PUPIL CONTROL IDEOLOGY AND TEACHER

INFLUENCE IN THE CLASSROOM

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CHAPTER I

INTRODUCTION

During the past twenty years, a major thrust in educational

research has been an emphasis on the teaching-learning process.

Basically, this research has included studies which have been concerned

with comparisons of various instructional methodologies and pupil

achievement, teacher characteristics and teaching effectiveness, and

teacher behaviors as related to pupil achievement. Two factors have

been identified which are of major consequence and concern to educators.

The first factor is pupil control. The second factor concerns the

teacher-pupil interpersonal relationships within the classroom setting.

In relation to pupil control, the maintenance of order and disci-

pline in the classroom has become a subject of increasing interest and

concern. Nelson and Thompson (1963) state that success and failure of

teachers are frequently reported in terms of pupil control. The main-

tenance of order and discipline is rated at the top of the list of

problems teachers considered to be their major difficulties. Certainly,

many administrators and parents judge a teacher's success or failure in

terms of that teacher's ability in "pupil control".

What constitutes pupil control? Willower, Eidell, and Hoy (1967)

state that pupil control can usually be explained as the essential

ingredient of group life, and it implies requirements for and re-

straints upon behavior. The centrality of pupil control in education

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was reported by Willower and Jones (1963) in their junior high school study. They state that pupil control was the salient feature in the organizational life of the public schools. Carlson (1964) indicates that client control is a significant concern in organizations that have no control over client selection and when the organization has no choice concerning client participation. Schools, prisons, and mental institutions fall into this category.

Although there is wide variation in the interpretation of what constitutes adequate control or discipline in the classroom and how to attain it, there seems to be near uniformity of opinion that unless teachers and pupils work together in harmony toward desired ends, little of value can be accomplished by them. Broadly interpreted, the achievement of discipline in the classroom is the process whereby a teacher arranges an environment and sets the stimuli in such a manner that all pupils in a given situation cooperate in desirable activities and experience satisfaction and growth in the undertaking (Bond, 1952).

The second factor which is of concern to educators is the inter-personal relationships that occur between teachers and pupils within the classroom setting. At present, the most appropriate method of determining teacher-pupil interpersonal relationships in the classroom environment is by systematically observing the verbal behavior of both teachers and pupils.

One of the better known research methods in the area of interpersonal relationships of teachers and pupils in the classroom setting is interaction analysis which has become a standardized method of describing pupil-teacher interaction in the classroom. The Flanders system is probably the most widely used of these classroom observational systems.

This instrument measures pupil-teacher relationships by describing verbal behavior (Simon and Boyer, 1967).

(4) Flanders has indicated that a major consequence of his research has been the identification of the influence teachers exert upon pupils, *which effect students achievement.* (Amidon and Flanders, 1967). Teacher influence consists of two types: indirect and direct. Indirect influence is referred to as consisting of soliciting the opinions or ideas of the pupils, applying or enlarging on those opinions or ideas, praising or encouraging the participation of pupils, or clarifying and accepting their feelings. Direct influence consists of stating the teacher's own ideas or opinions, directing the pupil's actions, or justifying the teacher's authority or use of that authority. Flanders states that:

> In the classroom, teacher-pupil relationships are essentially
> superior-subordinate in quality. The responsibility for class-
> room activities is the teacher's and both the teacher and
> pupil expect the teacher to take charge, to initiate and to
> control the learning activities. The freedom to direct or
> not to direct the activities of others is initially given
> only to the teachers; whatever freedom pupils have in this
> respect results from actions of the teacher. No pupil can
> consistently ignore the authority of the teacher, and it is
> most difficult and sometimes impossible for a pupil to escape
> from the teachers control. (Amidon and Flanders, 1967, p. 3)

achievement
One of the factors influencing pupil freedom in the classroom may center around the beliefs the teacher holds with respect to classroom control (Gossen, 1969).

Justification for the Study

The concept of direct teacher influence seems to be compatible with custodial pupil control ideology orientation of teachers. The custodial orientation of pupil control ideology of teachers leads them to structure autocratic classrooms, to view behavior in moralistic

terms, and cause them to be imbued with pessimism and watchful mistrust (Willower, Eidell, and Hoy, 1967).

The concept of indirect teacher influence seems to be compatible with humanistic pupil control ideology orientation of teachers. The humanistic orientation of pupil control ideology of teachers leads them to desire a democratic classroom climate with democratic social inter-action with pupils, open channels of two-way communication, and in-creased student self-determination. Teachers and pupils can assert their individual differences and are willing to take responsibility for their actions (Willower, Eidell, and Hoy, 1967).

Research to analyze the relationships between the pupil control ideology of teachers and their operational behavior in the classroom should prove to be a fruitful inquiry. A study of this nature should have merit in that it should lead to a greater understanding on the part of teachers, supervisors, and administrators of how teachers and pupils function in the classroom environment.

Even though modern elementary school teachers may be better pre-pared to cope with classroom control problems than their counterparts in the past, the intensity and complexity of the problems that beset children have increased. In any event, the teacher variable and the pupil variable have changed in the last decade, and such changes are worthy of new analysis. Therefore, the purpose of this study was to analyze whether the pupil control orientation of teachers differential-ly affected their operational behavior in the classroom setting. *on their students achievement.*

Statement of the Problem

This study is an investigation of the relationships that exist

between the teacher's pupil control ideology and his behavior as expressed by verbal interaction with students in the classroom environment.

Answers to the following questions were sought: (1) Do teachers who hold a humanistic pupil control ideology differ from teachers who hold a custodial pupil control ideology in the type of influence they exert over pupils through their verbal behaviors? (2) Do pupils in classrooms of teachers who hold a humanistic pupil control ideology differ in their verbal behavior from those pupils in classrooms of teachers who hold a custodial pupil control ideology?

Basic Hypotheses

This study proposed to establish a basis for the testing of the following null hypotheses:

1. Direct influence in the classroom which is reflected by verbal interaction will not differ significantly between teachers who are custodial and teachers who are humanistic in their pupil control ideology.

2. Indirect influence in the classroom which is reflected by verbal interaction will not differ significantly between teachers who are custodial and teachers who are humanistic in their pupil control ideology.

3. Pupil verbal behavior in the classroom setting does not differ significantly between pupils taught by custodial teachers and pupils taught by humanistic teachers.

Definition of Terms

For the purposes of this study the following definitions will be
used.

Control. Control as an essential ingredient of group life implies
requirements for and restraints upon behavior. The orientation of
teachers toward this aspect of school life is referred to as pupil
control ideology. The teacher's orientation toward pupil control
ranges from "custodial" at one end of a continuum to "humanistic" at
the other (Willower, Eidell, and Hoy, 1967).

Custodial. Teachers with a custodial pupil control orientation
stereotype their students in terms of appearance, behavior, and parents'
social status. These teachers view behavior in moralistic terms in-
stead of attempting to understand it. Their relationships with stu-
dents are on an impersonal basis. Teachers holding a custodial view-
point are imbued with pessimism and watchful mistrust (Willower,
Eidell, and Hoy, 1967).

Humanistic. The humanistic teacher is optimistic that, through
close personal relationships with pupils and the positive aspects of
friendship and respect, students will be self-disciplining rather than
disciplined. Learning and behavior are viewed not moralistically, but
in sociopsychological terms. Two-way communication channels between
teacher and pupils are open; flexibility in status and rules leads to
a democratic classroom climate. In such a situation the importance of
the individual is stressed and emphasis is placed upon individual needs
and patterns of growth (Willower, Eidell, and Hoy, 1967).

Interaction Analysis. The classification of teacher-pupil con-
tacts into specifically defined behavioral acts is called interaction

analysis. Flanders (1966) identifies ten categories into which these contacts may be classified.

Dominant Behavior. Dominant behavior is the behavior of a person who is inflexible, rigid, and deterministic. Such a person disregards the desires or judgment of others and considers himself, in the conflict of differences, to hold all the correct answers. Examples are the use of force, commands, threats, shame, blame, attacks against the personal status of another. Domination is the technique of autocracy or dictatorship. It obstracts the growth process in others. It is the antithesis of the scientific attitude and the open mind (Anderson, 1939).

Socially Integrative Behavior. This term designates behavior leading to a oneness or commonness of purpose among differences in individuals. It is the behavior of a flexible, growing person who is looking for new meanings, greater understandings in his contacts with others. It is noncoercive; it is the expression of one who attempts to understand others, who is open to new data. It is consistent with the scientific attitude, the open mind. It is an expression of growth in the person using it, and a stimulus to growth in others. It does not stifle differences, but makes the most of them; it actually creates new and harmonious differences (Anderson, 1939).

Indirect Teacher Behavior. Those acts by the teacher toward the pupils which maximize the freedom of the student to respond are termed indirect influence or behavior (Amidon and Flanders, 1967).

Direct Teacher Behavior. Those acts which minimize the freedom of the student to respond are classified as direct teacher behavior (Amidon and Flanders, 1967).

Matrix. A table consisting of ten rows by ten columns. It is used for recording the sequence of events in the classroom. From this table, the data are interpreted. A separate matrix is used for each observation (Amidon and Flanders, 1967). (See Appendix A.)

Revised Indirect (ID) Ratio. The ratio of indirect statements to direct teacher statements which is found by dividing the number of tallies found in the matrix, in columns (or categories) 1, 2, 3 by the total number of tallies in columns 1, 2, 3, plus those in 6 and 7. An I/D ratio of .5 would indicate two indirect statements were made for every direct statement. This ratio eliminates the effects of categories 4 and 5 (lecture and asking questions) and gives information about whether the teacher is direct or indirect in his approach to motivation or control (Flanders, 1966).

Major Assumptions

For the purpose of this study, the following assumptions have been applied:

1. The Pupil Control Ideology Form provides a systematic method for determining the pupil control orientation of elementary school teachers.

2. The Flanders Interaction Analysis Scale provides a systematic method for the classification of teacher-pupil interaction in the elementary school classroom.

3. The primary acts that determine teacher behavior in the class-room are expressed by verbal statements.

4. The primary acts that determine pupil behavior in the class-room are expressed by verbal statements.

5. The use of trained observers is a reliable procedure for gathering data in elementary school classrooms.

6. The activities of the observers in the classroom did not appreciably alter the patterns of teacher-pupil interaction.

Procedures and Analysis of Data

For the purposes of this study the following limitations have been applied:

1. The two hundred and sixty teachers who participated in the initial phase of this study were elementary school teachers who teach in a large suburban school district in Missouri.

2. The district was selected because of its large population of elementary school teachers and because it included a range of socio-economic levels.

3. Twenty teachers were selected on the basis of Pupil Control Ideology scores from the initial group to participate in the second phase of the study.

4. Each teacher in the two groups in this study was observed three times for twenty minutes during language arts classes. Language arts was chosen as a content area since this was a subject commonly taught by all the teachers in the study. Additional instructions were given to the observers. They were told not to observe classes prior to or immediately after holidays, school assemblies, or when a substitute teacher was in charge of the class.

5. The analysis of teacher pupil control ideology and teacher influence was limited to replies received from the instruments employed in the analysis.

6. Analysis of the data was made by the use of the test of significance of a difference between proportions and the t test for significant differences between groups.

Data and Instrumentation

The general plan employed in conducting the study may be outlined as follows:

1. The Pupil Control Ideology Form (Willower, Eidell, and Hoy, 1967) was employed to determine the pupil control orientation of the teachers in the initial phase of the study.

2. The investigator personally administered the instrument to the teachers in the initial phase of the study.

3. The sample in the second phase of the investigation consisted of twenty teachers. The ten teachers who scored the highest on the PCI Form comprised the custodial teacher group. The ten teachers who scored the lowest on the PCI Form comprised the humanistic teacher group.

4. The Flanders Interaction Analysis Scale was employed in three classroom observations made of each teacher participating in the second phase of the study. Three observers made independent observations of the subjects in this study. The observers were trained in the Flanders technique by the investigator.

5. Inter-observer reliability checks were made prior to, during, and after the investigation. The three observers had consistently high reliability estimates throughout the investigation (r = .796 - .887).

6. The data gathered were expressed quantitatively. The statistical instruments used on the data obtained from both instruments were

the test for significant differences between proportions ($\bar{z}$) and the $\underline{t}$ test for significant differences between groups.

7. A final report of the information gathered was prepared. The conclusions to be drawn by this study were limited to the specific degree of difference, if any, between the pupil control ideology of teachers as measured by the Pupil Control Ideology Form and their classroom behavior as measured by the Flanders Interaction Analysis Scale.

<div align="center">Selection of the Instruments</div>

The information used in this study was gathered through the use of two instruments. Permission for the use of the Pupil Control Ideology Form was secured from the authors, Donald J. Willower, Terry L. Eidell, and Wayne K. Hoy. Permission for the use of the Flanders Interaction Analysis Scale was granted by the author, Ned A. Flanders.

The Pupil Control Ideology Form was used to determine the pupil control ideology of the sample of teachers in the initial phase of the study. This instrument contains twenty statements. Responses are made to each statement on a five-point Likert-type scale. The responses are scored from five (strongly agree) to one (strongly disagree). The total score on the instrument represents the teacher's pupil control orientation; the lower the score, the more humanistic the pupil control ideology.

The Flanders Interaction Analysis Scale was employed to assess the degree of indirect influence the teacher exerts over pupils in the classroom. The Flanders system is composed of ten categories for classifying teacher and pupil verbal interaction.

These two instruments of analysis were used solely for the purpose of identifying the differences, if any, in teachers' pupil control ideology and the differences, if any, in the way the two groups of teachers interacted with their pupils.

Selection and Notification of Teachers

The elementary schools represented in this study are from a large metropolitan area school district located in the Midwest. Twelve elementary schools from this district were selected to participate in this study.

The superintendent of the school district was contacted in person to secure permission for the selected elementary schools to participate. Permission to be included in the study was secured from the principals themselves. The teachers participating in the second part of the study were not contacted. Permission to make classroom observations was granted to the observers by the individual principals.

The initial instrument of analysis was personally administered by the writer to each elementary school faculty in the study.

Organization of the Data

Scoring the Pupil Control Ideology Form encompassed tabulating the instruments and ranking the scores to determine the ten highest and the ten lowest scores for selection of the two groups (custodial, humanistic) of teachers.

Scoring the Flanders Interaction Analysis Scale encompassed tabulating the teachers' verbal behaviors as categorized by the observers. Totals were computed for the two experimental groups. In addition,

selected verbal behavior cells were tabulated for later analysis for a
test of significant differences between groups. The cells were select-
ed as being the most representative of the broad categories of verbal
behaviors (Flanders, 1966, p. 26).

The statistical test used to determine the differences, if any,
between the experimental teacher groups for the proportions of indi-
rect, direct, and pupil verbal behavior was the test for significant
differences between proportions (Guilford, 1965, pp. 185-187). The
level of confidence was set at the .05 level. The following formula
for the test of significant differences between proportions was
employed (Guilford, 1965, pp. 185-187):

$$\bar{z} = \frac{P_1 - P_2}{\sqrt{\frac{2(pe\ qe)}{N_i}}}$$

The statistical test used to determine the differences, if any,
between the two teacher groups for the selected cells of verbal behav-
ior was the $\underline{t}$ test for significant differences between groups (Popham,
1967, p. 145). The level of confidence was set at the .01 level.

The following formula was employed for the $\underline{t}$ test for significant
differences between groups (Popham, 1967, p. 145).

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{n_1 + n_2} - 2\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Format for Succeeding Chapters

Five chapters sufficed to fulfill the requirements of this study. When all the materials were collected, they were arranged into categories adapted for the basic organization of the report as indicated. Following the present introductory chapter, Chapter II is devoted to a review of related research and literature. Chapter III presents a discussion of the instrumentation of the study. Chapter IV presents a statistical treatment of the data used in the study. Finally, Chapter V summarizes the entire study, presents findings of the study, gives conclusions drawn from the findings, makes recommendations in keeping with these conclusions, and suggests areas for further research.

REVIEW OF RELATED RESEARCH AND LITERATURE

Currently, American education is undergoing a vast re-evaluation and re-organization. Some basic trends can be identified. One trend deals with technological applications to educational materials, machines and programs designed to increase teaching effectiveness and learning efficiency. Quite another trend is that in which curriculum specialists, psychologists, administrators, and teachers are attempting to understand the feelings of students--that broad area termed the affective "domain". A third trend is the increasing concern of the public towards student unrest, protest, and misbehavior.

Although in recent years there has undoubtedly been a growing interest in the study of pupil control and elementary school teachers' attitudes toward this problem, researchers have just begun to contribute toward a solution. However, unanswered questions still exist as to whether or not elementary school teachers differ in their beliefs in relation to what constitutes misbehavior of pupils in the elementary school and the type of instructional methodology used in the elementary school classroom. This has been so because of the difficulty a scientific approach into this field would present. Educators, today, are fully cognizant of the problem, and an energetic effort is currently underway to remedy the situation.

This chapter includes a review of selected sources of information pertaining to concepts of classroom social interaction and the teacher's classroom behavior as well as the sociological and psychological aspects of teacher attitudes toward the discipline of children.

Interaction Analysis

Interaction analysis is a procedure that may be used by observers to systematically collect data in the classroom. It is a method of summarizing what the teacher actually does in such a way so that more accurate judgments may be made about his classroom behavior and/or teaching effectiveness.

Teaching effectiveness is an area of research which is concerned with relationships between the characteristics of teachers, teaching acts, and their effects upon the educational outcomes of classroom teaching. In 1954, Morsh and Wilder concluded after reviewing research on teaching effectiveness published between 1900 and 1952: "No single, specific, observable teacher act has yet been found whose frequency or percent of occurrence is invariable /and/ significantly correlated with student achievement." Research in this area permits cautious optimism and indicates that the tools long needed for the analysis of the teaching-learning process are gradually being developed (Flanders and Simon, 1968).

In the last few years, however, research has begun to relate certain teacher behaviors to specific consequences in the climate of the classroom and in the academic achievement of pupils (Flanders and Simon, 1968).

In 1960, Flanders (1965) conducted an experiment involving sixteen eighth-grade math teachers and sixteen seventh-grade social studies teachers. The study demonstrated that both attitude development and achievement were significantly better for the classes of the teachers who use indirect teaching strategies. During 1961-62 Flanders and Amidon (1961) conducted a study involving 560 eighth-grade math and 480 seventh-grade social studies students, producing the same results with significantly higher achievement and attitude development for the group taught by teachers using indirect methodology.

LaShier (1966) found significantly higher achievement and attitude development for eighth-grade biology students in classes with student teachers who use indirect teaching techniques.

On the elementary school level, Brown (1960) showed higher achievement in arithmetic among elementary classes of under- and over-achievers for pupil-centered classes. Nelson (1966), in a language arts study, found that first graders' compositions were superior both quantitatively and qualitatively in terms of total verbal output and vocabulary for the indirect methodology. Bellter, Weber, and Amidon (1966), in a study of one hundred culturally deprived kindergarten pupils, indicated that teachers using indirect methodology produced greater gains from their classes on achievement measures.

Soar (1967), in a study of sixteen classes of third, fourth, fifth, and sixth grade students, found vocabulary growth greater for groups instructed by indirect teaching techniques and reading growth greater for groups in grades three, four, and five instructed by indirect methodology. Furst and Amidon (1967), in a study of high and low achieving groups of elementary school youngsters, found that the high

groups tended to have more teachers who use indirect teaching methodology than teachers who utilized direct instructional techniques.

Davidson (1968), in his study of children from grades two to six, found that teachers who use indirect methodology produced higher levels of critical thinking. Powell (1968) states that classes taught by teachers who used indirect methodology make higher scores on achievement tests, but there was no significant difference in reading achievement. Weber (1968), in a study of 180 third and fourth grade students, found that the classes instructed by teachers who used indirect methodology had higher scores on verbal creativity.

Campbell (1968), in a study of ten general science teachers and their seventh through ninth grade junior high school classes, found that the group instructed by indirect methodology was significantly better in terms of achievement and scientific attitude development.

It is thus apparent that micro-elements involved in the indirect-direct teaching strategies do affect achievement and attitude development in almost every subject matter area from kindergarten through ninth grade.

Campbell and Barnes (1969) indicate surprise that even though much of the research is new and not generally widely published much of the educational community appears not to be aware of the contribution being made in this area.

Of the recently developed systems for analyzing the instructional process, interaction analysis is one that is currently well known and widely used. There is much literature available which describes the systems of interaction analysis and the social-psychological theory which forms its basis (Amidon and Hough, 1967). The social interaction

that takes place between the teacher and his pupils forms the basis for studying classroom behavior.

Some of the earliest systematic studies related directly to pupil and teacher behavior were done by Anderson (1939) and were based upon what he termed "dominative" and "socially integrative" contacts. Dominative characteristics are those in which the teacher acts in a somewhat rigid, even compulsive manner. The teacher tries to make others act in accordance with his own relatively unalterable designs or values. He attacks the attempts of his pupils to interact with him in a democratic way; he employs shame, force, commands, and threats. He is unwilling to permit the pupils' goals or desires or purposes to contribute to the determination or orientation of class goals.

Socially integrative contacts are characterized by the individual's ability to be flexible in behavior which attempts to bring out the differences in others and find common purposes among differences. (Anderson, 1939)

Later, Flanders (1967) noticed that the research of Anderson produced a series of consistent and significant findings:

1. The dominative and integrative contacts of the teachers set a pattern of behavior that spreads throughout the classroom; the behavior of the teacher more than any other individual sets the climate of the class. The rule is that when either type of contact predominates, domination incites further domination and integration fosters further integration. It is the teacher's influence that spreads among pupils, even when the teacher is no longer in the room. Furthermore, the pattern a teacher develops in one year is likely to persist in his classroom the following year with completely different pupils.

2. When a teacher's integrative contacts increase, pupils show an increase in spontaneity and initiative, voluntary social contributions, and acts of problem solving.

3. When a teacher's dominative contacts increase, the pupils
are more easily distracted from school work and show
greater compliance to, as well as rejecting teacher domi-
nation.

Shaw and Rector (1967) indicate that serious, sophisticated, and

significant work has been done on the general topic of the educational

environment, in that certain kinds of interrelationships between the

behavior of authority figures (i.e., teachers) and children have been

clearly demonstrated.

Lewin, Lippitt, and White (1939) examined the aggressive responses

of ten-year-old boys subjected to three controlled leadership roles in

an extracurricular club setting. The leadership roles were defined as

authoritarian, democratic, and laissez-faire. To gather their data,

the researchers used an observational technique in addition to other

instruments. They discovered that aggressive behaviors and extremely

apathetic nonaggressive ones were produced by authoritarian leadership.

These findings supported and extended the prior work of Anderson. An

extension of the Lewin, Lippitt, and White study is the conceptualiza-

tion of "dependence on the leader." This is a state of affairs in

which group members are unable to proceed without directions from the

group leader. (Flanders, 1967)

The interaction that takes place between a teacher and pupils and

the various complexities of the interactions as reported by the two

mutually supportive basic and independent studies by Anderson, and

Lewin, Lippitt, and White gave rise to the notion of classroom climate

(Flanders, 1967). That a classroom climate exists is further supported

by Biddle and Adams (1967) who state that classrooms exist as interest-

ing social systems which arise out of relationships between teacher

behavior and other observable conditions of the classroom. They

further conceptualize the social environment of the classroom as an independently observable phenomenon.

Withall (1949) defines classroom climate as the sum of the general emotional factors present in each individual classroom. He explains that a complex of feelings arises out of this shared experience and interpersonal interaction. In addition, climate may be, to some extent, pupils and teachers comprehending and accepting each other's goals and needs.

Withall states this as follows:

> Operationally, climate may be defined as influencing the sense of common purpose of a group or individual problem, the degree of objectivity with which the problem is attacked, and the degree of self-involvement or participation by the individual. Climate probably affects the degree of freedom, spontaneity, and range of roles available to each individual within the limits set by the problem and the group . . .

Withall (1949) also showed that a classification of the teacher's verbal statements into seven categories produced an index of teacher behavior almost identical to the Integrative-Dominant categories of Anderson.

Using contrasting behaviors on the part of teachers, in laboratory situations, Flanders found that a sustained dominative pattern of behavior was consistently disliked by pupils and produced attendant physical change and emotional and intellectual disabilities. Pupil reactions to integrative contact reversed the trend and pupils moved toward adjustment. (Flanders, 1951)

Two years after the Withall study, Perkins did further work with Withall's seven category observational technique. He found that greater learning occurred in groups under pupil-centered leadership. (Perkins, 1951)

Approaching the problem of pupil-teacher interaction from the students' point of view, Cogan (1967), in a large-scale assessment, found that students reported doing more assignments and self-initiated work for teachers whom they perceived falling into the integrative pattern of behavior.

A number of investigations have focused on deliberately restricted or isolated characteristics of the teacher. Johnson (1935); Kounin and Gump (1958); Kounin, Gump, and Ryan (1961); and Alden (1959) have studied teachers' disciplinary techniques. Smith (1960), Meux and Smith (1964), Aschner (1958), and Wright and Proctor (1961) have investigated the logic of teacher presentations.

In another approach, teacher behavior is observed in terms of the pedogogical techniques employed. Thus teacher behavior is coded as "summarizing," "lecturing," "encouraging," "assigning," "explaining," "demonstrating," and so on by such investigators as Barr (1929); Morsh (1956); Wrightstone (1934); Cornell, Lindvall, and Saupe (1952); and Johnston (1969).

Still other investigators have used concepts that appear to represent a wider variety of interest fields, for instance pedagogical and social activities. Typical extended studies have been those of Medley and Mitzel (1955, 1958, 1959), Morrison (1961), Wilk, et al. (1960), Bowers and Soar (1961), Soar (1962), Solomon (1962), and Spalding (1963). These studies have attempted to correlate various dimensions of teacher behavior in order to establish patterns of joint occurrence.

Whereas most studies have conceptualized teacher behavior in absolute terms, a few studies have conceptualized teacher behavior as dependent upon pre-existing conditions, particularly focusing upon

certain types of pupil behavior. Kounin and Gump (1958) studied teacher response to pupil deviances, while Smith (1960) and Wright and Proctor (1961) viewed the teacher within a complex conceptualization of the microenvironment, in which the responses of both teachers and pupils were jointly analyzed for logical content.

Although the style of pupil treatment is technically another aspect of teacher behavior (Biddle and Adams, 1970), many studies have concentrated upon it. Referring to the teacher's approach variously as dominative (versus integrative), teacher centered (versus pupil centered), or direct (versus indirect), these studies have focused upon the degree of teacher authoritarianism and have attempted to relate this dimension to learning, pupil morale, and other dependent variables. Studies which may be categorized as belonging to this group include those of Anderson and Brewer (1946); Anderson, Brewer, and Reed (1946); Withall (1949, 1951); Polansky (1954); Dobson (1966); Mitzel and Rabinowitz (1953); Wispé (1951); Hughes (1959); Calvin, Hoffman, and Hardin (1957); and Flanders (1959, 1960a, 1960b, 1964).

Flanders and his associates at the University of Michigan in their studies of the effects of teacher influence upon measures of student attitudes developed a ten-point observational scale. This instrument is known as the Flanders Interaction Analysis System or by the author's name, Flanders (sometimes appearing in capital letters). The Flanders System is by far the most widely used and the most sophisticated of the observational techniques (Simon, Boyer, 1968; Campbell, Barnes, 1969). It uses the terms "direct" influence and "indirect" influence rather than "integrative" and "dominant." The terms can be equated, however: direct=dominant and indirect=integrative. (Flanders, 1961)

Flanders selected ten kinds of behavior which he considered basic to give him insight into the nature of teaching. Of his ten categories, seven were concerned with teacher behavior; two other categories were concerned with pupil behavior; the final category, a residual one, provided for moments of silence or confusion. Making ingenious use of these categories, Flanders classified teachers as direct or indirect (or loosely interpreted as "authoritarian" or "democratic," respectively) (Biddle and Adams, 1970).

Since observation categories involve concepts which are, in turn, related to some theory, interaction analysis is a process of abstracting the intent of an act from the act itself. The observer must judge whether an act increases or decreases the student's freedom of action. (Flanders, 1966).

Specifically, as a system, interaction analysis possesses at least two inherent features which render it a valuable tool. (Ober, 1967). The first feature is the systematic nature of the interaction analysis which provides the theoretician and the classroom teacher with a common set of well articulated cognitive organizers which describe the verbal activities of the classroom learning situation. Secondly, the analytical nature of interaction analysis provides a means of obtaining reliable and meaningful feedback regarding the effectiveness of newly planned teaching strategies under actual classroom conditions. Amidon (1966), Hanney (1966), and Hart (1967) find that student teachers trained in interaction analysis when compared with student teachers trained in learning theory principles use more indirect influence and elicit more student-initiated ideas. Amidon (1966) states that interaction analysis appears to increase individuality in teacher behavior.

Additional studies by Flanders (1962), Furst (1965), Moskowitz (1966, 1967a, 1967b), Lohman (1967), and Simon (1966) also seem to indicate similar results.

The technique of interaction analysis has been employed for use in planned educational change (Flanders, 1968; Amidon and Hunter, 1967). They state that observational techniques can provide some of the answers to questions of how educational change can take place and to determine how successful recent attempts have been to improve teaching in the schools. Amidon and Hunter (1967) formulate a principle regarding this phase of educational change:

> The teacher can improve and accept the responsibility for
> improvement if he can be given tools which make him a
> social scientist, systematically investigating his own
> teaching.

In this case, the teacher uses the data he collects to improve his teaching. Interaction analysis observation techniques are effective tools for use in this process (Amidon and Hunter, 1967). Garfinkel (1968) indicates the importance of observational techniques in foreign language instruction. He states, "Nothing but an observational technique could give so much information in such precise, reliable, and valuable terms."

Gallagher (1967) and Spaulding (1967) used observational techniques to measure teacher-child "transactions" in live classroom situations in a program designed to bring about behavior modification in children. They employed two instruments developed by the authors themselves (Gallagher, 1967; Spaulding, 1968) to be used in teacher training. The authors state that the teachers found the observation techniques useful in determining how effective their efforts were in bringing about

certain desired pupil changes, and helpful in providing feedback regarding their own classroom behavior.

Flanders (1968) describes several uses for interaction analysis in projects which attempt to help teachers modify their behavior through in-service training. Psencik's (1969) research indicates that the teacher's way of performing various activities of his classroom role seems to have an important bearing on how these activities will be received by the students. Amidon and Flanders (1967, p. 3) state:

> The teacher, then, is continually exerting influence on the children and on the learning situation. But how much knowledge does he have about the methods of influence he is using? How much does he know about how children perceive his behavior? And how much control is he able to exert over his behavior in the classroom? By studying his own behavior in some systematic, objective manner, the teacher may gain further insight into his own pattern of influence. As he gains insight into his behavior, he may decide, as many teachers have decided, that he wants to change his behavior because either he is not achieving what he thought he was achieving, or he is not achieving what he has now decided he wants to achieve on the basis of new insights about how children learn.

Psenick (1969) further states that from the point of view of the student, teacher behavior forms part of the total classroom situation. The teacher may view his behavior as a product of interaction between what the situation demands and the personal factors involved. Thus, he continues, it may be assumed that only the teacher can make changes in his classroom behavior. Others help in the process of change, but they cannot do so unless the teacher himself desires to change.

In summary, it has been shown that interaction analysis has been established as a relevant concept in the study of the social interaction between teacher and pupils in the classroom. Many authors have claimed that interaction analysis is useful as a test of teacher effectiveness and/or ability. However, it is widely known for its use as a

research tool for determining a variety of classroom conditions, teacher effectiveness being only one of these.

Pupil Control

Various terms are used to describe the phenomenon of pupil control. Terms such as "behavior," "order," and "discipline" appear frequently in the literature. Cogan (1967) explains that a pupil's school behavior is to some extent determined prior to his entering the classroom. However, he reasons that the behavior of the teacher is an important factor, among others, in the school related work of his pupils. Waller (1932) saw this pupil-teacher relationship as a confrontation of attitudes between pupils and teachers from which there is developed underlying hostility that can never altogether be removed.

Another perspective of the teacher-pupil relationship is described by Landis (1939). He explained pupil control as a form of social control; the process by which social order is established and maintained.

That pupil control is of concern to educators should not be surprising. The problem of pupil control is an old one. An abundance of literature can be found on this topic. However, a review of the literature reveals little more than a reporting of prescriptions or opinions. Hoy (1968) and Kounin, Gump, and Ryan (1961) state that more studies are needed to better inform us about what constitutes the nature of the classroom as a unique setting that is separate and distinct from other settings for children's groups. This concern has been expressed by other writers. In an article dealing with expectations of behavior, Jones (1967) stated that from a review of philosophical discussions, surveys and experiments on the subject of classroom control,

the lack of an adequate, systematic body of concepts and generaliza-

tions seems evident. Hoy (1968) states that it is unfortunate that

there is little systematic study of pupil control in schools.

The importance of and focus upon pupil control in the school

should not be surprising, especially in the light of the involuntary

nature of student participation (Hoy, 1968). Carlson (1964) provides

us with a typology of service organizations and an incisive analysis of

the school as a special type of service organization. He points out

that some service-type organizations select their clients and some do

not. In some cases, clients must participate in the organization and

in others the clients can refuse to participate. Public schools,

prisons, and public mental hospitals fall into the category of organi-

zations that have no control over client selection and where clients

have no choice concerning their participation in the organization.

With these considerations in mind, it seems reasonable to expect that

control of clients will be of central concern to these types of organi-

zations.

Willower and Jones (1963) found the institutional theme was unmis-

takenly pupil control in their study of a junior high school in Penn-

sylvania. Pupil control problems appeared to play a central role in

the teacher-teacher and teacher-administrator relationships (Willower,

1965). The work of Willower and Jones (1963) in identifying the cen-

tral importance of pupil control in a public school led to the develop-

ment of an instrument to measure the control ideology of teachers.

The work of Gilbert and Levinson (1957) in classification of

hospital personnel in their client-control ideology was adapted for use

with public school personnel. They conceptualized two categories of

ideologies, "custodial" and "humanistic." These prototypes are conceived as being at opposite ends of a continuum and are considered to be "ideal types in the sense in which Max Weber used the term; that is they are pure types not necessarily found in such form in experience (Willower, Eidell, and Hoy, 1967).

Willower, Eidell, and Hoy (1967) conducted a study to test various phases of the concept of pupil control ideology relating to professionals in public school education. The professionals were teachers, administrators, and counselors in the elementary and secondary schools. The findings indicated that teachers were more custodial in their pupil control ideology than principals and counselors, and that principals were more custodial in their control ideology than counselors. Furthermore, male teachers were found to be more custodial in their pupil control ideology than female teachers, secondary school teachers more custodial in their pupil control ideology than elementary school teachers, secondary school principals more custodial in their pupil control ideology than elementary school principals, and more experienced teachers more custodial in their pupil control ideology than less experienced teachers.

In addition, the researchers wished to gather data on the relationship of personality factors and pupil control ideology. For this purpose, they employed Rokeach's (1960) concept of open and closed mindedness as measured by the Rokeach Dogmatism Scale Form E. The general hypothesis that closed minded educators would be more custodial in their pupil control ideology than would open-minded educators was tested and confirmed.

Further analysis of the data collected by Willower, Eidell, and Hoy revealed a relationship of certain personal characteristics to pupil control ideology scores. They found that male teachers had a more custodial pupil control ideology than female teachers; however, the authors state that this finding must be interpreted cautiously since most of the male teachers held their positions at the secondary level and most of the female teachers held positions at the elementary school level. There was a positive relationship shown between age and the degree of custodialism; secondary school principals with five years or less experience in administration were significantly more custodial than their more experienced counterparts; and at the elementary school level, as the amount of education of the teachers increased, custodial pupil control ideology decreased.

In a more recent study, Willower, Eidell, and Hoy (1969) in reference to secondary school pupil control ideology attempted to determine "how custodial is custodial." It was found that secondary school teachers formed an adaptation of "on stage" custodialism. Thus, a teacher holding a relatively humanistic pupil control ideology can, for the benefit of fellow teachers, project a more custodial ideology than actually held. Two important consequences, according to the authors of "on stage custodialism" are:

1. it reinforces custodial norms in the teacher subculture and,

2. custodial pupil control ideology gradually becomes internalized as individuals modify their verbal behavior.

The preceding study adds further evidence to Hoy's (1967) findings on the subject of teacher socialization and increased teacher custodialism. He found that student teachers were more custodial after than

before their student teaching. His assumption from these findings was
that the teacher subculture of the school would emphasize a greater
custodial ideology than the student would have experienced in his
college preparation.

A subsequent article by Hoy (1968) disclosed that the pupil con-
trol ideology of beginning teachers who taught the year immediately
after graduation became significantly more custodial, while there was
no significant change in custodialism for those who did not teach the
same year.

From the data of his most recent research, Hoy (1969) found that
the second year of teaching experience seems to have had little impact
on the pupil control ideology of the group of teachers under study.
Hoy states that perhaps that the first year of teaching provides most
teachers with an adequate period to become socially integrated into the
teacher subculture, at least as far as pupil control ideology is con-
cerned. In addition, Hoy found an important exception to this general
pattern in that teachers who changed schools after their first year of
teaching were less susceptible to the socialization of the teacher sub-
culture during their initial year of teaching. Although, he states,
these teachers became significantly more custodial during their student
teaching, there was no further significant change in their pupil con-
trol ideology during their first year of teaching. Since Hoy's most
recent study focused only upon the respondent's declared opinions and
attitudes--their ideology, not behavior--he cautions the reader to keep
these factors in mind when interpreting the results of his investiga-
tion. He states:

If role related ideology, in part, determines a cognitive
orientation to role, then the pupil control ideology of
teachers would seem to serve a basic function of structuring
aspects of behavior, that is of providing an internal guide
to action. However, perfect congruence between role ideology
and role performance is not expected in the school situation;
contemporary social system pressures as well as intrapersonal
processes probably intervene to reduce the congruence.

In the same vein, Roberts (1969) concludes that student teachers
becoming more custodial during their student teaching is due largely to
three factors: 1) student teacher's pupil control ideology upon enter-
ing student teaching; 2) his perception of his cooperating teacher's
pupil control ideology; 3) and the socialization process during his
student teaching.

Appleberry (1969), in his study of forty-five selected elementary
schools, found a relationship between the organizational climate of the
school and the pupil control ideology of the teachers. Hoy and
Appleberry (1969a, 1969b) found significant evidence to support the
premise of the pupil control orientation aspect of the organizational
life of elementary schools. Their findings indicate that the behavior
of teachers and administrators in humanistic elementary schools was
generally more open, accepting, and authentic than the behavior in
custodial schools. The authors relate authenticity and openness in
organizational behavior with humanistic pupil control orientation.

Blankenship and Hoy (1969a) used the Rokeach Dogmatism Scale (Form
E) to identify open and closed minded biology teachers. Their study
shows that the more open-minded an individual, the better should his
ability be to receive and analyze information objectively and to act
upon the information independently and upon its own merits. Addition-
ally, they found that open-minded biology teachers were more ambitious,
enthusiastic, resourceful, self-reliant, progressive, and assertive.

In an additional report, Hoy and Blankenship (1969b) found that biology teachers who reacted favorably to new science curriculum materials ranked higher on measures of capacity for independence of thought and action than those teachers who reacted less favorably.

Jones' (1969) research indicates that the teacher who has a more humanistic pupil control ideology will exhibit a higher percentage of classroom activities consistent with those recommended by the Biological Sciences Curriculum Study (BSCS) than the teacher who has a more custodial pupil control ideology. He also concludes from the scores on the total Biology Classroom Activities Checklist (BCAC) that the expectation expressed by Blankenship and Hoy was borne out.

In summary, pupil control has been recognized as a theme central to the concerns of educators. The problem is not a new one, but not until recently have there been systematic studies that have provided insights into this area. This has been due, in the main, to the development of the pupil control ideology instrument which identifies a teacher's pupil control ideology along a continuum from custodial to humanistic.

CHAPTER III

INSTRUMENTATION OF THE STUDY

The purpose of this study was to determine whether teachers whose
pupil control ideology was relatively humanistic, differ in their
classroom verbal behavior from teachers whose pupil control ideology
was relatively custodial; and whether pupils whose teachers are rela-
tively humanistic in their pupil control ideology differ in their
verbal behavior from pupils whose teachers are relatively custodial in
their pupil control ideology.

In order to fulfill the requirements of this study it was neces-
sary to measure the pupil control ideology and the classroom practices
of twenty elementary school teachers. The investigator chose two
instruments to gather the data to fulfill these requirements, the Pupil
Control Ideology Form and the Flanders Interaction Analysis Scale.

Two lines of inquiry were followed in this investigation in ob-
taining evidence on elementary school teachers' pupil control orienta-
tion and their classroom verbal behavior. First, the pupil control
ideology of the participating teachers was measured by eliciting their
responses to the Pupil Control Ideology Form. Second, the participat-
ing teachers' classroom behavior was ascertained by analyzing their
verbal responses and their students' verbal responses as categorized
by the Flanders Interaction Analysis Scale.

The following description of the Pupil Control Ideology Form and the Flanders Interaction Analysis Scale will assist the reader in an understanding of this study.

Pupil Control Ideology Form

The Pupil Control Ideology Form (PCI) was employed by the investigator to determine the pupil control orientation of teachers. This form contains twenty statements. Responses are made to each statement on a five-point Likert-type scale and are scored from one (strongly disagree) to five (strongly agree). The total score on the instrument represents the teacher's pupil control orientation; the lower the score, on the instrument, the more humanistic the pupil control ideology of the respondent. (See Appendix A.)

Reliability

The authors who developed the PCI Form calculated a split-half reliability coefficient by correlating even-item subscores with odd-item subscores (N=170). The resulting Pearson product-moment coefficient was .91; application of the Spearman-Brown formula yielded a corrected coefficient of .95 (Willower, Eidell, and Hoy, 1967).

Further reliability calculations were made when data were collected from a new sample (N=55). Using the same techniques, the Pearson product-moment correlation produced a coefficient of .83; application of the Spearman-Brown formula yielded a corrected coefficient of .91 (Willower, Eidell, and Hoy, 1967).

Validity

The procedure used in validating the PCI Form was based upon
principals' judgments concerning the Pupil Control Ideology of certain
of their teachers. Principals were asked to read descriptions of the
custodial and humanistic viewpoints and to identify a specified number
of teachers whose ideology was most like each description. It was then
possible to compare mean scores on the PCI Form of the two groups of
teachers.

A t-test of the difference of the means of two independent samples
was applied to test the prediction that teachers judged to hold a cus-
todial pupil control ideology would differ in mean PCI Form scores from
teachers judged to have humanistic pupil control ideology. Using a
one-tailed t-test, the calculated t value was 2.639, indicating a
difference in the expected direction, significant at the .01 level
(Willower, Eidell, and Hoy, 1967).

A further check on the validity of the PCI Form was made by a
comparison of the mean scores of personnel in schools known by reputa-
tion to be humanistic with the mean scores of personnel in other
schools at the same grade level (Willower, Eidell, and Hoy, 1967).
A trend was found to exist in the expected direction.

A cross-validation was carried out using the same techniques
described earlier (based upon principal's judgments of teacher ideol-
ogy). A new sample of seven schools was selected. Using a one-tailed
t-test, the researchers found the mean difference in PCI Form scores
for teachers judged to be custodial in ideology and teachers judged to
be humanistic was significant at the .001 level (Willower, Eidell, and
Hoy, 1967).

Flanders Interaction Analysis Scale

The Flanders Interaction Analysis Scale was employed in the investigation to assess the extent of direct or indirect influence that the participating teachers exerted over their pupils in the classroom. The Flanders system is composed of ten categories which are described below. Each category is a prototype of verbal interaction. Categories one through four classify teacher statements as indirect or allowing for the maximizing of student freedom of interaction. Categories five, six, and seven classify teacher statements that minimize student freedom of response. Categories eight and nine account for student responses to teacher initiated interaction and student initiated interaction respectively. The last category, ten, categorizes silence, confusion, or anything other than teacher or student talk.

The larger sections of teacher and student verbal behavior (indirect influence and direct influence) are subdivided in order to make the total pattern of teacher-pupil interaction more meaningful. Indirect influence consists of four observation categories: accepting feeling, praising or encouraging, accepting ideas, and asking questions. Direct influence is divided into three categories: lecturing, giving directions, and criticizing or justifying authority. Student talk is divided into only two categories: responding to the teacher and initiating talk. All categories are mutually exclusive; yet together they are totally inclusive of all verbal interaction occurring in the classroom (Amidon and Flanders, 1967).

The Categories

The subdivisions of Flanders' interaction analysis scale of pupil-teacher verbal interactions are described below.

1. <u>Acceptance of feeling</u>. The teacher accepts children's feelings when he understands how children feel, that they have the right to have these kinds of feelings, and that he will not punish them for their feelings. These kinds of statements often communicate to children both acceptance and clarification of the feeling.

2. <u>Praise or encouragement</u>. Often praise is a single word: "good," "fine," or "right." Sometimes the teacher simply says, "I like what you are doing." Encouragement is slightly different and includes such statements as "continue," and "yes, tell me more about your idea." Also, included in this category are jokes that release tension, but not those that threaten students or are made at their expense.

3. <u>Accepting ideas</u>. This category is similar to the first category; however, it only incorporates acceptance of student ideas, not acceptance of expressed emotion. When a student makes a suggestion, the teacher may paraphrase the student's statement, restate the idea more simply, or summarize what the student has said.

4. <u>Asking questions</u>. This category includes only questions to which the teacher expects an answer from the pupils.

5. <u>Lecture</u>. Lecture is the form of verbal interaction that is used to give information, facts, opinions, or ideas to children. The presentation of material may be used to introduce, review, or focus the attention of the class on an important topic.

6. <u>Giving directions</u>. The decision about whether or not to classify the statement as a direction or command must be based upon the

degree of freedom that the student has in response to teacher direction.

7. <u>Criticizing or justifying authority</u>. A statement of criticism is one that is designed to change student behavior from nonacceptable to acceptable. Another group of statements that might be included in this category are those that might be called statements of defense or self-justification.

8. <u>Student-talk: response</u>. A student responds verbally or answers a question during verbal contact initiated by the teacher.

9. <u>Student-talk: initiation</u>. A student initiates verbal contact by raising his hand or by speaking to the teacher or to another pupil.

10. <u>Silence or confusion</u>. Periods of confusion in communication or periods of silence are classified in this category.

A series of steps in training observers was followed by the investigator. Amidon and Flanders (1967) outline these steps as: (1) memorizing the categories, (2) following a simple set of rules, and (3) practicing using audio tapes from various classrooms. After working on these tapes for six to ten hours, observers begin to develop the ability to make judgments easily and to categorize consistently (Amidon and Flanders, 1967).

Observer Reliability

Observer reliability was estimated by Scott's Coefficient. Scott's method is unaffected by low frequencies, can be adapted to percent figures, can be estimated more rapidly in the field, and is more sensitive at higher levels of reliability. Scott calls his coefficient "pi" and it is determined by the formulae below:

Formula 1. $\quad \pi = \dfrac{P_o - P_e}{1 - P_e}$

P_o is the proportion of agreement between observations made of the same teacher by different observers and P_e is the proportion of agreement expected by chance which is found by squaring the proportion of tallies in each category and summing these over-all categories.

Formula 2. $\quad P_e = \displaystyle\sum_{i=1}^{k} P_i^2$

In Formula Two, there are k categories and P_i is the proportion of tallies falling into each category. In Formula One, "pi" can be expressed in words as the amount that two observers exceed chance agreement divided by the amount that perfect agreement exceeds chance (Flanders, 1966).

Observation and Recording of Data

The observer records a sequence of category numbers which represent the categorized teacher-student statements. A recording is made once every three seconds for twenty minutes. These numbers are then recorded in a matrix (a table, ten columns by ten rows). The generalized sequence of teacher-pupil interaction can be examined readily in this matrix. A separate matrix is used for each lesson. By reporting the different kinds of statements in the form of percentages of the total interaction found in the matrix, the observer can develop a description of the classroom. In this manner the total amount of teacher-talk, pupil talk, silence or confusion can be computed. In order to determine the Indirect Ratio (I/D Ratio) of teacher behavior, the following formula is used:

Indirect (1-4) ÷ Direct (1-4) plus (5-7) = I/D Ratio

(1-4) and (5-7) represent the categories.

The Revised I/D Ratio is employed in order to find out the kind of emphasis given to motivation and control in a particular classroom. The formula for the Revised Indirect Ratio is as follows:

Indirect (1-3) ÷ Direct (1-3) plus (6-7) = Revised I/D Ratio

(1-3) and (5-7) represent the categories.

The two instruments described in this chapter comprise the instrumentation of this study. They were selected for the sole purpose of discovering the difference, if any, in teachers' pupil control ideology and their classroom verbal behavior, and the difference, if any, in the verbal behavior of their students. The procedures used in the study and the data from the study will be presented and analyzed in Chapter IV.

CHAPTER IV

PROCEDURES, ANALYSIS, AND TREATMENT OF DATA

This chapter describes the procedures used by the investigator to collect the data in this study. Also presented in this chapter are the tabulated results of data obtained from the instruments described in Chapter III. The data gathered in this investigation were used for the primary purpose of testing the following null hypotheses:

1. Direct influence in the classroom which is reflected by verbal interaction will not differ significantly between teachers who are custodial and teachers who are humanistic in their pupil control ideology.

2. Indirect influence in the classroom which is reflected by verbal interaction will not differ significantly between teachers who are custodial and teachers who are humanistic in their pupil control ideology.

3. Pupil verbal behavior in the classroom setting does not differ significantly between pupils taught by humanistic teachers or pupils taught by custodial teachers.

The data were collected through the use of the Pupil Control Ideology Form and through the use of the Flanders Interaction Analysis Scale. The rationale, purpose, and the content of these two instruments were presented in Chapter III.

Subjects

The sample for this study were twenty elementary school teachers employed by a Missouri school district. Several considerations were taken into account which resulted in the selection of the sample.

First, the district selected for this study offered a large enough elementary school teacher population (355) to permit adequate sampling. Second, the investigator's teaching and administrative experience at the elementary school level had been in the general geographic locale. A third consideration was the willingness of the administrative authorities of the district to participate in this study. The schools within the district represented a range in terms of socio-economic levels (lower-middle class to upper class) and in instructional arrangements (self-contained classrooms to team teaching), which was a fourth consideration.

Each elementary principal in the district received a personal telephone call to explain in general terms the focus of the investigation. The principal was then asked if he would permit his school to participate in the study. Having secured permission to proceed from the principal, an appointment was made to meet with the building faculty in order to administer the Pupil Control Ideology Form.

Of the fifteen elementary schools in the district, one was eliminated because of possible bias due to the writer's acquaintanceship with several members of the faculty, and two schools chose not to participate in the study. Twelve schools, representing 260 teachers, were included in the initial phase of this investigation.

Data Collection

In all schools included in the study, the PCI Form was administered by the investigator to the faculty members in a scheduled faculty meeting. After the instructions were given, the principal was excused from the room while the faculty completed their copies of the instrument.

The instructions given in each faculty meeting included the reading of the instructions printed on the instrument as well as the following statements:

1. No individual, school, principal, or district will be identified in the report of this study.

2. No one will see any of the responses except for the data processors at the Oklahoma State University Computer Center.

3. I cannot interpret any item on the instrument for you; each person is to respond to each item just as he reads it, and in light of his own situation.

4. Please do not talk to any other person while you are responding to the instrument.

5. When you have completed all the items in your booklet, give it to me and you are free to leave.

Responses were obtained from virtually all faculty members in the study. Forty-nine librarians, guidance counselors, physical education teachers, and kindergarten teachers responded to the instrument; however, their test data were not included in this investigation. The scores of the remaining 211 subjects were analyzed and from this analysis twenty teachers were selected to comprise the two groups in this investigation.

The ten teachers who scored the highest on the PCI Form were selected to comprise the custodial pupil control ideology group. The ten teachers who had the lowest scores on the PCI Form were selected to comprise the humanistic pupil control ideology group. (See Table I.)

• The mean PCI scores for these two groups were found to be significantly different. Information in Table I indicates a t value of 23.521 df = 18 was obtained. This value exceeds the tabled value of 3.922 for the .001 level of significance. (Popham, 1967, p. 145)

TABLE I

SUMMARY OF DATA FOR A t-TEST FOR SIGNIFICANT
DIFFERENCES BETWEEN THE TWO TEACHER GROUPS
FOR PUPIL CONTROL IDEOLOGY SCORES

Group A Custodial		Group B Humanistic	
Teacher	PCI Score	Teacher	PCI Score
1	62	11	28
2	65	12	31
3	65	13	32
4	66	14	34
5	66	15	35
6	66	16	36
7	67	17	36
8	68	18	37
9	71	19	37
10	73	20	37
N = 10	$\sum$A 669	N = 10	$\sum$B 343
	Mean $(\overline{A})$ 66.9		Mean $(\overline{B})$ 34.3

$t = 23.521$ $df = 18$ $p < .001$

Scoring The Instruments

Responses to the Pupil Control Ideology Form were tabulated and checked by hand, using a desk calculator. Data collected from the observers using the Flanders Interaction Analysis Scale were punched on IBM cards and tabulated on an IBM 360-50 computer using an original program designed by personnel at the Oklahoma State University Computer Center. Pupil Control Ideology scores as well as personal and professional data collected for each individual were also printed and tabulated as a total part of the computer program.

Since no prior hypotheses concerning demographic data were established in this study, no statistical tests of the data were made. A summary of these data are reported in Tables II and III.

Demographic data for the ten teachers comprising the custodial pupil control ideology group are reported in Table II.

Demographic data for the ten teachers who comprised the humanistic pupil control ideology are summarized in Table III.

The pupil-teacher interaction of each teacher in the two experimental groups was observed in the classroom three times. Three female observers were employed and trained to use the Flanders Interaction Analysis Scale to record the verbal behavior of the teachers and their pupils in the study. The observers were selected from mid-year education graduates from metropolitan St. Louis colleges and universities and were trained by the investigator in four three-hour sessions. The training sessions began with memorizing the Flanders' categories. The later sessions included listening to audio training tapes, practice in recording classroom interaction, and discussing certain "ground rules" covering the categorization of interaction.

TABLE II

DEMOGRAPHIC DATA FOR THE TEACHERS WHO COMPRISED
THE CUSTODIAL PUPIL CONTROL IDEOLOGY GROUP

Teacher	Sex	Grade Taught	Years Experience	Age Range
1	F	6	1	20 - 29
2	F	3	4	20 - 39
3	M	6	9	30 - 39
4	F	2	2	20 - 29
5	F	4	1	20 - 29
6	F	4	10	40 - 49
7	F	3	7	20 - 29
8	F	2	8	40 - 49
9	M	6	19	40 - 49
10	M	6	8	20 - 29

Mean Grade Level: 4   Mean Years Experience: 6   Mean Age: 33

TABLE III

DEMOGRAPHIC DATA FOR THE TEACHERS WHO COMPRISED
THE HUMANISTIC PUPIL CONTROL IDEOLOGY GROUP

Teacher	Sex	Grade Taught	Years Experience	Age Range
11	F	5	1	20 - 29
12	F	3	2	20 - 29
13	F	1	1	20 - 29
14	F	5	20	40 - 49
15	F	5	5	20 - 29
16	F	4	3	20 - 29
17	F	1	2	20 - 29
18	F	4	10	30 - 39
19	F	1	2	20 - 29
20	M	6	9	30 - 39

Mean Grade Level: 3   Mean Years Experience: 5.5   Mean Age: 29

Specific instructions were given to the observers when the study
was actually underway. Only language arts classes were to be observed
since this was a subject commonly taught by all the teachers in the
study. Additional instructions were given to the observers that
classes were not to be observed prior to or immediately after holidays,
school assemblies, or when a substitute teacher was in charge of the
class. The observers were not told why the teachers in the study were
being observed nor did they know the experimental identity of the
teachers. The actual recording of verbal interaction in the subjects'
classrooms was tallied every three seconds for 20 minutes on a sheet
that was specially designed for this study. (See Appendix B.)

Scott's coefficient (Flanders, 1966, pp. 13-22) was employed to
compute observer reliability prior to the investigation, once during
the investigation, and once after the investigation. (See Table IV.)

Scott's Coefficient

$$\pi = \frac{P_o - P_e}{1 - P_e}$$

Formula 1.

The study took place during February, March, and April, 1970.
The total length of the investigation was ten weeks. Eight weeks
elapsed between the first and second reliability estimates, and two
weeks elapsed between the second and third estimates.

TABLE IV

SUMMARY OF OBSERVER RELIABILITY DURING
THE COURSE OF THE INVESTIGATION

Observer	Prior	During	After
A x B	.887	.846	.869
A x C	.885	.833	.830
B x C	.879	.796	.799

Testing the Hypotheses

The three related hypotheses of the study were tested using the
test of significance of a difference between proportions (Guilford,
1965, pp. 185-187). Each hypothesis is stated and the result of the
test of significance of a difference between proportions follows it.
The level of confidence for $\bar{z}$ was set at the 0.05 level which required
a value that was greater than 1.96 for significance.

Test of Significance of a Difference
Between Proportions, $\bar{z}$

$$\bar{z} = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{2(P_o - P_e)}{N_i}}}$$

Formula 2.

Hypothesis I: Direct influence in the classroom which
is reflected by verbal interaction will not differ signifi-
cantly between teachers who are custodial and teachers who
are humanistic in their pupil control ideology.

To test this hypothesis, the total number of tallies of the categories containing the teachers' direct verbal statements were used in the analysis. Direct teacher verbal statements are contained in categories five through seven (lecture, giving directions, and criticizing or justifying authority). The proportion of direct teacher verbal statements was computed for the teachers in the custodial pupil control ideology group by dividing the number of tallies for direct teacher verbal statements by the total tallies in all the categories containing teacher talk, one through seven (5-7 $\div$ 1-7). This procedure was repeated for the teachers' direct verbal statements for the humanistic pupil control ideology group. The resultant quotients expressed the proportion of direct teacher verbal statements. The relevant data are presented in Table V.

TABLE V

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANCE
OF A DIFFERENCE BETWEEN PROPORTIONS FOR DIRECT
TEACHER INFLUENCE IN THE CLASSROOM

Group A Custodial	Group B Humanistic
Total Tallies Categories 5-7=6140	Total Tallies Categories 5-7=2621
Total Tallies Categories 1-7=8440	Total Tallies Categories 1-7=6063
Proportion of Direct = .727	Proportion of Direct = .432

z = 1.207   df = 10   Not Significant At The 0.05 Level of Confidence

The computed $\bar{z}$ for testing the first hypothesis was 1.207. With

10 degrees of freedom, this value was not significant at the .05 level.

Therefore, the first hypothesis was not rejected.

> Hypothesis II: Indirect influence in the classroom
> which is reflected by verbal interaction, will not differ
> significantly between teachers who are custodial and teachers
> who are humanistic in their pupil control ideology.

For this hypothesis it was necessary to compute the proportion of

the teachers' indirect verbal statements. This was accomplished by

dividing the total tallies for the categories concerning indirect

teacher statements by the total number of tallies for teacher talk

(Categories 1-4 ÷ Categories 1-7). Indirect teacher verbal statements

are contained in categories one through four (acceptance of feeling,

praise or encouragement, accepting ideas, and asking questions). The

relevant data for the testing of this hypothesis are contained in

Table VI.

TABLE VI

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANCE
OF A DIFFERENCE BETWEEN PROPORTIONS FOR INDIRECT
TEACHER INFLUENCE IN THE CLASSROOM

Group A Custodial	Group B Humanistic
Total Tallies Categories 1-4=2300	Total Tallies Categories 1-4=3342
Total Tallies Categories 1-7=8440	Total Tallies Categories 1-7=6063
Proportion of Indirect = .27	Proportion of Indirect = .55

$\bar{z}$ = 1.401   df = 10   Not Significant At The 0.05 Level of Confidence

For this hypothesis the computation of the test of a significance of a difference between proportions yielded a $\bar{z}$ value of 1.401. With 10 degrees of freedom, the $\bar{z}$ value was not significant. Therefore, according to the level of significance previously established, the hypothesis could not be rejected.

> Hypothesis III: Pupil verbal behavior in the classroom setting does not differ significantly between pupils taught by humanistic teachers or pupils taught by custodial teachers.

The final hypothesis was tested by utilizing the total tallies in categories eight and nine (pupil responses to teacher initiated interaction and pupil initiated talk). The total pupil-talk dimension is represented by these two categories. It was necessary to compute the proportion of pupil talk for each experimental group. This was achieved by dividing pupil-talk tallies for categories 8-9 by the total tallies in the verbal statement dimension categories 1-9 (8-9 $\div$ 1-9). The relevant data are presented in Table VII.

TABLE VII

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANCE OF
A DIFFERENCE BETWEEN PROPORTIONS FOR PUPIL
VERBAL BEHAVIOR IN THE CLASSROOM

Group A Custodial	Group B Humanistic
Total Tallies Categories 8-9= 3113	Total Tallies Categories 8-9= 6087
Total Tallies Categories 1-9=11,553	Total Tallies Categories 1-9=12,140
Proportion Pupil Talk = .269	Proportion Pupil Talk = .501

$\bar{z}$ = 1.06   df = 10   Not Significant At The 0.05 Level of Confidence

The computed $\bar{z}$ for testing this hypothesis yielded a value of 1.06. With 10 degrees of freedom the $\bar{z}$ value was not significant.

Supplementary Analysis of Data

In the preceding analysis, the three related null hypotheses were not rejected. The data that underwent statistical analysis were those contained in the larger sections of teacher and pupil verbal behavior. These sections were the indirect influence dimension (categories 1-4), the direct influence dimension (categories 5-7), and the pupil verbal behavior dimension (categories 8 and 9).

A supplementary analysis of the data was suggested by Flanders (1966) who stated that the 3-3 cell (teacher accepts and develops student ideas) is by far the most important in estimating the teacher's support of student participation. He further states:

> that an above average frequency in this cell often means that the teacher develops the ideas of students with considerable care . . . a mark of a truly indirect pattern of influence (Flanders, 1966, p. 26).

Flanders (1966, p. 4) states that direct influence "increases the active control of the teacher and often stimulates conformity and compliance." The most frequently used verbal statements in the direct influence pattern of verbal interaction are the statements contained in the 5-5 cell (lecture, giving facts or opinions about content or procedure).

Flanders (1966) also states that the 8-8 cell (pupil talk: response) and the 9-9 cell (pupil talk: initiation) indicate whether or not the pupils have the opportunity to develop their own ideas. A high loading in the 9-9 cell often indicates student-to-student communication and greater self-direction.

The statistical test chosen to make the supplementary analysis of the data was the t test for a significance of a difference between the humanistic and custodial pupil control ideology teacher groups. The pooled variance formula was used (Popham, p. 145).

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{n_1 + n_2 - 2}\right)\left(\frac{1}{n_1} \times \frac{1}{n_2}\right)}}$$

Formula 3.

A computer analysis of the 3-3 cell pattern for the two experimental groups revealed the data summarized in Table VIII. The resultant t value was 5.137. With 18 degrees of freedom, the t value was significant beyond the .001 level.

A computer analysis for the frequency of occurrences for the 5-5 cell was made. The data for this analysis are reported in Table IX. For the 5-5 cell (Table IX) the computed t value was 2.969. With 18 degrees of freedom, this value was significant beyond the .01 level of confidence.

A computer analysis for the frequency of occurrences for the 8-8 cells and the 9-9 cells was made. The relevant data are reported in Tables X and XI.

For the 8-8 cell (Table X) the computed t value was 0.239. With 18 degrees of freedom, the t value was found to be not significant.

The t value which was computed for the 9-9 cells (Table XI) yielded a value of 3.482. With 18 degrees of freedom, this value was significant at the .01 level.

TABLE VIII

A SUMMARY OF THE DATA FOR A TEST OF A SIGNIFICANT
DIFFERENCE BETWEEN TEACHER GROUPS FOR THE 3-3
CELL - ACCEPTING AND DEVELOPING STUDENT IDEAS

Group A Custodial		Group B Humanistic	
Teacher	Frequency of 3-3 Cells	Teacher	Frequency of 3-3 Cells
1	8	11	21
2	6	12	44
3	6	13	25
4	4	14	24
5	14	15	31
6	4	16	60
7	1	17	15
8	6	18	34
9	14	19	17
10	33	20	45
	ΣA = 96		ΣB = 316
N = 10	Mean ($\overline{A}$) 9.6	N = 10	Mean ($\overline{B}$) 33.3

t = 5.137   df = 18   Significant At The 0.001 Level of Confidence

TABLE IX

SUMMARY OF THE DATA FOR A TEST OF A SIGNIFICANT
DIFFERENCE BETWEEN TEACHER GROUPS FOR THE
5-5 CELLS - LECTURE, GIVING
FACTS OR OPINIONS

Group A Custodial		Group B Humanistic	
Teacher	Frequency of 5-5 Cells	Teacher	Frequency of 5-5 Cells
1	166	31	136
2	301	12	88
3	516	13	32
4	169	14	175
5	226	15	100
6	192	16	316
7	243	17	66
8	187	18	103
9	214	19	53
10	457	20	200
	Σ_A 2671		Σ_B 1269
N = 10	Mean $(\overline{A})$ 267.1	N = 10	Mean $(\overline{B})$ 126.9

t = 2.969   df = 18   Significant At The 0.01 Level of
Confidence

TABLE X

SUMMARY OF THE DATA FOR A TEST OF A SIGNIFICANT
DIFFERENCE BETWEEN TEACHER GROUPS FOR THE
8-8 CELLS - TEACHER INITIATED PUPIL TALK

Group A Custodial		Group B Humanistic	
Teacher	Frequency of 8-8 Cells	Teacher	Frequency of 8-8 Cells
1	115	11	11
2	96	12	23
3	131	13	162
4	30	14	19
5	23	15	78
6	251	16	121
7	214	17	141
8	53	18	100
9	100	19	228
10	47	20	99
	$\sum A = 1060$		$\sum B = 982$
N = 10	Mean $(\bar{A}) = 106.0$	N = 10	Mean $(\bar{B}) = 98.2$

t = 0.239   df = 18   Not Significant At The 0.01 Level of
Confidence

TABLE XI

SUMMARY OF THE DATA FOR A TEST OF A SIGNIFICANT
DIFFERENCE BETWEEN TEACHER GROUPS FOR THE
9-9 CELLS - PUPIL INITIATED PUPIL TALK

	Group A Custodial		Group B Humanistic
Teacher	Frequency of 9-9 Cells	Teacher	Frequency of 9-9 Cells
1	28	11	60
2	8	12	270
3	41	13	40
4	36	14	94
5	37	15	190
6	51	16	137
7	12	17	107
8	36	18	121
9	122	19	121
10	40	20	328
	$\Sigma A = 411$		$\Sigma B = 1468$
$N = 10$	Mean $(\overline{A}) = 41.1$		Mean $(\overline{B}) = 146.8$

$t = 3.482$ $\qquad$ $df = 18$ $\qquad$ Significant At The 0.01 Level of Confidence

Summary

The three major related null hypotheses of the present study were tested and the results were summarized in this chapter. The null hypotheses were tested using the data in the larger sections of teacher and pupil verbal interaction and were not rejected.

Supplementary analyses of four selected interaction cells were made. The teacher groups were found to be significantly different for three of these interaction cells, accepting and developing student ideas (3-3 cell); lecturing and giving facts or opinions concerning content or procedures (5-5 cell); and student initiated pupil verbal behaviors (9-9 cell). No significant difference was found between the teacher groups for one interaction cell, teacher initiated student talk (8-8 cell).

Chapter V presents the findings of the study, the conclusions drawn from the findings, and recommendations of areas for further research.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS,

AND RECOMMENDATIONS

This study was designed to determine whether the pupil control orientation of teachers differentially affected their operational behavior in the classroom setting.

Summary

A review of related literature seems to reveal two parallel patterns of thought in relation to the focus of this study: (1) Pupil control is a central concern to educators, and one variable upon which a measure of teaching effectiveness is based; (2) Observational techniques, employed to analyze teaching methodologies, have become accepted methods of recording teacher and pupil behavior in the classroom. In light of these parallel psychosociological considerations, an investigation of this nature seemed to have merit.

Two instruments of analysis were used. The Pupil Control Ideology Form (PCI) was employed to identify the teachers' pupil control ideology. The Flanders Interaction Analysis Scale was used to identify patterns of teaching behavior by observing and recording the teacher pupil interaction in twenty elementary school classrooms.

The selection of the participating school district was based upon several factors: (1) a teacher population large enough to permit

adequate sampling; (2) geographic locale; (3) an expressed willingness to enter into the investigation; and (4) a diversity of socioeconomic levels and instructional arrangements. The twenty teachers whose classroom verbal behavior was studied were selected by their PCI scores from an original population of two hundred and sixty. The ten teachers who scored the lowest on the PCI Form comprised the humanistic pupil control ideology group, whereas the ten teachers who scored the highest on the PCI Form comprised the custodial pupil control ideology group.

The major objective of the study was to test the following null hypotheses: There are no significant differences between teachers who hold a humanistic and those who hold a custodial pupil control ideology in their use of indirect verbal behavior, direct verbal behavior, or in the type of verbal behavior employed by their pupils.

The data were analyzed through a test of a significant difference between proportions and a test of a significant difference between groups. The level of significance was set at the 0.05 level of confidence.

Findings

The findings of this study considered to be the most significant were the following:

1. The difference for the proportion of indirect verbal behavior between teachers who hold a custodial pupil control ideology and teachers who hold a humanistic pupil control ideology was not significant.

2. The humanistic and custodial pupil control ideology teacher groups differed significantly in the frequency of use of verbal behaviors categorized as accepting and developing student ideas (3-3 cell).

An inspection of the means for both groups of teachers revealed that the humanistic pupil control ideology group of teachers accepted and developed student ideas a significantly greater number of times than did their custodial pupil control ideology teacher counterparts.

3. No significant differences for the proportion of direct verbal behavior were found to exist between the humanistic pupil control ideology and custodial pupil control ideology groups of teachers.

4. The humanistic and custodial pupil control ideology teacher groups differed significantly in the frequency of use of verbal behaviors categorized as lecturing, and giving facts or opinions concerning content or procedures (5-5 cell). An inspection of the means for both groups revealed that the custodial pupil control ideology group of teachers lectured, gave facts or opinions concerning content or procedures a significantly greater number of times than did the humanistic pupil control ideology teacher group.

5. There was no significant difference for the proportion of verbal behaviors between the humanistic pupil control ideology teacher group and the custodial pupil control ideology teacher group.

6. No significant difference was found to exist between the humanistic pupil control ideology and the custodial pupil control ideology groups of teachers for the incidence of pupil talk initiated by the teacher.

7. The pupils in the classrooms of the humanistic and custodial pupil control ideology teachers in this study differed significantly in the frequency of use of verbal behaviors categorized as pupil initiated verbal behaviors (9-9 cell). An inspection of the means for both groups revealed that the pupils in the classrooms of the humanistic

pupil control ideology teacher group initiated a significantly greater number of verbal behaviors than did the pupils in the classrooms of the custodial pupil control ideology teacher group.

Conclusions

The following conclusions have been drawn from the findings of this study:

1. The pupil control ideology of the teachers in this study appears to be reflected in their teaching methodology.

    A. Teachers who are humanistically oriented in their pupil control ideology appear to be more concerned with feelings, emotions, and human relations in their verbal interactions with students.

    B. On the other hand, teachers who hold a relatively custodial pupil control ideology appear to be more concerned with content, subject matter, and presenting facts and opinions than their humanistic pupil control ideology counterparts.

2. The pupil control ideology of teachers appears to be reflected in the degree to which they expect compliance and conformity to rules and authority on the part of their pupils.

    A. The humanistic group of teachers was apparently more concerned with the development of independent thought and action on the part of pupils as evidenced by the kind and type of verbal behaviors they encouraged.

    B. The custodial group of teachers was apparently more concerned with controlling and limiting the kinds of

responses elicited from pupils.

3. Children's classroom verbal behavior appears to be determined, in large measure, by their teachers.

    A. Children in classrooms of teachers who hold a relatively humanistic pupil control orientation are apparently permitted a wider latitude of freedom in initiating or making verbal statements. These teachers apparently seek to actively engage their students in learning by creating a classroom environment which encourages and supports their spontaneous participation.

    B. Children in classrooms of teachers who hold a custodial pupil control orientation appear to be more prone to make statements when the teacher determines pupil responses are appropriate.

Theoretical Considerations

In education today, a quiet revolution is taking place. It is not the revolution that is related only on the periphery to such innovations as systems analysis, computer assisted instruction, or advanced organizational arrangements. The real revolution is not one of materials, ideas, and machinery, but one that encompasses people and their feelings. It is primarily aimed at helping children reach adulthood without many of the crippling fears, suspicions, and hypocrisies so common in our elementary schools today.

A totally new orientation toward teaching is becoming increasingly important for educators. It can be no longer appropriate to neglect or ignore the affective side of instructional methodology which

encompasses feelings, values, attitudes, and human emotional behavior. But, most educators as yet are just simply incapable of trusting themselves and trusting children to the degree where they are willing to admit that learning is so vastly important and teaching is so unimportant that teachers should be willing to allow students to learn, which is quite a different approach than trying to make them learn. The latter approach seemingly has not succeeded in the past and is not succeeding today. Yet, successful teachers in every age have employed approaches similar to the ones currently being emphasized in the area of affectively based classroom relationships. Many teachers, today, accept this philosophy in theory, but only a few are beginning to dare to put it into practice.

This study provides some insights into some aspects of the problem of pupil-teacher affective relationships. The evidence would seem to clearly indicate that teachers who hold a humanistic pupil control orientation tend to create, through their verbal behavior, classroom climates in which they encourage, praise, and support pupil verbal behavior.

On the other hand, teachers who hold a custodial pupil control orientation tend to exert control over their pupils' verbal behaviors. This teacher group evidenced a greater number of verbal behaviors characterized as subject and content centered. While they were controlling what was being taught, these teachers also tended to control how it was going to be taught by allowing student interaction to take place only when it was elicited.

Much of the research literature concerning classroom social interaction indicates that pupils, whose teachers' classrooms are

permissive, tend to achieve better, produce more written work, and tend to exert social control over themselves. Recent literature concerning programs that are affectively based, yet founded in the learning theories of Dewey, Piaget and Montessori, are being watched with increasing interest by educators in the United States. These programs are in operation in the British Infant and Primary Schools and are developing in elementary schools in North Dakota and Canada. As yet, most administrators, teachers, and parents of children in public schools in this country have yet to be convinced that this avenue is an acceptable approach.

Teachers are participating in and taking responsibility for designing and guiding experiences which involve and promote the cognitive and affective development of pupils in the schools. Within this context, this conceptual orientation holds schools and teachers accountable to acknowledge the total life of the child, his home, and family; his personality and emotions; and his cultural patterns and degree of socialization. It is important, then, that a teacher be willing to accept what a child is and learn to adapt to each child's uniqueness. Teachers must be willing to continually strive to understand the dynamics of teacher-child interaction and the consequence of each upon the other. Teachers can accomplish this through a continual appraisal of his and the child's feelings and thoughts as manifested through their behaviors.

Certain implications for teacher in-service education and teacher preparation institutions would seem to grow out of the findings of a study of this nature. An increased emphasis by writers in the field and by the institutions of higher education upon understanding of child

growth and development and intellectual development has undoubtedly

been reflected in the attitudes of teachers regarding pupil control.

However, the significant differences between the two groups of teachers

in this study in their pupil control ideology and instructional method-

ology would indicate that the literature and college curricula are not

necessarily effective in bringing about a change in attitudes and

behaviors on the part of the teachers which are consistent with what

they know.

There must be a sustained effort through a program of continuing

education, whether it be district in-service or university follow-up

programs, to assist the teacher in understanding the dynamics of child

behavior. Teachers must be able to understand their own thoughts and

feelings in order to help children approach that which is their right--

freedom to learn.

Recommendations

The data from this study would seem to suggest that elementary

school teachers should become increasingly aware of the kinds of influ-

ence they exert over pupils in the classroom. This goal might be

accomplished by a carefully designed in-service education program which

is aimed, primarily, at helping teachers determine their own teaching

behavior and interpersonal relationships in the classroom through

careful analysis of their teaching strategies and methodologies.

A teacher's effectiveness in the classroom is often considered in

light of his ability in pupil control. Although it is evident that

limits need to be set for children concerning behavior in the class-

room, the data from this study would seem to indicate that pre-service

programs are needed which can be of assistance to individuals who are
preparing for teaching careers. A program of this type might help them
become sensitive to the needs of children and help them develop the
skills necessary to maintain a dynamic balance between freedom and
control in the classroom. Hopefully, these experiences can lead would-
be teachers towards creating truly effective learning environments.

Recommendations for Further Research

One important characteristic of a research study is the questions
that it generates. Additional empirical investigations can assist in
substantiating the validity of the results and conclusions of this
study by concentrating on various aspects of the pupil control orienta-
tion of teachers and upon the verbal interaction of pupils and teach-
ers. The final section of this inquiry will delineate some of the
areas that would seem pertinent and important for further investigation:

1. A research investigation that attempts to analyze a larger
portion of teacher-pupil verbal interaction should be made. A smaller
sample of teachers observed over a longer period of time would attempt
to validate the assumption that the proportion of teacher and pupil
verbal behaviors for the two teacher groups would be significantly
different.

2. Attempts should be made to determine the relationship if any
between administrative and supervisory personnel and their perceptions
of "ideal" pupil control orientation of teachers and verbal interaction
in the classrooms of selected schools with "humanistic" and "custodial"
pupil control ideology.

3. Some investigations should attempt to determine the differ-
ence, if any, between socio-economic level of schools for the propor-
tion of indirect-direct classroom verbal interaction and the frequency
of tallies of interaction cells.

4. A research investigation should be made to assess the academic
achievement of pupils whose teachers are either humanistic or custodial
in their pupil control ideology.

5. Additional investigations need to be made to determine whether
a relationship exists between humanistic or custodial pupil control
orientation of teachers or indirect-direct verbal behavior and the
semester grades they record for students.

6. A study should attempt to determine whether demographic vari-
ables such as teacher, age, education, and years of experience relate
to indirect or direct verbal behavior in the classroom.

7. Further research should be attempted to identify additional
dimensions of the belief systems of teachers which relate to their
operational classroom behavior.

As research investigations continue to produce additional informa-
tion concerning how teachers' belief systems and how other teacher
characteristics affect the learning of children, and these pieces of
information are interwoven into a pattern that indicates a complex of
highly interrelated behaviors, generalizations concerning the teaching
act can be made. The over-all effect of these investigations will be
to contribute to the understanding of the teacher of his relationship
with children in the classroom learning situation. This should be the
major direction of research in education.

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APPENDIX A

INSTRUMENTS

PUPIL CONTROL IDEOLOGY FORM

On the following pages a number of statements about teaching are presented. Our purpose is to gather information regarding the actual attitudes of educators concerning these statements.

You will recognize that the statements are of such a nature that there are no correct or incorrect answers. We are interested only in your frank opinion of them.

Your responses will remain confidential, and no individual or school will be named in the report of this study. Your cooperation is greatly appreciated.

INSTRUCTIONS: Following are twenty statements about schools, teachers, and pupils. Please indicate your personal opinion about each statement by circling the appropriate response at the right of the statement.

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	It is desirable to require pupils to sit in assigned seats during assembles.	SA	A	U	D	SD
2.	Pupils are usually not capable of solving their problems through logical reasoning.	SA	A	U	D	SD
3.	Directing sarcastic remarks toward a defiant pupil is a good disciplinary technique.	SA	A	U	D	SD
4.	Beginning teachers are not likely to maintain strict enough control over their pupils.	SA	A	U	D	SD
5.	Teachers should consider revision of their teaching methods if these are criticized by their pupils.	SA	A	U	D	SD
6.	The best principals give unquestioning support to teachers in disciplining pupils.	SA	A	U	D	SD
7.	Pupils should not be permitted to contradict the statements of a teacher in class.	SA	A	U	D	SD

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
8.	It is justifiable to have pupils learn many facts about a subject even if they have no immediate application.	SA	A	U	D	SD
9.	Too much pupil time is spent on guidance and activities and too little on academic preparation.	SA	A	U	D	SD
10.	Being friendly with pupils often leads them to become too familiar.	SA	A	U	D	SD
11.	It is more important for pupils to learn to obey rules than that they make their own decisions.	SA	A	U	D	SD
12.	Student governments are a good "safety valve" but should not have much influence on school policy.	SA	A	U	D	SD
13.	Pupils can be trusted to work together without supervision.	SA	A	U	D	SD
14.	If a pupil uses obscene or profane language in school, it must be considered a moral offense.	SA	A	U	D	SD
15.	If pupils are allowed to use the lavatory without getting permission, this privilege will be abused.	SA	A	U	D	SD
16.	A few pupils are just young hoodlums and should be treated accordingly.	SA	A	U	D	SD
17.	It is often necessary to remind pupils that their status in school differs from that of teachers.	SA	A	U	D	SD
18.	A pupil who destroys school material or property should be severely punished.	SA	A	U	D	SD
19.	Pupils cannot perceive the difference between democracy and anarchy in the classroom.	SA	A	U	D	SD
20.	Pupils often misbehave in order to make the teacher look bad.	SA	A	U	D	SD

INFORMATION SHEET

INSTRUCTIONS: Please complete this form by checking the appropriate boxes and filling in blanks where indicated.

1. Sex
( ) Male ( ) Female

2. Age
( ) 20-29 years ( ) 30-39 years ( ) 40-49 years
( ) 50-59 years ( ) 60-69 years

3. Present position (specify as indicated)
( ) Elementary Teacher (please specify level) _____
( ) Other (please specify position) _____

4. Experience as an educator (as of the end of this academic year)

_____years as a teacher

_____years as a principal, supervising principal, or superintendent

_____years as a guidance counselor

_____years, other (please specify position) _____

5. Amount of education

( ) Less than Bachelor's degree
( ) Bachelor's degree
( ) Bachelor's degree plus additional credits
( ) Master's degree
( ) Master's degree plus additional credits
( ) Doctor's degree

6. Undergraduate preparation
( ) Major within the field of education
( ) Major in area outside the field of education

7. Graduate preparation
( ) Major within the field of education
( ) Major in area outside the field of education.

FLANDERS CATEGORIES FOR INTERACTION ANALYSIS

TEACHER TALK	INDIRECT INFLUENCE	1.* ACCEPTS FEELING: accepts and clarifies the feeling tone of the students in a nonthreatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included. 2.* PRAISES OR ENCOURAGES: praises or encourages student action or behavior. Jokes that release tension, not at the expense of another individual, nodding head or saying, "um hm?" or "go on" are included. 3.* ACCEPTS OR USES IDEAS OF STUDENT: clarifying, building, or developing ideas suggested by a student. As a teacher brings more of his own ideas into play, shift to category five. 4.* ASKS QUESTIONS: asking a question about content or procedure with the intent that a student answer.
	DIRECT INFLUENCE	5.* LECTURING: giving facts or opinions about content or procedure; expressing his own ideas, asking rhetorical questions. 6.* GIVING DIRECTIONS: directions, commands, or orders to which a student is expected to comply. 7.* CRITICIZING OR JUSTIFYING AUTHORITY: statements intended to change student behavior from nonacceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference
STUDENT TALK		8.* STUDENT TALK--RESPONSE: a student makes a predictable response to teacher. Teacher initiates the contact or solicits student statement and sets limits to what the student says. 9.* STUDENT TALK--INITIATION: talk by students which they initiate. Unpredictable statements in response to teacher. Shift from 8 to 9 as student introduces own ideas.
		10.* SILENCE OR CONFUSION: pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer.

*There is NO scale implied by these numbers. Each number is classificatory, it designates a particular kind of communication event. To write these numbers down during observation is to enumerate, not to judge a position on a scale.

INTERACTION ANALYSIS
OBSERVATION RECORDING SHEET

DATE_____TIME_____TEACHER'S NAME_____

SCHOOL_____GRADE LEVEL_____

START
HERE

↓

MATRIX

	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
TOTAL										
%										

Matrix Total

I/D Ratio = _____   Extended   3-3 Cell = _____
                             Indirect = _____
Revised   9-9 Cell = _____
i/d Ratio = _____   Extended
                             Direct   = _____   Vicious
i/d Row 8 = _____   Circle = _____
                             Extended
i/d Row 9 = _____   i/d   = _____

TEACHER TALK _____   Student Talk_____   s/t _____

APPENDIX B

FLANDERS OBSERVATION DATA

FLANDERS OBSERVATION DATA
TEACHER GROUP A (CUSTODIAL)

Teacher Number	Categories									
	1	2	3	4	5	6	7	8	9	10
1	8	55	24	157	377	97	73	264	143	211
2	0	58	47	158	463	130	45	145	51	273
3	0	44	22	164	648	56	60	215	80	192
4	4	55	27	142	414	115	47	134	88	402
5	5	64	38	182	523	120	18	133	107	321
6	7	55	29	57	585	50	53	376	83	128
7	2	52	30	150	416	106	14	381	62	240
8	2	66	26	126	415	139	21	172	116	271
9	4	45	57	56	369	109	13	171	162	176
10	10	27	68	177	605	38	31	150	80	99
Total:	42	521	368	1369	4815	960	375	2141	972	2313

FLANDERS OBSERVATION DATA
TEACHER GROUP B (HUMANISTIC)

Teacher Number	Categories									
	1	2	3	4	5	6	7	8	9	10
1	22	134	89	63	289	72	45	78	399	235
2	20	136	83	140	176	48	9	104	506	181
3	31	84	81	120	82	71	2	332	388	287
4	18	55	71	95	298	92	14	168	214	188
5	21	96	136	157	198	68	3	268	319	117
6	33	92	119	83	228	58	2	232	515	80
7	29	100	89	111	158	35	9	290	242	228
8	11	91	117	94	163	54	7	260	348	141
9	14	73	32	176	102	97	14	390	350	151
10	42	153	97	134	294	29	4	187	497	149
Total:	241	1014	914	1173	1988	624	109	2309	3778	1757

VITA

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