responsiveness Measure. In scoring the inventory, one adds up algebraically the number of pluses and minuses for each line of the answer sheet to determine the strength of the respondent's Mastery, Flexible, and Neutral orientations to communication responsiveness. There are six types of responsiveness that can be expressed depending upon how many times an individual makes any particular response: $M / F / N, M / N / F, F / M / N, F / N / M, N / F / M, N / M / F$. The first designation in each set is the preferred mode of responsiveness. The second designation indicates one's back-up strategy, and the third designation indicates the orientation least characteristic of an individual.

From the answer sheet, one can not only determine the respondent's overall or composite responsiveness orientation, but one can also determine the type of responsiveness indicated for each of the six
dimensions: the handling of communication purpose, communication climate, transmission, reception, sequencing, and coping with communication barriers.

Norms of the Communication Responsiveness Measure. Using a student respondent population of 2,305 , norms were determined. This group consisted of 54 percent males and 46 percent females. Of this population 5.4 percent did not have a distinctive enough communication responsiveness patterns to be assigned to a responsiveness group. Thirty-two percent ( 255 females and 473 males) was placed in Mastery Responsive patterns; 30 percent ( 435 females and 260 males) was placed in Flexible Responsive patterns; 33 percent (311 females and 447 males) was placed in Neutral Responsive patterns (Hughey, no date).

## Partitioning of the Subjects

In the current study, each student was partitioned into one of three responsiveness groups according to the preferred mode of communication responsiveness indicated in his/her composite score. Consequently, the Flexible Responsive group contained 1,132 students; the Mastery Responsive group contained 1,148 students; the Neutral Responsive group contained 1,268 students.

The communication graduate teaching assistants, of course, were not undergraduate non-majors. Therefore, they were not partitioned into responsiveness groups on the same basis or with the same norms as the undergraduate non-majors. The twenty-nine graduate teaching assistants were divided into responsiveness groups according to their own norms. Each graduate teaching assistant was ranked three ways from strongest to
weakest orientations on each of the three scales: Flexible Responsive, Mastery Responsive, and Neutral Responsive. The object was to find the groups of instructors that were more Flexible, Mastery, or Neutral Responsive than the other instructors. In this three-way ranking, there were two teaching assistants who held the same position on two scales. One was in the eighth position on both the Neutral and the Flexible scales. One was in the seventeenth position on both the Flexible and the Mastery scales. Since these two teaching assistants did not show a clear preference, they were removed from the analysis. Consequently, the sample population used in this study consisted of twenty-seven, rather than twenty-nine, teaching assistants. These remaining twentyseven instructors were partitioned into three groups: the nine instructors who expressed the strongest Neutral orientation (three males and six.females), the nine instructors who expressed the strongest Mastery orientation (seven males and two females), and the nine instructors who expressed the strongest Flexible orientation (three males and six females). A more even distribution of males and females in each of the three responsiveness groups would have been more desirable, but this ex post facto study did not allow for the manipulation of this variable. Consequently, this unequal sex distribution must be kept in mind when interpreting the interaction results of this study.

## Course Grades Measure

The grades used in this study were those earned in a multi-sectioned basic hybrid speech course. This course is planned by a basic course director, and it introduces students to three levels of human speech communication: interpersonal, small group, and public. Students
participate in six speech communication projects and earn seventeen grades during the course of the semester. The grades are partitioned in the following manner:

Grade Brief Description
Grade 1 Attendance and class participation
Grade 2 Oral project \#1--description and analysis of a problematic communication episode

Grade 3 Written portion of project \#2--transceiver analysis profile of the interviewee

Grade 4 Oral portion of project \#2--description, analysis, and evaluation of an in-class interview

Grade 5 Written portion of project \#3--details of plans made for an informative speech and post-speech evaluation

Grade 6 Delivery portion of project \#3--speech to inform
Grade 7 Content portion of project \#3--organization, support, and wording

Grade 8 Written work and participation of project \#4--private problem-solving discussion (annotated bibliography, written test covering discussion principles, participation/leadership assessment by the instructor)

Grade 9 Delivery portion of project \#5--public persuasive group discussion followed by a forum period

Grade 10 Content portion of project \#5--evidence and reasoning
Grade 11 Written portion of project \#6--audience analysis, speech outline, post-speech evaluation

Grade 12 Delivery portion of project \#6--speech to persuade followed by a forum period

Grade 13 Content portion of project \#6--all content factors are emphasized

Grade 14 Standardized, objectively-scored midterm examination
Grade 15 Standardized, comprehensive, objectively-scored final examination (this grade is doubled and becomes grade 16, also)

Grade 17 Quizzes devised and administered by the instructor.

These grades were determined using specific department criteria and received letter grades with point equivalents ranging from $A+$, which earned 29 points, and running down to a D-, which was worth 18 points. An F got 16 points, and a 0 was given to any project not attempted.

While the quizzes were devised by each instructor, the midterm and final tests were carefully standardized. Both tests used in this course were constructed by the instructors working as a group. Each instructor submitted five multiple-choice questions over material in the textbook. In a validation session, all instructors responded to the items submitted by rating them on a 0 to 5 scale. Any item receiving a 0,1 , or 2 was considered too poor to use and was not included in the final draft of the test. Reliability scores for the 50 -item midterm test range from 0.68 to 0.80 . Reliability scores for the 100 -item comprehensive final test range from 0.87 to 0.94 . Each semester the grading of these tests was held constant from section to section, and a uniform grading scale was used across all sections for the letter grade assigned. Therefore, the instructor had no opportunity to make personal judgments on the correctness of the answers or on the grade a test received. During the three-year period of this study, the average grade distribution on the midterm test was as follows: $12 \%=\mathrm{A}, 23 \%=\mathrm{B}, 37 \%=\mathrm{C}$, $18 \%=\mathrm{D}$, and $9 \%=\mathrm{F}$. For this same period, the average grade distribution on the final test was as follows: $10 \%=A, 20 \%=B, 40 \%=C, 20 \%=D$, and $10 \%=F$.

## Methodology

Using the sixteen grades that instructors had given their students and both the instructors' and students' communication responsiveness as they reported it on the CSRI, this study examined the relationship
between communication responsiveness, grading, and learning orientations in two ways:

1. by examining the grades that are largely determined by an instructor's judgment; by looking at student performance on the instructor-bound components of the course, and
2. by examining the grades that are not subjectively given; by looking at student performance on the course-bound, objectively-scored components of the course.

## Procedure for Judgment Grade Analysis

The following methods were used to investigate the influence of teacher/student communication responsiveness on the subjective grades that instructors gave students. First, all instructors were divided into one of three groups according to the strength of preferred communication responsiveness each reported--flexible, mastery, and neutral. Second, the midterm test and final test grades were removed from the grades considered in this analysis. The remaining fourteen grades for each student were converted into z scores in order to standardize them. Next, the $z$ scores earned by each instructor's students were grouped according to the three student responsiveness modes. A mean was then determined for each student responsiveness mode, so that each instructor had three judgment scores: the mean given to the Flexible Responsive students, the mean given to the Mastery Responsive students, and the mean given to the Neutral Responsive students.

These data were set up into a repeated measures design. The instructors, who were partitioned into the three communication responsiveness groups, became the unit of analysis. They were measured three
times: as they evaluated their Flexible students, their Mastery students, and their Neutral students. Therefore, the data were then subjected to a two-factor mixed design analysis of variance with repeated measures on one factor to see if there were variances in grades according to the instructor mode of responsiveness, student mode of responsiveness, and/ or the interaction between instructors and students. Finally, significant differences were subjected to a Duncan New Multiple Range test to determine exactly where the significance lay.

## Procedure for Cognitive Grade Analysis

The second portion of this study concerned what is termed "coursebound" grades, the grades received on two multiple-choice, objectivelyscored tests. Andersen (1979) was probably correct in her observation that any test score reflects the student's I.Q., study habits, and motivation more than it reflects instructor influence. For this reason the midterm test was considered baseline data, and the difference between that grade and the final test grade was considered as the cognitive measure. With the large sample size of 3,548 students, which minimizes individual differences, it was assumed that the studentrelated influence on the grade would not vary much from the middle of the semester to the end of it and that the difference between those scores could be interpreted to reflect instructor influence. The relationship between instructor communication responsiveness and student cognitive change was explored in the manner described below.

Again, all instructors were divided into one of the three communication responsiveness groups--flexible, mastery, and neutral. Second, both the midterm test scores and the final test scores were converted
into $z$ scores in order to standardize them. For each test, the z scores earned by each instructor's students were grouped according to the three student responsiveness modes. A mean was then determined for each student responsiveness mode, so that each instructor had three test scores given for each test: the means given to the Flexible Responsive students on both the midterm and final, the means given to the Mastery Responsive students on both the midterm and final, and the means given to the Neutral Responsive students on both the midterm and final.

As in the first analysis, the data were arranged into a repeated measured design: instructors in each of the three instructor responsiveness groups were measured three times on the midterm test and three times on the final test according to the three types of student responsiveness. The data were subjected to a three factor mixed design analysis of variance with repeated measures on two factors in order to determine variance due to the instructors' responsive mode, the students' responsive mode, the tests, and the interaction among the three. Finally, significant differences were subjected to a Duncan New Multiple Range test in order to determine exactly where the significances lay.

## Statistical Procedure

For both the judgment grade and the cognitive grade analysis, SPSSX MANOVA programs were used. Follow-up tests included an estimated omega-squared (Hays, 1973, p. 487) and Duncan's New Multiple Range Test (Kirk, 1968, pp. 93-94). The degree of significance was set at the 0.05 level.

## CHAPTER IV

## RESULTS AND DISCUSSION

## Overview of the Chapter

This chapter is divided into two major portions. First, the results of the judgment grade analysis are presented and discussed. Following this is the presentation and discussion of the results of the cognitive grade analysis.

Judgment Grade Analysis

The first analysis of variance focused on the judgment grades, those fourteen grades awarded by the instructors that were grounded in the instructors' subjective evaluation of student work. The results of this repeated measures analysis of variance are displayed in Table I.

As Table I shows, there was no teacher responsiveness or student responsiveness by teacher responsiveness interaction effect. The only significant difference was found among the students themselves. This difference among the students explained $15.9 \%$ of the total variance. A Duncan New Multiple Range Test was conducted on the marginal means of the scores for the three student groups to determine which group or groups of students accounted for that significant difference. These marginal, as well as cell, means are displayed in Table II. Table III displays the results.

## TABLE I

## ANALYSIS OF VARIANCE TABLE JUDGMENT GRADES

|  | Sum of Degrees of <br> Squares <br> Freedom | Mean <br> Square | F Ratio | Significance | $\omega^{2}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Teacher (A) <br> Responsiveness | 0.233 | 3 | 0.117 | 1.407 | NS |  |
| Error | 1.988 | 24 | 0.083 |  |  |  |
| Student (C) <br> Responsiveness | 0.574 | 2 | 0.287 | 30.103 | .000 | 0.159 |
| Teacher X (AXC) <br> Student <br> Responsiveness | 0.225 | 4 | 0.006 | 0.589 | NS |  |
| Error | 0.457 | 48 | 0.010 |  |  |  |
| Total | 3.477 | 80 |  |  |  |  |

## TABLE II

## DISPLAY OF JUDGMENT DATA BY CELL MEANS OF

 COMMUNICATION RESPONSIVENESS GROUPS|  | Flexible <br> Students | Mastery <br> Students | Neutral <br> Students | Marginal <br> Means |
| :--- | :--- | :--- | :--- | :--- |
| Flexible <br> Instructors | -0.001 | -0.076 | -0.163 | -0.080 |
| Mastery <br> Instructors | 0.140 | -0.013 | -0.111 | 0.005 |
| Neutral <br> Instructors | 0.159 | 0.031 | -0.043 | 0.049 |
| Marginal <br> Means | 0.100 | -0.019 | -0.106 |  |

TABLE III
DUNCAN NEW MULTIPLE RANGE TEST TABLE ON RESULTS OF JUDGMENT GRADE ANOVA


The scores of the Flexible Responsive students were significantly higher than the scores of the Mastery Responsive and the Neutral Responsive students. There was no significant difference between the scores of the Mastery and Neutral Responsive students. Whatever the Flexible Responsive students were doing was valued by all instructors, despite their own responsiveness types.

Instructors apparently were not awarding judgment grades on the basis of some relationship with their own communication responsiveness style. They awarded grades on the basis of how students measured up to a standard. All three instructor groups felt that Flexible Responsive performed best, Mastery Responsive students next, and Neutral Responsive students least well. On this basis, one can reject the judgment portion of the hypothesis, since there was no interaction, homophilous or otherwise. Judgment grades were not in part a function of the interaction between instructor and student communication responsiveness. They were the function of all instructors responding more positively to the Flexible Responsive students.

## Cognitive Grade Analysis

To summarize quickly, the cognitive analysis examined the difference between the midterm and final test grades. These test scores also had been converted into $z$ scores. The three factor mixed design analysis of variance with repeated measures on two factors that was performed on this data produced the results displayed in Table IV.

As Table IV shows, there was no teacher responsiveness, test, teacher responsiveness by test, or teacher responsiveness by student responsiveness interaction effects. There were two significant

TABLE IV
ANALYSIS OF VARIANCE TABLE COGNITIVE GRADES

|  |  | Sum of Degrees of <br> Squares <br> Freedom | Mean <br> Square | F Ratio | Significance | $\omega^{2}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Teacher (A) <br> Responsiveness | 0.387 | 2 | 0.193 | 0.726 | NS |  |
| Error | 6.388 | 24 | 0.266 |  |  |  |
| Test | (B) | 0.002 | 1 | 0.002 | 0.026 | NS |

effects: a student main effect and a teacher responsiveness by test by student responsiveness interaction. The student effect accounted for $13.2 \%$ of the variance while the three-way interaction accounted for only $0.9 \%$ of the variance. The Duncan New Multiple Range test was conducted on the marginal means of the gain/loss scores (see Table V) to determine what student group or groups accounted for the significant student responsiveness main effect. The results are shown in Table VI.

Again, as was found before in the analysis of the judgment grades, the difference lay in the performance of the Flexible Responsive students, whose cognitive scores were significantly higher than those of either the Mastery or Neutral Responsive students.

The three-way interaction effect, however, is not so simply explained. Although it was significant at the 0.015 level, it explained less than $1 \%$ of the total variance. Table VII displays the results of the Duncan New Multiple Range Test which was conducted on individual cell means in order to help interpret the teacher by test by student interaction. Fiqure 1 visually presents all of the cell means used in this analysis. Lines running from left to right indicate changes for particular instructor/student combinations over time, i.e., between the midterm and final. Heavier lines indicate those changes significant at the 0.05 leve1. One way of describing the three-way interaction is to note that differing instructor/student combinations produced different patterns of change: some yielded nonsignificant changes, some yielded significant increases, and some yielded significant reductions.

The Duncan New Multiple Range Test conducted on the cell means produced a number of significant differences that are not germane to the hypothesis under examination. As discussed earlier, the midterm test

TABLE V
DISPLAY OF COGNITIVE DATA BY CELL MEANS OF COMMUNICATION RESPONSIVENESS GROUPS

|  | Flexible Students | Mastery <br> Students | Neutral <br> Students | Mean Gain/Loss |
| :---: | :---: | :---: | :---: | :---: |
| MT | 0.107 | -0.107 | -0.040 |  |
| Instructors F | 0.227 | 0.027 | -0.008 |  |
| Diff | +0.120 | +0.134 | +0.032 | +0.095 |
| MT | 0.232 | -0.057 | -0.092 |  |
| Instructors F | 0.153 | -0.067 | -0.099 |  |
| Diff | -0.079 | -0.012 | -0.006 | -0.032 |
| MT | 0.046 | -0.025 | -0.131 |  |
| Instructors F | 0.119 | -0.220 | -0.262 |  |
| Diff | +0.073 | -0.195 | -0.131 | -0.084 |
| Mean Midterm | 0.128 | -0.063 | -0.087 |  |
| Mean Final | 0.166 | -0.087 | -0.123 |  |
| Mean Gain/Loss | +0.038 | -0.024 | -0.036 |  |



$$
*_{p}=0.05
$$

TABLE VII
duncan new multiple range test table on results OF COGNITIVE GRADE THREE-WAY INTERACTION




First Letter $=$ Instructor Responsiveness Orientation Second Letter = Student Responsiveness Orientation

Figure 1. Teacher Responsiveness by Test by Student Responsiveness Interaction Effect
was taken as baseline data. The difference between that test and the final test was considered as the cognitive measure. Therefore, only those change scores were of particular interest to this study.

There were four significant changes between the midterm test and the final test. Both Flexible Responsive and Mastery Responsive students taught by the more flexible responsive instructors gained cognitively; these student qroups posted respective gains of +0.12 and +0.13. Mastery Responsive and Neutral Responsive students of the more neutral responsive instructors both posted significant cognitive losses. Neutral Responsive students showed a -0.17 loss; the Mastery Responsive students posted an even greater loss value of -0.19 . This suggests that the more neutral responsive instructors were not effective cognitive teachers for the maiority of their students. Or, put another way, it suggests that Neutral and Mastery Responsive students had difficulty learning cognitively from the more neutral responsive instructors.

To summarize the issue of cognitive achievement, the greatest factor was student communication responsiveness orientation. Overall, as can be seen in Table $V$, the Flexible Responsive students learned the most cognitively. Flexible Responsive students showed a composite qain of +0.038 , while Mastery Responsive students showed a composite loss of -0.024 and Neutral Responsive students showed a composite loss of -0.036.

Since there is one interaction effect, teacher responsiveness by test by student responsiveness, that portion of the hypothesis which states that cognitive grades are in part a function of the interaction between instructor and student communication responsiveness can be accepted. Two teacher/student groups made siqnificant increases
(F/M and F/F); two teacher/student groups made significant decreases ( $N / N$ and $N / M$ ) ; the changes of the other five teacher/student groups were not statistically significant. This interaction might have been more revealing had the variable of sex been a part of the design.

Because the three-way interaction accounts for only $0.9 \%$ of the total variance and the student main effect accounted for $13.2 \%$, it would seem that how much a student learns cognitively was more determined by him/herself than it is by the type of teacher the student has. However, if a Mastery or a Neutral Responsive student had the opportunity to pick an instructor, he/she would be wise to select a more flexible responsive rather than a more neutral responsive teacher.

## CONCLUSIONS AND IMPLICATIONS

Overview of the Chapter

This final chapter deals with four main areas. First, a review of the study is presented. Second, the implications that the research suggests are discussed. Third, suggestions for further study are offered. A conclusion section completes this chapter.

Review of the Study

This study attempted to answer the question, does the communication responsiveness of the teacher and/or student influence the awarding of judgment and cognitive grades in a communication class. The analyses of variance that were conducted produced three main effects. In the case of judgment grades, those arades that are based on an instructor's subjective evaluation of student work, the main effect resided with the student rather than with the teacher making the judqment. All instructors gave higher grades to their Flexible Responsive students than they did to students of the other two responsiveness types. In the case of cognitive achievement, again the major main effect was the result of the student, more specifically the Flexible Responsive student. There was also a lesser teacher responsiveness by test by student responsiveness interaction, which suqgested that the amount of cognitive achievement
between the midterm test and the final test was a combination of teacher and student communication responsiveness types. However, this interaction accounted for only $0.9 \%$ of the total variance. Simply stated, $15.9 \%$ of the judgment grades and $13.2 \%$ of the cognitive grades earned in a communication class depend upon the communication responsiveness expressed by the student; only $0.9 \%$ of the cognitive grades depends on the interaction between teacher and student communication responsiveness. Each of the main effects should be examined in greater detail.

Judgment Grade Main Effect

Student communication responsiveness accounted for $15.9 \%$ of the variance in the judgment grades. Such a finding should not be surprising. If a student is concerned with understanding, is supportive of others, interacts but places emphasis on nonverbal cues, listens well, adapts to others, and attempts to prevent communication barriers from occurring, that student should do well in a hybrid speech communication course that covers interpersonal, group, and public communication. All teachers give this student high marks. This student is a Flexible Responsive student. This is not to suggest, however, that the Flexible Responsive student would do equally well in another type of communication course, such as argumentation and debate or persuasion, for example.

The fact that no teacher responsiveness main effect was found to impact upon judgment grades should be expected in a course that deliberately sets out to eliminate any instructor-biased variation. Because the course used for this study is a multi-sectioned course, every effort is made to make the sections as uniform as possible. The course was planned by a director; all sections use the same text,
syllabus, and criteria in the evaluation of assignments. The presemester workshop with the teaching assistants focuses largely on acquainting them with the criteria and training them how to apply these standards. Much attention is given to comparative grading of assignments. During the semester, all teaching assistants are observed in the classroom partially in an effort to see if the criteria are being maintained. Each teaching assistant is counseled with several times during the course of the semester.

On a very practical level, finding no interaction effect in the judgment grades awarded is a positive sign. What this study suggests is that teaching assistants of whatever communication responsiveness type can be trained to recognize a standard of performance and reward it accordingly. This study indicates that judgment grades are given on the basis of a student's performance rather than on the proclivities of the instructor. No matter what teacher a student gets, superior students will get the highest grades and inferior students will get lower grades. This study offers a response to all those Speech 2713 students who say, "I would have gotten a higher grade if I had just had another teacher." Statistically this isn't so. The student and not the teacher is responsible for the différence in judgment grades.

## Cognitive Grade Main Effects

When it comes to cognitive learning, this study suggests that Kosinski (1978) was largely, but not entirely, correct. Kosinski maintained that the teacher has no impact on what students learn. This study indicates that students make the biggest difference in cognitive achievement. It was the students who accounted for $13.2 \%$ of the variance
in the cognitive grades. Flexible Responsive students, especially, make the highest grades. This study was not designed to discover why they do so, but one might speculate that students who put priority on understanding, who listen well, who adapt to the ways that others sequence messages, and who strive to keep misunderstandings from occurring would probably learn well cognitively.

There was also a slight interaction effect among teacher responsiveness by test by student responsiveness, which accounted for 0.9\% of the variance in the cognitive grades. Of the nine teacher/student groups ( $F / F, F / M, F / N, M / F, M / M, M / N, N / F, N / M, N / N$ ), four groups produced significant change scores (F/F, F/M, N/M, N/N). Of these four groups, two groups produced higher cognitive scores ( $F / F$ and $F / M$ ), and two groups produced lower cognitive scores ( $N / M$ and $N / N$ ).

The pattern of this interaction effect, at first glance, appears to express both a homophilous interaction (Flexible Responsive students of the more flexible responsive teachers made a significant cognitive gain) and a heterophilous interaction (Neutral Responsive students of the more neutral responsive teachers made a significant cognitive loss). However, nothing in the notions of homophily and heterophily explains why Mastery Responsive students with the more flexible responsive teachers gained even more than the Flexible Responsive students or why Mastery Responsive students with the more neutral responsive teachers lost more than the Neutral Responsive students.

It would appear that while student communication responsiveness orientation is the most important factor in what one learns in a hybrid speech class, at the same time it would be marginally better to have a more flexible responsive rather than a more neutral responsive teacher.

## Implications

This study suggests that instructors made judgment evaluations according to a standard that they were trained to recognize, since the only significant effect rested with the students. Therefore if uniformity of grading is a desired outcome, it can be achieved with careful training. In cases where this is done, instructor variance can be held to a nonsignificant level.

This study further suggests that students' ability to learn cognitively is in part a function of the students' communication responsiveness orientation and, in smaller part, a function of the interaction between teacher, test, and student. The Mastery Responsive students seem to be the most affected by teacher responsiveness patterns different from their own. With the more flexible responsive teachers, they posted the largest gain, but with the more neutral responsive teachers, they posted the largest loss. Exactly what behaviors are at work are open to speculation, or perhaps to further investigation. The current research methods could not identify them.

Even though the mode of teacher communication responsiveness did not make a statistically difference in the outcomes of a hybrid basic speech course, the mode of teacher responsiveness does produce different results. The more flexible responsive instructors seem to effect the greatest amount of cognitive learning. However, the judgment grades of the more mastery responsive instructors vary the least from the mean, so one might argue that they are the fairest or the most realistic in their judgment grading. Hughey and Harper (1983a) reported that students evaluate the more mastery responsive instructors higher than they
evaluate other types of instructors. Apparently students prefer teachers who neither grade them too leniently as the more neutral responsive instructors do nor teach them the most, as the more flexible responsive instructors do. Or perhaps students are just attracted to the dynamism of the more mastery responsive instructors. The current study suggests that the Conversation Self-Report Inventory might be used in the selection of graduate students for teaching assistantships. Knowing in advance which graduate students are neutral responsive communicators would identify those who would be most likely to give inflated judgment grades overall and who would effect the least amount of cognitive learning.

However, in the performance speech course used in this study, the type of communication responsiveness of the teacher was by far less important to the outcomes of the class than were the types of communication responsiveness expressed by the student. There were no significant differences attributable to teachers. But $15.9 \%$ of the variance in judgment grades and $13.2 \%$ of the variance in cognitive achievement were due to students. Less than $1 \%$ of the variance in cognitive grades related to the interaction between students, teachers, and the tests.

## Suggestions for Further Study

A fairer test of the impact of communication responsiveness in instructor grading and student cognitive learning would have to be conducted in a course where individual instructors designed, taught, and evaluated according to their own propensities. Knowing a teacher's communication responsiveness style suggests some things about his/her grading behavior. Knowing a student's communication responsiveness
style suggests some things about his/her learning behavior. In a course with more instructor freedom, one could see if these tendencies developed into a more pronounced pattern.

A refinement of this study would be to add the variable of sex differences. Since it has been demonstrated that females get higher grades in speech courses than do males (Pearson, 1982), it might be well worth pursuing the question of how sex differences of both students and teachers interact with communication responsiveness differences in speech course outcomes.

Another variable that might be revealing is that of the amount of experience that a teacher has. If one made a distinction not only between communication responsiveness but also between the amount of teaching experience instructors had when they entered the study, it is possible that teacher communication responsiveness would not continue to be a nonsignificant variable.

An extension of this study could investigate whether these grading/ learning trends hold up across disciplines or if this is something peculiar to communication courses. If one accepts Cooper's (1981, p. 1) belief that "the essence of teaching is communication," one might expect that the impact of communication behaviors would transcend the teaching of communication and impact on other disciplines as well.

Another area of investigation would be to more specifically identify the mechanism that triggers the learning loss of the Mastery Responsive students who are taught by the more neutral responsive instructors and the learning gain of Mastery Responsive students who are taught by more flexible responsive instructors. Mastery Responsive students seem to be the most affected by differences in instructor
types, but the current study could offer no reason why.

## Conclusion

The hypothesis that judgment grades and cognitive grades are in part a function of the interaction between instructor and student communication responsiveness can neither be totally accepted nor totally rejected. There was no interaction effect in the judgment grade analysis. The main effect here was the result of the students' communication responsiveness despite the communication responsiveness of their teachers. The cognitive grade analysis produced one main effect and one interaction. Of the two, the larger significance lay with the students' communication responsiveness, just as it did in the analysis of the judgment grades. The three-way interaction of teacher responsiveness by test by student responsiveness is the reason why the hypothesis cannot be totally rejected. Both Mastery Responsive and Flexible Responsive students improve their test scores if they have a more flexible responsive instructor, while both Mastery Responsive and Flexible Responsive students improve their test scores if they have a more flexible responsive instructor, while both Mastery and Neutral Responsive students cannot maintain their test scores but lose if they have a more neutral responsive instructor.

Instructor training can account for the lack of teacher variance in the awarding of judgment grades. With the cognitive grades, the type of communication skills measured by the CSRI identifies the better 1 isteners and understanders and, consequently, the better learners. In both grade analyses, the students influenced the grades significantly. And in both cases, Flexible Responsive students made the greatest
difference--not an altogether surprising result in a hybrid communication course. The three-way interaction is not so easily explained. No reason was offered why Mastery Responsive students learn so well from more flexible responsive instructors and so poorly from more neutral responsive instructors. Perhaps a design which incorporated the variable of sex of both instructors and students would suggest an explanation.

At this point one can conclude that matching students to teachers would not significantly improve overall course outcomes. The difference in outcomes in a basic speech course is due to the communication responsiveness of the student so long as the teachers are uniformly trained. The interaction effect, while there, was quite small; it explained less than $1 \%$ of the variance in the cognitive grades. Less than $1 \%$ of the variance in only a portion of the total grades earned in a speech course would probably not be worth the administrative problems that teacher/ student matching would create. The negative effects of this interaction could be reduced more easily by awarding teaching assistantships to the more flexible responsive graduate students. Anyone directing a basic speech program largely taught by graduate teaching assistants should take heart at such findings.

Andersen, J. F. Teacher immediacy as a predictor of teaching effectiveness. In D. Nimmo (Ed.), Communication yearbook 3. New Brunswick, N. J.: Transaction Books/International Communication Association, 1979.

Barker, L. L. The relationship between sociometric choice and speech evaluation. Speech Teacher, 1969, 18, 204-207.

Bock, D. G. The effects of persuasibility on leniency, halo, and trait errors in the use of speech rating scales. Speech Teacher, 1970, 19, 296-300.

Bock, D. G. \& Bock, E. H. The effects of the sex of the experimenter, expectancy inductions, and sex of the rater on leniency, halo, and trait errors in speech rating behavior. Communication Education, 1977, 26, 298-306.

Broadfoot, P. M. Communication in the classroom: A study of the role of assessment in motivation. Educational Review, 1979, 31, 3-10.

Bryson, R. Teacher evaluations and student learning: A reexamination. Journal of Educational Research, 1974, 68, 12-14.

Cooper, P. J. Speech communication for the classroom teacher. Dubuque, Iowa: Gorsuch Scarisbrick, 1981.

Elliot, S. Perceived homophily as a predictor of classroom learning. In D. Nimmo (Ed.), Communication yearbook 3. New Brunswick, N. J.: Transaction Books/International Communication Association, 1979.

Evans, J. R. \& Hughey, J. D. Interview satisfaction and commitment as a function of interviewer communication responsiveness. Paper presented at the annual meeting of the International Communication Association, San Franscisco, Ca., 1984.

Geisinger, K. F. Who are giving all those a's? An examination of highgrading college faculty. Journal of Teacher Education, 1980, 31, 11-15.

Geisinger, K. F. \& Rabinowitz, R. Individual differences among college faculty in grading. Journal of Instructional Psychology, 1980, 7, 20-27.

Harper, B. H. \& Hughey, J. D. Cognitive and affective aspects of teacher effectiveness. Paper presented at the annual meeting of the Midwest Basic Course Directors' Conference, Amana, Ia, 1983.

Hays, W. L. Statistics for the social sciences (2nd ed.). New York: Holt, Rinehart and Winston, Inc., 1973.

Henrikson, E. H. The relation among knowing a person, liking a person and judging him as a speaker. Speech Monographs, 1940, ㄱ, 22-25.

Hughey, J. D. A guide for the conversation self-report inventory. Unpublished manual, no date.

Hughey, J. D. \& Harper, B. H. Instructor responsiveness and outcomes of the basic course. Paper presented at the annual meeting of the International Communication Association, Dallas, Tx., $1983 a$.

Hughey, J. D. \& Harper, B. H. What's in a grade? Paper presented at the annual meeting of the Speech Communication Association, Washington, D. C., 1983b.

Hughey, J. D., Harper, B. H. \& Harper, P. D. The effectiveness of graduate teaching assistants and patterns of cormunication. Paper presented at the annual meeting of the Speech Communication Association, Louisville, Ky., 1982.

Jayne, C. D. A study of the relationship between teaching procedures and educational outcomes. Journal of Experimental Education, 1945, 14, 101-134.

Kerlinger, F. N. Foundations of behavioral research. New York: Holt, Rinehart \& Winston, 1973.

Kirk, R. E. Experimental design: Procedures for the behavioral sciences. Belmont, California: Brooks/Cole, Wadsworth, 1968.

Knower, F. H. A suggestive study of public-speaking rating-scale value. Quarterly Journal of Speech, 1929, 15, 30-41.

Kosinski, R. J. Using standardized exams to assess teacher effectiveness. American Biology Journal, 1978, 40, 27-29.

Leesavan, A. T. Cultural differences in communication patterns: A comparison of thais and americans. Unpublished doctoral dissertation, Oklahoma State University, 1977.

Lyzenga, T. J. A multiple regression analysis of predictive accuracy: The effects of communication sensitivity, estimatability, and selected demographic variables in zero-history dyads. Unpublished masters thesis, Oklahoma State University, 1978.

McCroskey, J. D. \& Wheeless, L. R. Introduction to human communication. Boston: Allyn \& Bacon, Inc., 1976.

McKeachie, W. J., Lin, Y. G., Moffett, M. M., \& Daugherty. Effective teaching: Facilitative vs. directive style. Teaching of Psychology, 1978, 5, 193-194.

Meier, R. S \& Feldhusen, J. F. Another look at dr. fox: Effect of stated purpose for evaluation, lecturer expressiveness, and density of lecture content on student ratings. Journal of Educational Psychology, 1979, 71, 339-345.

Murray, H. A. Explorations in personality. New York: Oxford Press, 1938.

Neal, W. P. Demographic, personality, and nonverbal perception correlates of communication sensitivity. Unpublished masters thesis, University of New Mexico, 1970.

Neal, W. P. \& Hughey, J. D. Personality correlates of communication sensitivity and general sensitivity. Paper presented at the annual meeting of the Speech Communication Association, San Antonio, Tx., 1979.

Norton, R. W. Teacher effectiveness as a function of communicator style. In B. D. Ruben (Ed.), Communication yearbook 1. New Brunswick, N. J.: Transaction Books/International Communication Association, 1977.

Norton, R. W. \& Nussbaum, J. F. Dramatic behaviors of the effective teacher. In D. Nimmo (Ed.), Communication yearbook 4. New Brunswick, N. J.: Transaction Books/International Communication Association, 1980.

Nussbaum, J. F. Effective teaching: A communicative nonrecursive causal model. In M. Burgoon (Ed.), Communication yearbook 5. New Brunswick, N. J.: Transaction Books/International Communication Association, 1982.

Nussbaum, J. D. \& Scott, M. D. Instructor communication behaviors and their relationship to classroom learning. In D. Nimmo (Ed.), Communication yearbook 3. New Brunswick, N. J.: Transaction Books/ International Communication Association, 1979.

Nussbaum, J. F. \& Scott, M. D. Student learning as a relational outcome of teacher-student interaction. In D. Nimmo (Ed.), Communication yearbook 4. New Brunswick, N. J.: Transaction Books/International Communication Association, 1980.

Pearson, J. C. The influence of student gender on grading in the basic performance and nonperformance communication courses. Paper presented at the annual meeting of the Speech Communication Association, Louisville, Ky., 1982.

Power, C. N. Effects of student characteristics and level of teacherstudent interaction on achievement and attitudes. Contemporary Educational Psychology, 1977, 2, 265-274.

Rogers, E. M. \& Shoemaker, F. F. Communication of innovations: A crosscultural approach. New York: The Free Press, 1971.

Rosenshine, B. \& Furst, N. The use of direct observation to study teaching. In R. M. W. Travers (Ed.), Second Handbook of Research on Teaching. Chicago: Rand McNally, 1973.

Scott, M. D. \& Nussbaum, J. F. Student perceptions of instructor communication behaviors and their relationship to student evaluation. Communication Education, 1981, 30, 44-53.

Smith, H. C. Sensitivity to people. New York: McGraw-Hill, 1968.
Solomon D., Rosenberg, L., \& Bezdek, W. E. Teacher behavior and student learning. Journal of Educational Psychology, 1964, 55, 23-30.

SPSS, Inc. SPSSX user's guide. New York: McGraw-Hill, 1983.
Steele, C. M. The validity of the telephone apprehension measure. Unpublished masters thesis, Oklahoma State University, 1983.

Stockford, L. \& Bissell, H. W. Factors involved in establishing a meritrating scale. Personnel, 1949, 26, 94-116.

Terwilliger, J. S. Assigning grades--Philosophical issues and practical recommendations. Journal of Research and Development in Education, 1977, 10, 21-39.

Thorndike, R. L. \& Hagen, E. Measurement and evaluation in psychology and education. New York: John Wiley and Sons, 1969.

Travers, R. M. W., VanWagenen, R. K., Haygood, D. H., \& McCormick, M. Learning as a consequence of the learner's task involvement under different conditions of feedback. Journal of Educational Psychology, 1964, 55, 167-173.

APPENDIXES

## APPENDIX A

THE CONVERSATION SELF-REPORT INVENTORY

FORM: 38OAK

On the following pages are sixty (60) items concerning the way a person feels about and behaves in the most common of all communication situations--THE CONVERSATION. We would like for you to read each item and decide which of the three alternatives is most characteristic and which is least characteristic of your own feelings and behavior.

Since different people think different things about the items, NO ALTERNATIVE IS MORE CORRECT THAN ANY OTHER. We simply want to know which alternatives YOU consider most and least typify your ACTUAL CONVERSATION FEELINGS AND BEHAVIOR.

Our purpose is to catalog the similarities and differences in conversational patterns among various people. Your particular responses will be pooled with those of others, thus insuring anonymity.

In responding to the Inventory, please follow these directions:

1. On the provided answer sheet, fill in the information blanks at the top of the page (name, etc.).
2. For each item, you are asked to do two things:
a. Select the one alternative that is most typical of your actual feelings and behaviors in a conversation. Place a "plus" in the corresponding alternative box $[t]$ on the answer sheet.
b. Select the one alternative that is least typical of your actual feelings and behaviors in a conversation. Place $a$ "minus" in the corresponding alternative box $[-]$ on the answer sheet.

Be sure and choose one most and one least typical characteristic for every question, even if the preference for one alternative over the others is very silight.
3. Here is an example:

Item in the Booklet Answer Sheet Response Boxes
(61) In conversations:

1. I'm cheerful
2. I'm resourceful.
3. I'm tactful.
(61)
[_] [This example has "I'm [ $\pm$ [This example has "I m $3[-] \quad$ as most typical and "I'm tactful" as least typical.]

There is no time limit, but work as rapidly as you can. Please return both this booklet and the answer sheet to the person administering the Inventory. Thank you for your cooperation.

THE CONVERSATION SELF-REPORI INVENTORY
FORM: 980AB
(1) In conversations where people try to talk others into something:

1. I see to it that all points of view are brought out.
2. I promote my own point of view when I know it is the best one.
3. I keep away from those who would tamper with my private beliefs.
(2) After a conversation with a friend has been going on for some time:
4. I interrupt the other person in an effort to hurry things along.
5. I get very tired if it drags on too long.
6. I give the other person as much time as it takes to make his/her point clear.
(3) In conversations with those who don't talk much:
7. I find it very difficult to keep the conversation going.
8. I talk enthusiastically about the other person and his/her ideas.
9. I use language that is direct and to the point.
(4) In conversations with those who would rather prove a point than hear me out:
10. I feel I can learn something if I really listen.
11. I'd prefer to be somewhere else.
12. I tend to be hardheaded and turn their arguments against them.
(5) In conversations where involved jokes or stories are told:
13. I deduce the punch line or point before the speaker finishes.
14. I am the one who has to explain the point to others.
15. I have to have the point explained to me.
(6) When a conversation becomes uncomfortable because the other person refuses to "face up" to a problem:
16. I avoid getting caught up in a person's problems.
17. I use quite a bit of "colorful" language.
18. I am eager to listen.
(7) In conversations where complicated issues come up:
19. I enjoy exchanging views on complex, emotionally-demanding subjects.
20. I enjoy persuading others to the most reasonable point of view.
21. I don't like to get very involved in conversations that become too serious and demanding.
(8) In conversations with those I've just met for the first time:
22. excitement is generated when 1 express my beliefs.
people react to me in a fairly noncommittal way.
23. people respond by revealing personal information about themselves that they are reluctant to reveal to others.

BE SURE AND CHOOSE ONE MOST [ + ] AND ONE LEAST [-] TYPICAL CHARACTERISTIC FOR EVERY ITEM, EVEN IF THE PREFERENCE FOR ONE ALTERNATIVE OVER THE OTHERS IS VERY SLIGHT.
(9) In conversations with those who tend to monopolize a conversation:

1. I seldom comment on what is being said.
2. I talk with the other person, not at the other person.
3. I am not wishy-washy; I present my point of view with vigor.
(10) In conversations with those who say they know how I feel about matters that they have not personally experienced:
4. I listen to a person even if I think the person doesn't really have anything to say.
5. I appear to listen even if I'm really thinking of something else.
6. my reactions may seem hostile if the person's comments are "out of line."
(11) In conversations that ramble from point to point:
7. I straighten things out by giving some structure to the conversation.
8. I figure vut what people are trying to say.
9. I have a hard time making sense of the conversation.
(12) When a person comes to me to discuss a personal conflict that has definite ethical or moral implications:
10. I become somewhat anxious.
11. I'm confident of my ability to give good advice.
12. I remain open-minded throughout the conversation.
(13) In general "bull sessions":
13. I 3 m an information-giver.
14. I am an opinion-leader.
15. I am a people-watcher.
(14) If a person acts superior to me in a conversation:
16. I compete to win the dominant position.
17. I become passive and nonresponsive.
18. I get totally involved in whatever is being discussed.
(15) In conversations with those who focus on me and my ideas:
19. I feel like I'm being forced to speak when I would prefer to observe what is going on.
20. I feel my vocal, facial, and hand expressions convey more meaning than the words I use.
21. I feel that repeating my statements will help the other person catch my intended meaning.
(16) When a question is being asked that makes it obvious that the questioner hasn't been listening in a conversation:
22. I depend on the questioner's "unspoken messages" to explain his/her intentions.
23. I can understand why the questioner doesn't listen well in boring conversations.
24. I plan how to let the questioner know that his/her lack of attention irritates me.

BE SURE AND CHOOSE ONE MOST [+] AND ONE LEAST [-] TYPICAL CHARACTERISTIC FOR EVERY ITEM, EVEN IF THE PREFERENCE FOR ONE ALTERNATIVE OVER THE OTHERS IS VERY SLIGHT.
(17) In conversations with those who appear to be rigid and inflexible in their thinking

1. I'm seldom surprised or confused if peop'e are well-organized, systumatic, ald logical.
2. I'm seldom surprised or confused by anything that people say or do. 3. people puzzle me by saying one thing and then doing another.
(18) When I feel friction developing between me and the other person in a conversation:
3. I become tense and uncomfortable.
4. I stand up for my point of view in a confident and assertive way.
5. I find out his/her expectations and point out areas of common agreement.
(19) In some conversations, I tend to be:
6. too open to other people's ideas.
7. too eager to pursue my own interests.
8. too aimless during the conversation.
(20) In some conversations, I tend to be:
9. too suspicious of other people's motives
10. too unconcerned with what is going on.
11. too preoccupied with making sure that everyone feels good about what is happening.
(21) In some conversations:
12. I could care less about saying anything.
13. I restate or paraphrase what the other person has just said too often.
14. I speak above the listener's level of understanding.

In some conversations:

1. I listen in order to conform to the wishes of others.
2. I don't listen very closely.
3. I listen in order to formulate rebuttals to the opinions of others.
(23) In some confusing conversations:
4. I take charge and make sure things are clear and organized.
5. I pick up on the other person's motives as easily as if they were my own.
6. I think everything is going along fine only to learn later that the person I was talking with was upset or disturbed about something.
(24) In conversations where conflicts arise, I find myself
7. avoiding the point of contention.
8. forcing my views on others.
9. becoming too sensitive to the emotions of others.
(25) Compared to most people I know:
10. I am more of an "investigator" in conversations.
11. I am more of a "leader" in conversations.
12. I am more of a "bystander" in conversations.

Compared to most people 1 know:

1. I sem more competitive in conversations
2. I secm more neutral in my feelings in corversation;.
3. I seem to ga in more trust in conversations.
(27) Compared to most people 1 know:
4. I am more evasive or withdrawn in conversations.
5. I give more compliments in conversations.
6. I am better to hold the floor when I speak in conversations.
(28) Compared to most people I know:
7. I am better at taking criticisms from others in conversations.
8. I am more easily distracted in conversations.
9. I am more eager to talk in conversations.
(29) Con.pared to most people I know:
10. I tend to be more organized in conversations.
11. I tend to be better at figuring people out in conversations.
12. I tend to be more rambling in conversations.
(30) Compared to most people in conversations, I respond to conflict situations:
13. in a more cautious and reluctant way.
14. in a more confident and rational way.
15. in a more agreeable and thoughtful way.
(31) Those that I converse with might get the impression that
16. I'm more concerned with understanding their ideas than with the truthfulness of what they say.
17. I'm a good person to have on their side in an argument.
18. I'm usually in the background and seldom in the "spotlight."
(32) Those that I converse with might get the impression that
19. my critical evaluations of others are correct.
20. my shyness explains my lack of involvement in conversations.
21. my sensitivity to people takes its toll from me emotionally.
(33) Those that I converse with might get the impression that
22. I should talk more.
23. I'm warm and considerate in the way I speak.
24. I'm strong and steadfast in the way I present my views.
(34) Those that 1 converse with might get the impression that
25. I practice good listening habits.
26. I'm an inconspicuous observer.
27. I exhibit effective speaking techniques.
(35) Those that l converse with might get the impression that
28. I'm organized and not vacillating.
29. I'm insightful and not rigid.
30. I'm confusing and not threatening.

BE SURE AND CHOOSE ONE MOST [ + ] AND ONE LEAST [-] TYPICAL CHARACTERISTIC FOR EVERY ITEM, EVEN IF THE PREFERENCE FOR ONE ALTERNATIVE OVER THE OTHERS IS VERY SLIGHT.
(36) Those that 1 converse with might get the impression that

1. I'm the one who is good at staying out of disputes.
2. I'm the one who is good at restoring order in disputes.
3. I'm the one wtoo is a good "go-between" in disputes.
(37) Those that don't converse with me very of ten might get the impression that
4. I reveal too much information about myself.
5. I exert too much control over them.
6. I don't respond to them and what they say.
(38) Those that don't converse with me very of ten might get the impression that
7. I'm threatening in conversations.
8. I'm uninvolved in conversations.
9. I'm "taken advantage of" in conversations.
(39) Those that don't converse with me very of ten might get the impression that 1. I refuse to talk too much of the time.
10. I bother the other person by asking for her/his ideas too frequently.
11. I use a large vocabulary in order to impress others.
(40) Those that don't converse with me very of ten might get the impression that
12. I spend too nuch time listening to the problems of others.
13. I am bored and withdrawn from the conversation.
14. I am talkative and concerned with "holding the floor."
(41) Those that don't converse with me very often might get the impression that
15. I am too rigid and inflexible in the way l explain my views.
16. I am too prone to oversimplify my explanations of complex issues.
17. I fail to explain my views in a coherent way.
(42) Those that I have conflicts with in conversations might get the impression that
18. I'm too prone to become quiet and uncomminicative in conflict situations.
19. I'm too prone to debate with them and impose my view on them.
20. I'm too prone to discuss things at length without reaching a specific conclusion.
(43) In my own conversations:
21. I want to be the one to clarify troublesome points.
22. I want to be the one to get the best point of view adopted.
23. I have no definite purpose in mind.
(44) In my own conversations, I want to
24. deal with the task at hand in a dynamic way.
25. avoid becoming overstimulated and hyperactive.
26. protect the feelings of those involved.
(45) In my own conversations, I want my contributions
27. to be as brief as possible.
28. to conform to the expectations of others.
29. to capture and maintain the attention of listeners.

BE SURE AND CHOOSE ONE MOST [+] AND ONE LEAST [-] TYPICAL CHARACTERISTIC FOR EVERY ITBM, EVEN IF THE PREFERENCE FOR ONE ALTERNATIVE OVER THE OTHERS IS VERY SLIGHT.
(46) In my own conversations:

1. I want to listẹn for the feelings underlying the speaker's message.
2. I want to listen but find it very difficult to concentrate on what is being said.
3. I want to listen for details and evaluate facts given by the speaker.
(47) In confusing conversations:
4. I want to get things organized.
5. I want to "size up" what is really going on.
6. I want to get away from the turmoil.
(48) In my own conversations, I want to be able to
7. avoid the unpleasantness that arises from conflict situations.
8. take decisive and, perhaps, unpopular actions that are required when things get out of hand.
9. risk revealing my intermost feelings in order to cope with the symptoms of conflict.
(49) The real purpose most people have when they engage in conversations is to
10. learn the views of others.
11. change the views of others.
12. pass the time of day.
(50) In actual practice, most conversationalists respond to others in a fairly
13. defensive or aggressive way.
14. detached or neutral way.
15. supportive or empathetic way.
(51) In actual practice, most conversationalists are quite
16. brief and don't speak when something comes up they don't know about.
17. adaptive and build on the ideas expressed by others.
18. articulate and express their opinions freely and often.
(52) In actual practice, most people really listen
19. to unspoken messages to gauge how the speaker feels about things.
20. to very little of what is being said.
21. to words and statements to gauge the soundness of the speaker's thinking.
(53) In actual practice, confusing conversations
22. become clear when speakers are urged to take up one point at a time in a logical. orderly way.
23. become clear when listeners adapt their thinking to the pattern of arrangement used by the speaker.
24. become more puzzling and confusing the longer they go on.
(54) In actual practice, most conversationalists
25. don't do much to cope with conflicts that arise.
26. effectively handle conflicts once they come to a head.
27. prevent situations from getting to the conflict stage in a way that satisfies those involved.

BE SURE AND CHOOSE ONE MOST [+] AND ONE LEAST [-] TYPICAL CHARACTERISTIC FOR EVERY ITEM, EVEN If THE PREFERENCE FOR ONE ALTERNATIVE OVER THE OTHERS IS VERY SLIGHT.
(55) The best cunversations are those where

1. peofle bring ,ut all points of view and inderstand them (even immoral views) as if they were their own.
2. people are convinced of and accept the best point of view presented.
3. people pass the time of day with no particular purpose in mind.
(56) The best conversations are those where
4. people get down to the "heart of the matter" even if some get their feelings hurt in the process.
5. people don't feel like they are being forced "to get into the act."
6. people protect the feelings of those involved even if the matter remains unresolved.
(57) Satisfying conversations are those where
7. a person doesn't have to say much if he/she doesn't feel like it.
8. a speaker adapts to others by using nonverbal messages to get meanings across.
9. a speaker relates to others by using a good vocabulary to make meanings clear.
(58) The best conversations are those where
10. people are prepared to listen with complete attention to any matter that comes up.
11. people are free to be nonparticipants if something comes up they don't want to consider.
12. people are prepared to express their views on any matter that comes up.
(59) In confusing conversations, it is best to be the one who
13. is well-organized, systematic, and logical.
14. simplifies the corments of others for those who don't understand what's going on.
15. is undisturbed and unaffected by the confusion.
(60) When conversing with quarrelsome people, the best advice is to
16. "Keep out of the line of fire."
17. "Be assertive."
18. "Be supportive."

## APPENDIX B

## THE CSRI ANSWER SHEET

## CSRI ANSWER SHEET 980AB

I
II $\qquad$ IV
FOR EACH ITEM, place a " + " in the alternative box that is MOST TYPICAL of you and your conversations and place a "-" in the alternative box that is LEAST TYPICAL of you and your conversations.


## VITA

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Thesis: EFFECTS OF COMMUNICATION RESPONSIVENESS UPON INSTRUCTOR JUDGMENT GRADING AND STUDENT COGNITIVE LEARNING: AN EXPLORATORY STUDY

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