STUDENT INFLUENCE UPON THE TEACHER: THREE CASE STUDIES AND THEIR THEORETICAL IMPLICATIONS FOR A BIDIRECTIONAL INTERACTION MODEL

ROBERT LLOYD YOUNG

Student Influnce upon the Teacher: Three Case Studies and Their Theoretical Implications for a Bidirectional Interaction Model

BY

A thesis submitted to the School of Graduate Studies in partial fullfillment of the requirements for the Degree of Master of Education

Department of Educational Psychology
Memorial University of Newfoundland

August 1984

St. John's Newfoundland

Abstract

The purpose of this study was to examine student influence upon the teacher within the context of a bidirectional model of interaction. The possibility of using the teachers' motivational structure as a means of explaining and predicting the occurence of student influence was also considered.

The theoretical framework for the study was developed from a review of the literature. The key components of the model were: the teachers' predispositions, including their motivational structure, the objective situation, and the definition of the situation. Presumably, the teachers' behavior would be controlled by their definition of the situation, which would be a function of the predispositional structure and the objective situation.

The interaction between the teacher and the students in three elementary classrooms was studied. These teachers were chosen from a sample of 54 teachers, who had first been categorized into three groups, on the basis of a Q-Sort. Thus, there was one teacher to represent each of the categories: significant others motivated, student motivated and growth motivated. A case study of each class was then conducted.

The Q-Sort, developed to help choose teachers, proved to be effective for identifying teachers' predispositions toward categories, but proved inefficient in discriminating teachers' predominant category.

The results of the study indicated that students did influence the interaction in classrooms, and further indicated that there was a difference in how this influence occurred. However, it proved difficult to predict student influence using

the psychological constructs of the three motivational types. In part, this was because teachers were not purely any of the three categories. It was more plausible to rank student behaviors in order of importance and then predict student influence on this basis.

Acknowledgements

I would like thank the following people:

- Dr. William Spain, thesis supervisor, for his time, advice and encouragement.

- Gwen Brokenshire for her advice and help during the development and administration of the Q-Sort used in this study.

- The three teachers who volunteered to allow extended observation of their classroom and generously gave of their time to be interviewed.

- My wife, Karen, for her encouragement and endless editorial advice -- a very special thank-you.

Table of Contents

List of Tables

List of Figures

Chapter 1
OVERVIEW

1.1. Purpose of study

The purpose of this study was to observe classroom interaction patterns and to find evidence of student influence on the teacher. More specifically, the study compared and contrasted interaction patterns and student influence on teachers with different motivational systems.

Hence, the major factors under consideration in this study were (1) teacher motivational systems, (2) teacher behavior, and (3) pupil behavior.

1.2. Rationale

1.2.1. The need for a bidirectional view of classroom interaction.

While not the only goal of education, academic achievement is certainly one of the primary goals. Because of this, a great deal of research has been generated which focuses on the link between academic achievement and classroom climate (Rosenshine, 1979). Traditionally, research in this area has studied how the teacher engineers various factors of the classroom to create the optimum conditions for learning to occur. This research has shown that teachers can alter outcomes according to the way they structure the class, the way they control it and the content they introduce to it (Crocker et al, 1976). On the basis of this and other research (Brophy, 1979, and Rosenshine, 1979), it has been shown that a teacher who operates the classroom in a businesslike manner and engages students in on-task behavior will foster better achievement gains. This research

has found that teacher behavior influences the whole classroom milieu, which in turn influences the academic achievement of the students.

One of the underlying assumptions of this research has been that students function largely in a reactive capacity to teachers within the context of the classroom (Fiedler, 1975). Some researchers have come to feel that this interpretation of interaction in the classroom is not adequate and have considered instead, a bidirectional interaction model (Fiedler, 1975; Klien, 1971; Noble and Nolan, 1976; and Randhawa, 1980). These researchers have produced evidence which shows, that while teachers do influence students, students also influence teachers. This is an important consideration, as it may be a factor in explaining why, often, teachers fail to achieve optimum conditions for learning.

1.2.2. Motivational structure as a basis of influence

Given that students can influence teacher behavior, it is necessary to gain an understanding as to what sorts of behaviors will be influencial in modifying teacher behavior. To help in this understanding, it is useful to consider teacher motivation in the theoretical framework of the "social learning theory" of Bandura and Walters (1964). They contend that learning of appropriate behaviors requires a model, and, more important in the context of this study, contingent reinforcement of the behaviors.

Assuming that teachers have fundamental needs as formulated by Maslow (1970), positive reinforcement can be defined as satisfaction of these needs and negative reinforcement can be defined as deprivation of these needs. Within this model of motivation, a teacher is considered to have two types of needs: deficiency needs and growth needs.

Deficiency needs are arranged in a hierarchy with physiological needs at the bottom. Safety needs, acceptance needs, and self-esteem needs are successively higher in the hierarchy. According to Maslow (1970), these needs are fulfilled

primarily through social interaction and are necessary to maintain psychological health.

Growth needs include self-acturalization and aesthetic needs, and are satisfied through the activity itself, as the person engages in given tasks. The fulfillment of these needs comes from the actual doing of the deed. The source of satisfaction is internal to the person. According to Maslow (1970), satisfaction of these needs is not necessary to maintain psychological health. In most cases, for a person to engage in activities related to meeting growth needs, the deficiency needs are already being met.

Thus a student could influence his/her teacher by contingent reinforcement of teacher behaviors. Reinforcement might be seen as student behaviors which enhance or hinder satisfaction of the teacher's deficiency and/or growth needs.

1.2.3. Interactive model

Given that findings by Fiedler (1975), Klien (1971) and others have indicated that there is a two-way interaction between students and teachers, then the next consideration is "how" teachers and students influence each other. To facilitate understanding of this social phenomenon, it is helpful to consider this problem within an interactive model which can be applied to a classroom. Such a model has been provided by Stebbins (1975). His theory contains three major constructs.

First, there is what Stebbins (1975) termed the "objective situation" which is "the immediate social and physical surroundings and the current physiological and psychological state of the actor" (p.6). In this case, it would include the observable behavior of the students and the teacher. Such behavior would be capable of communicating meaning to another person. This could be verbal or non-verbal in nature.

The objective situation will be different for each person involved. Even

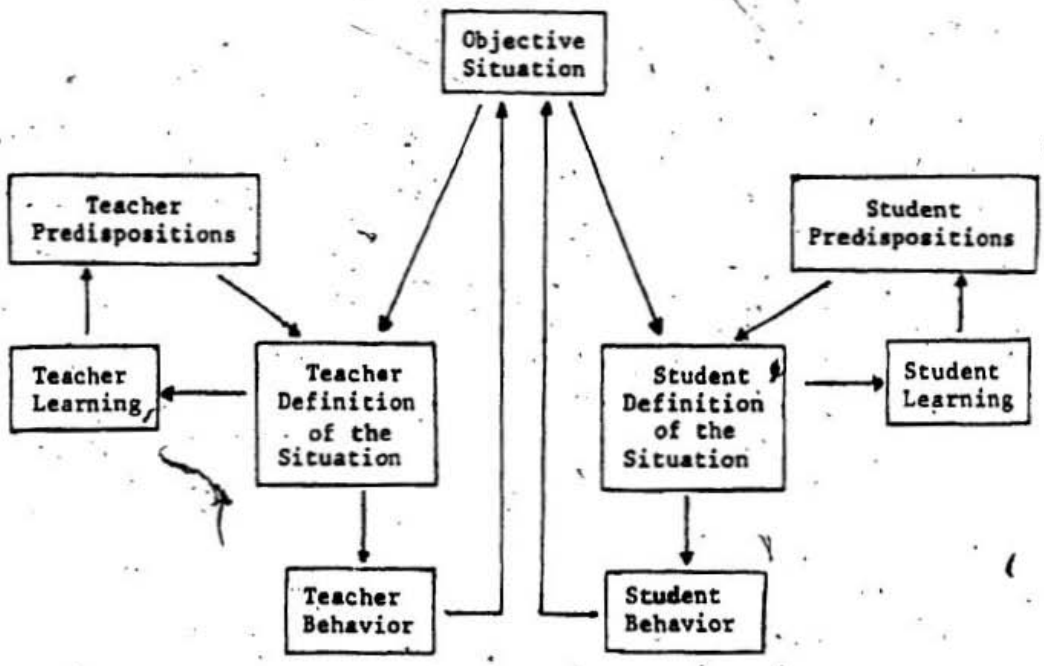


Figure 1: Flowchart of the bidirectional model

though the classroom could be considered a common environment, influences outside the classroom will influence classroom events. For example, statements made by teachers or the principal to a teacher have an impact on what occurs in the classroom; yet, these influences are not necessarily evident to students.

The second construct is what Stebbins (1975) has referred to as "predispositions". He has stated that they "equip us with specific, usually habitual, views of the world and guide behavior in the immediate present" (p.12). They are somewhat synonomous to the beliefs, expectancies and attitudes of a person (Jablonski, 1983).

The definition of the situation is the third contruct. Stebbins (1975) used this term to refer to the interpretation of the "interrelation of the activated predispositions and the elements of the objective situation". This is his term for the person's perception of the objective situation.

The definition of the situation would then guide subsequent behaviors of the person. Findings by Dunkin and Biddle (1974) and Brophy (1979) can be seen to support this, though they used different terminology.

1.2.4. The teachers' decision-making process

Next, the mediational process of the person must be considered. A given behavior by one person is observed and then processed by the other before a reaction occurs. Jablonski (1983) referred to this mediational process as "decision-making". Each time, the person has a number of options which can be chosen. For example, Hyman (1980) listed sixteen options available to teachers when fielding student questions. The teacher has to make a decision as to which option to exercise. Jablonski stated: "Such a definition of the situation would become the pivot for the decision-making process and would be the antecedent to teacher behavior" (p.3).

So, within this model, one person would influence the other person by

performing an overt behavior which became part of the objective situation. This in turn would be observed by the other person and through a perceptual process, in which the observed behavior interacts with that person's predispositions, the situation would be defined. This definition of the situation would be antecedent to the person's behavior. This mediational process would be true for both teachers and students.

In addition, the person could be influenced by a change in his beliefs and attitudes. This also would influence the definition of the situation and thus the person's behavior. This potentially has great significance in that different sets of predispositions will result in different behaviors.

1.2.5. The role of the teachers' motivational structure in this model

How teachers defines a situation as meeting their needs will influence how they behave (Jablonski, 1983). This will depend on what they have learned from their past experiences. According to what they have had reinforced, and by whom they have been reinforced, an expectancy for current situations will be formed.

In such a model, motivation would be a part of the person's predispositional structure. Bandura (1977) wrote about expectations of future consequences as motivators. He considered these incentives to be hierarchically ordered in a manner analogous to Maslow's hierarchy of needs. Jablonski (1983) has also noted in her review of the literature that many authors have suggested that predispositions are organized in a hierarchical fashion.

Expectancies about who fulfills needs, and on what behaviors needs fulfillment is contingent on, are part of this predispositional structure. As such, it is part of the basis upon which decisions are made.

Potential sources of need satisfaction would be family and friends, work collegues, or students. These sources of deficiency needs satisfaction can be

placed into two categories pertaining to the classroom: (1) students and (2) significant others. Thus teachers can be categorized as either perceiving students as their primary source of deficiency need satisfaction or perceiving significant others as their primary source of deficiency need satisfaction. Such perceptions may result in their finding different student behaviors reinforcing.

A third category of teachers must also be considered. These are teachers who are primarily growth motivated.

1.2.6. The nature of student influence within this theoretical framework

Viewing classroom interaction in this theoretical framework allows one to project the manner in which students would influence teachers.

If students are seen by teachers as the primary sources of need satisfaction, then satisfaction or deprivation of deficiency needs by students will be strong reinforcers. The teacher will attempt to create a relationship in which students satisfy needs. This type of teacher would likely be the most influenced by students.

This sort of individual will attempt to meet the need to feel accepted and to enhance esteem through interaction with students. Demonstrations of warmth toward the teacher by the students will be reinforcing. Student-initiated contact or, in the case of negative control, avoidance of contact with the teacher will be reinforcing. Praise and approval of the teacher's classroom structure, control and content will also be reinforcing. In general, any social reinforcement which, positively or negatively, affects the teacher's feeling of acceptance and esteem will potentially be influential.

If significant others are a primary source of needs satisfaction then the teacher will attempt to operate the classroom in a manner which elicits reinforcement from this group. In this case, the behavior of the student in the

classroom is an indirect means of needs satisfaction. The teacher will operate the class according to norms which significant others deem appropriate.

Students can influence the teacher by complying or not complying with these norms. This may mean keeping quiet, staying on-task, showing interest in academic matters, and behaving in socially appropriate ways. In short, by exhibiting behaviors characteristic of student types which research has shown teachers to value -- for example, compliant, achievement oriented, and non-disruptive (Brophy and Good, 1974) -- students influence their teachers.

A third category arises if the teacher is motivated by self-actualization and aesthetic needs. If this is the case, then the incentive comes from the satisfaction of teaching itself. To some extent this should neutralize external controls, though not entirely. The students' response to the presentation of material or teaching techniques will be a gage by which teachers determine the effectiveness of what they are doing. The feedback does not necessarily satisfy a need of the teacher, but it does give the teacher information about the effectiveness of the teaching process. For instance, through negative reinforcement such as talking, restlessness, and inattentiveness when the task is one with which they are not comfortable, students can influence the teachers' decisions.

Whichever of the categories teachers fall into, they will be influenced by the students. The difference will be in the degree of influence, the type of behaviors which will influence the teacher and the nature of teacher response to these behaviors.

1.2.7. Summary

In the context of a bidirectional interaction model, the teacher's behavior can potentially be influenced by student behaviors, or changes in the teacher's belief and attitude system. By influencing teacher's behavior, students can affect their academic outcomes. For example, if a student is trying to meet the need for

attention from the teacher and attempts this by doing a good job on a work assignment, that student is engaging in behavior which will result in improved achievement. On the other hand, if the student gains attention by behaving in a disruptive manner and succeeds in engaging the teacher in off-task behavior, the academic outcome will be affected in a negative direction.

Conceptualizing classroom interaction as bidirectional, and as varying according to the motivational structure of the teacher has major implications for educational research and teaching. Researchers and teachers need to recognize that student input into classroom interaction is a variable which affects the outcomes of the process. In addition, researchers and teachers must become more aware of teachen motivational structures and how they affect the process of student influence. In the context of such a model, these variables are significant in that they influence the learning process as it occurs in the classroom.

1.3. Definition of terms

This section provides definitions of the terms used in this study to refer to behaviors observed and catagories of students and teachers.

1.3.1. Categories of behavior

On-task: Any action which pertains to the task or activity of immediate concern in the classroom.

Off-task: Any action which is not related to the task or activity of immediate concern in the classroom.

Attending: The student's eye or body orientation is toward the teacher or task, or the student's behavior indicates involvement in the ongoing classroom activity.

Disruptive: Any pupil behavior which elicits an off-task response from the teacher.

Positive Behavior: Student's teacher-directed behavior which the teacher considers to be desirable.

Negative Behavior: Student's teacher-directed behavior which the teacher considers to be undesirable.

Pupil-initiated: Teacher-directed behavior by a student which occurs when that student is not specifically called upon or designated by the teacher.

Teacher-intitiated: Teacher-directed behavior by a student which results from questions or commands from the teacher.

1.3.2. Categories of motivating behavior

Accepting: Behavior which is generally facilitative in nature involving warmth, positive regard and understanding.

Esteem-enhancing: Behavior of an evaluative nature aimed at enhancing the person's sense of worth or sense of pride in task involvement and accomplishment.

Interest-providing: Behavior aimed at providing interesting and fulfilling activities to the parties involved.

Direct: Any motivating student behaviors which of themselves provide immediate reinforcement to the teacher for engaging in present or past behavior.

Indirect: Any student behaviors which results in teacher reinforcement from significant others.

1.3.3. Categories of teachers and students

Significant Others Motivated Teacher: This teacher perceives of significant others -- administrators, peers and parents -- as his/her major source of deficiency needs satisfaction with regard to his/her teaching career.

Student Motivated Teacher: This teacher perceives of his/her students a primary source of needs satisfaction in terms of his/her teaching career.

Progressive Non-technical Teacher: This teacher operates his/her class in a manner which emphasizes the needs of students within the context of traditional content and methodology. (This term is used in chapter 5 to refer to Ron who, while being student oriented, did not consider them the primary source of needs satisfaction.)

Growth Motivated: This teacher satisfies his/her growth needs through the task of teaching.

Peer-directed Student: This type of student directs his/her behavior towards attaining needs satisfaction primarily from interaction with other students.

Teacher-directed Student: This type of student directs his/her behavior towards attaining needs satisfaction primarily from the teacher.

1.4. Research questions

The following research questions have been formulated:

1) What are the specific student behaviors which influence teacher behavior in the classroom?

2) What are the overall patterns of student-teacher interaction and in what ways do they differ for each teacher?

3) Is the student motivated teacher more influenced through social reinforcement by the students than either the significant others motivated teacher or the growth motivated teacher?

4) Is the significant others motivated teacher influenced more through indirect motivation than either the student motivated teacher or the growth motivated teacher?

5) Is the growth motivated teacher influenced less by students than either the student motivated teacher or the growth motivated teacher?

6) Is the significant others motivated teacher influenced less by students than the student motivated teacher?

1.5. Limitations

This research entailed the observation of three classrooms over a period of three weeks. The classes were chosen on the basis of the motivational structure of the teacher. The data collected was qualitative in nature. As such, the study should be regarded as the interpretation of classroom interaction arrived at by this author. No claim can be made that other observers would have derived the same meanings. However, the intent of the research was to interpret a set of theoretical propositions using a symbolic interaction methodology. This would argue that the interpretations ultimately must be interpreted through the predispositions of the observer.

If a limitation exists in the study, it was that while proposing a bidirectional model of interaction, the primary focus was the teacher, rather than the teacher and students.

Chapter 2
LITERATURE REVIEW

The primary focus of this investigation was on student influence of teachers in the classroom within the context of a bidirectional model of interaction. As already stated, this is not the traditional focus of research on classroom interaction. Therefore research literature has been reviewed which focuses on a bi-directional model that includes student influence on the teacher. Also, material concerning teachers' predispositions; the objective situation and the definition of the situation was reviewed. In addition, pertinent research literature concerning motivation of teachers and students in terms of how it relates to this interaction model has been considered. Finally, material relating to Q-Sort methodology was overviewed.

2.1. Bidirectional classroom interaction

Typically, in research on classroom interaction, the assumption has been that teachers influence student behavior with students merely playing a reactive role. Studies on classroom behavior have shown that teacher behavior actually can systematically alter student behavior (Noble and Nolan, 1976). However, some researchers, feeling the above assumption is not adequate, have raised concern that little is known about how students affect teacher behavior (Noble and Nolan, 1976; Klein, 1971; and Randhawa, 1983).

B.F. Skinner, as early as 1953, had said that a complete functional analysis in classrooms must look both ways. Winne and Marx (1977) supported this view noting that a reconceptualization of research in teaching is necessary. "Rather

than investigate whether teaching of one or another kind is effective, we propose that research should question how teachers influence learners and vice versa" (p. 670).

In related fields of inquiry, a unidirectional model has already proven inadequate in conceptualizing interpersonal interaction. Bell (1968) summarized studies on the area of socialization, indicating that a unidirectional model is too imprecise. He stated that the assumption of a unidirectional effect of parents upon children was a fiction of convenience rather than belief. Bell pointed out that many of the correlational studies on socialization can be plausibly reinterpreted, indicating the effects of children on parents. Osofsky and O'Connell (1972) found that mothers' and fathers' behavior was systematically and differentially a function of the behavior of their young daughters.

Studying the effects of group behavior on that of their leaders, Haythorn, Couch, Haefner, Langham, and Carter (1956) reported that, to a significant degree, the behavior of leaders was a function of the attitudes or personality characteristics of the followers. Hemphill (1949) also found that a group's productivity and morale depends on variables associated, not only with the leader, but with the group itself. In studies by Hastorf (1965), Zdep and Oakes (1967), and Hemphill (1961), conditions to increase or decrease a group member's verbal participation and leadership attempts were systematically manipulated.

Blubaugh (1966), in a somewhat more related study, found that negative feedback increased the speaker's total non-fluencies, decreased the speaker's rate of speaking, and verbal output. This made the speaker dissatisfied and unhappy with the speaking experience.

More related to research about student influence on teacher behavior are studies in which students appeared to influence the behavior of the counselor. In these studies, students were asked to exhibit prearranged behaviors to an unsuspecting counselor (Bandura, Lipsher and Miller, 1960; Gamsky and Farwell,

1966; Heller, Myers and Kline 1963; Russell and Snyder, 1963). The findings indicated a change in counselor behavior.

Several studies have looked at the way adults can influence students. Rosenfield (1967) observed adults conducting interviews with eighth grade students on a one-to-one basis. He found that when the interviewer followed students' answers with approving responses such as a smile, head nod, verbal acknowledgement or gesticulation, the students showed higher percentages of smiles and head nods than when the interviewers gave disapproving responses or no responses. Sarbin and Allen (1968) found that by using verbal and nonverbal social reinforcement during and after speech, two professors could increase the verbal participation of low participating students.

Jones and Thibault (1958) offered an alternative to the unidirectional model. They asked the question of how important the behavior of one person in a dyadic relationship is in determining the behavior of the other. They described two types of interactions which could be considered endpoints of a continuum. In reciprocally contingent interactions at one end, "the behavior of one actor is contingent on the behavior of the other and vice versa" (p. 157). In asymmetrically contingent interactions, at the other end, "the behavior of one actor is contingent on the behavior of another, but the other's behavior is independently determined" (p. 155).

Fiedler (1975), relating this model to classrooms, stated that asymmetrically contingent interactions "are often governed by a hierarchical organization, such as characterizes "traditional" classrooms. (p. 736). "Alternative" classrooms which offer students more choice as to how and what they learn could be characterized as having reciprocally contingent interaction among students in these classrooms. Fielder (1975) suggested that classrooms can be considered as lying at various points along this continuum.

Fiedler (1975) studied classroom interaction by using the Hit-Steer

Observational System to reveal the patterns of interaction, especially the extent to which the behavior of each is contingent on the other. In addition to finding that interaction in the classroom is reciprocal, her research found that classroom events are at least partly determined by students.

Yarrow, Waxler and Scott (1971) conducted a study investigating the interaction between adults and children in a nursery school setting. They found that adults' positive and negative behavior varied considerably from child to child. "This variability was systematically related to and modified by child characteristics of dependency, friendly and aggressive interactions with their peers, social reinforcement of the child, and sex of the child" (p. 300).

Besides demonstrating that interaction in classrooms is indeed reciprocal, several interesting research questions were raised. One question was, which individual variables in teachers are associated with a tendency to encourage student influence attempts. Research by Koenigs, Fiedler and deCharms (cited in Fiedler, 1975), suggested that the complexity and abstractness of the teacher's belief system is one relevant variable.

Noble and Nolan (1976) looked specifically at the relationship between rates of student volunteering and (a) the differential rates of teacher questions directed to the individual students and (b) the percentage of volunteering approved by the teacher. The patterns suggested that the students influenced the number of questions directed to them by teachers. This suggests that students and teachers accomodate each other. This study called into question research which has noted differential treatment toward groups of students classified by sex (Brophy and Good, 1970; Jackson, Silberman, and Wolfson, 1969), by socioeconomic status (Hoehn, 1954; Rist, 1970), by teacher attitude (Silberman, 1969), and by teacher expectancy (Brophy and Good, 1970). Noble and Nolan observed that these results may in fact have been obtained as a result of student behavior, rather than a set attitude on the part of teachers towards students classified differentially.

Klien (1971) demonstrated that a college class could change the verbal behavior of guest lecturers from approving statements to critical statements, by changing from attention to nonattention on cue. Klien, further concluded from the results, that, at least at a college level, positive behavior by students results in positive teacher behavior.

Randhawa (1980, 1983) investigated the relationship between the verbal interaction of teachers and their students in grades 4-6 and junior high. He concluded that the quality and type of intellectual climate are generally dependent on the quality and type of intellectual input of both teachers and their students.

Summary. Research literature does support the assumption that a bidirectional model of interaction better explains what occurs in relationships. In particular, it indicates that studies in classroom interaction need to take bidirectionality of influence into consideration when explaining classroom processes and related outcomes.

2.2. Predispositions

The term predispositions is derived from the work of Stebbins (1975), who defined predispositions as "products of past experience [which] impinge upon our awareness, equip us with specific, usually habitual, views of the world and guide behavior in the immediate present" (p. 12). Somewhat synonomous to this term are the more frequently used terms of "attitudes", "beliefs", "values", and "ideologies". Each of these terms, while possessing different definitions (Dawes, 1972, p. 16), shares many of the same characteristics. Thus, they will be discussed under the rubric of predispositions. While both the students and the teacher bring sets of predispositions with them to a classroom, the focus of this review was primarily on the teacher.

Stebbins (1975) characterized predispositions in the following manner: (1)

Predispositions include the product of an individual's social interactions, an individual's long range goals, and an individual's attitudes and values--all of which are "products of past experience" (p.12). (2) Predispositions are "enduring states" (p. 12). (Stebbins differentiates between long and short term goals, considering only long term goals to be predispositions. Short term goals have an "immediate aim", and hence, are not an enduring state. Thus, they are not predispositions.) (3) The relative permanency of predispositions facilitates people acting the same way in a given situation. (4) Predispositions are inactive until triggered by "situational stimuli" (p. 12).

Rokeach (1968) made a differentiation between attitudes and predispositions based upon the characteristics of endurance. He argued that some predispositions are momentary and suggested that the "more enduring persistent organizations of predispositions" (p.12) be called attitudes. This difference is one of terminology rather than concept. (Such terminological difficulties will recur throughout the discussion, reflecting the pattern of the literature which lacks, to some degree, "terminological consistency".)

Rokeach (1968) and Kerlinger (1967) both viewed the concept of an attitude as enduring and predisposing an individual to act in a certain way. Rokeach defined attitude as:

> a relatively enduring organization of beliefs atound an object or situation predisposing one to respond in some preferential manner (1968, p.112)

Kerlinger's definition of attitude was that it:

> is an enduring structure of descriptive and evaluative beliefs that predispose the individual to behave selectively toward the referent of the attitude. (1967, p.110)

Shaw and Wright (1967) also addressed the "enduring" nature of attitudes. They suggested three factors which caused the stability of attitudes: (a) the interrelationships of attitudes, (b) the reinforcements present when the attitudes were learned, and (c) the desire of individuals to exert closure, that is, the

stronger and more central the attitude, the more resistant it would be to change. These authors further refer to attitudes "being predispositions to respond to social objects". (p. 6).

Newcomb (1975) stated that both psychologists and sociologists regard attitudes as tendencies to act with regard to some specifiable entity. Like the authors previously cited, Newcomb (1968) considered attitudes to be enduring, specifying that "residues are carried over to new situations" (p.22). While attitudes are enduring over time, they will change "as new residues are acquired through experience in new situations" (p.22). Newcomb (1968) further noted that attitudes exert a "dynamic" influence upon individual's responses to objects and situations, thus suggesting an interplay between attitudes and the situational influences to determine behavior.

Other writers have further defined how change occurs over time stating that the stronger or more central the belief is to the person, the more resistant it is to change (Rokeach, 1968; Shaw and Wright, 1967). It can be assumed then, that the stronger the belief held, the greater the accumulation of incongruent experiences needed to change the belief. Also, it might be assumed that in situations where beliefs conflict, the stronger, or more dominant belief will govern congruent behavior.

The notion put forth by these writers (Rokeach, 1968; Shaw and Wright, 1967; Newcomb, 1968; and Kerlinger, 1967) of predispositions as being stable suggests a hierarchical order. Their enduring nature could be considered a function of this order. The stronger, more important predispositions would be higher in the hierarchy and thus more resistant to change. Hence, the higher in the hierarchy, the more stable a predisposition would appear over time.

Other writers have also referred to the fact that predispositions are innumerable and are organized or structured in some manner. Sharp and Green (1975) talked of "systematically related beliefs" (p.68); Kerlinger (1967) used

"structure of descriptive and evaluative beliefs" (p.110); Shaw and Wright (1967) used "a relatively enduring system of affective and evaluative reactions" (p.10); and Rokeach (1968) used the phrase "organization of beliefs" (p. 112).

The complexity inherent in a person's attitude is evident from Rokeach's (1968) attempt to distinguish "attitudes", "beliefs" and "values" and to explain their relationship to each other. He defined values to be "abstract ideals, positive or negative, not tied to any specific attitude, object or situation, representing a person's beliefs about ideal modes of conduct and ideal terminal goals" (p.124). Rokeach postulated that values are ranked in a hierarchical organization by importance and that they are subsets of beliefs. He stated that beliefs "describe the object of belief as true or false, correct or incorrect; evaluate it as good or bad; or advocate a certain course of action or a certain state of existence as desirable or undesirable" (p.113). Beliefs are organized into belief systems. Further, attitudes are defined as an organization of beliefs. Thus, values are a subsystem of beliefs, which in turn, are a subsystem of attitudes, each having its own hierarchical organization.

In attempting to come to terms with belief systems various researchers have proposed differing clusters of beliefs, or have expounded upon those factors which they consider the most important. Green (1971) suggested that a belief system is comprised of four main components: (1) core beliefs, (2) belief clusters with relations between them, (3) evidential beliefs, and (4) a correspondence between the rank ordering of beliefs and the relations between them. Silberman (1969) focused on teacher attitudes toward students through analysis of classroom observational data and interview data. He identified attachment, concern, indifference and rejection as four distinct attitudes that teachers held about their students.

Sharp and Green (1975) hypothesized that the following factors were the most important in teachers' belief systems: (1) how the teachers viewed themselves as students; (2) the professional training they had received; (3) on-the-

job experiences; (4) individual world views as a result of personal socialization experiences.

The conceptual complexity of the belief system of teachers is highlighted by the work of Wehling and Charters (1969) and Shavelson and Stern (1981). Eight distinct and relatively independent dimensions of teacher belief systems emerged from the research carried out by Wehling and Charters (1969):

1. subject-matter emphasis
2. personal adjustment ideology
3. student autonomy vs. teacher direction
4. emotional disengagement
5. consideration of student viewpoint
6. classroom order
7. student challenge
8. integrative learning

Shavelson and Stern (1981), in a review of research on teachers' pedagogical thoughts, judgements and decisions, referred to predispositions as "teacher characteristics". Among the dimensions they presented are beliefs about students, conceptions of subject matter, commitments to planning strategies and beliefs about teaching.

Predispositions can be conceived of as having both an affective and a cognitive component (Jablonski, 1983). The affective component would be whether or not one feels something to be pleasing. The cognitive component would be what one knows about the object (Jablonski, 19[illegible]. McKennell (1974) observed that writers often disagree over whether beliefs, the affective component in McKennell's work, and cognitions should be included under the term "attitudes". He purported that both elements were indeed parts of attitudes, stating:

> what makes a belief part of an attitude is that the idea-elements themselves are responded to emotionally. In technical jargon, the attitude consists of "cognitions invested with affect" or "hot cognitions". It is the evaluative aspects of beliefs which makes [sic] them part of attitude systems. (p.15)

Katz (cited in Dawes, 1972, p.16) wrote that attitudes "include the affective, or feeling core of liking or disliking, and the cognitive, or belief elements which describe the effect of the attitude, its characteristics, and its relations to other objects." The importance of the teacher's total knowledge of a situation (the cognitive element) as integral in coordinating a personal set of ideas and belief (the affective element) prior to teacher action or behavior has been reiterated by Sharp and Green (1975).

Rokeach (1968) took a somewhat different view. He conceived of an attitude organization as having three components: a cognitive component, an affective component, and a behavioral component.

Given the varied characterization of the components of predispositions and the fact that many authors have suggested a hierarchical organization of predispositions, the actual process of decision-making as affected by teacher predispositions becomes difficult to envisage. A possible explanation for the operation of predispositions may be inherent in the hierarchical organization of predispositions (Jablonski, 1983). Either elements from within specific categories or the most important categories would feature prominently in the decision-making process.

Ajzen and Fishbein (1980) proposed such an explanation. These authors theorized that an individual has many beliefs about an object, but it is not possible to attend to all these beliefs at any given time. Thus, they have suggested that between five and nine beliefs should be considered salient. It is these "salient beliefs" which predominate in determining the behavior of an individual. Such a conceptualization makes the decision-making process in relation to predispositions seem more functional.

An explanation for the surfacing of extemporaneous behaviors which do not fit the general pattern of behaviors can also be found in the work of Ajzen and Fishbein (1980). These writers suggested that a person's intentions are a function of attitudes (a positive or negative judgement of the behavior) and "the subjective norm" (how the individual feels others will view the behavior). They indicated that "the subjective norm may exert pressure to perform or not to perform a given behavior, independent of the person's own attitude toward the behavior in question" (p. 7). An example would be a teacher who is less tolerant of misbehavior when the principal (norm setter) is in the room. This particular example highlights the applicability of these concepts to the significant others motivated teacher. In a larger context, it suggests that the perceived source of needs satisfaction is a major force in determining the ordering of a person's predispositional structure.

Summary. Researchers and theorists vary as to terminology and how they address issues related to teachers' predispositions. Still they share key components of predispositions in their definitions. Predispositions are "residues of experience" which are continuously, but gradually, shaped with new experience. The stronger the predisposition, the more resistant it is to change. Predispositions are hierarchically organized belief structures which have a cognitive and an affective component. They account for predictable patterns of responding to stimuli in a person's environment; however, extemporaneous behaviors do occur. Such behaviors may arise because the teacher predispositions that become salient in those situations may be evoked by the subjective norms perceived by the teacher.

2.3. Objective situation

Wundt (cited in Ittleson, 1973) wrote "for every piece of knowledge two factors are necessary--the subject who knows and the object known, independent of this subject" (p. 6). With reference to the classroom, either the teacher or a student would be "the subject who knows". The present section deals with "the object known, independent of the subject", that is the objective situation.

Stebbins (1975) defined the "objective situation" as "the immediate social and physical surroundings and the current physiological and psychological state of the actor" (p.8). MacIver (cited in Stebbins, 1975) defined it as "the situation as it might appear to some omniscient and disinterested eye, viewing all its complex interdependencies and all its endless contingencies" (p. 7). Thus, the term is used to label a hypothetical situation in which all the elements and their possible interrelationships are contained.

Jablonski (1983), referring to the pedagogical setting, stated "the objective situation is that set of circumstances which exists in the classroom, before an interpretation is placed upon it by the teacher" (p. 19). The social elements, psychological elements, structural elements, and logistical elements -- all the ingredients and qualities of a classroom -- comprise the objective situation. These elements might include aspects of the school itself; the children, the parents, the staff, the geographical location and the cultural heritage of the area.

Shavelson and Stern (1981) referred to the objective situation as antecedent conditions of teaching. The factors they suggested which comprise the objective situation are: (1) information about students, (2) the nature of the instructional task, and (3) the classroom/school environment.

Some authors have considered the objective situation in terms of the types of elements which contribute to the teaching situation, the teacher's ability to change these elements and the manner in which they limit the teaching situation. The term "frame factors" was used by Lundgren (1977) to refer to "factors which limit the variation of the teaching process" (p.42). Examples of frame factors are the time schedule, the fact that children are bussed, the fact that the there is no science laboratory, or the fact that the children are of a particular religious faith. Dyer (in Ornstein, 1973) called these factors "surrounding conditions" and suggested they fell into one of three categories: conditions pertaining to home, conditions pertaining to school and conditions pertaining to community.

Crocker et al. (1976) also addressed those variables which are beyond the control of the teacher, yet, are also an integral part of the teaching process. Some examples of the "boundary conditions" of the teaching situation, as seen by Crocker et al. (1976) are:

1. nature of the curriculum
2. time available
3. class size
4. grouping arrangements
5. teacher deployment
6. classroom characteristics
7. school characteristics
8. societal demands (school board, province, pressure groups, etc.) (p.14).

Similarly, Palmer (in Wick and Beggs, 1971) referred to the community, the school system, the school and the classroom as "situational factors".

Summary. A review of the literature indicates that researchers consider common characteristics to be universal across settings. The elements of the home and community, the school, aspects of instruction and the students appear to be global qualities of the objective situation.

2.4. Definition of the situation

A definition of the situation results from the interaction of various aspects of teacher predispositions and the objective situation (Stebbins, 1975). Essentially, it is the meaning that an individuals attribute to evolving occurrences around them. It is the manner in which they perceive the situation.

Stebbins (1975) considered the definition of the situation to be "a more or

less conscious synthesis and personal interpretation of the interrelation of the activated predispositions and the elements of the subjective situation" (p. 15). The subjective situation is the term used by Stebbins (1975) for "a mental construction, the elements of which have been taken from a larger whole...through the process of selective perception" (p.6). The relationship of the definition of the situation to goal-directed behavior is explained in a four stage model: (1) the subject enters a setting with an action orientation in mind; (2) aspects of these surroundings activate some of the predispositions the subjects carry with them; (3) aspects of the surroundings, the orientations, and the activated predispositions initiate selection of a cultural or habitual definition or further construction of a unique one; (4) this definition guides subsequent goal-directed action in the situation.

Other researchers have grappled with the idea of considering action, based on the way one thinks before one acts. Harnack (1968) described the process of defining the situation as choosing "the best road to take". The choice would be mediated by what he referred to as "screens of selection". A person weighs the separate factors in a situation, using screens of selection, before making a decision and acting upon that decision.

Bross (in Phillips, 1971) also highlighted the importance of an integrative system of decision-making. He, like Harnack (1968), maintained that information passed through a "filter system". Bross (in Phillips, 1971) speculated that the "screens" consisted of values and predictions through which information passed before it was integrated and behaviors emerged.

Shavelson and Stern (1981) proposed that attributes and heuristics form the basis for teacher behavior which is the result of "teacher cognitive processes". The cognitive processes would be considered roughly analogous to the process of perception based on teacher predispositions. The information processed could be viewed as the objective situation. The selective processing of elements in the objective situation would essentially be the teacher's perception or definition of the situation (Jablonski, 1983).

McIntyre and Morrison (1977) hold that classroom processes could be viewed by means of usefully "conceptualized perspectives" which are somewhat analogous to Harnack's (1968) screens of selection and Bross's (in Phillips, 1971) filtering system. McIntyre and Morrison (1977) presented six clusters of conceptualized perspectives which could be useful for examining various factors of classroom life:

1. psychological processes
2. classroom as a processing system
3. temporal structure of classroom activity
4. substance of classroom activity
5. interpersonal relations
6. persons

These perspectives could be conceived of as operating in terms of the teacher arriving at a definition of the situation.

Martin (1976) presented a different perspective of definition of the situation. He viewed an individual as attempting to define a situation by trying to see it from other people's viewpoints. While proposing this hypothesis, Martin (1976) did concede, "in the final analysis, an individual acts according to his own definition of the situation, through his interpretations of what he thinks others expect of him" (p. xi).

Summary. Behavior and the decision preceding it do not occur in a vacuum. The situation is defined through an interaction between the person's predispositions and the objective situation. This definition of the situation guides subsequent behavior. Because the objective situation is constantly changing, the teacher must be in a continuing process of defining the situation.

2.5. Motivation

It is necessary to briefly overview motivation as it is formulated by Bandura and Walters (1964) and Maslow (1970). These authors wrote from different theoretical perspectives: Bandura and Walters (1964) from a social learning point of view and Maslow (1970) from a humanistic point of view.

Bandura and Walters (1964) provided part of the theoretical basis of this research, contending that behavior is learned through contingent reinforcement. In a later work, Bandura (1977) addressed more specifically the topic of motivation in a social learning context. He suggested that humans' anticipatory capacities enable them "to be motivated by prospective consequences. Past experiences create expectations that certain actions will bring valued benefits, that others will have no appreciable effects, and that still others will avert future trouble" (p. 18). He further stated that, through symbolically representing forseeable outcomes, people convert future consequences into current motivators of behavior. A motivator, then, would be roughly analogous to a predisposition.

In developing this concept, Bandura (1977) suggested a "developmental hierarchy of incentives" (p. 103). The lower levels of the hierarchy would consist of material consequences, symbolic consequences and social contracting arrangements. The highest level of development is when the individual regulates his own behavior by "self-evaluative and other self-produced consequences" (p. 103). Bandura (1977) observed that after "signs of progress and merited attainment become a source of personal satisfaction, knowledge that one has done well can function as a reward" (p. 104).

It is relatively easy to see the relationship between Bandura's developmental hierarchy and Maslow's (1972) hierarchy of needs. The lower level incentives would correspond to the basic needs formulated by Maslow. The higher level incentives, which are self-regulated, would correspond to the growth needs formulated by Maslow.

Writing about motivation, Maslow (1972) observed that motivated behavior must be "understood to be a channel through which many basic needs may be simultaneously expressed or satisfied" (p. 153). Maslow suggested that motivation is based upon goal attainment, rather than upon instigating drives. Typically an act has more than one motivation.

Maslow (1972) stated that "the situation or the field in which the organism reacts must be taken into account" (p. 154). In terms of the model outlined in the rationale, this could be termed the objective situation. Further, "the field itself must be interpreted in terms of the organism" (p. 154). The field is analogous to the objective situation. The "interpretation in terms of the organism" could be considered to be the definition of the situation.

Regarding the relationship between these components and motivation as antecedents of behavior, Maslow (1970) stated, "motivations are not the only determinants of behavior. While behavior is almost always motivated, it is also biologically, culturally, and situationally determined as well" (p. 154). Explained as such, motivation could be considered a part of the predispositional structure of an individual.

Several writers have taken Maslow's motivational theory and applied it to the role of occupation in the life of an individual. Roe (1956) wrote:

> The application of this [Maslow's] theory to occupational psychology is fairly obvious. In our society there is not a single situation which is potentially so capable of giving some satisfaction at all levels of basic needs as is the occupation. (p. 32).

Blai (1982) built upon this assumption that motivation, as formulated by Maslow, is related to job satisfaction. His research indicated that there is a direct association between need fulfillment and job satisfaction. This implies that need satisfaction is a motivator of behavior to obtain fulfillment of needs in an occupation. As such, it can be considered a part of the predispositional structure of a person.

Exactly where motivation fits into a model of decision-making is somewhat unclear from a review of related literature. That motivation is an integral part of decision-making is undoubted, yet, its relationship to predispositions and definition of the situation was defined differently by various authors.

Foote (1951) considered motivation and definition of the situation to be the same construct:

> In a sentence, we take motivation to refer to the degree to which a human being, as a participant in the ongoing social process in which he necessarily finds himself, defines a problematic situation as calling for performance of a particular act, with more or less anticipated consummations and consequences, and thereby his organism releases the energy appropriate to performing it. (p. 15)

Predispositions were not considered in this model.

Stebbins (1975) considered such a view incomplete. He incorporated predispositions into his model, holding that they were necessary to account for the patterning, timing and direction of behavior. Stebbins (1975) observed that predispositions "recurrent activation also helps explain why human beings are motivated the same way in similar classes of situations at various points in time" (p. 34). Thus, predispositions interact with motivation, in that a person interprets a situation as meeting his needs based upon past experiences.

Similarly, Shaw and Wright (1967) referred to attitudes and motives as being alike in that both terms refer to the direction of behavior. A distinction made is that "an attitude is not characterized by an existing drive state, but only refers to the probability that a given motive (and its accompanying drive) may be elicited" (p. 5). This is much like the distinction Stebbins (1975) made between predispositions and motives.

Taking a different view to these authors, Krech and Crutchfield (cited in Newcomb, 1968) considered motivation to be a component of attitudes: "An attitude can be defined as an enduring organization of motivational, emotional, perceptual and cognitive processes with respect to some aspect of the individual's

world" (p. 23). Newcomb (1968) attempted to differentiate between the two by defining attitudes as more persistant and inclusive than motives. Further, Newcomb (1968) suggested that a person could have a wide range of motives aroused by a situation, but only a single attitude.

From a different perspective, Staats (1968) referred to "motivational stimuli" within the context of social learning theory. In Staats' (1968) model the attitude system and the motivational system are one and the same.

In developing a system of attitudes within his learning model, Staats (1968) suggested that the arrangement of the components be hierarchical in nature. Such a conception explains why, at given times, various stimuli differ in their relative reinforcing intensity. In discussing his hierarchy, Staats (1968) used Maslow's hierarchy of needs as support.

Atkinson (1982), from yet another perspective, attempted to explain the relationship between motive, expectancy and incentives. He defined incentive as "some potential reward or goal" (p. 24); motive as "the disposition within the person to strive to approach a certain class of positive reinforcers (goals) or to avoid a certain class of negative incentives (threats)" (p. 25); and expectancy as "a particular kind of cognitive association aroused in the person by situational cues" (p. 25). Atkinson stated their relationship in a "principle of motivation":

> The strength of motivation to perform some act is assumed to be a multiplicative function of the strength of the motive, the expectancy (subjective probability) that the act will have as a consequence of the attainment of an incentive, and the value of the incentive: Motivation= f(Motive x Expectancy x Incentive) (p. 26).

Here Atkinson (1982) has attempted to account for individual differences in arriving at decisions about how to behave in given situations.

Feather (1982) suggested that values are a particular class of motives, which are "tied to a normative base relating to an evaluative dimension of goodness-badness" (p. 270). Feather (1982) drew this conclusion based on definitions by

other authors who defined motives and values in a very similar manner. He noted that Rokeach (1979) considered values to be hierarchically organized and McClelland (1965) considered motives to be hierarchically organized.

Blum and McHugh (1971) took issue with the view of motives as "casual" antecedent variables to behavioral events. They suggested that "to provide a motive, then, is to formulate a situation in such a way as to ascribe a motive to an actor as part of his common sense knowledge, a motive to which he was oriented in producing the action" (p. 100). Blum and McHugh (1971) suggested that motives are a "grammar of application" for the "categorization [of] problems which members regularly resolve, methodically producing the organization of their every day environment" (p. 108). Their use of motives, basically, is an aspect of the theory of definition of situation concerned with the justification of plans of action.

Summary. From a review of related literature, it is clear that there is not a unanimous agreement about the relationship of motivation to the interaction model. There are, however, common elements which link motivation to predispostions and suggest that motives are, in fact, a component of the predispositional structure as it is formulated in this research. Both are hierarchically structured systems. Both are antecedent to decision-making. Many writers consider motivation to be related to constructs such as beliefs, values and attitudes which are considered components of predispositions. Therefore, motives can be considered an integral part of the predispositional structure of individuals and, as such, would be an important part of the interplay with the objective situation. This in turn will affect the definition of the situation and thus the behavior of the individual.

2.6. Q-Sort

The Q-Sort technique was originated by Stephenson in 1953 and has several advantages for investigating attitudes, beliefs, values and motives. In a Q-Sort, items--with each item usually placed on a card--are sorted into groups along a continuum. In a forced Q-Sort, the number of cards placed in each group is usually predetermined to approximate a particular frequency distribution.

Jablonski (1983) stated that "the variables in any Q-Sort are ordered or scaled relative to each other with respect to a specific criterion, with a specific subject as a frame of reference. It is basically an ipsative measure" (p. 33). Being an ipsative measure, the Q-Sort provides person-centered data in numerical form which is available for analyses.

Jablonski (1983) further stated that the whole Q-Sort procedure "is founded on a basic vocabulary, thus making it essential to carefully choose items for each card" (p. 38). Wittenborn (1961) maintained that, prior to 1960, items lacked structure and seemed to have been assembled informally. The result was uncertain analyses.

Later studies attempted to remedy this problem. Kerlinger (1966) pooled items from several related lists: the Allport-Odbert list of 18,000 traits, Barr's list, and Charter's and Waples' list. Kerlinger (1966) ultimately ended up with a 90 item Q-Sort after evaluating a list of 400 adjectives using such criteria as validity, applicability to the teaching situation, lack of ambiguity and non-repetition. Kerlinger used 36 judges, all with educator status at different levels of teaching: professors, elementary and secondary teachers, parochial school teachers and military officer teachers.

Sontag (1968) constructed an 80 item Q-Sort to measure perceptions of desirable teacher behaviors. One hundred and seventy-five items were drawn from the literature in four areas: (1) teaching subject matter (2) interpersonal

relations (3) authority-discipline and (4) normative-social. Five judges, knowledgeable in test construction and educational theory, examined the items for validity and clarity. Items which could not be classified in one of the four areas, or were not considered teacher behaviors or were not clear were rejected. Twenty items were assigned to each category, giving 80 items in all.

In a validation study of the structure of social attitudes, Kerlinger (1972) used two Q-Sorts. One Q-Sort, used previously in a study by Smith (cited by Kerlinger, 1972) was a 60 item structured Q-Sort of liberal and conservative attitudes. The other was called the "Referents Q-Sort". The sources used to obtain items for this Q-Sort included treatises on conservatism and liberalism, texts on educational philosophy, newspaper editorials, magazine and journal articles and existing attitude scales. The final Q-Sort had 80 items. No mention was made of the criteria used, the methods or the individuals employed in its construction.

Housego and Boldt (1978) produced a 60 item Q-Sort. An original pool of over 100 items was generated by principles, teachers, and student teachers using theory and practical experience. These items were then examined by four faculty members to ensure validity, resulting in a reduction to a 60 item Q-Sort.

In determining whether the Q-Sort which results from the item selection process is useful, the reliability and validity of the instrument have to be considered.

The reliability of Q-Sort instruments is often demonstrated through the test-retest method. This is obtained when "the same measuring instrument is applied on two occasions to the same sample of individuals...and the scores [are] correlated" (Ferguson, 1976, p.427). The Q-Sorts developed by Caggiano (1970), Kerlinger (1966), and Housego and Boldt (1978) all used the test-retest method to establish the reliability of their instruments.

Validity, typically has not been addressed in the studies involving Q-Sorts (Wittenborn, 1961). Jablonski (1983) suggested that this may be a function of the practice of minimal reporting of item pool development. One of the few researchers who did deal directly with validity was Caggiano. She stated in her study that "the validity of the sort was established in the process of its construction" (p. 91) as the items used were developed to coalesce with a particular theory. Yet, Caggiano (1970) was forced to admit that "whether or not the theory itself is valid is the question basic to the whole study" (p.91).

Assuming validity and reliability of an instrument and considering its uses, one problem often associated with this type of measure is that the ranking of items creates an item interdependency. Hence, once a particular item is ranked, another is automatically displaced. Such displacement masks differences that could be present. While this is certainly a problem in some instances, it need not always be the case.

Jablonski (1983) observed that forced interdependence of items lends itself to specific theoretical situations "in which certain elements may be perceived as encroaching more on a decision than others" (p. 35). Thus, once an element is considered to be of greater importance it automatically displaces elements of lesser importance.

Whether the Q-Sort should be forced or unforced has also created controversy in the research literature (Cohen, 1976; Livson and Nichols, 1956). In the unforced sort, the subject has the option of distributing the items as he sees fit. The forced sort requires that the items be sorted in a preconceived frequency distribution. Block (1956) commented that each type of sort lends itself to particular situations stating:

> The unforced approach is desirable in those circumstances where the scale separation of items is important and the ordering of the items is held to be irrelevant or is in fact undifferentiating...the forced approach is more useful when item order is judged of paramount importance. (p.492).

Block (1956) also stated "the forced Q-Sort method appeared equal or superior to the natural unforced Q-Sort method" (p. 492).

Some writers have argued whether a forced choice should be a rectangular or quasi-normal distribution; yet, Livson and Nichols (1956) observed that "there has been an almost exclusive use of a quasi-normal distribution for the Q-Sort" (p.160). Livson and Nichols (1956) found that the use of a rectangular distribution did not significantly affect reliability of Q-Sort information, but later research by Sontag (1968), Kerlinger (1970) and Caggiano (1970) indicated that use of a quasi-normal distribution has remained prevalent. The most likely reason being that the rectangular distribution requires "the maximum possible number of inter-item discriminations" (Livson and Nichols, 1956). Thus it is a more difficult sort.

Summary. Q-Sort methodology is considered to be very useful for investigating predispositions. Typically, the subject orders the items on the sort along a continuum in a predetermined distribution. Such a forced procedure is useful in this research in that the relative value of the items is important in the decision-making process. Reliability of a Q-Sort has typically been established using the test-retest method. Validity of a Q-Sort has been established on the basis of expert opinion and item selection.

Chapter 3
METHODOLOGY

3.1. Introductory Rationale

Analysis in the context of this research, might better be conceptualized as the development of theory grounded in the research conducted. On a theoretical level, arguments for this type of approach in social psychological research have been made by many, including those who follow the methodology of symbolic interactionism as expounded by Blumen (1969), who takes the earlier works of G.H. Meade (1934) as his starting point.

Relating specifically to the empirical rationale for dealing with subjective reality and associated qualitative data, there is a well-established body of literature in the grounded theory tradition, for example, Glaser and Strauss (1967). Focusing specifically on education, there is the Canadian research by Martin (1976, 1982) and Stebbins (1974). The essense of the approach is to discover how different people interpret the world in which they live through the interpretations of the subjective meanings which individuals place on their actions, and discovering the subjective rules for these actions. The approach requires a continuous interpretation of the stream of social interaction, using the full range of information in the interaction. This requirement disqualifies event coding and time interval sampling as a methodology, as they simply cannot provide data which will capture the complexity of the interaction.

A log, or electronic record, provide the only reasonable means of preserving the data in studies of this sort. The only test of the quality of the data is in the

interpretations which it yields. If the interpretations make sense in the context observed, validity claims made for the data can be said to be justified (Glaser and Strauss, 1967).

3.2. Overview of procedure

For this research three classrooms were selected for observation from 7 schools in the greater St. John's, Newfoundland area. Each was an elementary (Grades 4-6) classroom chosen on the basis of the motivational system of the teacher as determined by the results obtained from a Q-Sort administered to all elementary teachers in these schools. Teachers were ranked according to their scores in each of the three motivational categories. The teacher who, both best represented the category and agreed to participate, was chosen. One was a deficiency motivated teacher, whose needs were met primarily by students; one was a deficiency motivated teacher, whose needs were met primarily by others; and, one was a growth motivated teacher.

These classes were then observed over a 17-day period which allowed approximately a week's observation in each class. The observation focused on the interaction between the students and the teacher and concentrated specifically on the behaviors by which students influence teachers.

The data was collected by recording, in a log, the behavior which occurred during interaction in the classroom between students and the teacher. Besides an anecdotal account, the observer kept a record of his reactions and impressions of what had transpired in the classrooms. Thus, in a sense, the analysis of data was ongoing throughout the observation period.

In conjunction with third party observation, interviews with both teachers and students were utilized to collect data. Selection of those interviewed was based upon the findings during observations.

After the observation period, the information collected on each of the

classrooms was organized and analysed to observe patterns and trends in the interaction of each class. The specific behaviors used by students to influence teachers were also noted. Some of the behaviors were intended to influence the teacher while others appeared to be employed unconsciously. This determination was based upon the interviews with the students. The classes were then compared to each other to ascertain existing differences related to the motivational structures of the teachers.

3.3. The choice of classrooms

3.3.1. Initial sample

Initially, the Q-Sort was administered to 54 elementary teachers, from seven schools in the greater St. John's area. The purpose of the sort was to evaluate the primary motivational category of each teacher.

The observer met with the principals in each of the schools to explain how the Q-Sort was to be administered. They, in turn, gave the Q-Sort to their teachers and instructed them in the procedure for its completion. In addition to the verbal instructions, written instructions were attached to the Q-Sort. Thirty-three of the fifty-four Q-Sorts were returned to the observer.

3.3.2. Q-Sort

The Q-Sort was four pages long. The first page consisted of instructions. The second consisted of a set of blanks arranged along a continuum to approximate a normal distribution. On the last two sheets were the 18 items to be sorted (See Appendix A for a copy). The subjects were required to rank these items along the continuum in a forced sort.

3.3.2.1. Reasons for using Q-Sort methodology

A Q-Sort format had been chosen because it was felt to be superior to other questionnaire formats for the purposes of this study. It forced subjects to choose which items were most or least like themselves. The items had to be placed along a continuum in a fixed pattern which resulted in the maximum discrimination between categories (Block, 1956). In deciding an item was most like oneself, an item of lesser importance was placed lower on the continuum. This interdependence of items was considered to be an asset in categorizing teachers into motivational types. The items ranked highest indicated the behaviors which were most important to the subject, and thus, it allowed insight into hierarchical order of the subject's motivational structure.

The quasi-normal distribution was employed because it was less difficult for subjects. A rectagular sort requires the maximum number of discriminations (Livson & Nichols, 1956); still, it was felt that the advantages gained by using a rectangular sort would be less than the loss caused by teachers refusing to take the time to complete the Q-Sort.

3.3.2.2. Item selection

The items used were developed with the assistance of 18 judges, including teachers, graduate students, research assistants and professors. These people served in various capacities, at various times. Many helped generate items. They critiqued items generated by the researcher on the basis of his research. Some served as subjects for initial drafts of the Q-Sort, then gave feedback on the procedure and on individual items. This method of item selection is in keeping with that used by other researchers such as Kerlinger (1966), Sontag (1968) and Housego and Boldt (1978).

Each of the items was a description of behaviors which the researcher and judges considered typical of one of the three teacher categories. Initially, lists of teacher behaviors considered to be typically motivated by one of the three

categories of needs, were generated. The list for each of the categories was then evaluated according to two criteria. First, the behaviors needed to be those which would typically be motivated by only one category of needs satisfaction so as to effectively differentiate between teacher types. Thus, if a behavior could be motivated by either growth needs satisfaction or deficiency needs satisfaction by students, it was rejected. Second, it was considered important that some items not appear more attractive than others. The reason for this caution was that teachers might choose certain items because they perceived of them as being more valued by the researcher.

The resulting items were organized into a Q-Sort format and given to people who had not participated in the generation of items. After doing the sort, they evaluated each item on its clarity and the degree to which it reflected their motivation for engaging in the behavior. The items were then reworded, if necessary, or replaced. Ultimately a poole of 18 items -- 6 for each of the 3 categories -- was developed. Each item was considered to be indicative of a particular motivational orientation. The Q-Sort may be seen in Appendix A.

3.3.3. Analysis of Q-Sort results

After administration of the sort, the results were tallied. Subjects obtained a score in each of the three categories. Once the Q-Sorts had been scored, they were checked by a second party. The same checking procedure was followed when entering the data into the computer for analysis.

Looking at table 3.1, it can be seen that the student-motivated scale dominated the sort. The raw score mean was over 4.5 points higher than either of the other scales. Further the standard deviation for the student scale was smaller than the other two scales. This indicates that overall the subjects scored high on the student scale with few being extremely low. This could indicate one of two things.

Table 3-1: The means and standard deviations of the three category scales.

Category	Raw Score Mean	Standard Deviation
Student Motivated	27.086	3.156
Significant Other Motivated	22.543	4.341
Growth Motivated	22.343	4.151

One possibility was that most teachers tended to have a high level of student orientation. This was the case even for those who had a stronger affiliation to one of the other categories. When one considers the amount of time a teacher spends in contact with students and/or the usual motives for deciding to enter the teaching profession, this would appear to be a logical assumption.

Another possibility was that the Q-Sort did not accurately differentiate between the three categories, skewing the scores in favor of the student-motivated scale. This would mean that the items considered indicative of a student-oriented teacher were more attractive to subjects.

In terms of interpreting the scores, it meant that student-directed teachers were more differentiated from the other categories. Conversely, teachers in the other two categories were less purely either growth or significant others motivated.

In order to eliminate scaling differences between the three scores, the raw scores were then converted into standard scores[1] , (see Appendix B for table of raw and standard scores). Two further calculations were carried out. The first was the difference between each raw score and the average of the second and third intra-individual scores. The second was the difference between the second and third scores. The results of these calculations can be found in Appendix C.

The maximum overall differences between a person's highest standard score and his/her second and third scores were the primary criterion for choosing teachers. However, the value of this score was qualified by the similarity between the second and third scores. The reason for this qualification was that similarity between the second and third highest scores was indicative that the person was more like the category in which he scored highest. This was a function of the ipsativity of the scale.

Several of the high scores were rejected because the subjects taught in a school using an open classroom format. It was felt that this emphasis would contaminate their scores on the Q-Sort. Further, the classroom structure would interfere with comparisions between the three classes.

3.3.4. The three classes chosen

Of those remaining, three teachers were approached. The significant others motivated teacher had ranked highest in his category; the student motivated teacher had ranked highest in his category; and, the growth motivated teacher had ranked fourth highest in his category. (Three teachers ranked higher in the growth motivated category, but had been rejected because they taught in a school with an open classroom format.)

Thus, the sample was limited to three classes. This allowed a longer term observation than would have been possible if more classes were included. Longer

[1] standard score = |raw score - mean| / standard deviation

term observation provided data which was more natural: that is, the students and teacher had the opportunity to become comfortable with the observer's presence. In addition, it provided more opportunity to observe the entire repertoire of behaviors. Possibly the strongest benefit of limiting the number of classrooms observed was that it allowed the observer to view the patterns of behaviors which varied from day to day. In short, this meant that more in depth and varied data was collected on each of the classes.

3.4. Observation training

To prepare for the job of observer, the researcher practiced in two classrooms. One and one half hours were spent in each classroom. The purpose was to provide an opportunity to overcome awkwardness as an observer and to gain a better awareness of the types of behavior to look for while in the classroom.

The practice helped overcome the initial shock caused by the sheer volume of behavior to be observed. It also provided an opportunity to realize several technical difficulties that would have impeded observations during the actual research. For example, the need to situate oneself to enable a view of the students' facial expressions became evident as the teachers observed reacted to students' facial expressions. The importance of noting thoughts and impressions for later consideration was realized as the observer attempted to recall his impressions after the practice sessions.

3.5. Data collection

The collection of data occurred over a 17-day period through in-class observation. Half-day sessions were observationed according to a schedule arranged with the teachers. Where possible such activities as assemblies or free periods were avoided. Carl and Dan were observed for 22 hours, while Ron was observed for 25 hours.

In a general sense, the student behaviors recorded were those which the observer felt were designed to influence the behavior of the teacher. In more specific terms they included students' social reinforcement of the teacher and behaviors which indirectly reinforced the teacher. In addition, they included direct attempts to alter the behavior of the teacher through positive and negative feedback concerning the content, structure and control of the classroom. An attempt was made to make these interpretations within the overall context of the classroom situation.

Social reinforcement involved student behaviors that the observer believed the teacher would find rewarding. It included verbal behaviors such as praise of the teacher or in a negative sense, criticism. It also included, nonverbal behavior such as smiling, close physical proximity when talking, eye contact and in a negative context, smirking, and avoidance of eye contact.

Behaviors which the teachers appeared to find indirectly reinforcing, because they resulted in attainment of esteem and acceptance by significant others, were also recorded. Examples of this were on-task behavior, compliance, and non-disruptive behavior. The negative categories of such behavior were off-task behavior, inattentiveness and disruptive behavior. These behaviors are not a complete description of the behaviors observed, but serve only to illustrate the types of behaviors recorded.

In order to compile data on each of the classes several methods were used. While in class, the observer maintained a log, in which a descriptive record of behavior was kept as it occurred. The types of student or teacher behavior and the responses they elicited were described. Behavior which elicited no response was also noted, when the observer thought it should have done so. Further, the particular time periods and subjects were noted to ascertain responses which resulted from these variables. This log served as a reference for later description of behavior and analysis.

In addition to the description of classroom interaction, the observer recorded his interpretation of what had been observed during the day. This served as a record of the ongoing analysis of data. This was considered necessary because of the interpretive nature of the data analysis, and often served to guide the observation on succeeding days.

To gain insight into the interaction process, interviews were conducted by the observer. The interviews were not formal or structured, and were conducted primarily during the last several days of the observation period in freetime and after school. Both teachers and students were interviewed. Students were asked about their perceptions of student influence upon the teacher, and specific methods they personally employed. An extensive interview was conducted over several sessions with each of the teachers. The questioning centered on issues which had arisen during the observation period. This involved questions about why they had reacted to certain situations in the class during the observation period. Further, the general nature of the classroom interaction which had occurred earlier in the school year was discussed. As well, more abstract issues dealing with the teacher's motivational structure were explored. Areas such as aims, values, and goals were considered.

Then, in each of the classes, five students were chosen for a briefer interview. These students were picked to be representative of both high and low academic students, and both teacher-oriented and student-oriented students. Questions dealt with how they perceived their relationship with the teacher and their opinions of classroom interaction.

Chapter 4

CARL: THE SIGNIFICANT OTHERS MOTIVATED TEACHER

The first section of this chapter discusses conclusions drawn about Carl's[2] predispositional structure and its hierarchical order. Next, the manner in which students used these predispositions to influence him is described. Evidence to support these conclusions is provided in each section.

4.1. Carl's predispositions

Carl's predispositions fell into two main categories. First, he defined himself as more "traditional" or "old fashioned" in his approach to teaching. These terms were used by Carl as a rubric for a set of predispositions related to operating his class in a manner which would gain approval from significant others. These tended to predominate. A second group of predispositions concerned the relationship he wished to have with students. The predispositions will be discussed in their hierarchical order.

4.1.1. Predispositions related to gaining approval from significant others

Carl perceived of significant others as his primary source of needs satisfaction. This predisposition was rated highest in the hierarchy because it affected and dominated the others. Carl stated that teachers were the most important members of this group. Parents were also influential, while the

[2]The names of the teachers and students used in this study are ficticious.

principal and school board administrators played a less important role. The influence of significant others upon Carl was evident during observations and was further supported by statements which Carl made during the interviews.

One way to gain acceptance and respect from staff members is for the teacher to operate his classroom in such a way that it does not interfere with other classes. Thus a major predisposition of Carl's was that his class function smoothly and quietly. This not only involved working quietly and on-task during class time, but also meant behaving while at assemblies or during recess.

When asked to participate in the study, his one reservation was that this class was noisier than his classes usually were in the past. This concern continued throughout the study as he frequently referred to this issue with the observer. It was also a dominant theme throughout interactions with the students. He often scolded them for talking or other misbehavior.

In order to facilitate control over the class, Carl tended to teach the class as a group and be rather directive in his approach. During observations there were several occasions when students did work together or when Carl was working with a group while the others worked independently. However, soon after the noise level rose, Carl reverted to a single group approach.

When using such an approach, all work was done at the same pace with explanations being given to the whole class. Individual differences were largely overlooked. For example, reading classes were conducted with students in a single group. Typically, when beginning a new story the vocabulary was placed on the board and discussed. Next the text was read aloud, with all the students taking a turn. Then the story was reviewed and the questions from the text were assigned.

Carl's perception that he was being judged by significant others was also a factor contributing to his emphasis on the mandated curriculum. Carl explained that teachers with the same grade compared test results. Thus, if his class did

well in a test, he considered it to be a reflection of his teaching. Further, even though he knew this was not a valid measure, Carl liked his students' projects and materials to compare well with those of students in other classes. As well, Carl expressed concern that teachers of the following grade judged him in accordance to how well-prepared his students were for their grade. Hence, Carl stated that he emphasized the cumulative subjects, such as mathematics and language arts, towards the end of the year.

Carl's desire for approval from his peers affected his predispositions concerning the mandated curriculum. While the observer was present, little was covered other than that prescribed by the school board.

Geography, science and health were covered primarily by reading the text and doing questions from the text. In mathematics students worked at the exercises in the book. Carl spent a high percentage of class time at the board explaining and correcting work. The general pattern was to correct homework, illustrate a new concept and then assign seatwork.

He defined his goals and objectives as those found in the teachers' manuals. When interviewed, Carl stated that the guidelines he used for teaching were "the goals and objectives outlined in the teachers' texts".

Carl also made it a primary goal to cover the mandated curriculum. Since he defined his objectives as those found in the teaching manuals, if the students exhibited mastery of the material found in the texts, then he felt that his job was complete. This belief was based on the assumption that each year's curriculum built upon the previous year's, thus making it necessary to see that students have a strong foundation before attempting the following year's work.

To some extent it was more important to complete the curriculum than to have the students understand the work. For instance, when a student was having difficulty understanding his work, Carl would attempt to help him. However, if

that student was unable to grasp that concept, and time was short, Carl would move on in order to finish the work. (While this was not the norm, it does indicate that the predisposition to emphasize completion of work was, in some instances, stronger than meeting the interests of the student.) Another example is the way in which humorous, off-task incidents were dealt with. Carl stopped humorous comments by students if they interfered with work. When he did allow students to tell of a comical incident, he quickly got the class back on-task.

The fact that teachers compared themselves with each other pervaded other aspects of teaching. Since classes of the same grade were placed in adjacent rooms, noise level was a consideration. The walls were moveable partitions and noise could be heard between classes. On several occasions, a teacher from an adjoining room came in after a session to apologetically inquire if her class had disturbed Carl.

Parents, also defined as a source of needs gratification, were perceived by Carl to rate him according to the students' work. Hence, Carl stated that he liked students to have "nice" art work, projects and stories to take home. Based on observations, this did not motivate him to do more than prescribed in the course outlines. It did, however, cause him to attempt to ensure that the work sent home was "neat and attractive".

Summary. This section dealt with predispositions based on reinforcement by significant others. Fellow teachers were the first concern, with an emphasis being placed on order, discipline and covering the mandated curriculum. The parents were an important secondary concern, with an effort being made to show evidence that the children were working in a productive manner.

4.1.2. Predispositions concerning student perceptions

There were several salient predispositions concerning how Carl wished to be perceived by the students. First, it appeared to be important that he be accepted and respected by the students. This was evidenced during the observation period. If students became interested in a topic, he pursued it with them. At times, student contributions were off-topic, yet Carl listened and responded. This seemed to be a function of the fact that students were not passive, but gave strong social reinforcement by responding to him with warmth and interest. His pace quickened, with his facial expressions and voice tones becoming more lively. He listened to personal stories about home during free time. When students asked to bring plants or pets -- hamsters, cats, tadpoles -- to class he allowed them to do so. Still, he told the observer that this practice was bothersome and that he tried to discourage it. In short, he wanted to please the students and gain their approval.

In fact, it was a goal of Carl's to make school interesting for the students. This emphasis was reflected in Carl's Q-Sort. He gave a high rating to questions such as, "If students become interested in topics not in the lesson plan, I will pursue their interests."

To facilitate a relationship in which his needs were fulfilled, Carl was predisposed to condone a fair amount of physical movement. Students could go to the sharpener, to the tap, or to friends' desks during seatwork without asking permission. Many entered class just after the bell had gone and went to the tap to get a drink without asking. When the bell went for gym, music, or lunch, students would rush from their seats and line up at the door. It did not matter if Carl had not finished talking or they had not completed their work. If Carl wished to do more work, he first had to get them seated again or at least quieten them down.

Further, Carl liked to occasionally joke with students. He would make

humorous comments or allow students to make them. His chuckling and facial expressions indicated that he enjoyed these occasions. Observations and comments by students indicated that they liked this and appreciated Carl for it.

Summary. So Carl, while being predominantly significant others motivated, was also student motivated. Student motivation was judged to be secondary because it was usually evidenced within the context of behavior which would not conflict with significant others motivated behavior. Allowing children to bring animals to class gained rewards from the students, but it was also very visable to significant others. While Carl would respond to student interest and listen to students' comments which were off-task, he would not let them be too disruptive.

4.1.3. Predispositions concerning growth motivation

Carl did show evidence of growth motivation. He stated that he felt rewarded when students showed by their work that they had learned something he had taught them. However, observations indicated that this was lower in the hierarchy and did not provide much incentive which affected Carl's teaching. For instance, Carl used student interest to expand on the curriculum on several occasions, but only where it did not interfere with covering curriculum or if the subject did not have a great deal of content and filler was needed.

4.2. Influence

Within Carl's classroom, individuals were able to meet their needs in a variety of ways. Before describing how individual students influenced classroom activity, a description of group influence will be given.

4.2.1. Group influence

A salient feature of this class was the existence of a "steering group". Lundgren (1972) has used this term to refer to students who were academically in the 10-25 percentile range, and paced the class through their interactions with the teacher. The author believes this construct can be broadened to refer to a group which, by its behavior, exerts influence over other aspects of the classroom.

The students in the steering group were by no means homogeneous, yet, as a group, they dominated interaction in the class. Some interacted with the teacher primarily on-task. They directed many discussions, with Carl reacting to their statements and questions. During seatwork they would demand individual attention by behaving in a disruptive manner -- walking up to the teacher, or calling out, "Sir, Sir" -- so that at times Carl did not get to other people in the class. The majority interacted both on-task and off-task. They initiated most of the interactions with the teacher. In fact, a general feature of this class was a high percentage of student-initiated contact, or teacher-initiated contact caused by student misbehavior.

Besides influencing the teacher, this steering group influenced other students. Upon seeing this group gain the teacher's attention inappropriately, and misbehaving with little consequence, others imitated them. Carl specifically cited Scott, Jerry and Adam, believing that their disruptive behavior served as a model for other students. Student comments alluded to this dynamic: "At first the class was shy, except for a few, ... now we all speak out"; "Most people were real good ... now we talk quietly and get away with it"; "When the teacher got mad, they [students] used to get sooky [act childishly] ... now they ignore it." Such student comments indicated that the change appeared to be a function of the students' realization of Carl's tolerance.

The prime result of the steering group's influence upon Carl and the other students was the inconsistant interaction pattern which had developed over the

year. Carl explained that the steering group's resistance in complying to the norms he had attempted to impose, had forced him to become tolerant of their behavior. As other students modelled the steering group's behavior, the increased toleration generalized to much of the class. Still, such behavior continued to bother Carl and he attempted to stop it. The tolerance appeared to be a matter of resignation to the fact that he could not control their behavior.

During discussions, Carl asked students to raise their hands before speaking, but, often, they simply called out. Frequently they were responded to if contributions were considered valid; that is, judged to add to the topic. Conversely, if Carl judged the contributions to add little, he tended to ignore them, and at times reprimanded the student. If this failed, Carl said he resorted to asking specific people to answer in an effort to get those speaking out of turn to stop and listen. During observations, the success of this tactic was limited. Frequently, if a student was asked to answer a question, those whom the teacher was attempting to silence simply repeated themselves -- each time louder. If those asked were slow answering, others volunteered the answer.

Still other times, out of frustration, they were scolded for speaking out of turn. Carl indicated that he had to keep at them much of the time: "Come on now, settle down to work please", "That's enough, don't say anything else today", "Hurry up and get your books out, we only have 20 minutes left".

Whether Carl chose to respond to raised hands, to allow students to call out, or to pick people at random, would vary. Often the procedure changed partway through a session. He told the observer that his usual practice, in past years, had been to have students raise their hands. This had worked well, however, this class persisted in contributing out of turn.

Further, while he made it clear that contributions should be on-topic, he sometimes listened to off-topic statements. Humorous statements were sometimes condoned and sometimes rejected. Thus inappropriate actions were sometimes rewarded; and hence, they were continued.

By allowing students to speak out of turn, Carl gave them a certain amount of control in discussions. Rather than acting as the director, deciding who would speak, he ended up reacting to the students' comments.

Thus, Carl had dealt inconsistantly with the steering group by randomly reinforcing their behavior and causing it to persist. Further, other students in the class had modelled their behavior so that it had generalized to the class.

In the context of Carl's predispositional structure, the inconsistency can be interpreted as a conflict of interests. Carl desired the class to be orderly and disciplined. However, constant detentions and punishments are generally considered a sign of poor control. If Carl were to pursue such a course, the opinion of significant others might be adversely affected. Besides this, Carl indicated that in his opinion, efforts to attain a smoothly functioning class had become counterproductive to curriculum coverage. In addition, Carl desired to be accepted and respected by students. He stated that he liked being with children. He had a very pleased expression when students responded warmly to him. Hence, Carl had defined the situation as requiring him to be lenient; and yet, he considered this an inadequate solution. Therefore Carl would fluctuate in the manner in which he operated his class.

The class as a whole exerted influence in other ways. Students were cognizant of doing some of these, but were uncognizant of others. One method, using Carl's predisposition toward gaining approval of students, was to persistently petition Carl. An example of this occurred one afternoon when the class managed to see an unplanned film. Adam had asked several times if they could see a film during the afternoon, but was told "no" each time. Ultimately they viewed a film. Exerpts from student interviews indicated that this occasionally occurred: "we nag him to do something ... sometimes he gives in"; and, "if we ask before class he will sometimes change".

Observations indicated that the teacher was willing to accommodate

students' requests if these could be accomplished without interfering with other objectives related to pleasing significant others. For instance, the unplanned film was related to the unit, but scheduled for a later date. Thus, it was in keeping with Carl's desire to cover the curriculum.

A variation on this theme combined direct requests with negative reinforcement. "Making a deal with the teacher" was how one student phrased it. Students agreed to be quiet and attentive in return for some request. One contract was to sculpt soap carvings in art. On another afternoon, they contracted to have a spelling bee during the last twenty minutes. (This contract went unfulfilled because the students did not remain quiet, which was their end of the bargain.) Thus, the teacher informally bargained with students to reduce misbehavior. This instance involved Carl's strong predisposition for a quiet, orderly classroom.

Influence was also achieved through positive reactions to activities and topics they liked. At times when Carl introduced a worksheet the class went "Yaaaa...". One worksheet received a clap. Once worksheets were handed out, the class worked quietly. It is hard to estimate how much this behavior influenced the teacher; however, it was obvious that he liked these reactions. He smiled when students cheered and would look at the observer, his eyes twinkling with delight. As the students quietly applied themselves, he relaxed in his dealings with them. Student interest was both directly and indirectly satisfying. It was an indication of approval from students, and also, it was considered an important goal of teaching by significant others.

The results of student interest were evident. Topics which interested the class were expanded upon. This might be a prolonged discussion with more opportunity for student participation. It could mean spin-offs such as art activities, being read to from books on the subject, or small writing assignments. This was illustrated during a reading period, the class became interested in the central character of the story -- a talking rock; so, for art Carl had the students

bring rocks, paint on faces, stick on hair, and create names for their characters. The historical figure, George Washington Carver, also generated class interest. The teacher found and read them his biography. Then in science, the class grew peanuts since it was his work with peanuts that gained Carver fame.

Such teaching activities can be interpreted in two ways. First, they can be considered as the products of process-oriented teaching, with Carl using the students' interest as a foundation to build upon. Second, the incentive for following such a course can be considered a function of deficiency needs fulfillment. This would result from student feedback and approval by peers for introducing such high interest activities. Since these teaching activities were a lower priority than other predispositions, such as curriculum coverage, the more likely explanation is that it was primarily the second interpretation.

Students were also able to waste time at the beginning of sessions by getting drinks. Many of them arrived just after the bell went and lined up at the tap. When asked about this, Carl explained that it was more trouble to have them lined up at the fountain in the hall or nagging him for drinks throughout class. Hence, it gained student acceptance, reduced disruption for teachers on corridor duty and reduced negative reinforcement in class.

4.2.2. Individual influence

On an individual basis, students met their personal needs through interaction with the teacher. According to the student and his goals, the behavior was very different. To illustrate this a representative sample will be described.

Scott dominated classroom interaction, obtaining more than twice as many teacher contacts as any other student. During the first several sessions, he continually made remarks to the observer. If Carl left the room, Scott visited other students. When Carl was in the room, Scott tended to seek his attention. To do so, besides misbehaving, Scott made many on-task comments. If ignored,

he repeated a comment until he received a response. At times, Carl reprimanded him for this practice; at other times, Carl acknowledged him. One reason for his acknowledgement was that Scott's comments were usually relevant -- though not always. Sometimes, if the off-task comments were humorous, they were accepted. Usually though, Scott's off-task comments elicited a negative response.

Through such behavior, Scott satisfied his needs. His comments gained the attention of the teacher and the class. Even when spoken to for misbehaving, he achieved his goal which was to gain attention. When singled out, Scott would smile at Carl and/or look about the class with a huge self-satisfied grin to make sure he had been noticed. Once, while reading about the mouth in health Scott blurted, "I have a big mouth!" In spelling when they came to the list word "stern", Scott said, "Mr. James had to be stern with us." He highlighted his disruptive behavior in each instance. On each occasion, the class and Carl laughed. Pleased with his success Scott smiled, at one point bowing.

The reason for Scott's success in gaining attention and approval appeared twofold. One, he was persistant -- a type of negative reinforcement. Carl would respond in order to end the disruption caused by his nagging. Even as Carl said, "Scott, sit in your seat!" or "Stop talking", Scott would continue his off-task behavior. This was a negative use of Carl's predispositions toward classroom order and on-task work.

Two, Scott's social skills were good. He smiled, made eye contact, and showed a genuine interest in what Carl said. Further, he contributed to class discussions and was funny. Thus, Scott met Carl's need for student acceptance.

Leslie achieved similar results, though on a smaller scale. She spoke out of turn, both on-task and off-task. Her favourite pastimes were walking to the tap for a drink and talking with Tracy. These two friends exhibited approximately the same amount of on-task and off-task behavior while in class; yet, they were treated very differently. Tracy received harsher rebukes. Her off-task behavior

was more often noticed and stopped. She less successfully engaged the teacher on-task. The differences can be attributed to several factors noticed during observations.

One factor was Leslie's high academic standing. It was reinforced in interactions with the teacher. She said things like, "Good, I got that one right." Tracy, on the other hand, was of average academic ability, and in Carl's opinion, not performing at her potential.

Though Tracy was a nice girl, Leslie had a better social demeanor. Leslie was pleasant, made eye contact, smiled and was energetic. She gave the impression of being very happy. These traits were evidenced in her dealings with the teacher. Once, after she had answered for another student, she giggled, put her hand to her mouth -- as if it had slipped out -- and said, "Oops, sorry." Tracy, on the other hand, smiled less, and made less eye contact.

Further, Tracy gave the impression of being less responsive to teacher control. If Leslie was told to stop, she temporarily stopped. When Carl's tone was sharp, she was close to tears. Tracy, however, would lower her eyes and appear penitent; but would soon be misbehaving again. Responsiveness to such behavior on Carl's part reinforces the fact that, to a degree, he was also student oriented.

The fact that Tracy often came to school without her books, or without her homework completed was cited by Carl as a source of irritation. He said that it contributed to his attitude towards her, and that this was aggravated by the fact that she always had a "flimsy" excuse.

In short, Leslie was more compliant. She gave more positive social reinforcement. Her work habits were better. Thus, she gave more direct and indirect reinforcement, which resulted in her being treated more leniently and given more attention. Hence, while both girls were equally disruptive, Tracy was treated less leniently and received less social reinforcement from the teacher.

Another group also used the teacher's desire for quiet, orderly behavior and academic achievement to produce interactions patterns which met their needs. This group complied to these norms in order to influence the teacher. They were, however, less obtrusive than the steering group.

For instance, Tony was seldom spoken to in class. He worked very quietly, keeping mainly to himself. At times, however, he stood up and walked around or whispered to another student. Whereas other students were noticed by Carl, Tony seldom attracted attention. During the obervation period, he was never refused help when he approached the teacher. Once, when Tony and two others were at the teacher's desk seeking assistance, Carl ordered them back to their desks; then, upon noticing Tony, called him back and assisted him. (This was by no means the norm, with Tony receiving less help than most; however, it highlights the fact that he was viewed differently by Carl.)

Other than specific cases, when help was needed with work, Tony avoided interaction with Carl, and, to a lesser degree, the class. He seemed shy and was content to do his work without bother. He achieved this, and gained relative freedom to move about by his desk, while students who were less compliant were quickly told to sit in their seats. This treatment appeared to be a function of the fact that his behavior corresponded to Carl's predispositions. Tony was quiet, well-behaved and did excellent school work. Besides this, he was mannerly and respectful to Carl.

The interaction between Carl and Tony highlighted another important consideration about the two-way interaction model. Often, because it is an ongoing process in which both parties influence each other, the direction of influence can be interpreted in either direction. In this case, an alternative interpretation might be that Carl, by leaving Tony to himself, but helping whenever he sought assistance, was able to obtain desired student behavior.

Heather was not as academically able as Tony; still, she was very quiet. By

being non-disruptive, she could behave off-task with virtual immunity. She would get a drink 2 to 3 times some sessions. Unlike most students, she would never ask permission. She also frequently sharpened her pencil. To stretch the time taken for these activities, she took a convoluted path to and from her desk. Varying this theme, Heather would choose students across the room to assist her with work. Again, she took the long way over and back.

If she was noticed doing something, such as playing with a string instead of following in her text, little was said. Heather's off-task behavior was overlooked by Carl because she complied with his predisposition for quiet, orderly behavior.

Other students, such as Janet, were satisfied to talk to their neighbours and have limited contact with the teacher. They were quiet and on-task. They, therefore, were infrequently asked to contribute to discussions -- others volunteered. When most of the class was off-task -- for example, between activities -- they talked to a nearby person knowing that one of the louder students would be singled out.

Another group of students resorted to off-task activities for needs satisfaction. By behaving off-task or by being disruptive they were able to get Carl to behave in ways which met their needs. In this case, the group consisted of academically weak students. A prime example was Jerry. According to Carl, he had done little homework all year. This irritated Carl since he considered homework to be important. Jerry also frequently misbehaved. Carl felt that these two factors had caused him to be overly strict with Jerry. At times Jerry was spoken to when he was not the only student misbehaving, or spoken to more sharply than the incident deserved. (Carl was currently attempting to alter this attitude.)

For Jerry's part, he realized that the teacher's threats held few consequences. The observations were conducted late in the school year and Jerry, like the other students, was aware that Carl would, within limits, tolerate his off-task behavior.

Many of Jerry's comments constituted efforts to get the class to laugh at him. In his desire to gain recognition from the class, Jerry used Carl's predisposition for order. Once in art class, students were to generate a list of words which included the word dog -- dog-earred, hot-dog -- and then draw pictures to illustrate the words. Jerry began calling out "Jackson-dog", and "Straight-dog". Such remarks, which were often nonsense, aggravated Carl, but gained the attention desired.

Ian used similar tactics, making comments, which were poor attempts at humor, to gain class approval. His contribution during an analysis of a poem about ink --"ink stinks"; during an explanation of the French male and female gender -- "Sir, I don't have a skirt, so I'm not a girl". He parroted other students' comments, which had received a positive reaction from the class and teacher. During one observation, the teacher was talking to the class, when Ian shouted to the observer, "Hi sir!"

While he was disruptive, Ian was also exhuberant and would give Carl a big laughing smile while relating an anecdote. Carl admitted he liked this behavior. Thus, while he frequently scolded Ian, he laughed at some of his comments and responded warmly to him when he was on-task.

A major cause for singling out Ian was his low-pitched, husky voice. On one occasion, Carl mentioned the fact that Ian's voice carried above everyone else's in the class.

Yet, whether Ian was laughed at or reprimanded, he found it pleasing. He appeared to like the attention of the teacher, often smiling at him, even after a scolding. When singled out, he looked to see if he had been noticed, gleaming with delight when others were looking at him.

Several students used the teacher's disapproval to gain respect. John was the leader of this group. He gained the admiration of the others by aggravating

the teacher. He would twirl his ruler, talk and make faces. When the teacher spoke to John, he would look at his cohorts and smile. The message was, "we got him that time".

Adam attempted to have the last word when being chastised. He would look on passively. The message to his peers was, "This does not bother me". He would question the teacher's decisions. He seemed aware that the teacher seldom backed up threats with consequences. He did not comply with the teacher's requests in order gain esteem from other students. As one student put it, "Adam was always trying to be a bigshot."

Summary. Observations indicated that this class was able to exert a considerable amount of influence over Carl's behavior. In some cases they were able to bargain with him to have certain activities. By reacting positively to an activity they were able to prolong it and increase the frequency of its occurrence. A steering group dominated the interaction, often creating a situation wherein the teacher, rather than the students, was the reactor. Individuals influenced Carl's perception of them, and thus, how he treated them. Some received more attention. Others, created a negative impression, thereby gaining satisfaction from other students.

4.3. Conclusion

Carl was predisposed to attend to several types of student behavior. Consequently, he was influenced by these behaviors. In order of importance they are: non-disruptive behavior, on-task behavior, and positive social reinforcement (including student interest).

To summarize student influence upon Carl, it is helpful to consider his behavior within a model which categorizes his responses to types of student behavior.

(1) Students who were on-task, non-disruptive and gave Carl positive social

reinforcement, were treated leniently. They were allowed a little more freedom. Further, Carl tended to interact with them in a positive manner with few negative exchanges.

(2) Students who were on-task, non-disruptive, but did not give Carl much positive social reinforcement, were also treated leniently. However, Carl left these students to themselves, while he attended to other students who demanded his attention.

(3) Students who were on-task and disruptive, but gave Carl positive social reinforcement, were treated inconsistently. Carl usually stopped the disruptive behavior. However, at times he was tolerant of the disruption. In addition, he was not as strict with these students.

(4) Students who were on-task, disruptive and did not give much positive social reinforcement tended to be immediately stopped and treated with less tolerance than the other groups mentioned thus far.

(5) Students who were off-task, but non-disruptive and gave Carl positve social reinforcement were treated permissively. Their behavior tended to be tolerated as it disturbed no one. This should be qualified in that there were time limits involved. A student could not be off-task continually.

(6) Students who were off-task, non-disruptive and gave Carl little positive social reinforcement, were made to get back on-task when noticed. However, the fact that their behavior was non-disruptive meant that they were not quickly noticed.

(7) Students who were off-task, disruptive, but gave Carl positive social reinforcement, would be stopped. Though the manner in which this was done did not tend to be curt. Further, if the students were not continually off-task and disruptive they were more often tolerated than those who continually behaved in this manner.

(8) Students who were off-task, disruptive, and gave little social positive reinforcemtent tended to be treated strictly. They often received scoldings as Carl attempted to get them back on-task.

Chapter 5

RON: THE PROGRESSIVE NON-TECHNICAL TEACHER

The first section of this chapter discusses the conclusions drawn about Ron's predispositional structure and its hierarchical order. Next, the manner in which students used these predispositions to influence him is described. Evidence to support these conclusions is provided in each section.

5.1. Predispositional structure

Like Carl, Ron's predispositions can be grouped into two categories: one category relating to students and another category relating to significant others. A major difference between Carl and Ron was the amount of emphasis Ron placed on satisfying the needs of students. The Q-Sort defined Ron as a student motivated teacher. Observations indicated that his student focus was a method of teaching. While students were a major source of needs satisfaction, significant others appeared to be more important. As such, Ron cannot really be considered a student motivated teacher. Therefore, he has been labelled a "progressive non-technical teacher." This term is defined as a teacher who operates his class in a manner which emphasizes the needs of students within the context of traditional content and methodology.

After discussing Ron's predispositions toward students and significant others, his other predispositions will be discussed in order of importance.

5.1.1. The relationship between students and significant others

Ron's major predisposition was his student emphasis. This shaped and determined his other predispositions. He said, "the student, as far as I'm concerned, is the crux of the teaching process". While all three teachers made similar statements, with Ron, it was manifested in the way he dealt with students.

The students were very responsive to Ron: they smiled, stood in close proximity, and were warm towards him. While walking down the hallway many students would say "Hi" or tell him something. If he was on corridor or outside duty, students would congregate around him. In observing Ron, it was obvious this interaction satisfied his needs for acceptance and esteem. He would smile -- the mouth, cheeks, eyes all expressed his pleasure.

Comments made during interviews reflected his predisposition to view students as a major source of needs satisfaction. He said he considered it important to have a relationship in which there was no tension between students and himself. He felt he had been successful in achieving this goal. Ron was very comfortable teaching the class. He felt they were "approachable and appreciative of the effort he put into working with them". The amount of time he made himself available to students was a further indication of the importance of this interaction. He stayed late after school, participated in intramural sports, and encouraged students to stop by his house for help.

However, significant others were also a major source of needs satisfaction for Ron. He operated his class in a manner which gained approval from other teachers. Further, a by-product of his student focus was that they behaved in ways which significant others valued.

The importance of needs satisfaction by significant others was evidenced in Ron's behavior. He had grown up in the school neighbourhood and was now active in community church life, and served on several community committees.

This made him visible to the parents. Second, he accepted extracurricular activity. During the present school year, he had started a student council and participated in intramural sports. Third, he was helpful to staff members. In particular, he watched classes for teachers in nearby rooms if they needed to leave and shared the materials for experiments which he had put together. Fourth, Ron operated his class in a non-disruptive and on-task manner which was pleasing to other teachers and the principal.

Furthermore, his basic approach of focusing on the students' needs within a traditional context, meant that often the same behavior which resulted in direct needs satisfaction by students, also resulted in indirect needs satisfaction from significant others. For instance, when students came to Ron's home for help with homework, he perceived of this as a sign of acceptance and respect from them. However, parents also would be impressed by his willingness to give of his time. Hence, both groups gratified his needs. Further, teachers would observe or hear about the quiet, on-task behavior of the students and their positive interaction with Ron. Some might hear, as the observer did, when one of Ron's students approached him and stated his high opinion of Ron including the reasons for the opinion. Certainly, parents heard directly from their children.

Acceptance by the principal was particularly important to Ron. He felt grateful because the principal had made it possible for him to move back to the school district. Ron said that the principal had "taken a risk that I would work out fine, even though he did not know me." Because of this confidence, Ron said he attempted to put forth an extra effort. Further, Ron noted that that the principal had treated him as a professional who was competent and capable of making his own decisions. This gave Ron a big boost in self-esteem and extra incentive to continue working as he had with students.

Ron was judged to be primarily significant others motivated because he appeared to place behaviors which typically gain approval from significant others ahead of student acceptance. Order, control and on-task behavior were placed

above student approval. The interviews with Ron and the students indicated that he had been very strict. He used detentions and other forms of punishment during the first part of the year to achieve these goals.

Summary. Hence, needs fulfillment by significant others was higher in Ron's predispositional hierarchy. However, his predisposition toward gaining needs satisfaction from students was also high. Further, behavior which satisfied students' needs, was both a means of obtaining direct needs satisfaction from students and a means to an end, in that it resulted in indirect needs satisfaction from significant others.

5.1.2. The other predispositions

Ron's predispositions toward significant others and students led to a number of other predispositions. A high priority was given to having a very structured class. This seemed to be a result of a desire by Ron to be in control of the class. Some structure was due to school regulations, but more rules were added by Ron. Whichever the case, he rigidly enforced them. No students were permitted in the classroom without the presence of a teacher. When going to the bus or to another part of the school, students had to first queue and then walk single file. These were school regulations and Ron strictly enforced them.

A rule instituted by Ron, dictated that before going to the washroom a student had to sign his name, the date and the time on a form hung by the door. This rule was a reaction to an incident in which several students damaged school property while out to the washroom.

Earlier in the year, student misbehavior was recorded on file cards. Later, a list was kept of students who failed to do their homework. These practices had succeeded, according to Ron, in making students aware that he was keeping track of their behavior. Such procedures suggested to the observer that there was a high degree of teacher control.

Ron also emphasized quiet and orderly behavior, stating that, during the first two thirds of the year, he had strived to improve student behavior and output. He used negative reinforcement, such as scolding and nagging. Consequences such as lines, detentions and isolation were also employed.

At this point in the year, virtually no student engaged in off-task behavior. When either Ron or a student was speaking, everyone else listened. Nobody spoke out of turn. If a student wanted to contribute, he/she first raised a hand to obtain attention. One result of this orderliness was that students' comments were relevent and added to what had been said.

Likewise, when Ron was lecturing, the class was quiet and attentive. Ron spoke in a straight-forward manner with little dramatics or humor. The result of such behavior was that the students were compliant, which was a strong source of indirect needs fulfillment, as teachers and principals value such behavior.

It was interesting that Ron stated he valued students' compliance because he felt it was prerequisite to having a good relationship with them. Observations indicated that the classroom was a comforable setting. The students appeared to be relaxed and content. The interaction between the teacher and students was not forced or tense. Little criticism was directed toward them. Only one student was disciplined during the observation period. It was likely that the students' compliance was partially a result of the fact that their needs were being met.

Ron provided what Aspy and Roebuck (1977) has referred to as a "facilitative environment". Students were listened to and accepted. Ron attempted to help them with their personal and academic problems.

Effort by students was also valued. While homework was important, class work received more emphasis. Ron made it clear that he judged students favourably if they were making an effort with their school work. A final, perhaps obvious, behavior was completion of assigned work. When rating students' ability, Ron would frequently refer to this criterion.

Ron felt that he should abide by the mandated curriculum. He did so, using textbooks and the chaulkboard. However, in conjunction with this, Ron occasionally added projects and suggested activities. The reason he gave for doing so was to make it more interesting for the students. In science, the class did suggested experiments. For religion, he gave assignments and had students make wall displays and mobiles. Students worked on group projects in history. Mathematics, however, was a matter of working through the textbook.

Ron's emphasis on the curriculum has been ranked low. While he desired to complete at least those subjects, such as mathematics, which were cumulative, he was more concerned that the material be relevant to the students and that they understand it. When correcting exercises or doing examples, Ron involved students. If a student made an incorrect response, Ron did not ask someone else for the correct answer. Instead, he would help the student to understand his mistake, often getting him to verbalize his thought process. He would take considerable time to ensure that the student understood the concept before moving to something else. Further, when evaluating students, Ron placed a great deal of emphasis on participation and effort, rather than on mastery of the curriculum.

Summary. Ron emphasized structure and orderly, on-task behavior in his class. Due to his focus on students he provided facilitative conditions (Aspy and Roebuck, 1977) for the students. He placed more emphasis on students' understanding and involvement than on completing the mandated curriculum.

5.2. Influence

As is obvious from the above description, the class functioned in accordance to Ron's wishes. Students behaved in ways which he found very satisfying. Still, students did have input into the classroom process. In fact, they were able to shape Ron's behavior so that their needs were met by him. First, the group influence of the students will be discussed, followed by a description of how individual students influenced classroom activity.

5.2.1. Group Influence

In considering student influence in this class it is significant to note how students did not behave. Particularly evident was their lack of overt effect upon the curriculum and classroom structure. Students never asked Ron to show a film, to read to them, or to do group work. While in class they were very passive and compliant. Further, students stayed on-task.

The extent to which this was a function of classroom interaction was difficult to assess. Most likely it was a combination of factors. One factor was lack of a role model. Ron claimed that the class lacked a leader to adversely influence other students. One boy had served this role, but he left early in the school year. Ron stated, as did one of the girls who was interviewed, that class behavior had improved since his departure. (The lack of role models might also account for the fact that there was no dominant steering group in this class, as had been case with Carl's class.) Another factor, attested to by the teacher and students, was Ron's rigid enforcement of structure and order during the first third of the year.

The result was a static interaction pattern. Students appeared content with the manner in which the teacher operated, and conversely, the teacher was happy with the students' behavior. Actually, the pattern of interaction which had been achieved was very complex. It involved a balance of the teacher's academic expectencies and students' academic output; a balance of the teacher's behavioral expectencies and the students' behavior; and, a balance of the teacher's structure and the students' expectancies about format.

While the students conformed to Ron's expectations, they also modified them. By year's end, due to their performance, Ron considered these students to be academically weak; thus, he never held high expectations for the quality of their work. Based on observations, he had become more tolerant of incomplete homework. Several times when assignments were due and a number of students

had not passed theirs in, Ron only told them the assignment's value toward the final grade and reminded them how close they were to the year's end. Due to improved work habits by the majority of the students, he had given them more responsibility for getting their work done. Ron felt at this point that he could ease up on the strict supervision and still have control. This was primarily evidenced in mathematics. Since the class was behind with only a few weeks left in the school year, Ron loosened the structure to increase the pace. Instead of Ron correcting the work, the manual was placed on a table for student reference. Since students were operating at their own pace, more help was given individually or in small groups.

Ron's style of interaction had changed since he moved to this school two years previously. He related how he had found the younger students more "open and willing to talk about themselves ... and relationships with family and peers". Because of this, he had relaxed more with students and modified his teaching style to a more interactive approach, making greater use of student contributions. School work was related to student's personal life where applicable. He often responded to the feeling embodied in student's comments, rather than to just the content. The fact that students would talk to him about such issues seemed to reward Ron. He frequently referred to the quality of such interactions as an indication that he was doing something right as a teacher. As such, it was esteem enhancing for him.

Such influence was still ongoing. Ron said that how he operated individual classes was a function of the student behavior. With classes who exhibited self-control and responded personally to him, he was less business-like. If he found that the class abused such freedom, he imposed more structure. Similarly, the number and scope of projects was a function of the class. With classes who were able to work independently, projects were more frequent and more complex. Since Ron left his homeroom to teach several other classes, the observer had the opportunity to verify these statements. In another class which Ron taught, an

involved history project had been ongoing for five months. Ron believed his homeroom needed more structured individual work. Observations supported this belief. This seemed to be a function of his desire for wanting interaction with the students, while at the same time the need for control over the class dominated his decisions.

During the observation period Ron gave one assignment that involved independent work. The quality of the students' work that was done during this assignment was very poor. Yet, when the students did structured seatwork or took part in a discussion, they were on-task and productive. This has two possible explanations. First, it can be interpreted as the class's resistance to projects and groupwork in favour of individual seatwork and discussions because these were more familiar and comfortable for them. They resisted, according to Ron, by engaging in disruptive behavior and by being inattentive when he introduced these activities. Such an interpretation is in keeping with findings by Good and Brophy (1984). Second, it can be interpreted as Ron reverting back to a more controlled approach because of his need for structure.

5.2.2. Individual influence

Students, as a group, did influence teacher behavior, but it was individual influence that was most apparent. Students defined the situation differently, and therefore, behaved differently to meet their needs.

One group received a high proportion of the student-teacher interactions. These tended to be private interactions such as getting help with work, or asking permission to do something. To refer to them as a steering group such as existed in Carl's class, would not really be valid, for they did little to influence the operation of the class. Besides, their contacts with the teacher were usually on-task.

For instance, Roger had transferred to the school three weeks previously,

and was far ahead of the class in mathematics. Ron had him assist others with their work. According to Roger's facial expressions, he was flattered to aid other students, and he liked the frequent contacts with Ron, when he sought confirmation or clarification of a procedure he was explaining to another student. Roger, by assisting other students, evaded work. He spoke quietly with other students. Observations indicated that these chats were often off-task; yet, he frequently conferred with Ron, which gave the appearence of on-task behavior. Thus, Roger was able to meet his needs by appearing on-task, and by voluntarily participating.

Patsy put a good deal of effort into her work. She contributed to discussions, but the majority of teacher contacts were for help with seatwork. She also sought help from Ron after school. Patsy related to Ron in a relaxed manner and thanked him for helping her.

Jesse was also considered a top student because of his input into class. This high ranking appeared to be a result of his exhibiting valued behaviors, such as on-task work and voluntary participation.

Patsy and Jesse made good use of social skills. They displayed warmth, were attentive, smiled, and showed interest. Ron responded to this reinforcement by having longer interactions, and by being less formal with them. He smiled more and used more relaxed tones.

Sandi also had high input into classes. Ron responded positively to her participation. While not considering her a top student, he spoke highly of her and tolerated some off-task behavior. She could doodle in her books and waste time without being scolded. Other students were stopped for similar behavior.

These students were teacher directed. Their behavior was primarily on-task, the aim of which seemed to be acceptance and approval from Ron. Based on observations, Ron gave them time and attention. He was seldom judgmental

and showed them respect. Ron stated that he tried to give students the benefit of the doubt and "not be down on them all the time". This applied to all students.

Other students achieved the opposite effect. A group of boys realized that Ron tended to interact with those who volunteered and sought help. They did neither, thus giving Ron a minimum of positive social reinforcement. They would seldom smile or give any indication of acceptance. Instead, interaction consisted of bland, polite and formal response, such as is typical when dealing with a superior. When asked if they were having difficulty, the response was usually a politely mumbled "No Sir". The result was that Ron had less interaction with these students. He stated, that within limits, he let students choose the amount of contact they wanted with him. One of his goals was to provide a comfortable environment for students; and thus, he did not want to impose upon them. This behavior appeared to be a result of his student emphasis and desire for positive student feedback.

Darrin was a prime example. Ron considered him bright, but lazy. He quietly worked on-task, though with little effort. When he wanted a break, he approached another student for help. When off-task, he was unobtrustive. In cases when the teacher did approach Darrin, the encounters tended to be brief. A typical interaction occurred in a mathematics period while Darrin was using the manual to correct his work. Ron asked, "How's it [mathematics work] going, Darrin?" Darrin replied, "Fine [without looking up]." "Having no problem?" "No." "Okay." By giving him minimum positive social reinforcement, Darrin effectively terminated the conversation with Ron.

Kirk was similar to Darrin, but he maintained a higher profile. He had given up any hopes of passing. His mother called during the observation period to express her concern over his attitude. He produced little work, though this was not evident from observing him in class. During seatwork he used the same tactics as Darrin. For breaks he sauntered over to friends to get help. They would huddle over the textbook, but many of the conversations overheard by the

observer had nothing to do with the subject matter. Like Darrin, he minimized conversations with the teacher: "Sir, I'm finished." "Everthing?" "Yes sir." "Corrections?" "No sir." "All right then, do them."

Hence, Kirk abided by the rules and had a comfortable existence in the classroom, without a great deal of pressure to work. This is not to imply he did no work, but rather, that Ron never constantly pressured him to produce good work. Further, he had minimal contact with Ron due to not giving him much positive social reinforcement.

It was low productivity which jeopardized Kirk's passing, specifically his lack of completed homework. While this was true of several students, it was more often true of Kirk. He would come to school with his work incomplete and never mention it to Ron. It only became evident when he was asked to hand in homework, or when questioned about the work. In a stern, but not loud voice, Ron would ask why it had not been done and when he intended to get it done. Kirk would maintain a subservient and penitent pose. His eyes would be down or fearfully looking at the teacher. He answered Ron in a low, unsure tone. The end result was that the work was seldom completed.

A conversation between Ron and Debbie exemplified those related to homework. When correcting science homework Debbie was unable to answer a question. Ron asked if she had done the assigned work. Almost inaudibly, she replied, "No sir, I couldn't do it." "Okay, you will have to do them this weekend." Debbie's eyes were focused on her desk top. "Did you have trouble reading this page?" "Yes sir." In a sterner tone, Ron said, "I didn't see you up here for help did I?" Eyes down, Debbie made no reply.

In such interactions, Ron was stern; still, there was little hint of anger and seldom any stated consequences. It seemed that if one responded properly, there was relative immunity. For example, several students never passed in religion assignments. Kirk in particular was singled out as having only completed one of

four assignments given in the last five months. After being scolded for this, rather than being made to work on their assignments, they were allowed to work on some posters for religion with the rest of the class.

Unlike this group, Carla tended to interact with the teacher off-task, but in an appropriate manner. She volunteered to run errands, to clean erasers, or to put up posters. She told Ron about incidents which occurred at home or with friends. Sometimes, this would be within the context of discussions in religion or health. Carla also talked to Ron before and after class. In talking with him, Carla was vivacious. She had friendly, expressive eyes. She smiled and fidgeted, as if excited that Ron was listening to her. Ron also appeared to enjoy her. He smiled and his remarks indicated that he was interested in what she was saying.

Glenn also liked to run errands for the teacher. He was poor academically and had failed the previous year. He indicated to the observer that he had felt isolated and shunned last year and had feared that the same thing would happen this year. The fact that he was getting his share of involvement made him responsive to Ron. When asked to do something, he did so with eagerness. Ron showed his appreciation by thanking him and by often sending him on errands.

Cathy kept to herself while in class. Because she had made a tremendous improvement in her work over the year, Ron rated her highly. At this point, she was working well and was left to contact the teacher when she wanted help. When interviewed, Cathy said that she had done poor work at the beginning of the year, which resulted in the teacher continually "yelling" at her. She found that he did not "yell" at her when she did "good" work, so she decided to improve. By improving, she not only avoided the constant scoldings, but she also began gaining positive feedback from Ron. In this case, it was obvious that Ron influenced Cathy to change her work habits. Still, the fact that he rated her higher than her work warranted, and that he praised her in class, can be interpreted as her realizing a way to change Ron's behavior towards her.

Summary. From observations then, while Ron was a powerful actor in the interaction, students did influence what occurred. As a group, they lowered Ron's expectations. They limited the type of work he gave them to that which was highly structured and supervised, because they appeared to find this type of work more comfortable. Teacher-centered individuals were able to interact more with Ron, while student-centered individuals were able to choose the amount of interaction they had with him. This could vary from minimal, to frequent on-task, through to visiting him at home.

5.3. Conclusion

Ron was predisposed to attend to several types of student behavior. Consequently, he was influenced by these behaviors. In order of importance, they are: on-task behavior, non-disruptive behavior, and positive social reinforcement.

To summarize student influence upon Ron it is helpful to consider his behavior within a model which categorizes his responses to these types of student behavior.

(1) Students who were non-disruptive, on-task, and gave positive social reinforcement were rated highly by Ron. He also gave them help during seatwork or after school. This tended to be reactionary in that these students requested help.

(2) Students who were non-disruptive, on-task, and gave minimal positive social reinforcement tended to be left alone. Ron gave, or at least offered them help and required them to participate in discussions, but he felt that he should not force them to interact with him as long as they were working quietly.

(3) Students who were non-disruptive, off-task, and gave positive social reinforcement were told to get back to work. However, this seldom occurred. Students were usually on-task during observations. When they were off-task it tended to be for short periods of time and thus was either not noticed or ignored.

Interviews did indicate that earlier in the school year, persistent off-task behavior was punished.

(4) Students who were non-disruptive, off-task, and did not give positive social reinforcement were treated in much the same way as those who gave positive reinforcement. In either case, prolonged off-task behavior was not tolerated, once it had been noticed.

(5) Students who were disruptive, on-task and gave positive social reinforcement were asked to settle down. (It should be noted that during the observation period virtually no disruptive behavior occurred.) On the few occasions students were a little too disruptive during work which involved noise, such as an experiment, they were simply asked to quieten down.

(6) Students who were disruptive, on-task and did not give positive social reinforcement were again simply asked to quieten down or to stop whatever was considered disruptive. The only time Ron would be sterner with the students was if he felt that their behavior was habitual.

(7) Interviews indicated that Ron was very stern with students who were both disruptive and off-task. If such behavior persisted, then they were punished. Ron stated that during the first part of the year he had kept a record of disruptive behavior and incompleted work. It did not appear to matter whether or not he was given positive social reinforcement by these students.

Thus, it appeared that Ron was very consistent in the manner in which he dealt with off-task and disruptive behavior. Still, those who were usually involved and gave positive feedback to Ron were treated with a little more tolerance. However, observations indicated that this was a function of the fact that they were usually compliant to the norms of the teacher. Since there was very little disruptive or off-task behavior during the observation period, it is hard to estimate the effect of social reinforcement in the form of smiles or warmth.

Volunteering and involvement did seem to cause Ron to be more lenient and to rank students favourably.

Chapter 6

DAN: THE GROWTH MOTIVATED TEACHER

The first section of this chapter discusses the conclusions drawn about Dan's predispositional structure and its hierarchical order. Next, the manner in which students used these predispositions to influence him is stated. Evidence to support these conclusions is provided in each section.

6.1. Dan's predispositional structure

Dan's predispositions can be organized into the three categories outlined in the rationale of this study. These prepositions will be discussed in order of their importance to Dan.

6.1.1. Predispositions related to growth motivation

The observations and interviews indicated that Dan's growth motivation was the predominant category of needs fulfillment in the classroom. It appeared to provide incentive for his interest in the process of teaching.

During the interviews, it became clear that Dan had considered the curriculum and had developed his ideas about what was worthwhile and how to best present it to students. Besides academic goals, he attempted to use the interaction with students to achieve social goals. Hence, he consciously interjected values which he considered to be important -- fairness, equal rights, and healthy lifestyles.

Dan devoted time to making sure the content covered the areas he felt it should. The mandated curriculum formed a foundation upon which work was based, but to this, Dan added materials found by browsing professional books and journals. These included units and worksheets. The questions asked were frequently developed by Dan. He read to students from a novel for 15 to 20 minutes per day. The students loved this, becoming involved in the characters' lives and in the plot. They pleaded to see the illustrations. This practice seemed to have stimulated interest in reading, as many of the students were using the library. Another popular addition to the curriculum was drama practice. During the observation period, the class was preparing to present a play for the Canada Day concert. One of Dan's goals, related to the curriculum, was to find "material which would inspire the students".

Dan felt student interest was important, and thus, geared his classes toward achieving this goal. These efforts gave Dan a sense of satisfaction. For instance, one day in mathematics Dan drew stick men on the board. This grabbed the students' attention. After convincing them that this activity involved mathematics, Dan wrote information about the figures on the board, such as height, weight and age. To match names with the figures, the students had to complete a series of computations. On another occasion in social studies, he had students brainstorm to develop a picture of entertainment in modern Newfoundland. This was then contrasted with entertainment as it existed in early Newfoundland. Another time, Dan presented several problems on the board which required creative thinking. The students solved them and demanded more, and Dan had a worksheet ready for them. The pleasure of such successes was transparent with Dan wearing a pleased expression and being more relaxed in his interaction with the students. Such efforts also affected the quality of teaching. One student stated, "It is never boring. There is always something to do -- always something planned."

Dan was also predisposed to use humor. This does not imply he constantly

joked, for he tended to be be serious and on-task. However, to generate interest in work or to make a point about misbehavior, he used humor. An example of the latter occurred during a mathematics class. Cecille had been told to pay attention twice. Dan had just spent 10 minutes explaining the method for doing a type of division calculation, and then had set the class to work. Within 20 seconds, Cecille asked how to do the first problem. Dan threw up his hands, looked at the ceiling, turned and stomped out the door. The class laughed as Dan re-entered a few seconds later and, with an exasperated look, said, "Honestly Cecille, you're going to make me retire before I'm 30."

Since student interest was a goal in that it contributed to learning, it also served the function of providing feedback to Dan as to how successful activities had been. If students were interested in an activity, then the method of presentation and the content were judged a success.

Dan emphasized structure, and planned classes in detail. A period might consist of 3 or 4 different 10 minute activities. Dan's purpose in doing this was to alleviate boredom for the students. When planning lessons he alternated, when possible, the types of activity, so that there was not a morning of seatwork and an afternoon of discussion. In addition, the morning or afternoon session was often ended with a high-interest activity. Such teaching practice is consistant with his growth motivation, in that it was Dan's interest in the process and his attempts to enhance learning that provided the incentive for such planning.

Dan repeatedly informed students of these plans during a session. He said he had found this increased students' efficiency in switching activities. Each Monday he gave a dictation which outlined the overall plan for the week. Again, the incentive for Dan making the effort involved was his interest in creating a more efficient learning process.

Another predisposition related to Dan's growth motivation was his belief that the student was the reason for teaching. This belief manifested itself in

process-oriented activities, rather than in student-oriented activities, as it had with Ron. Dan's attitude was that schools existed for students; therefore, as a teacher he should do everything in his power to help them learn. He considered change in students to be a measure of his success. Therefore, students' comments indicating they had grasped the concepts presented during discussions and assigned work provided feedback about the success of the lessons.

Though he did not state it as such, Dan's comments and actions indicated that he viewed students as part of a system, and thus, to be most effective, he believed he had to affect the whole system. This principle pervaded Dan's work.

Related to this principle was Dan's involvement with committees. His belief was that through them, the curricula, the school and eventually the school system could be changed. He felt that his involvement would benefit the students; hence, he was willing to give up time and endure the tedium often associated with such work. Alternatively, it can be viewed as a means of gaining recognition from teachers and the principal.

Dan kept in touch with the parents because of their importance to the students' learning and psychological growth. He noted that in the past, parents provided insight into students' problems. In addition, he believed that students' knowledge of the existing liason between parents and the teacher provided security. Hence, he attempted to meet all of the parents and, to a limited extent, create a team approach with them.

In short, Dan not only realized the many components of the system which affected the students, but he also believed that he should actively work with them.

Dan attempted to teach in accordance to his values and beliefs. Though he tried not to cover topics which were offensive to significant others, he said he would not ignore a topic that he considered important. He used the example of

abortion. He said he would cover this topic, but in a manner which would not upset significant others.

If it did come to a conflict between significant others and his values, then his values prevailed. He said he would "go to the bitter end for a student, even if it meant confronting staff or parents". He cited one instance in which he confronted the guidance counselor over the process being used to help an emotionally disturbed boy. He felt the counselor's approach was ineffective, so he worked to institute a new approach. Thus, this teacher acted upon his beliefs, in an effort to better serve his students' long term needs. From these examples cited by Dan, it became evident that his values predominated the role of needs fulfillment from significant others.

Further, in a long term context, it was not student reinforcement which rewarded Dan; rather, it was the process of working with them. Dan told the observer that he found his work with several of the students very rewarding. The observer noted that the behavior of these students seemed to irritate the teacher. While agreeing that he was irritated by their misbehavior, Dan said that he found the process of working with them in an effort to bring about healthy change, exciting. Such satisfaction led to a situation in which he was dealing with students differently, in an attempt to change them in ways he considered worthwhile.

Dan, then, tended to be growth oriented in his work. He tried to improve as a teacher, and this involvement in the teaching process provided satisfaction of growth needs. His attempts to implement his values and beliefs took priority over gaining needs fulfillment from significant others and students. This further indicated that his growth motivation was dominant. However, it was also true that he satisfied his deficiency needs through his job.

6.1.2. Predispositions related to student motivation

Students were a major source of deficiency needs satisfaction. Referring to students, Dan stated: "The relationship has to transcend them liking me. I want us to have a rapport. I want a caring relationship. It makes teaching worthwhile."

This desire motivated Dan to interact with students on a personal level. He was open about his feelings. When the class functioned as he liked, he was pleasant. Conversely, if he was irritated with the students or curriculum, this also was evident. He would tell students how he felt. A student said that she liked the way Dan interacted with them: "He was almost like a friend."

The students were attached to Dan. They liked being in his class. All but one of the students interviewed, cited Dan as the reason they liked school. They listed various aspects of his teaching that they enjoyed: "He was funny"; "He talked at their level recess and lunch time"; "He was not too rigid"; and, "He did interesting things in class". The acceptance gained by such activities may have provided an incentive for Dan's efforts.

While making the class interesting was a function of Dan's process orientation, sometimes it appeared to be a result of his desire to gain approval from students. Anecdotes, such as the tale about a tapeworm being enticed from a person's intestines, were told solely for interest. In fact, Dan's habit of utilizing personal experience and knowledge had evolved due to student feedback. He said that students responded to these accounts as they made topics seem more alive and tangible. The students listened intently and asked questions. For his part, Dan enjoyed the students' interest. He was animated as he told the stories and looked pleased when questioned.

Further, he would allow conversations to briefly wander off-topic to something which interested the students. Once a worksheet of riddles was given.

This was very interesting; still, its function was to fill time in a way which pleased the students.

The lack of rigidity with which threats were executed was a further indication of Dan's desire to be accepted by students. He seldom carried out threats of detention or withdrawal of high-interest activities. The pattern observed was that after a threat, students stopped the irritating behavior for several minutes, but then the threat was forgotten.

Students were also given the freedom to state their opinions. They could say things like, "I think this is a stupid story", or "This is boring, Sir". Dan did not treat such comments as out of place, but rather, responded, "I agree, this is a stupid story, but the school board won't let us use a reader which I feel is better" or "Give it a chance, you don't even know what it's about yet." Dan stated that he tried to be open with students about his feelings and encouraged them to be open with him.

6.1.3. Predispositions related to significant others motivation

Dan also appeared to seek needs fulfillment from significant others. He was concerned about visible student misbehavior. For example, he was upset, and spoke to the class very harshly after the librarian reported that they had misbehaved during library period. The difference between this incident and misbehavior in the homeroom appeared to be its visability to other teachers. Similarly, Dan supervised the movement of his students throughout the school, even when this meant leaving the majority of the class unsupervised in the homeroom.

Some class activities initiated by Dan were conspicuous ones which would be noticed by significant others. Interesting art and language arts activities were posted on the walls. A display of antique items and books, gathered by the students for social studies, was placed in the hall. These activities were visible

manifestations of the teacher's work and focused attention on his efforts. This is not to imply that this was a prime reason for doing such activities, but rather, that esteem satisfaction was a by-product because significant others would respect the teacher's efforts.

Summary. Hence, students and significant others did provide needs fulfillment for Dan, but, his growth motivation appeared to be the dominant predisposition. It resulted in a process orientation. Dan attempted to interest students and enhance their learning. He did this by supplementing the curriculum and by trying various activities.

6.2. Influence

Students were able to influence Dan by using his predispositional structure. A description of group influence will be given and then the manner in which individuals influenced him will be outlined.

6.2.1. Group influence

Group influence was facilitated by the fact that, like Carl, Dan operated the class in an inconsistent manner. Students were asked to raise their hand to get permission to speak before volunteering comments or answers. Realizing this procedure excluded those who were reluctant to participate, Dan sometimes asked specific students for comments or answers.

The difficulty was that students spoke out of turn. Dan would ask one person a question, only to have another person call out the answer. In other cases, students employed attention-seeking behavior in order to gain the right to speak -- tapping their desk , or calling "Sir, sir".

As a result, the noise level was high. This was aggrevated as some classmembers used this noise as an opportunity to chat to each other. Dan fluctuated between tolerating the noise and attempting to reduce it.

This inconsistency can be understood as a conflict in Dan's predispositional structure. He wanted the students to be quiet and non-disruptive. He also wanted them to be interested and involved. In the hopes of generating interest Dan would allow students to speak out of turn as their enthusiasm rose. Then, as some students began to abuse this leniency, he would attempt to exert more control, but desiring approval from students, he would seldom apply any consequences to the disruptive behavior.

Hence, some students would use this inconsistency as an opportunity to behave off-task. Others would use this leniency to speak out of turn or to dominate discussions. A few would use it as an opportunity to irritate the teacher and thus, gain approval from their peers.

The students were also able to influence Dan in other ways. One method cited by a student was to "ask real sweet" and then "be real good". At times this approach succeeded. These requests tended to be for activities which Dan valued. The class provided incentives in that they behaved well and showed interest during these activities.

Conversely, when Dan threatened to withdraw valued activities, students would momentarily settle down. Then, within minutes, they would resume their off-task behavior without being punished. One student noted that, at times, they were not interested in the activity and continued the disruptive behavior. However, the student was unable to explain why an activity was not always valued enough to work as an incentive to stop misbehaving. A possible explanation might be that on some days their interest in a particular activity had been saturated and thus it was not valued.

Student feedback also influenced the types of activities and materials that Dan added to the curriculum. The students' reaction to an activity was the criterion for its evaluation. Dan wanted students to be involved in the process and successfully achieving the objectives of the activity. Therefore, students were

often read to because they showed interest in it and appeared to spend more of their spare time reading. Similarly, drama got students involved and interested, so it was continued.

Similarly, discussions were subject to student influence. When students showed an interest in some topic, though it may have been off-task, the teacher would pursue it.

6.2.2. Individual influence

Comments by students about how they gained or avoided attention provided insight into individual's influence upon the teacher. The sometimes high noise and activity level which existed in the classroom made it difficult for some students to gain the teacher's attention. To overcome this problem students developed various methods, such as tapping on the desk, hand waving or even more disruptive behavior. Some students said they would shout what they wished to say.

According to Dan, the success of these methods was a function of the content of their contributions. He lightly stated that if the contribution began with "my grandfather told me ...", it tended to be cut off, since he judged this to be an indicator that a "frivolous" comment followed. From observations though, Dan's expectancy of the quality of students' contributions also affected the success rate. Those who generally made relevant comments were listened to more frequently than those who tended to make irrelevant comments.

Conversely, at times avoidance of attention was desired. For instance, one student said that, when Dan was asking questions and came to one she did not know, she would sit up and begin scanning the text as if she were searching for the answer. Observations indicated that this technique was successful for those students who made a practice of volunteering when they knew the answers. It appeared that Dan interpreted those who volunteered to be interested and competent, and thus not in need of his prodding.

To facilitate off-task activity, common ploys were used. One student cited looking into a book while conversing with neighbours. Another cited moving a pencil as if writing. Based on observations, these activities were successful. The fact that students considered it necessary to appear on-task indicated the importance of this behavior to the teacher.

Success in avoiding attention rested on being non-disruptive. The students reprimanded were conspicuous in their off-task behavior: e.g., turned around chatting, chatting loudly, slouched in the seat, or staring out the window.

To gain a clearer understanding of the dynamics of teacher-student interaction specific students will now be discussed. They will be considered in the context of three groups: on-task, teacher-oriented students; off-task, student-oriented students; and those who fit neither of these.

On-task, teacher-oriented students looked to the teacher for attainment of needs satisfaction through on-task activity. Each student's manner was different. David quietly did his work. He was shy, seldom contributing in class. His major complaint about the class was that the noise sometimes interfered with his work. Since David did good work and was quiet the teacher left him alone unless he asked for help.

His counterpart was Vivian, who was task-oriented, but also frequently contributed to class discussions--at times in a disruptive manner. Some of the contributions were made to gain the observer's attention. At times, she would make a comment, and then look to see if she had been noticed. If the observer was looking at her she would smile with pleasure. Dan noted that he had reached the same conclusion due to Vivian's increased input while the observer was present.

She volunteered answers, contributed to discussions, and asked questions, thereby enhancing her esteem needs. Dan's description was, "she likes to

perform". Though he found it irritating, Dan condoned her behavior because the quality was good and it contributed to the functioning of the class.

Wendy and Jessica also voluntarily participated in class discussions and were task-oriented. The quality of Wendy's work was very high. In addition, unlike Vivian, she tended to contribute more appropriately: that is, during discussions, after raising her hand or after being asked. She also used a good deal of social reinforcement. She was polite and smiled. These behaviors enabled Wendy to control both the amount of input into class and when it occurred. She volunteered answers she knew. If she did not wish to contribute she tended to be overlooked, while others who had not volunteered in previous sessions were called upon. Since her contributions and her demeanor were good, the teacher responded positively. Her comments were seldom cut short and she was seldom chastised for occasional talking.

Jessica's behavior was similar to Wendy's, though she was a poorer student academically. Her work and contributions were primarily on-task, which resulted in a degree of tolerance. This was illustrated on several occasions as Jessica talked out loud to another student about a story they were discussing in reading, but was not reprimanded. The fact that the comments were on-task by a task-oriented student seemed to be the critical factor.

These students influenced the teacher by compliance to his norms. By working on-task, by contributing to class discussions and by engaging in mimimal disruptive behavior, they attained satisfaction of their needs from the teacher.

Some class members looked to other students for needs satisfaction. One method of accomplishing this was to interact with the teacher in a manner which gained reinforcement from other students.

Kenny, Lori, Chad, Loretta, Heather and Liam frequently engaged in off-task behavior--primarily talking. As a result, they were often told to "turn

around", "stop talking" or "get back to work". While they were frequently reprimanded, it certainly was not in proportion to the amount of their off-task behavior. Their misbehavior was endured, in part, because they were quiet and persistent. Several of these students, who were interviewed, mentioned Dan's lack of rigidity.

Further, for several members of the group, Dan's reprimands served to focus the class's attention on them, giving them a degree of status.

Bud also used the teacher's scoldings in this manner. When the teacher reprimanded him, Bud was visibly pleased. On one occasion, as Bud talked to another student, the teacher grimaced at him, then walked over and silently, but expressively mouthed, "be quiet or else". Bud grinned widely, and looked around to confirm that he had the class's attention. Another time, when told to get back at his mathematics, he pulled his hood over his head to get attention. A final illustration occurred during a class discussion with Dan seated at the back of the room. Bud had straddled his chair and was chatting to Peter behind him. The teacher told him to turn around and move closer to his desk. Again, Bud was very pleased to be singled out. Within a minute, wearing a smug expression, Bud had rotated his chair 180 degrees to face the back of the room. Dan ignored this action as well as Bud's smug expression. It was not ignored by the other students.

The most disruptive student was Bud's cohort, Peter. He frequently engaged in off-task activity geared towards seeking the attention of the other students. One day during seatwork he walked over and pinched Liam. On another occasion he gurgled loudly. Harold had made the sound first, and Peter was not to be outdone. When interviewed, several students mentioned Peter's misbehavior.

Dan would ask Peter questions as a ploy to keep him on-task. Many questions were asked when he was turned around talking or twirling a ruler. He was often reprimanded, though these reprimands tended to be ineffective, and were sometimes ignored.

Dan did not like to push him too hard. He said that Peter had a temper and if he was scolded too often or too harshly, he would "get his back up or lose his temper and then do nothing". As a result, Dan was satisfied to keep him "reasonably" non-disruptive and on-task.

Richard was another student who was treated leniently due to the teacher's perception of him. He continually chatted to those around him. In the middle of an explanation Dan would be interrupted by a comment which might or might not be on-topic. One student claimed that Richard "talked to himself if nobody else listened". By not conforming to class norms, Richard had convinced Dan that he was hyperactive. Dan stated, "I honestly believe that the child cannot control himself". Based on this perception Dan allowed Richard to talk more than was the norm. Other students, and Richard himself, did not share this perception. One student's opinion was "Richard always talked ... to get other people's attention". Richard stated his reason for talking was "to stop from getting too bored".

These students gained needs satisfaction through off-task activity. Other students were treated differently due to the interplay between Dan's growth motivation and aspects of their background or behavior. For instance, Sean was a foster child. Therefore, Dan stated that he attempted to be more caring with Sean because he felt this was lacking at home. Harold who was weak academically received more help in this area. On two occasions while the observer was present, the majority of a period was spent helping Harold. (What differentiates this case from others observed was that Harold did not ask for help; it was Dan's decision.)

The most striking case was Judy. Dan found his work with her extremely satisfying; yet, while the observer was in the class, Judy's behavior was often aggravating and seldom rewarding. She slouched in her seat, exhibited poor work habits and was often inattentive. Referring to this sort of behavior, Dan stated that, while she still could be very irritating, the improvement since September

had been tremendous. The reward was the process of working with Judy and in seeing her change over a period of time.

Summary. As a group, students could influence Dan to do certain activities. They influenced his decisions about the types of activities done in class by their reactions to them. Individuals, in complying to Dan's norms, were viewed positively and allowed to volunteer out of turn. Other students were able to engage in more off-task behavior. Some were able to interact negatively with Dan and thus, gained needs satisfaction from the other students.

6.3. Conclusion

Dan was predisposed to attend to several types of student behavior. Consequently, he was influenced by these behaviors. In order of importance they are: interest and achievement in the task, on-task behavior, and non-disruptive behavior. Social reinforcement was a factor in that it affected how the teacher perceived the students and thus how he responded to requests. It also influenced how leniently the students were treated. Still, it was not as significant a factor as the three mentioned above.

To summarize student influence upon Dan, it is helpful to consider his behavior within a model which categorizes his responses to these types of student behavior.

(1) Students who were interested, on-task and non-disruptive, were thought very highly of by Dan. He would be involved with them and allow their interests to dictate the direction of the work.

(2) Students who were interested, on-task, but disruptive, tended to be treated leniently. While Dan would attempt to stop disruptive behavior, he was willing to sacrifice this, within limits, to achieve interest and involvement with the work. This in part accounted for the noise which existed at times.

(3) Students who were interested, but off-task, and non-disruptive, tended to be temporarily overlooked. This was because such off-task activity was temporary. Since it was not disruptive it was overlooked.

(4) Students who were interested, but were off-task and disruptive were not an issue, since this seldom occurred. If they were interested, then they were on-task except for short periods of time.

(5) Students who were disinterested and were on-task and non-disruptive were left to work alone and be helped if necessary. In many cases visible interest would not be a factor. Silent reading or seatwork are examples of this. However, during activities such as discussions, when interest was desired, Dan encouraged all the students to take part.

(6) Students who were disinterested, on-task and disruptive were noticed by the teacher. If they were engaged in some distracting activity such as absentmindedly humming, they were told to stop. However, this category also included such activities as making negative comments about the material. In such cases, Dan allowed students to state their opinions.

(7) Students who were disinterested, off-task and non-disruptive were made to get back on-task when noticed. However, often, due to being non-disruptive, there was a time lapse before Dan realized that were off-task.

(8) Students who were disinterested, off-task and disruptive were frequently scolded. The behavior of this type of student attracted the teacher's attention and was at odds with the goals which he was attempting to attain. There were however, several of these students -- for example, Sean, Richard, and Peter -- whom Dan perceived of as having special needs. Thus, they received differential treatment.

Chapter 7

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The purpose of this chapter was to discuss the conclusions which were drawn with respect to the research questions, to examine their theoretical implications and to present recommendations for practice and future research.

7.1. Conclusions

The conclusions will be discussed in order of the questions presented in Chapter 1.

7.1.1. What are the specific student behaviors which influence teacher behavior in the classrooms observed?

To separate student influences from the context of the interactions within which they occurred, and to categorize them, is a somewhat artificial exercise. One reason is that these students used several types of influence concurrently when interacting with the teacher. This was exemplified by Scott and Jerry in Carl's class. Both persistently spoke out of turn, but, Scott was attended to more frequently because his comments were often relevant or humorous and because he used better social skills. Therefore, to say that a single behavior influenced the teacher is misleading, when taken out of the context of the student's total behavior pattern.

Further, the students' behavior had a cumulative effect upon the teacher's perception of them. Newcomb (1968) has noted that change in attitude occurs

"as new residues are acquired through experience". Carl had been frustrated by his awareness of this phenomena in his interaction with several students. He said that he "felt bad" because he had overreacted to their behavior in specific instances. He believed this was due to the attitude he had formed because of their previous misbehavior.

In addition, Newcomb (1968) noted that a perception exerts a "dynamic" influence on the individual's responses. Thus, throughout any student-teacher interaction, teachers' attitudes will influence reactions. This helps account for the fact that Ron reacted differently to students who had not completed their homework. It also helps in understanding Ron's different expectations with regard to work. In Dan's case, his perception of Peter as having a bad temper caused him to be more lenient with him. He perceived Richard to be a hyperactive child, thus he was allowed to talk more than other students. Further, it was because Dan perceived of Vivian as a "coy female" that he reacted negatively to her social reinforcement.

It is also important to note that the same type of behavior was often used by two different students to achieve very different results. According to the students' definition of the situation, what they desired was very different. For instance, a student-directed student might interact with the teacher on-task as a means of ultimately being able to interact more with friends off-task. Such was the case with Roger in Ron's class. A teacher-directed student, on the other hand, might interact with the teacher on-task to gain attention. Patsy did this in Ron's class.

Realizing these qualifications, several categories of student behavior which influenced teachers can be discussed.

7.1.1.1. On-task and off-task behavior

All three teachers valued on-task behavior. Consistantly applying oneself to seatwork, or having one's homework done raised the teacher's opinion. An interesting example was Cathy, who showed great improvement in her work habits over the year. As a result Ron ranked her very high in terms of class standing, even though he admitted she still was not an academically strong student. Further, he openly praised her in class for her improvement.

Besides raising the teacher's opinion of themselves, students were treated more leniently if they behaved primarily on-task. Students, such as David, who liked to keep a low profile, and have little teacher contact, were allowed to do so. Conversely, if students wished to volunteer, as did Vivian, this was also tolerated more than the norm. Further, more off-task behavior by those students, who were primarily on-task, was often tolerated. Tony and Leslie exemplified this dynamic. Janet was an additional case of good work habits allowing a certain amount of off-task behavior with no consequences.

Students' willing participation was also valued. Those who volunteered answers and made contributions to discussions tended to be held in high esteem. This was especially true with Ron. Such behavior achieved several other results. It gained the teacher's attention. With some students, such as Ian and Vivian, it served the additional purpose of gaining student attention. Alternatively, Wendy used it to avoid being called upon by Dan to answer questions which she did not know. She would participate when she knew the material, then refrain from participation if she did not know the material.

Several students used off-task behavior to influence teachers. They were able to draw the teacher off-task, thus gaining the teacher's attention and consequently the attention of other students. A teacher who was irritated by the students' off-task behavior would react by scolding those responsible. These reprimands gained the attention of other students. John exemplified this type of

student. He conspicuously would not do his work, and thereby, drew the teacher off-task. In this way, he gained esteem enhancement from his peers. Liam and Sean did the same sort of thing in Dan's class.

7.1.1.2. Disruptive and non-disruptive behavior

Students were also able to influence teachers by being either disruptive or non-disruptive. Most did so by being non-disruptive. Students who were non-disruptive could have more off-task behavior tolerated. In part, this was due to not being noticed.. Often however, the teachers were aware of a student's inattention, but ignored it, choosing instead to attend to a more pressing issue in the class. Kirk was able to get by with a minimum of work, because he did not disturb the rest of the class. Ron knew that Kirk had given up any hopes of passing; therefore, since he was not disruptive, he was not pressured.

While most students complied with teacher norms to gain what they desired, several did the opposite. These students would not comply and thereby gained teacher and/or peer attention. For instance, Scott would interrupt discussions to capture the teacher's attention.

Students often used disruptive behavior as a form of negative reinforcement to influence the teachers. A common use of this approach was to gain attention. Students would continually engage in conspicuous activities until they were given attention. Scott would repeat a statement 5 times, predicated by "Sir" until he was acknowledged. Jerry would wave his hand continously until the teacher assisted him with seatwork. Lorrie would tap on her desk until noticed.

Several students had been able to create a greater tolerance for their off-task behavior through a type of negative reinforcement. If some disruptive behavior, such as calling out answers, was continually repeated, the teachers first tried to change it. Upon failing to do so, the teachers then modified their behavior in an attempt to avoid further irritation. Hence, Carl reprimanded Scott and Jerry less and Dan labelled Richard as hyperactive.

In a variation of this, students used disruptive behavior as a type of negative reinforcement, which was then used in conjunction with a form of contingiency contract. Students in Carl's class bargained with him: they would behave, if he gave them some concession.

7.1.1.3. Behavior indicating interest or lack of interest

Student's observable interest influenced teachers' decisions concerning the curriculum. Carl knew his students enjoyed following up social studies units with art activities, so he accommodated this interest.

Teachers were also affected by the lack of interest exhibited by students. If students were not interested in a topic, or found a particular method of presentation boring, they engaged in behavior which indicated this fact to the teacher. In Dan's class students began talking to each other. If they had been reading from the text too long in Carl's class, students began fidgeting, and were inattentive. Ron said that he had done few group projects with his class because they "fooled around, wasting a lot of time during group work". Research has corroborated that students use this approach to resist formats with which they are not comfortable (Good & Brophy, 1984).

7.1.1.4. Positive social reinforcement and negative social reinforcement

Students influenced teachers through their positive social feedback. Ron attributed the positive response of students to a more interactive approach, in which facilitative conditions were provided, to his adopting such a teaching style. Thus, while this style was very instrumental, it was students who were influential in his adopting it.

In a more personal context, such behaviors as smiling, making eye contact, being helpful, and showing warmth had significant influence. When Leslie smiled apologetically, it gained her a certain tolerance. 'Requests made by students using these skills appeared to be granted more often.

Conversely, some students did not want contact with the teacher. To achieve this they would refrain from smiling or making eye contact and would be cool towards the teacher. In this manner they were able to be left to themselves and contacts with the teacher tended to be brief and less frequent.

7.1.1.5. Requests

With the proper use of the sorts of influence mentioned above, students were often able to simply state their opinion or ask the teacher for something, in order to have input into classroom functioning. The teachers wanted to make school a pleasant experience (or place) and would comply with reasonable requests.

Summary. Thus, students were able to exert influence in their interactions with the teachers in a wide variety of ways. Often, several of these techniques were used in conjunction with each other. Further, the students' behavior influenced teachers through its cumulative effect on their predispositional structures.

7.1.2. What are the overall patterns of student-teacher interaction and in what ways do they differ for each teacher?

In discussing the three interaction patterns it would be useful to apply Lundgren's (1972) concept of frame factors. This term is used to refer to intervening factors in the environment which limit what occurs. The texts, the board policy, the administrator's rules, the bussing schedule and the parents' goals are all frame factors. Their significance is that, for each of the three classrooms, many of the frame factors were similar, and thus, could cause the similarities between the classrooms' interaction patterns.

While this concept helps account for the similarities, it also explains some differences, as the frame factors were not totally alike for each classroom. Bussing did not limit Ron's class as much as the others, because fewer students

were bussed. The principals in each of the schools were very different in their style of administration. The students' personalities were also noticeably different.

In applying the concept of frame factors to this research, its definition can be broadened to include the predispositional structure of each person under consideration. By affecting how the teacher defined the situation, these factors limited the decisions the teachers would make concerning their behavior.

Before comparing the interaction patterns which resulted, each teacher will be considered separately.

7.1.2.1. Significant others motivated teacher

Carl perceived his primary source of needs satisfaction to be significant others. Of particular importance were those teachers who taught the same grade and the following grade. The parents were also important. Carl attempted to gain satisfaction by operating his class in a manner which these significant others valued. This included an emphasis on quiet, on-task behavior. Also, it had resulted in an emphasis on completing the mandated curriculum, with Carl continually attempting to set a fast pace. It had made Carl very aware of the appearance of the work students produced. In short, Carl tended to emphasize tasks and student behavior which would, in his estimation, elicit reinforcement from other teachers and parents.

While significant others were the primary source of needs satisfaction, students also provided Carl with direct needs satisfaction through their interactions. Therefore, Carl frequently behaved in ways which he hoped would please students. He would occasionally allow jokes, or off-topics discussions.

To comprehend the interaction pattern which resulted, it is also crucial to understand the class composition. A group of students resisted complying to Carl's norms, and thus, had exerted considerable influence over the rest of the class. They could be considered a steering group (Lundren, 1972) in that they influenced

the behavior of the others in the class and commanded a high percentage of the interaction with Carl, who who was often solely reacting to their contacts with him.

The behavior of this group and the control they had over classroom interaction caused tension because their desires were at odds with Carl's needs satisfaction by significant others. Carl felt this class was somewhat out of control, in that, they were not consistently quiet, orderly, on-task, or producing quality work. The result also was an ongoing struggle, with a high degree of negative interaction, as Carl reprimanded students and cajoled them to comply to his norms. During the year, the students had successfully changed Carl' behavior, in that he had become more tolerant of misbehavior. Carl said he had attempted to change the manner in which he conducted class discussions, though this had only been marginally unsuccessful.

While there was conflict between the students and the teacher, there also had existed a good deal of positive interaction. Carl allowed students a fair degree of freedom and encouraged them to share things which they found interesting. This could involve telling the class a story or bringing a pet to school. Carl liked to talk with them during recess or lunch. The students enjoyed talking with him.

7.1.2.2. Progressive non-technical teacher

Ron focused on the students' needs in his teaching. With regard to his own needs satisfaction, this served two purposes. One, in interacting with students, Ron was able to gain direct needs satisfaction from their feedback. Two, students, in response to his style, had behaved in a manner which has been traditionally valued by significant others.

During school time the students were quiet and on-task. As a group, they were compliant, and seldom departed from the norms Ron had set. In the context of subjects such as religion or health, they were open and personal. These discussions proceeded orderly, and in a structured manner.

Several factors have been attributed to this pattern of student behavior. First, the class did not have a group of students or even one student who influenced the others by modelling disruptive, off-task behavior. Ron said there was no leader. Early in the year there had been a boy who served in this capacity, but his family had moved.

Second, during the first two thirds of the year Ron said he had set up consequences for breaking important rules. Further, during this time, he conspicuously tracked the behavior of students.

Third, the student-teacher interaction was primarily positive in nature, with Ron providing what Aspy and Roebuck (1976), borrowing from Carl Rogers, has called facilitative conditions: empathy, congruence, and positive regard. However, while Aspy advocates giving these unconditonally, Ron appeared to have made giving them conditional upon the students' behavior. As one student, speaking about the reason for her improved behavior stated, "Mr. McDuggell didn't yell at me when I did good work." Ron also implied this when he stated that he could not have eased up the pressure unless the students had responded to the way he taught.

Related to the positive ways in which the students and the teacher interacted in class was the fact that they also frequently interacted outside of class. Ron chatted with students during recess and lunch, and was involved in student-related activities after school. In addition, students visited Ron at his home.

The students played a significant role in bringing about this sort of classroom environment. It was their responsiveness which had initially led Ron to adopt such a manner of interaction. Further, as Ron indicated, it was the way they responded to his style which determined how strict and structured he would be.

The final outcome was that students were content with the manner in which Ron operated the class and thus were not constantly attempting to affect change. Their needs were being accommodated. Furthermore, they were relating to Ron in ways which he found very pleasing and their behavior was also indirectly rewarding.

7.1.2.3. Growth motivated teacher

Dan's teaching was growth motivated. He endeavored to teach according to his values. The motivation for most of his efforts was internal, due to involvement in the teaching process. He attempted to augment the mandated curriculum by adding new materials and improving upon the existing ones. He also tried to vary the presentation of the content in an effort to make it as interesting as possible. Besides being process oriented in the classroom, Dan involved himself with the system which affected the students. He did committee work related to the curriculum and kept in contact with parents.

Still, Dan also attempted to meet his deficiency needs through his involvement with significant others and the students. He fostered a "caring relationship" with students and engaged in conspicuous activities which would gain approval from parents, teachers and administrators. Hence, to some degree his career met all of his needs. This is in keeping with the writing of Roe (1956), who stated that an occupation has the potential of meeting a person's needs at all levels.

Dan's class liked him and enjoyed interation with him; however, many of the students were student-directed in terms of needs satisfaction. This meant that their behavior was frequently oriented towards gaining needs satisfaction from other students, rather than the teacher. The result was behavior which was at odds with Dan's aims, as it was disruptive to classroom functioning. In attempting to stop such behavior, Dan was drawn off-task and employed empty threats.

Further, the manner in which the interaction took place tended to be

inconsistent. Dan's predispositional structure led him to desire quiet, on-task, non-disruptive behavior from students. However, having students interested and participating in the ongoing process appeared to be more important. Hence, Dan was willing to sacrifice some control in order to facilitate the generation of interest and participation. Such an ordering of student behaviors helps to account for the inconsistency of interaction.

While there was negative interaction, there was also much positive interaction. Often this centered about the activities which Dan introduced to the class. He used many high-interest activities which were not part of the mandated curriculum. The students appreciated this. It was one of the things which they highlighted as a reason for liking him.

The students were able to influence what occurred in class by the feedback they gave Dan. The activities they showed interest in were prolonged, and repeated later.

7.1.2.4. Comparison of teacher types

In comparing these three teachers several trends stand out. The first of these was the high percentage of positive interaction in Ron's class, especially relative to the other two classes. Threats, warnings and pestering were not needed to get the students working as was the case in the other classes.

Correlated to this was the fact that little behavior was directed toward peers in an attempt to gain needs satisfaction in Ron's class. Again, this was not the case for the other two classes, each of which had a considerable amount the peer-directed activity.

Ron's goal was to make the class a comfortable place for students, but one in which they were compliant and on-task. His assumption was that if facilitative conditions were provided, then learning would occur.

While in Dan's classroom, it became clear that he was less concerned with order as long as the process was working and the students were interested and successfully learning. While not always as effective as he would have hoped, he did have a very clear set of values and he operated his class in an effort to achieve his purposes.

In working with students, Dan attempted to affect their whole system. He not only worked with them in class, but also attempted to change the curriculum and school policy. He also worked with the parent, while the other teachers worked primarily with just the students.

The fact that Carl was primarily significant others motivated meant that he was largely governed by the norms set by this group. As such, his teaching appeared to be more externally motivated than that of either Ron or Dan.

The speed at which classes were paced also differed. Carl often hurried the class in an attempt to get the curriculum covered. Dan planned his agenda in advance and attempted to meet it. Ron tended towards letting the students set the pace. He kept them on-task, but applied less pressure on them to speed up.

Even though the teachers basically abided by the mandated curriculum, each approached matters differently. Carl, the traditional teacher, followed the mandated curriculum more than the others. He tended to work directly from the text. In deciding what would be done, a major consideration was how it would be viewed by significant others.

Ron, mainly used the text, but emphasized discussion to personalize the material for the students. Ron did not criticize those having difficulty, instead he attempted to understand their problems with the material and to help overcome them.

Dan, tended to add many activities to the mandated curriculum which he

felt were geared to the academic needs of the students. Further, he attempted to manipulate the presentation of activities so that the format varied.

The manner in which the teachers approached the class was also reflected in the reasons students stated for enjoying their teachers. Carl was appreciated for his humor, tolerance and helpfulness. Ron was liked because he was helpful, understanding, and caring. Dan was highly thought of because he gave interesting work, and related well to the students.

In comparing the teachers, it was clear that their motivational structures were useful to help understand student influence. Still, these psychological constructs proved to be less useful in predicting the sorts of influence which would occur. Though the teachers had different motivational structures, the manner in which they were influenced overlapped considerably. However, it was possible to rank the student behaviors which were influential into a hierarchy. From this hierarchy, it was then possible to consider the power of these behaviors as incentives for the teachers. Those which were higher in the hierarchy, were more valued, and thus, capable of exherting a greater influence upon the teachers.

The hierarchical arrangement of behaviors which served as incentives for Carl was, from most to least important: (1) non-disruptive behavior, (2) on-task behavior, (3) positive social reinforcement, (4) completion of the curriculum, and (5) student interest in work. Orderly behavior and on-task behavior were ranked first and second because Carl's attempts to obtain these behaviors dominated his interaction with students. Positive social reinforcement was ranked third because Carl responded to it and attempted to gain it when interacting with students. Student interest was important, but was ranked fifth, below completion of the curriculum because he would sacrifice student interest to cover the curriculum.

The behaviors which affected Ron would be arranged in a hierarchy as follows: (1) on-task behavior, (2) non-disruptive behavior, (3) positive social reinforcement, (4) student contentment, and (5) curriculum completion. The

importance of on-task behavior was evidenced by the strictness with which it was enforced early in the year. The same was true for non-disruptive behavior. Positive social reinforcement was ranked third because Ron devoted considerable time to receiving it from students. However, he did not let fulfillment of this need interfere with obtaining non-disruptive or on-task behavior. Behavior which indicated contentment was ranked fourth. This term was used to refer to interest, and student comfort. He believed students needed to have a comfortable environment, and therefore, feedback as to how successful he had been achieving this goal influenced him. Completion of the curriculum was ranked fifth because though it was a goal which Ron strived for, it received less emphasis than the other goals already mentioned.

Behaviors which influenced Dan would be hierarchically arranged in the following manner: (1) student interest, (2) student achievement, (3) on-task behavior, (4) non-disruptive behavior, and (5) positive social reinforcement. Interest and achievement were ranked first and second due to the efforts Dan made to attain these goals. On-task behavior was ranked third because, though not emphasized as much as interest, the teacher realized it was important if students were to master the curriculum, and therefore, attempted to kept students primarily on-task. Non-disruptive behavior was also desired. It was ranked below the others because Dan was willing to sacrifice this, to a degree, in order to achieve goals which were more valued. Positive social reinforcement was sought after, but not at the expense of those behaviors already mentioned.

Summary. From the comparisons, it is clear that considering a teacher's motivational structure is useful in understanding what occurs in the classroom. Dan emphasized aspects of teaching which satisfied his growth needs. Ron focused on the students as a means of needs satisfaction. Carl had structured the class in ways which would attain needs satisfaction from significant others. However, an alternative may be to organize influential student behavior into a hierarchy which then could be used to predict student influence.

7.1.3. Is the student motivated teacher more influenced through social reinforcement by the students than either the growth motivated teacher or the significant others motivated teacher?

A comparison of these three teachers indicated that the progressive non-technical teacher (student motivated teacher) was in fact more influenced by students' social reinforcement. He focused on the students' needs and attempted to make school comfortable for them. This focus made him sensitive to student feedback as he attempted to foster a relationship with them. If a student gave him minimal social reinforcement he would spend less time with that student, believing that the student, within limits, should determine the amount of interaction. Students who voluntarily interacted with the teacher received a lot of teacher attention. Further, this teacher made a point of spending time with students during free time. He even encouraged them to visit his home.

Further, while it is true that he attempted to receive needs satisfaction from significant others, he tried to do so by being student-directed.

The other teachers were also influenced by students' social reinforcement, but other factors were more likely to override its effect. The significant others teacher was more concerned about pleasing teachers and parents. (Still, in Carl's class, social reinforcement tended to gain the students more tolerance of their misbehavior.) The growth motivated teacher placed more emphasis upon the process of teaching and his role in this process.

7.1.4. Is the significant others motivated teacher influenced more through indirect motivation than either the student motivated teacher or the growth motivated teacher?

The findings did indicate that the significant others motivated teacher was more influenced through indirect student incentives than the other teachers. Interviews with him revealed that he was much more conscious of other teachers and parents judging him by students' behavior than either of the other two

teachers. He tried to have the students bring good work home to the parents and attempted to have the students quiet and on-task because of the other teachers.

However, indirect reinforcement was also important to the progressive non-technical teacher. He stated that he had felt the need to prove himself as a teacher in the past. This indicates his need to gain approval from significant others. In class, he made sure that the students behaved according to the norms this group valued -- non-disruptive, on-task behavior. The reason that indirect student influence was judged to be less important for this teacher than the significant others motivated teacher was that it was not as dominant an influence.

The growth motivated teacher was also influenced by indirect reinforcement from the students. However, this appeared to be secondary to his emphasis on growth related activities.

7.1.5. Is the growth motivated teacher influenced less by students than either the student motivated teacher or significant other motivated teacher?

The answer to this question was not entirely clear. Overall, the significant others motivated teacher appeared to be the most influenced by students. The progressive non-technical teacher was also influenced by students, but he had a very high level of classroom control. With the growth motivated teacher it was difficult to discern the degree to which student influence was a function of his attempts to consciously involve them in the decision-making process.

A cause for this lack of clarity was that the growth motivated teacher was also deficiency motivated. Thus, it was difficult to know which level of needs fulfillment was operating in specific student-teacher interactions.

7.1.6. Is the significant others motivated teacher influenced less by students than the student motivated teacher?

The results of these case studies indicated that the significant others motivated teacher was most influenced by students. There are several explanations for this finding.

The teacher claimed that this class was unusual because there were several students who resisted his influence and had exerted considerable influence over classroom functioning. This being the case, then the influence exerted by students most years would be considerably less than observed.

A second consideration was the teacher's desire to obtain direct needs satisfaction from the students. Besides obtaining needs satisfaction from significant others he wanted to be accepted and respected by students.

Third, his desire to have students behave in ways which resulted in needs gratification from significant others may have made him more vulnerable to influence, than either of the other categories of influence. Student provision or denial of these behaviors may have been a very powerful incentive for the teacher.

7.2. Theoretical implications

One of the purposes of this research was to obtain data in which to ground theory. This section will discuss the implications which the findings had for the theory initially generated through a review of the literature.

In brief, this theory stated that classroom interaction is bidirectional; that is, teachers influence students, but students also influence the teachers. A definition of the situation occurs through an interplay of observable student behavior with the teacher's predispositional structure. This then serves as a basis for deciding how to behave.

The findings confirmed this theory, but also suggested that there was need for modification of the theory.

7.2.1. Bidirectionality of model

The observations did support previous research which had found that the interactive process was bidirectional. In all three classrooms the teacher not only influenced students, but also, was influenced by them. Hence, a model which attributes students the role of mere reactors to the teacher is incomplete. A student-teacher relationship is better understood in the context of a bidirectional model.

This must be qualified with the realization that the teacher was the most powerful actor in all three cases. This was in agreement with the findings of Randhawa (1982).

7.2.2. Influential behavior and attitude change

The findings also gave insight into how student influence occurs. Observations indicated that student behaviors which became part of the teachers' objective situation influenced their behavior. These behaviors had an immediate effect upon the teachers. Negative reinforcement also caused the teachers to change their behavior.

A second category of influence occurred over a longer period of time as student behaviors changed the predispositions of the teachers. This became evident during the interviews. The teachers talked about how they had formed certain expectancies for students and how gaining insight into students' backgrounds had changed the manner in which they interacted with individuals. For instance, Ron had become more structured with this class as a result of previous interactions during the first part of the year. He did this because he expected it to result in student behavior which he valued.

7.2.3. Motivational structure

Teachers were conceived of as possessing needs as outlined by Maslow (1970). The observations and interviews indicated that they behaved in ways which would obtain gratification of these needs.

Satisfaction of needs was further hypothesized as coming from three major sources: directly from students; from significant others, in which case, the students served as indirect satisfiers, with satisfaction being contingent upon their behavior; and from the teaching process itself which was internally satisfying. Again, observations and interviews indicated that these three catagories were valid.

Further, findings indicated that the different teacher motivational structures could be attributed to the differences observed. The students in the significant others teacher's classroom were able to influence him by behaving in ways which would be valued by teachers and parents. For instance, they bargained to be quiet, if they received some concession in return. Students in the progressive non-technical class did influence the teacher through social reinforcement. By giving minimal social reinforcement, students were able to drastically reduce the amount of contact they had with the teacher. Positive feedback to the growth motivated teacher about the materials used and the presentation of it, influenced his teaching. These three examples highlight the fact that the motivational structure did affect what would influence the teacher.

However, while the findings did support much of the theory, they also indicated that it was incomplete. The research revealed that the motivational structure was more complex then hypothesized.

Teachers had been categorized into three groups according to their motivational structures, the underlying assumption being that a teacher was either one or the other. The observations did indicate tendencies which

corresponded to these hypothesized categories, but they also suggested another, conceptualizaton of the construct.

The three teachers observed were all motivated to obtain needs gratification from significant others. All three were also motivated by the desire to obtain direct satisfaction of their needs from students. Only one of the teachers was significantly motivated to satisfy growth needs.

This data led the researcher to hypothesize that the categorization of teachers might better be conceived of as additive in nature. Thus, most teachers would be motivated by both students and significant others, with one group usually being perceived of as the dominant needs satisfier. Those who are growth motivated, would usually also gratify their deficiency needs through teaching.

The reason significant others were influential in all three cases was likely due to the control they have over a teacher. Teachers' careers depend on the relationship they foster with administrators. Parents are able to cause trouble for teachers if they so desire. Further, teachers tend to have strong predispositions about the rights of parents to control their childrens' education. Acceptance or rejection by colleagues, whom a teacher interacts with each day, is also a powerful incentive. Hence, while all three teachers perceived their relationship to significant others differently, they were all aware of the importance of compliance with their expectations.

The students also were powerful motivators in all three cases. Teachers spend approximately four to five hours a day in contact with their students. The magnitude of this interaction alone makes the potential for influence significant.

Further, an important factor related to student influence, which emerged during the interviews, was the teachers' ideological positions about their role. Each believed that students were the reason that schools existed. As such, students were a central focus of their teaching. This contributed to the teachers' responsivenes to the students.

Growth needs emerged as significant with only one of the teachers. This is in keeping with Maslow's (1970) theory, which held that growth needs are not necessary for psychological health and as such would not always be expected to be present. Further, it logically follows that when growth needs are present, they would be satisfied in conjunction with the ongoing satisfaction of deficiency needs. As Roe (1956) indicated, an occupation has the potential to satisfy all categories of psychological needs.

Thus, a more plausible conceptualization would be that for the majority of teachers their careers are a source of deficiency needs satisfaction. Both significant others and students would usually serve as satisfiers of these needs. With some teachers their careers would also function as a source of growth needs satisfaction. In all cases, their motivational structure would provide a basis of student influence.

This does not however, negate the possibility of teachers who fell solely into one of the categories. For instance, teachers might in fact be primarily growth motivated in their teaching career, if their deficiency needs were met totally outside of the context of teaching.

Other possibilities might also occur if teachers were deficiency motivated, but had been ostracized by one of the sources of needs fulfillment. Such would be the case if the teacher had been rejected by the students. The opposite situation could also exist. Another possibility, which has not been discussed, would arise if teachers' needs were simply not being met by their career.

Hence, the findings do not negate, but rather, qualify and expand upon the model as it was first stated.

7.3. Recommendations

This section will discuss the implications of the findings for research and practice.

7.3.1. Recommendations for research

The findings indicate several areas of further research. First, longer term case-studies should be carried out which trace the development of the interaction between the students and the teachers over a longer portion of the school year. The interviews indicated that the early part of the year was especially significant in the formation of interaction patterns.

Second, further data should be collected to help develop a better understanding of the motivational categories of teachers.

Third, research should be conducted which delves specifically into the relationship between the teachers' motivational structure and the manner in which they define the situation.

Fourth, observations should be carried out which collect quantitative data on the types of student influence which have been discussed in this research.

Fifth, in retrospect, the assumption that certain behaviors are indicative of either of the motivational categories may be a limitation on the logic of the study. For instance, the finding that the three teachers desired order may indicate that it was not really a result of significant others motivation. Therefore, these assumptions should be tested.

Sixth, in researching this material the teacher interviews proved very informative. Further research into the nature of teachers' motivational structures and student influence should be conducted using this methodology.

Seventh, a questionnaire should be developed which asks teachers to respond to certain teaching situations. This approach, using the right situations could prove very useful in collecting data on student influence. It could also be used in conjunction with a device which identifies the motivational type of the teacher.

Eighth, the Q-Sort developed for the selection of teachers, proved to be useful in identifying teacher orientations toward the categories, but it was ineffective in discriminating which category was dominant. Therefore, it should be further developed and tested for reliability and validity.

Ninth, the type of student -- low academic student-directed or high academic teacher-directed -- appeared to be a significant variable in this study regarding the type of influence they exerted. This area should be further investigated.

Tenth, more research should be carried out in categorizing the student behaviors which influenced teachers and determining whether they can be used as a means of predicting student influence upon the teacher.

7.3.2. Recommendations for practice

This section deals with the practical implications of the research findings. The value of this research to professionals was primarily that it could prove useful in providing insight into their interactions in classrooms or other situations. Through better understanding the variables which affect them in these situations, they can be more effective.

First, frame factors other than motivational structures proved to be important. These should be considered by professionals and effective strategies for coping with them developed.

Second, teachers need to carefully consider their motivational structures and how they affect their teaching. To what student behaviors do they respond? What determines their norms for teaching their class?

Third, teachers should not necessarily react negatively to student influence, but they should carefully consider how it occurs. Categorizing student behavior in terms of the types of behaviors which proved influential in this study -- for example, social reinforcement, interest, on-task behavior -- could help in this endeavor.

Fourth, it should be realized that students influence teachers to gain satisfaction for their own needs. Therefore, there is an implied message to which teachers should attend. When students apply negative reinforcement to the teacher in order to escape some task, there is a message about that activity which should at least be considered.

Fifth, principals, administrators, counselors and other professionals need to be aware that interaction in the class is bidirectional when working with the teacher or students. Further, they should also consider the teacher's motivational structure as a major variable in the influence.

Sixth, considering a career as a major source of needs fulfillment can be helpful in understanding dissatisfaction with the job, and help provide solutions to overcome this problem.

References

Ajzen, I., & Fishbein, M. Understanding attitudes and predicting social behavior. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1980.

Aspy, D. N., & Roebuck, F. N. Kids don't learn from people they don't like. Amherst, Massachusetts: Human Resource Development Press, 1977.

Atkinson, J. W. Old and new conceptions of how expected consequences influence actions. In N. T. Feather (Ed.), Expectancy-value models in psychology. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1982.

Bandura, A., Lipsher, D., & Miller, P. Psychotherapists' approach-avoidance reactions to patients' expressions of hostility. Journal of Consulting Psychology, 1960, 24, 1-8.

Bandura, A., & Walters, R. H. Social learning and personality development. New York: Holt, Rinehart & Winston, 1964.

Bandura, A. Self-efficacy: toward a unifying theory of behavioral change. Psychological Review, 1977, 84, 191-215.

Bell, R. Q. A reinterpretation of effects in studies of socialization. Psychological Review, 1968, 75, 81-95.

Blai, B. Predicting job satisfaction. Unpublished Paper, (available in ERIC Document Reproduction services, ED 210 582, 1982.)

Block, J. H. A comparison of forced and unforced Q sorting procedures. Educational and Psychological Measurement, 1956, 16, 481-493.

Blubaugh, J. The effects of positive and negative audience feedback on selected variables of speech behavior of normal-speaking college students. (Doctoral dissertation, University of Kansas) Dissertation Abstracts, 1966, 27, 1948-A.

Blum, A., & McHugh, P. The social ascription of motives. American Sociological Review, 1971, 36, 98-109.

Blumer, H. Symbolic interactionism: perspective and method. Englewood Cliffs, New Jersey: Prentice-Hall, 1969.

Brophy, J. E. Teacher praise: a functional analysis. East Lansing, Michigan: Institute for Research on Teaching, Michigan State University, 1979.

Brophy, J. E., & Good, T. L. Teacher communication of differential expectations for children's classroom performance: some behavioral data. Journal of Educational Psychology, 1970, 6, 365-374.

Brophy, J. E., & Good, T. L. Teacher-student relationships: causes and consequences. New York: Holt, Rinehart & Winston, Inc., 1974.

Caggiano, R. The relationship between the values and attitudes of elementary school teachers and pupils regarding pupil behaviors. Graduate Research in Education and Related Disciplines, 1970, 6, 83-97.

Cohen, L. Educational research in classrooms and schools. London: Harper & Row, 1976.

Crocker, R. K., Boak, T. R., Janes, E. M., & Spain, W. H. Strategies of teaching in elementary schools: causes and classroom behavioural consequences-- research proposal. Unpublished manuscript, Memorial University of Newfoundland, July 1976.

Dawes, R. M. Fundamentals of attitude measurement. New York: John Wiley & Sons, Inc., 1972.

Dunkin, M. J., & Biddle, B. J. The study of teaching. New York: Holt, Rinehart and Winston, Inc., 1974.

Egan, G. Interpersonal living: a skills/contract approach to human relations training in groups. Monterey, California: Brooks/Cole Publishing Company, 1976.

Feather, N. T. Expectancy-value models in organizational psychology. In N. T. Feather (Ed.) Expectations and actions: expectancy-value models in psychology. Hillsdale, New Jersy: Lawrence Erlbaum Associates, 1982.

Ferguson, G. A. Statistical analysis in psychology and education (4th ed.). New York: McGraw Hill, Inc., 1976.

Foote, N., Identification as the basis for a theory of motivation. American Sociological Review, 1951, 16, 14-21.

Fiedler, M. L. Bidirectionality of influence in classroom interaction. Journal of Educational Psychology, 1975, 67, 735-744.

Gamsky, N., & Farwell, G. Counselor behavior as a function of client hostility. Journal of Counseling Psychology, 1966, 13, 184-190.

Glaser, B. G., & Strauss, A. L. The discovery of grounded theory. Chicago: Aldine Publishing Co., 1967.

Good, T. L., & Brophy, J. E. Looking in classrooms. New York: Harper & Row, 1984.

Green, T. F. The activities of teaching. New York: McGraw-Hill Inc., 1971.

Harnack, R. S. The teacher, decision maker, and curriculum planner. Scranton, Pennsylvania: International Textbook Co., 1968.

Hastorf, A. H. The reinforcement of individual actions in a group situation. In L. Krasner & L. Ullman (Eds.), Research in behavior modifications: new developments and implications. New York: Holt, Rinehart & Winston, 1965.

Haythorn, W., Couch, A., Haefner, D., Langham, P., & Carter L. F. The effects of varying combination of authoritarian and equalitarian leaders and followers. Journal of Abnormal and Social Psychology, 1956, 53, 210-219.

Heller, K., Myers, R., & Kline, L. Interviewer behavior as a function of standardized client roles. Journal of Consulting Psychology, 1963, 27, 117-122.

Hemphill, J. K. Situation factors in leadership. Ohio State University Educational Research Monographs, 1949 (No. 32).

Hemphill, J. K. Why people attempt to lead. In L. Petrullo & B. Bass (Eds.), Leadership and interpersonal behavior. New York: Holt, Rinehart & Winston, 1961.

Hoehn, A. J. A study of social status differentiation in the classroom behavior of nineteen third grade teachers. Journal of Social Psychology, 1954, 39, 269-292.

Housego, B. E. J., & Boldt, W. B. Priorities of teacher behaviors as perceived by student-teachers in a school based program: an exploratory study. The Alberta Journal of Educational Research, 1978, 24, 53-65.

Hyman, R. T. Fielding student questions. Theory Into Practice, 1980, 19 (1), 38-44.

Ittelson, W. H. Environment perception and contemporary perceptual theory. In W. H. Ittelson (Ed.), Environment and Cognition. New York: Seminar Press, 1973.

Jablonski, G. L. An Investigation into the contruction of an instrument to measure the teacher's definition of the situation. Unpublished Master's Thesis, Memorial University of Newfoundland, 1983.

Jackson, P. W. Life in classrooms. Montreal, Quebec: Holt, Rinehart and Winston, Inc., 1968.

Jackson, P. W., Silberman, M. L., & Wolfson, B. J. Signs of personal involvement in teachers' descriptions of their students. Journal of Educational Psychology, 1969, 60, 22-27.

Jones, E. E., & Thibault, J. W. Interaction goals as bases of inference in interpersonal perception. In R. Taguri & L. Petrullo (Eds.), Person perception and interpersonal behavior. Stanford, California: Stanford University Press, 1958.

Kerlinger, F. Attitudes toward education and perceptions of teacher characteristics: a Q study. American Educational Research Journal, 1966, 3, 159-166.

Kerlinger, F. Social attitudes and their criterial referents--a structural theory. Psychological Review, 1967, 74, 110-122.

Kerlinger, F. Foundations of behavioral research. London: Holt, Rinehart and Winston, 1970.

Kerlinger, F. A Q validation of the structure of social attitudes. Educational and Psychological Measurement, 1972, 32, 987-995.

Klien, S. S. Student influence on teacher behavior. American Educational Research Journal, 1971, 8, 403-421.

Livson, N., & Nichols, T. Discrimination and reliability in Q-sort personality descriptions. Journal of Abnormal and Social Psychology, 1956, 52, 159-165.

Lundgren, U. P. Frame factors and the teaching process: a contribution to curriculum theory and theory on teaching. Stockholm, Sweden: Alurquist & Wiksell, 1972.

Lundgren, U. P. Model analysis of pedagogical processes. Stockholm, Sweden: Department of Educational Research, Stockholm Institute of Education, 1977.

Martin, W. B. The negotiated order of the school. Toronto: MacMillan, 1976.

Martin, W. B. Teachers' pets and class victims. St. John's, Newfoundland: Publications Committee, Faculty of Education, Memorial University of Newfoundland, 1982.

Maslow, A. H. Motivation and personality. New York: Harper & Row, 1970.

Maslow, A. H. A theory of human motivation. In R.J. Lowery (Ed.), Dominance, self-esteem, self-actualization: germinal papers of A.H. Maslow. Monterey, California: Brooks/Cole Publishing Company, 1973.

McClelland, D. C. Toward a theory of motive aquisition. American Psychologist, 1965, 20, 321-333.

McIntyre, D., & Morrison, A. Priorities in research into classroom life and teacher education. Scottish Educational Studies, 1977, 9, 4-13.

McKennell, A. C. Surveying attitude structures--a discussion of principles and procedures. Amsterdam: Elsevier Scientific Publishing Company, 1974.

Mead, G. H. Mind, self, and society: from the standpoint of a social behaviorist. Edited, with an introduction by C. H. Morris. Chicago: University of Chicago Press, 1934.

Newcomb, T. M. On the definition of attitude. In J. Gould and W. L. Kolb (Eds.), A dictionary of the social sciences. London: Routledge and Kegan Paul Ltd., 1975.

Noble, C. G., & Nolan, J. D. Effect of student verbal behavior on classroom teacher behavior. Journal of Educational Psychology, 1976, 68, 342-346.

Ornstein, A. C. Accountability for teachers and school administrators. Belmont, California: Fearon Publishers/ Lear Seigler Inc., 1973

Osofsky, J. D., & O'Connell, E. J. Parent-child interaction: daughters' effect upon mothers' and fathers' behavior. Developmental Psychology, 1972, 7, 157-168.

Phillips, D. C. Theories, values and education. Melbourne: University Press, 1971.

Randhawa, B. S. Do teachers shape the behavior of students and vice versa? Canadian Journal of Behavioral Science, 1980, 12(2), 187-193.

Randhawa, B. S. Verbal interaction of students and their teachers in junior high classrooms. American Educational Research Journal, 1983, 20(4), 671-686.

Rist, R. C. Student social class and teacher expectations: the self-fulfilling prophecy in ghetto education. Harvard Educational Review, 1970, 40, 411-451.

Roe, A. The psychology of occupations. New York: John Wiley & Sons, Inc., 1956.

Rokeach, M. Beliefs, attitudes and values. San Francisco: Jossey-Bass, 1968.

Rosenfield, H. M. Nonverbal reciprocation of approval: an experimental analysis. Journal of Experimental Social Psychology, 1967, 3, 102-111.

Rosenshine, B. V. Academic engaged minutes, content covered, and direct instruction. University of Illinois, 1979.

Russell, P. D., & Snyder, W.V. Counselor anxiety in relation to amount of clinical experience and quality of affect demonstrated by client. Journal of Consulting Psychology, 1963, 24, 358-363.

Sarbin, T.R., & Allen, V. L. Increasing participation in a natural setting: a preliminary report. Psychological report. 1968, 18(1), 1-7.

Sharp, R., & Green, A. Education and social control--a study in progressive primary education. London: Routledge and Kegan Paul Ltd., 1975.

Shavelson, R. J., & Stern, P. Research on teachers' pedagogical thoughts, judgements, decisions, and behavior. Review of Educational Research, 1981, 51, 455-498.

Shaw, M. E., & Wright, J. M. Scales for the measurement of attitudes. New York: McGraw-Hill Co., 1967.

Silberman, M. L. Behavioral expression of teachers' attitudes toward elementary school students. Journal of Educational Psychology, 1969, 60, 402-407.

Skinner, B. F. Science and human behavior. New York: Free Press, 1953.

Sontag, M. Attitudes toward education and perception of teacher behaviors. American Educational Research Journal, 1968, 5, 385-402.

Staats, A. W. Social behaviorism and human motivation: principles of the attitude-reinforcer discriminative system. In A. G. Greenwald, T. C. Brock, T. M. Ostrom (Eds.), Psychological foundations of attitudes. New York: Academic Press, 1968.

Stebbins, R. A. The disorderly classroom: its physical and temporal conditions. Monographs in Education, 1974 (12).

Stebbins, R. A. Teachers and meaning: definitions of classroom situations. Monographs and Theoretical Studies in Sociology and Anthropology, 1975 (10).

Stephenson, W. The study of behavior. Chicago: University of Chicago Press, 1953.

Wehling, L. J., & Charters, W. W., Jr. Dimensions of teachers' beliefs about the teaching process. American Educational Research Journal, 1969, 6, 7-30.

Wick, J. W., & Beggs, D. L. Evaluation for decision- making in the schools. Boston: Houghton Mifflin Co., 1971.

Winne, P. H., & Marx, R. W. Reconceptualizing research on teaching. Journal of Educational Psychology, 1977, 69, 668-78.

Wittenborn, J. Contributions and current status of Q methodology. Psychological Bulletin, 1961, 58, 132-142.

Yarrow, M. R., Waxler, C. Z., & Scott, P. M. Child effects on adult behavior, Developmental Psychology, 1971, 5, 300-311.

Zdep, S. M., & Oakes, W. F. Reinforcement of leadership behavior in group discussion. Journal of Experimental Social Psychology, 1967, 3, 310-320.

Appendix A
Q-SORT

ANSWER KEY

The statements were arranged in the following order:

(a) Student motivated category: 1, 5, 6, 11, 15, 18.

(b) Significant other motivated category: 2, 3, 8, 10, 13, 14.

(c) Growth motivated category: 4, 7, 9, 12, 16, 17.

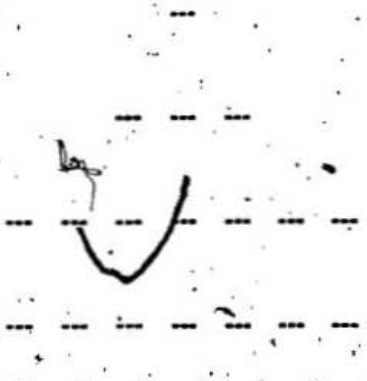
The scoring is completed by allocating a value to each item and then totalling the score for each category. Points are allocated as follows:
Items in column 1 are given 7 points each,
those in column 2 are given 6 points each,
those in column 3 are given 5 points each,
those in column 4 are given 4 points each,
those in column 5 are given 3 points each,
those in column 6 are given 2 points each,
those in column 7 are given 1 points each.

Instructions

This is a survey to assess aspects of teaching. It will take approximately 10 to 15 minutes of your time. It is important that you rate the statements according to how typical they are of your work as a teacher, rather than according to how you would like to work if you had optimum work conditions. It is not desirable to labor over your decisions, rather, place the items according to your initial impulse.

On pages 2 and 3 you will find a list of statements related to teaching. On page 1 you will find a set of blanks which approximate a normal distribution pattern. There are seven columns arranged along a continuum, with number 1 being most like me, and number 7 being least like me. The statements are to be arranged in this pattern according to how you rate them as being most like or least like your teaching. Thus, the two statements which are most like your teaching would be placed in column 1, and the two statements least like your teaching would be placed in column 7. Then, of the remaining statements, the two which you consider to be most like your teaching would be placed in column 2, and the two which you consider to be least like your teaching would be placed in column 6, and so forth until all the statements have been used. The order in which they are placed within the columns in not important. Use each statement only once.

CONTINUUM



1 2 3 4 5 6 7

MOST LIKE — LEAST LIKE

*NOTE: The most time efficient way to do this is to read through all the statements; then complete the end columns first and work progressively inward.

Statements

1. If students become interested in topics not in the lesson plan, I will pursue their interests.

2. I use mostly individual seatwork, finding it more beneficial than group work, in social studies.

3. I tend to be a "disciplinarian" in terms of classroom control.

4. I subscribe to professional magazines and book clubs.

5. I tend to spend time during recess, lunch and/or after school talking to students.

6. I do not mind noise as long as I feel there is work being done.

7. I alter and/or add to the curriculum that which I consider to be important.

8. I make a point of letting parents know about the work and projects the students have been doing in school.

9. I attend N.T.A. workshops and find them quite useful.

10. I tend to go by the mandated curriculum, feeling that the objectives outlined by the board should be met.

11. I "go-to-bat" for students when they request help with some concern they are having with the system.

12. I develop many of my own materials and activities to supplement existing resources.

13. I have a lot of input at staff meetings.

14. I make it a practice not to refer students to the (vice-) principal for discipline problems.

15. In establishing classroom rules, I involve students in the decision-making.

16. I tend to try new techniques and activities that other professional such as counselors, reading specialists, and supervisors suggest.

17. I have been, or currently am involved in, N.T.A. special interest councils.

18. I spend class time discussing issues which students find relevant, and in which they are interested.

Appendix B

RAW SCORES AND STANDARD SCORES OF Q-SORT RESULTS

Table B-1: Raw scores and standard scores of Q-sort results

Raw Scores			Standard Scores		
Student Motivated	Significant Others Motivated	Growth Motivated	Student Motivated	Significant Others Motivated	Growth Motivated
24	27	21	-9778	10267	-3235
26	22	24	-3441	-1251	3992
21[a]	23[a]	28[a]	19284[a]	1053[a]	13628[a]
30	19	23	9233	-8162	1583
26	26	20	-3441	7964	-5644
24	29	19	-9778	14874	-8053
30	20	22	9233	-5858	-826
15	26	12	12402	-17376	8810
21	27	24	-19284	10267	3992
30	21	21	9233	-3554	-3235
29	20	23	6065	-5858	1583
31	25	16	12402	5660	-15281
27	19	26	-272	-8162	8810
24[b]	30[b]	18[b]	-9778[b]	17178[b]	-10463[b]
29	21	22	6065	-3554	-826
23	20	29	-12947	-5858	16037
23	22	27	-12947	-1251	11219
25	17	30	-6610	-12769	18446
27	17	28	-272	-12769	13628
27	30	15	-272	17178	17690
27	16	29	-272	-15073	16037
31	21	20	12402	-3554	-5644
31	22	19	12402	-1251	-8053
28	27	17	2896	10267	-12872
28	23	21	2896	1053	-3235

Raw Scores			Standard Scores		
Student Motivated	Significant Others Motivated	Growth Motivated	Student Motivated	Significant Others Motivated	Growth Motivated
27	26	18	-272	7964	-10463
28	24	20	2896	3356	-5644
21	31	20	-19284	19482	-5644
30	15	27	9233	-17376	11219
31	17	24	12402	-12769	3992
26	26	20	-3441	7964	-5644
29	23	20	6065	1053	-5644
32[c]	24[c]	16[c]	15570[c]	3356[c]	-15281[c]
24	20	28	-9778	-5858	13628
27	24	21	-272	3356	-3235

Note: The Q-sort scores for the case study subjects are as follows:

[a]Dan: Growth motivated teacher.

[b]Carl: Significant others motivated teacher.

[c]Ron: Progressive non-technical teacher.

Appendix C

RESULTS OF CALULATIONS USED TO DISCRIMINATE Q-SORT RESULTS FOR RANKING

Table C-1: Results of calculations used to discriminate Q-sort results for ranking

Student Motivated		Significant Others Motivated		Growth Motivated	
X	Z	X	Y	X	Y
-13294	13502	16774	-6543	-3480	-20045
-4812	-5243	-1526	-7433	6338	-2190
26625[a]	-12575[a]	3881[a]	-32912[a]	22741[a]	-20337[a]
12523	-9745	-13570	7650	1047	17395
-4061	13608	12507	2203	-7906	-11405
-13189	22927	23790	-1725	-10601	-24652
12575	-5032	-10062	10059	-2514	15091
16685	-26186	-27982	3592	11297	29778
-26414	6275	17913	-23270	8501	-29551
12628	-319	-6550	12468	-6075	12787
8203	-7441	-9682	4482	1479	11923
17213	20941	7099	27683	-24312	6742
-596	-16972	-12431	-9082	13027	7890
-13135[b]	27641[b]	27299[b]	685[b]	-14163[b]	-26956[b]
8255	-2728	-6174	6891	-2082	9619
-18037	-21895	-7403	-28984	25440	-7089
-17931	-12470	-387	-24166	18318	-11696
-9448	-31215	-18687	-25056	28135	6159
-701	-26397	-19447	-13900	20149	12497
-16	34868	26159	17418	-26143	-17450
-754	-31110	-22956	-16309	23709	14801
17001	2090	-6935	18040	-10068	15956
17054	6802	-3426	20455	-13629	13653
4198	23139	15255	15768	-19454	-7371
3987	4288	1222	6131	-5210	1843
978	18427	13332	10191	-14309	-8236

Student Motivated		Significant Others Motivated		Growth Motivated	
X	Z	X	Y	X	Y
4040	9000	4730	8540	-8770	-460
-26203	25126	31946	-13640	-5743	-38766
12312	-28595	-27602	-1986	15290	26609
16791	-16701	-20966	8410	4175	25171
-4601	13608	12507	2203	-7906	-11405
8361	6697	842	11709	-9203	5012
21532[c]	18637[c]	3211[c]	30851[c]	-24744[c]	12214[c]
-13663	-19486	-7783	-23406	21446	-3920
-332	6591	5110	2963	-4777	-3628

Note: X and Y represent the calculations:

$$X = \text{category score} - \frac{\text{2nd score} + \text{3rd score}}{2}$$

$$Y = \text{2nd score} - \text{3rd score}$$

The Q-sort scores for the case study subjects are as follows:

[a]Dan: Growth motivated teacher.

[b]Carl: Significant others motivated teacher.

[c]Ron: Progressive non-technical teacher.