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STABILITY OF EDUCATIONAL GOAL ORIENTATIONS

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# STABILITY OF EDUCATIONAL GOAL ORIENTATIONS

AND STREET

HELD BY TEACHERS

Ву

DeWayne B. Anderson

#### A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Department of Counseling, Educational Psychology, and Special Education

#### ABSTRACT

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#### STABILITY OF EDUCATIONAL GOAL ORIENTATIONS HELD BY TEACHERS

Bу

DeWayne B. Anderson

The purpose of this longitudinal study was to determine to what degree the educational goal orientations of teachers remain stable over time. Also of interest was the identification of factors (events, school environments, and personal characteristics) that are associated with change in teacher goal orientation.

Seventy-four experienced teachers were the subjects in this study. Data were collected via questionnaires administered on four occasions during a 5-year period, and interviews that took place after the last questionnaire administration.

It was found that teacher goal orientation is a relatively stable construct. Although a few teachers made major shifts in goal orientation, most of the changes did not persist over time. Teachers identified a variety of factors which they believed contributed to changes in educational goal orientation. They identified student behavior as the primary factor associated with major shifts in goal orientation. Contrary to research expectations, the most highly

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experienced teachers made considerably more shifts in goal orientation than did the relatively inexperienced teachers.

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## CHAPTER I

# THE PROBLEM

# Introduction

The educational goal orientations held by teachers represent a pivotal but often overlooked component of the teaching-learning process. These goal orientations are important for several critical reasons. First, they may have a significant influence on teacher decisions and behaviors, which in turn have a demonstrable relationship to the academic and social growth of students. Second, the goal orientations are important to the success of long-term attempts to improve our educational system because most improvements in the teachinglearning process must be implemented by teachers, and the extent to which teachers do or do not commit themselves will be determined by, among other things, their educational goal orientations. Thus, it is important to identify these orientations, use them as a base for promoting success in our schools, and, if need be, determine when and how changing these orientations will best facilitate the maximization of academic and social growth in students.

#### Background of the Study

In the Affective Outcomes Project at Michigan State University's Institute for Research on Teaching, it was determined that different

teachers place very different priorities on the many possible goals they may have for students (Prawat, Solomon, et al., 1981). The goal orientations of 40 elementary teachers were assessed during taperecorded 3-hour interviews. Content analysis of the transcripts revealed substantial differences, and a cluster analysis revealed some distinct goal orientations on the part of teachers (Prawat, 1980). It was discovered that in addition to being concerned about a student's acquisition of content, many teachers were very concerned about two socialization dimensions. One of these dimensions related to individual students learning how to perform academic work (learning about academic responsibility), while the other related to students developing the interpersonal skills requisite to functioning effectively as a member of a classroom or group (learning about social responsibility).

The discovery of the prominence of these socialization goal orientations, one emphasizing academic responsibility and the other social responsibility, led to the formation of the Socialization Outcomes Project in 1981 at Michigan State University's Institute for Research on Teaching. A major premise of this project was that teachers face a complex task of trying to balance concerns they have for students' knowledge acquisition with concerns they have for the two areas of classroom socialization. Therefore, an instrument (the Teacher Priorities Questionnaire [TPQ]) was designed to identify teachers' prioritization of these three legitimate areas of concern (Prawat, Anderson, Anderson, Jenkins, & Anderson, 1983). This 22-item forced-choice

questionnaire was administered to 108 third- and fourth-grade teachers in May 1982. Each teacher's responses resulted in a numerical profile (e.g., 15-2-5) representing the teacher's professed goal orientation (or how the teacher professed to balance goals in the three areas outlined above). Based on these profiles, teachers were selected for observation to determine how different teacher goal orientations are translated into classroom action (teacher behavior) and whether or not these differences are associated with differential effect on students (student outcomes).

In addition to the TFQ, a second instrument was simultaneously administered to the 108 teachers. This was the Problems in Schools Questionnaire (Deci, Schwartz, Sheinman, & Ryan, 1981), an instrument that identifies the degree to which teachers profess to be autonomygranting versus controlling when their students encounter problems in school. The purposes for using this instrument were to provide a validity check for the newer TFQ, as well as to study how the autonomycontrol dimension relates to teacher goal orientation.

This study does not concern itself with how teacher goal orientations are manifested in teachers' classroom behaviors or with how they might relate to differences in the academic or social growth of students. These and other questions are within the purview of the much larger Socialization Outcomes Project ongoing at the Institute for Research on Teaching. What is presented here is a longitudinal study that assesses to what degree teacher goal orientations exhibit temporal stability. In other words, does a teacher's priority profile



(relative balance among the three goal orientations) persist over time? This and related questions are presented in the next section of this report.

#### Purpose of the Study

The purpose of this longitudinal study is to assess the stability of teacher goal orientations. The primary question of interest is: Do the educational goal orientations of teachers change over time? Also of interest is: When a shift in goal orientation occurs, how permanent is the shift? Other important questions include: What type of person is most likely to exhibit a change in goal orientation? In other words, is there a relationship between teacher age, experience, or educational background and the propensity to change? What job-related and other environmental factors are related to changes in teacher goal orientation? Does assignment to a different grade level or a different building, or a change in supervisor or administrative priority bring about a change in teacher goal orientation? Also of interest is whether or not propensity to change goal orientation relates to a teacher's position on the autonomy-control dimension and whether changes in goal orientation are associated with predictable, concurrent changes in scores on the Problems in Schools Questionnaire (Deci et al., 1981). These and other questions are addressed in the current study.

#### Definitions

<u>Cognitive goal orientation</u>. A teacher having this goal orientation has expressed a relatively high degree of positive affect for the idea that cognitive goals are important. This teacher is primarily concerned with a student's academic ability and achievement, as well as with understanding, learning, self-expression, and creativity (Prawat, 1985).

<u>Task demands goal orientation</u>. A teacher having this goal orientation has expressed a relatively high degree of positive affect for the idea that task-demands goals are important. This teacher is primarily concerned with how well a student is making an "adaptation to classroom" work demands (Lambert & Nicoll, 1977). Teachers with this orientation would tend to emphasize goals such as student selfmotivation and independence, working neatly and carefully, following directions, and getting work done on time (A Anderson, 1985; Prawat, 1985).

Interpersonal goal orientation. A teacher having this goal orientation has expressed a relatively high degree of positive affect for the idea that interpersonal goals are important. Teachers with this goal orientation tend to stress that their students should become more caring, cooperative, and respectful of others, as well as more thoughtful about how their actions affect others.

"Autonomy-granting" teacher. This is a teacher who tends to grant a high degree of autonomy to students who are having problems by



encouraging them to consider the various elements of the problem and then to arrive at solutions for themselves (Deci et al., 1981).

"Highly controlling" teacher. This is a teacher who tends to react to classroom problems by independently deciding on solutions and then using sanctions to ensure that the solutions are implemented (Deci et al., 1981).

#### Importance of the Study

There is an ever-growing body of research indicating that what teachers do in the classroom is inextricably linked to what they think (Shavelson & Stern, 1981). Thus, it becomes important to identify what teachers think. However, it is obviously not feasible to assess the entire domain of every teacher's thoughts. Neither is it necessary. What is important is the identification of teacher thought most closely associated with teachers' classroom decisions and behaviors. Many feel the most germane area of teacher thinking is in the orientations teachers have to the two common, but competing, sets of educational goals: cognitive versus affective. These are sometimes labeled academic and socioemotional goals (Halperin, 1976). Most educators believe both are important, and thus the competitive aspect of these sets of goals exists only in how teachers choose to balance classroom time in accomplishing each. However, it is evident that there are teachers who place major emphasis on one set of goals much to the detriment of the other set. Kremer (1981) believed these teachers with "clear-cut" goal orientations must be located, and ways must be found "to change their focus of teaching in the direction of greater balance

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between the two domains" (p. 2). Thus, the current study is important because it assesses the feasibility of identifying and changing educational goal orientations.

#### Importance of Goal Orientations

The importance of teachers' goal orientations can be argued from both logical and empirical bases. It is inherently logical that differences among teachers with respect to goal orientations will create differences in classroom decisions, which will be manifested in differential classroom behavior on the part of teachers. In turn, these behavioral differences will result in differential outcomes among classrooms.

This goal orientation-decision-behavior-outcome linkage also has its empirical foundations. Shavelson and Stern (1981) in their review of research on teacher thoughts, decisions, and behaviors cited many researchers who have found that the goal orientations of teachers seem to influence eventual student outcomes in the areas of academic achievement, relationships with peers, and attitudes toward school. Halperin (1976) found that teachers with different orientations behaved differently in the classroom and that these differences seemed to affect children's perceptions of school. The BTES Phase III-B Study (Fisher et al., 1978) indicated that the goal orientations of teachers have some important implications for student outcomes. Thus, students of academic (content-oriented) teachers evidenced the most learning gains, while students of "affective" teachers showed the least. The

data also suggest that it is difficult to simultaneously maximize student gain in both academic and affective areas.

A study by Mitman, Mergendoller, Ward, and Tikunoff (1981) seemed to indicate that placing a priority on affective growth was counterproductive; that is, successful cooperative group behaviors occurred much more often in formal contexts where teachers were providing a great deal of structure and guidance. Similar results were reported by Prawat and Nickerson (1985). In a sample of 40 elementary teachers, they found that teachers who placed a high priority on affective outcomes were no more successful in promoting cooperative group behavior than were the teachers who emphasized cognitive outcomes. Although the authors cautioned the interpretation of results due to small sample size, they found that teachers who professed a mixed orientation (i.e., a balance between cognitive and affective goal orientations) were most successful in producing affective growth in students.

Kremer (1981) found that for those teachers who had very distinct differences in goal orientations, the orientations were excellent predictors of teacher behavior, not only in the teaching objectives they selected for use, but also in the stimuli and questions they presented during classroom instruction.

In sum, there are both logical and empirical bases for the view that teacher goal orientations are important. However, the empirical evidence linking goal-orientation differences with differential student outcomes is less than overwhelming. In the next section a factor which may contribute to this paucity of evidence is discussed.



#### Importance of Identifying Goal Orientations

Brophy (1978) indicated that certain dualistic personality traits seem to be closely associated with teaching behaviors. Examples of such traits include introversion and extroversion, internal and external locus of control, and open and closed belief systems. Several recent studies have suggested that certain goal orientations are incompatible with some of these personality traits (Halperin, 1976: Kremer, 1978, 1981: Prawat, Anderson, et al., 1986). For example, Halperin (1976) found that "permissive" teachers who focused on academic goals and "strict" teachers who focused on social goals caused much stress and anxiety in their students. Kremer (1978) found a similar situation with a group of "closed-minded" teachers who exhibited "psuedoprogressive" classroom behavior. Prawat et al. (1986) found that "autonomy-granting" teachers who professed an academic goal orientation and "controlling" teachers who professed an interpersonal goal orientation produced students who "were less knowledgeable academically than their counterparts in the more ideologically consistent (i.e., academic/control and social/ autonomous) classrooms" (p. G-17).

Thus it appears that teachers and prospective teachers who possess goal orientations that are incongruent with certain personality traits should shift their goal orientations to some point of compatibility. Also, if as Kremer (1981) stated, teachers with clear-cut goal orientations (highly affective or highly cognitive) need to be identified and have their orientations shifted so they become sensitive to both sets

of student needs, it may be necessary for teacher-training programs to become more individualized with student teachers made more aware of their orientations, and programs tailored to facilitate orientation adjustment. The present study demonstrates one means by which goal orientations may be identified and also suggests conditions that are conducive to bringing about change.

#### Changes in Goal Orientations

This study centers on the stability of teachers' goal orientations. Is it possible for the goal orientation of a teacher to undergo a substantive change over time? If so, what are the events and experiences that seem to be effective in bringing about change?

The research literature does not provide conclusive answers to these questions. Mahan and Lacefield (1978) found that the values and attitudes of supervising teachers had a powerful influence on the student teachers they supervised. Kremer and Moore (1978) found that during a year-long teacher-training program they were able to significantly make their student teachers more "progressive" in their orientations. However, Paschal and Treloar (1979) measured teacher attitudes during the first 3 years of teaching and found that significant changes that occurred during teacher training were only temporary, with obliteration occurring during the first few years of teaching.

Fuller (1969) and Adams (1982) both found that teachers did undergo significant attitudinal change between their first and fifth years of teaching. On the other hand, Gabel and Rubba (1979) studied the effect of 4 weeks of training on 36 elementary teachers at a summer

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National Science Foundation Institute; they found neither a significant attitudinal change nor a significant behavioral change in these teachers during the subsequent school year.

Do teachers make significant changes in goal orientations or do they not? The inconsistent and often contradictory research results obtained thus far have indicated the need for more and better research of the type presented here. Further support for this is found in Shavelson and Stern (1981). In their review of research on teacher thinking, they express the following:

The need for research on teaching to examine teachers' intentions has been justified on several grounds. One justification is that the solely behavioral model is conceptually incomplete. It can not account for predictable variations in teachers' behavior arising from differences in their goals. A second justification . . . is that research linking teachers' intentions to their behavior will provide a sound basis for educating teachers and implementing educational innovations. (. 455)

Shavelson and Stern conclude their review with six recommendations, one of which is: "Research should examine how teachers balance goals, what scripts teachers use in planning instruction, and the relation between goals and scripts" (p. 491).

It is evident that the answers are not in, and as Gabel and Rubba (1979) have said,

Educators need to know the types and length of experiences that are necessary to change teachers' attitudes and to maintain that change. This may be the most effective way of improving teachers' attitudes toward teaching and therefore improving the quality of teaching. (p. 24)

In sum, the need for this study rests on the importance of teacher goal orientations, the need to measure these orientations accurately,



and the importance of identifying which experiences will bring about the desired changes in teacher goal orientations.

#### Overview of the Study

Chapter I has presented the problem, provided a rationale for, and stated the purpose of the present study. In Chapter II, research relevant to the study is reviewed. Chapter III provides a description of the methods involved in the study, including sample characteristics, instrumentation, data-collection procedures, research questions, and analysis procedures. Chapter IV presents the data and the results of analyses. A discussion of the results is found in Chapter V, where relationships to past research and implications for future study are made. The limitations of the present study are also addressed.



# CHAPTER II

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# REVIEW OF THE LITERATURE

#### Introduction

The following review selectively presents research pertinent to the current study. It is divided into three major sections. First, the dimensionality of teacher attitudes is surveyed via a historical perspective. Starting with John Dewey at the turn of the century and continuing through to the present study, research is chronologically presented and questions are raised as to the structure and content of the teacher attitude domain. In section two, research investigating relationships between teacher attitude and teacher behavior is presented. Studies suggesting the possibility of predicting desirable teacher behavior from knowledge of teacher attitudes and characteristics are reviewed. In section three, literature relating to the stability of teacher attitudes is discussed. Research is presented in which attempts were made to change the attitudes of teacher candidates during preservice training, as well as the attitudes of experienced teachers through inservice training. Research associating certain personality characteristics with increased probability of attitude change is also presented.



# Dimensionality of Teacher Attitudes

# Historical Review

In 1902, John Dewey outlined what he considered to be two fundamental and disparate points of view on education and suggested that individuals tend to hold to one or the other of these views. One view emphasizes individual differences, children's needs, and the importance of social learning. The other view emphasizes discipline, subject matter, and the importance of moral standards. The former has since been given the label "progressivism" and the latter termed "traditionalism" (Kerlinger, 1958).

In the 50 years that followed the publication of Dewey's (1902) essay, few attempts were made to empirically determine the structure and dimensionality of educational attitudes. Kerlinger (1956, 1958) and Kerlinger and Kaya (1959) performed some of the first major experiments on the measurement of teacher attitudes. Kerlinger and Kaya constructed a self-report instrument, the Attitude Toward Education Scale, to measure the extent to which teachers believed in each of the two global educational philosophical orientations: progressivism and traditionalism. The major question of interest was that of determining the factorial nature of educational attitudes--that is, do they form a bipolar continuum, two separate factors, or many factors? They concluded that educational attitudes consist of two relatively independent and orthogonal dimensions (factors) called "progressivism" and "traditionalism." In other words, progressivism is not simply the opposite

of traditionalism; rather, each is an independent system in its own right.

Since the 1950s, researchers have been somewhat divided as to whether or not progressivism and traditionalism are, in fact, two independent dimensions. Similarly, they are divided on whether or not these two dimensions exhaust the domain of teachers' educational attitudes. Several studies that lend support to the notion of two independent and exhaustive attitudinal dimensions are Shaw and Wright (1967), Kerlinger (1970), Sontag and Pedhazur (1972), and Adwere-Boamah, Delay, and Jones (1982).

Other research has seemed to challenge the idea that the progressive and traditional dimensions exhaust the domain of educational attitudes. As Kerlinger (1967a) admitted, "the attitude domain was inadequately covered and the measurement instrument had too few items" (p. 191). The Minnesota Teacher Attitude Inventory (MTAI) developed by Cook, Leeds, and Callis (1951) was designed to measure a single factor, which had at one extreme a preference for democratic values (implied was a tendency to use democratic teaching methods) and at the other extreme a belief in and preference for autocratic values. Horn and Morrison (1965) conducted a factor-analytic study of the MTAI based on responses from 306 college students. They found five independent dimensions of teacher attitudes. Yee and Fruchter (1971) did a similar factor-analytic study and found the same five factors present. These are: a "modern" attitude toward classroom control versus a "traditionalistic" attitude; an optimistic, favorable attitude toward

students versus a pessimistic, unfavorable attitude; a permissive concern about "smart," "rebellious" behavior versus a punitive concern; an acceptance of students versus a rejection of students; and a desire to let children "run free" versus a desire to maintain control.

Although the five dimensions were reported to be statistically independent, there certainly appear to be some similarities and logical associations among them. Also, although the researchers concluded that their analyses refuted the uniqueness of the progressive versus traditional dimension, it certainly appears that each of the five factors represents a partial definition of the progressive and traditional dimensions.

Wehling and Charters (1969) developed several questionnaires containing a few original items, as well as items borrowed from the MTAI and Kerlinger and Kaya's (1959) Attitude Toward Education Scale. These were administered to several teacher samples ( $\underline{N} = 52$  to  $\underline{N} = 125$ ). Factor analysis led to the identification of eight dimensions of teacher belief. These are: subject matter emphasis, personal adjustment ideology, student autonomy versus teacher direction, emotional disengagement, consideration of student viewpoint, classroom order, student challenge, and integrative learning. However, most of these, at least the last six, dealt with very specific instructional strategies and thus may be only distantly related to a teacher's philosophical orientations. Another difference not resolved by the authors was that many of the dimensions were unipolar. Therefore, if teachers scored low on the dimensions, no presumptions could be made about what



they  $\underline{did}$  believe in because the antithetical goal preferences were missing.

Wolfe and Engel (1978) developed an instrument containing 18 items from the MTAI and 52 items from Wehling and Charters's (1969) questionnaire. The results of responses from 364 education majors were factor analyzed and yielded three interpretable factors. Wolfe and Engel believed that the 28 items loading positively on Factor I suggested a belief that children are naturally lazy and irresponsible. They also stated that their Factor I was a composite of Wehling and Charters's first and fourth factors and strongly resembled Kerlinger's (1967a) factor, "traditionalism." Factor II had 23 items that loaded positively on it and suggested a belief that instruction should be organized around the needs and interests of children. The researchers considered this factor to be an amalgam of Wehling and Charters's second, third, fifth, seventh, and eighth factors and that it bore a strong resemblance to Kerlinger's (1967a) "progressivism." Factor III was an expression of concern for a child's need for emotional support in the classroom. Because only four items loaded on this factor, Wolfe and Engel considered it to be a minor factor. Although Factor III was statistically independent of Factor II, one would logically want to make it a subset of Factor II. Wolfe and Engel did consider their research (the finding of two major factors) a confirmation of Kerlinger's (1967a) two independent and orthogonal attitudinal dimensions.


Bunting (1981) had 290 elementary teachers rate 56 items describing various facets of education. Submitting these items to factor analysis yielded four moderately independent dimensions of belief. These four factors were labeled "affective," "cognitive," "directive," and "interpretive." The affective dimension emphasized the importance of emotional development as an educational goal and stressed self-esteem and self-awareness as important objectives. The cognitive dimension stressed the active involvement of students in such mental processes as predicting, inferring, generalizing, and evaluating. The directive dimension stressed close teacher supervision of students and use of traditional curricula. The interpretive dimension stressed the importance of meaning and relevancy in the teaching of subject matter.

Several years later, Bunting (1985) attempted a validation study using an amended questionnaire and a new sample of elementary school teachers. She found that the four factors identified in her early research (1981, 1984) were not replicated in the new study. She did discover two factors, one of which was identical to her original "directive" dimension. The "affective," "cognitive," and "interpretive" dimensions collapsed into one new factor, which she called "student-centered." Again, the emergence of two independent dimensions lends support to the theory proposed by Kerlinger (1967a), with Bunting's (1985) "directive" and "student-centered" dimensions appearing identical to Kerlinger's "traditional" and "progressive" dimensions.

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#### Similarities Between Teacher Attitude Dimensions and Educational Goal Dimensions

How do the three scales in the TPQ (Prawat et al., 1983) compare to those that preceded it in the research literature? That is, do the statements made in the "content," "task demands," and "interpersonal" response options of the TPQ bear any resemblance to statements that load heavily on factors identified by previous researchers?

In comparing the TPQ to Bunting's (1981) original four scales, the interpersonal scale is very similar to her "affective" scale, and the content scale is similar to her "directive" scale. In relation to Bunting's (1985) later work, the interpersonal and content scales (from the TPQ) are similar to the "student-centered" and "directive" scales, respectively. The "task demands" statements do not appear in Bunting's factors (if, indeed, she used any of this type). It is quite possible that Bunting ignored the task demands dimension (as used in the TPQ) in her research.

The TPQ scales do appear to have similarities with the eight dimensions identified by Wehling and Charters (1969). The content scale corresponds with Factor I, "subject-matter emphasis." The interpersonal scale corresponds with Factor II, "personal adjustment ideology," Factor IV, "emotional disengagement," and Factor V, "consideration of student viewpoint." The task demands scale corresponds with Factor III, "student autonomy versus teacher control," Factor VI, "classroom order," and Factor VII, "student challenge." Factor VIII, "integrative learning," is not tapped by the TPQ.



The statements used by Kerlinger (1967a) and Horn and Morrison (1965) bear almost no similarity to those used in the TPQ. However, "content" and "task demands" priorities seem to best fit "traditionalism," with an interpersonal emphasis corresponding with "progressivism."

#### Questions Raised

The review of past research on the dimensionality of teacher belief systems raises many questions. Among these are: Why do so many dimensions seem unipolar? Why do researchers identify and deem important different sets of dimensions? Why do so many of these sets of dimensions appear to easily reduce to the same two dimensions: "traditionalism" and "progressivism"?

In answer to the first question, Kerlinger (1967b) suggested that the unipolarity of a dimension would disappear if one used the entire domain of teacher attitudes. He also suggested that the true bipolarity of the domain might be detected at a more fundamental level through second-order factor analysis.

In response to the second question, if one considers the complexity of human thought and behavior, it might be expected that more than one set of dimensions would be necessary to describe the way teachers think and behave in classroom situations. This view would support the use of instruments like the TPQ to identify how teachers differ in their goal orientations.

Regarding the third question, "traditionalism" and "progressivism" may be the two pervasive, underlying psychological orientations



held by humans, and it is these orientations that continue to surface because they serve to organize the more specific attitude systems that were earlier identified.

#### Attitude-Behavior Relationships

Knowledge of teacher attitudes is of little value unless these attitudes are related to teacher behaviors and subsequently to student outcomes. Can attitude be used to predict behavior? In most studies on teacher attitude there is an assumption that teachers' beliefs regarding education will influence teacher behaviors in the classroom. A second assumption is that teachers' classroom behavior will have an effect on the academic and social development of students (Wolfe & Engel, 1978).

In their review of empirical research on attitude-behavior relationships, Ajzen and Fishbein (1977) reported that many negative findings and nonsignificant relationships between attitudinal predictors and behavioral criteria have been accumulating for 50 years. These prominent social psychologists did conclude, however, that although a person's attitude may not predict any single action (behavior), it certainly influences the overall pattern of responses to an object. They pointed to a missing link, namely "intention," as a primary cause of nonsignificant relationships between attitudes and behaviors. According to their analysis, a single behavior is determined by a person's intention to perform the behavior. Thus, the link is one of attitude-intention-behavior.

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In their review of research on teachers' pedagogical thoughts, judgments, decisions, and behavior, Shavelson and Stern (1981) cited numerous studies showing a definite link between teacher attitudes, intentions, and behavior and the effects of teacher behavior on student achievement. The empirical link between teacher attitudes and teacher behavior has also been strengthened through research focusing on teacher expectations (Bunting, 1981). For example, Harvey, Prather, White, and Hoffmeister (1968) identified a bipolar dimension of teacher belief called "concrete-abstract." The concrete pole represents a fixed, authoritarian attitude, while the abstract pole reflects a tolerant, flexible attitude. They found that behaviors of the two teacher "types" varied considerably, with the behavior of the "abstract" teachers being in a direction usually considered educationally desirable. Ekstrom (1976) also found a systematic relationship between teacher attitude scores and identifiable teaching behaviors.

Halperin (1976) investigated the goals of 13 first-grade teachers and how these were behaviorally translated to students over the course of a school year. Her study indicated that teachers with different goals behaved differently in the classroom. Also, these differences seemed to affect students' perceptions of school. Rose and Medway (1981) developed a Teacher Locus of Control Scale (TLC) and found significant associations between teachers' TLC scores and classroom behavior variables.



But there are instances where teacher behaviors seem inconsistent with a teacher's professed belief system. Kremer (1978) hypothesized that when teacher behavior is at variance with teacher attitude, it is because teacher attitude is not congruent with teacher personality traits. The personality trait he studied was closed-mindedness versus open-mindedness as measured by Rokeach's Dogmatism Scale. Although he believed that the traditional and progressive attitudes toward education should correspond with closed-mindedness and openmindedness, respectively, he discovered a few "closed-minded" teachers who professed progressive attitudes. Most of these "pseudoprogressives" exhibited classroom behaviors inconsistent with what was expected from progressive teachers. Kremer (1978) believed that teacher behavior is highly predictable if one has knowledge of teacher attitudes and personality traits.

### Attitude Change

There is overwhelming support for the proposition that attitudes change as people encounter and adjust to their environments. However, there is much disagreement regarding the mechanism for change. Insko (1967) cited a variety of prominent theories that attempt to describe the mechanism. Some of these are: Sherif and Hoveland's Assimilation-Contrast theory, Helson's Adaptation-Level theory, McGuire's Logical-Affective Consistency theory, Osgood and Tannenbaum's Congruity theory, Rokeach's Belief Congruence theory, Festinger's Dissonance theory, Sarnoff's Psychoanalytic theory, and McGuire's Inoculation theory.



Do teachers and teacher candidates make significant changes in their belief systems as a result of planned and unplanned factors in their environments? And, if significant changes do occur, do these changes persist over time? This literature review focuses on three arenas in which change is often purported to occur: preservice training (including student teaching), inservice training (workshops for experienced teachers), and the day-to-day experiences of teachers in our schools.

#### Attitude Change During Preservice Training

Kremer and Moore (1978) studied 125 first-year female students at a large metropolitan school of teacher training in Israel. The year-long program was designed to make teacher candidates more "progressive" and less "traditional" in their educational orientations. They found a statistically significant overall change took place. They also found that the effects of the training were not the same for all students, but varied according to students' personalities. The personality traits they studied were open-mindedness and closed-mindedness, as measured by Rokeach's Dogmatism Scale, a test that had been administered to the students before the year-long training. Students who scored either low on closed-mindedness or high on open-mindedness tended to make significant changes in their orientations. In contrast, there were no significant changes for students high on closedmindedness.

Research also exists that indicates that student teachers experience attitude change when placed in a situation in which their educational orientations are at odds with those of their supervising teachers (Yee, 1969) or the school district (Walberg, 1966). Price (1961) and Mahan and Macefield (1978) found that student teachers' attitude change was usually in a conservative direction as somewhat progressive student teachers tended to get placed with more "traditional" supervising teachers. However, they did find that student teachers' attitude change can be in a more liberal direction when conservative student teachers are placed with more liberal supervising teachers. Mahan and Macefield stated that "there seems little doubt that the supervising teachers' values and attitudes, expressed vocally and/or concretely presented in their professional conduct, exercise a powerful influence upon the orientation of their student teachers" (p. 13).

In a 5-year study, Paschal and Treloar (1979) investigated the stability of teacher dogmatism (openness versus closedness in belief systems) and pupil-control ideology (custodial versus humanistic orientation toward control). They found that in pretraining (third year of college) an educational psychology course made college students more open in their belief systems and more humanistic in their pupilcontrol ideology. However, by the end of their student-teaching experience most had regressed in the direction of their original scores, and by the end of 3 years of teaching all changes had been obliterated.



Thus, it appears that some teacher candidates (i.e., openminded) are amenable to making changes in their educational orientations, but it is questionable how permanent these changes are, especially if the change is in a direction that is contrary to the existing educational mores of the employing school district.

## Attitude Change During Inservice Training

Many attempts have been made to change teacher attitudes via inservice workshops. In the area of elementary teacher attitudes toward science and science teaching. Hasan and Billek (1975) found no change in teacher attitudes. In a longer workshop (4 weeks), Moore (1975) found a significant change in teacher attitudes; however, the change did not persist beyond 1 year. Gabel and Rubba (1979) used Moore's (1975) instrument to pretest and posttest 36 elementary teachers who participated in a 4-week summer workshop. The posttest revealed a significant change in attitude toward science, but in readministering the instrument 4 months later (mid-November), they found that this change no longer existed.

Donlan (1981) investigated the attitudes of 27 teachers who participated in an intensive 5-week summer workshop. The participants took the Rotter Internal-External Locus of Control Scale, a 26-item, forced-choice questionnaire, to determine locus of control before participating. Results of this study indicated that teachers scoring high on internal locus of control showed significantly more positive



attitudes toward inservice education than did teachers with an external locus of control.

Nicholson and Tracy (1982) examined the influence a principal might have on a teacher's attitude toward curricular change and willingness to implement the change. They found that the following variables were neither significantly related to teacher attitude regarding curricular change nor teacher willingness to implement the change: teacher sex, race, educational level, length of teaching experience, and grade level taught. Those variables that significantly related to teacher attitude toward change were: teacher sense of participation and power, principal viewed as instructional leader, teacher age (younger teachers were more positive), principal's clarity of role and knowledge of the change, and principal age (the older the better). Of these five variables, only the first and the second were significantly related to teacher willingness to implement curricular change.

## Attitude Change as Adjustment to Institutional Pressures

Fuller's (1969) "concern theory" of teacher change is one in which she hypothesized that teachers move through three attitude phases (stages of concern) as teaching experience is gained. She provided empirical evidence to support the notion that inexperienced teachers exhibit a high degree of self-concern; that is, they are very concerned about how they are perceived by students, colleagues, administrators, and parents. As experience is gained, this self-concern of stage one



decreases and concern for instructional tasks and discipline increases. In the third stage, these task concerns diminish and the teacher's primary concern becomes centered on the effect he/she has on students' academic and social growth and well-being.

Adams (1982) did a partial replication of Fuller's "concern theory." He engaged in a longitudinal study in which he collected data from participating teachers at four points: student teaching, and near the end of the first, third, and fifth years of teaching. His findings supported only the first part of Fuller's concern theory; that is, teacher self-concern decreased across experience levels, and instructional task concerns tended to increase across the same levels. His data indicated that academic-effect concerns were highest of all concerns, and this did not change across experience levels.

Lipka and Goulet (1979) investigated whether teacher attitudes toward the profession change with age and/or the amount of professional experience accumulated by the teachers. A Likert-type scale was used, and teachers were asked to rate the importance of such factors as economic rewards, prestige, job security, opportunities for creativity, sense of fulfillment, and meeting of altruistic needs. They discovered that attitudinal differences were nonexistent among the age groups with the exception of some differences in first-year teachers.

From the above, it appears that in addition to socializing students, the enterprise of education also shapes and socializes teachers. Thus, any changes brought about by external staff-development workshops tend to disappear unless there is continued support for the



change within the daily environment of the teacher. Research evidence has seemed to support the idea that certain teacher characteristics (internal locus of control, open belief system, and teacher age) are associated with capacity for change. It is also quite possible that for any change to have permanence it must take place over a long period of time (4- and 5-week workshops were ineffective). Therefore, it may be that the best environment for change is the individual school building, with a respected and knowledgeable administrator as the primary change agent.

#### Summary

It is of course impossible, in a review of this type, to be totally inclusive. The research reviewed here indicated that although there is much information available concerning teacher attitudes, we are still a long way from fully understanding how these attitudes are developed, how they affect subsequent teacher behavior, and what environmental factors are most closely associated with change in attitudes. In the present study it is hoped that through a quantitative and qualitative analysis of data, gathered over time, and in several forms, the relationships between environmental factors and attitude change will become somewhat more clear.

## CHAPTER III

# DESIGN OF THE STUDY

## Population and Sample

The target population for this study was all 120 third- and fourth-grade teachers employed by a large, urban, midwestern school district during the 1981-1982 school year. This population was originally targeted by the Socialization Outcomes Project (described earlier in this report). These teachers were mailed the instrumentation used in the present study during May 1982, 1983, and 1984. Of the original 120 teachers in the target population, 108 responded in 1982, 80 in 1983, and 88 in 1984. Seventy-four of the teachers responded all 3 years; it is these 74 teachers who made up the sample for this study. This sample was very homogeneous: 64 were female, 10 were male, most were highly experienced, and most had considerable training beyond the bachelor's degree (see Table 1). Neither teacher age nor ethnicity was ascertained.

## Instrumentation

## Teacher Priorities Questionnaire (TPQ)

This questionnaire was developed by members of the Socialization Outcomes research project at Michigan State University's Institute for Research on Teaching (IRT). The purpose of the instrument is to assess



the relative emphasis teachers place on three common classroom goals. One common goal is the learning of subject matter, or "content." A second goal is "academic responsibility," or getting students to learn how to adapt to the various task-related demands of classroom life. The third goal is the development of "social responsibility," that is, teaching students the interpersonal skills that enable them to function effectively within the classroom group.

Years of Experience	Number of Teachers	Educational Background	Number of Teachers
0- 3	0		
4- 6	3	Bachelor's degree	0
7-9	7		
10-12	11	Bachelor's degree +	
13-15	19	additional credits	16
16-18	11		
19-21	6	Master's degree	39
22-24	7	•	
25-27	3	Master's degree +	17
28-30	4	additional credits	
31-33	2		
34-36	1	Doctoral degree	0

Table 1: Teaching Experience and Educational Background of Sample (1982)

The TPQ consists of 30 forced-choice items. Eight of these items serve as distractors; in other words, their only function is to prevent (or slow) the respondents' identification of the purpose of the



questionnaire. For each of the remaining 22 items, subjects must select one of three given response alternatives as being most preferable, or most representative of the subject's own goal orientation. Selection of one alternative indicates a preference for students' academic growth; the selection of a second alternative indicates a preference for students' interpersonal growth, while the selection of a third alternative indicates that students' adaptation to classroom task demands is of highest priority for the respondent. A sample item follows:

Which of the following is most essential to successful teaching at the elementary school level?

- ability to communicate knowledge at a level that students understand
- ability to create a cooperative atmosphere in the classroom
- ability to foster student initiative in responding promptly and accurately to work assignments

A composite of the scores a teacher receives on these three scales (content, adaptation to task demands, and interpersonal adjustment) is used as a measure of his/her professed overall priority system or goal orientation in the classroom. A complete copy of the TPQ is located in Appendix A.

<u>Development of the TPO</u>. The Socialization Outcomes research team wanted an instrument that would identify the degree to which a teacher professed having each of the three goal orientations discussed above. A literature search was conducted to locate existing instruments that assessed teacher beliefs, values, or goal orientations.

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Because none was found that adequately served the team's purpose, the research team decided to develop its own instrument. A pool of multiple-choice items was generated for possible inclusion in a questionnaire. Several sources were very helpful in the generation of items, especially the transcripts of teacher interviews conducted by the IRT's Affective Outcomes Project. This project was carried out in the 2 years before the commencement of the Socialization Outcomes Project and was a driving force in the initial development of the Socialization Outcomes Project. The interview protocols of Lortie (1975) and Bussis, Chittenden, and Amarel (1976) were also valuable sources of item stems and alternative responses.

The TPQ was piloted in three stages. First, an initial draft consisting of 65 items was administered to four elementary school teachers, all of whom were affiliated with the IRT. These teachers provided detailed feedback regarding the clarity of written instructions and of each of the 65 items. They also critiqued the plausibility of each response alternative. Based on this feedback, many items were revised to improve clarity and plausibility.

In the second stage of piloting, the revised questionnaire, still consisting of 65 items, was administered to 40 teachers in two graduate-level, off-campus education classes. This sample was quite diverse, including both elementary and junior high school teachers. The author of this report conducted an extensive item analysis using the results of this second pilot test. Indices of difficulty and discrimination were computed for each item and used to revise or



delete items. This resulted in an instrument composed of only 27 items, each of which appeared to have high discriminating power.

Many of the 27 items in the revised instrument appeared highly similar; this was to be expected as, essentially, the same question was being asked in 27 slightly different ways. In an attempt to prevent respondents from realizing this and thus identifying immediately the purpose of the questionnaire, eight distracting items were generated for inclusion in the questionnaire (see Items 1, 4, 8, 14, 15, 18, 20, and 23, Appendix A). These were interspersed among the "real" items to make it appear as though the questionnaire was a survey of teacher attitudes regarding a variety of issues, not just one.

In the third stage of piloting, the revised 27-item TPQ was administered to a sample of 24 third-, fourth-, and fifth-grade teachers in a suburban school district. An extensive item analysis was again used to further revise or delete items. Five of the 27 items were subsequently deleted, resulting in the 22-item (plus eight distractors) TPQ used in the current study.

Internal-consistency estimates were also computed for each of the three scales embedded in the TPQ (content, task demands, and interpersonal). These reliability estimates (Cronbach's alpha) were 0.73, 0.84, and 0.90 for the content, task demands, and interpersonal scales, respectively. (For more details regarding the development of the TPQ, see Prawat et al., 1983.)



## The Problems in Schools Questionnaire

This instrument is used to assess teachers' orientations toward using control versus granting autonomy as a technique for dealing with problem situations that commonly occur in schools (Deci et al., 1981). The Problems in Schools Questionnaire contains eight short vignettes describing typical school-related problem situations. Teachers who complete this questionnaire are asked to study each vignette along with four alternative solutions, or possible ways of dealing with the problem situation. These four behavioral options, or solutions, represent four points along a continuum from highly controlling behavior to highly autonomy-granting behavior on the part of the responding teacher. A "highly controlling" (HC) solution is one in which the teacher makes a decision about how to deal with the problem and then uses restrictive measures (sanctions) to ensure that the solution is implemented. In the "moderately controlling" (MC) solution, the teacher makes the decision and then attempts to get the child to implement it by invoking feelings of guilt in the child or by emphasizing that the child should do something for his/her own good. A third solution, one that is categorized as "moderately autonomous" (MA), is one in which the teacher encourages the child to look at what other students are doing as a means of solving the problem. In the fourth means of solving the problem, the "highly autonomous" (HA) approach, the teacher encourages the student to analyze the problem and then to devise his/her own solution. The following is an example



of one of the vignettes, along with its four alternative solutions. The HC, MC, MA, or HA appearing before the response alternative identifies the subscale to which it belongs.

Jim is an average student who has been working at grade level. During the past two weeks he has appeared listless and has not been participating during reading group. The work he does is accurate but he has not been completing assignments. A phone conversation with his mother revealed no useful information. The most appropriate thing for Jim's teacher to do is:

- (MC) 1. She should impress upon him the importance of finishing his assignments since he needs to learn this material for his own good.
- (HA) 2. Let him know that he doesn't have to finish all of his work now and see if she can help him work out the cause of the listlessness.
- (HC) 3. Make him stay after school until the day's assignments are done.
- (MA) 4. Let him see how he compares with the other children in terms of his assignments and encourage him to catch up with the others.

For each of the eight vignettes, responding teachers rate the appropriateness of each of the four behavioral options (solutions) on a scale of 1 (highly inappropriate) to 7 (highly appropriate). Thus, the respondent evaluates a total of eight highly controlling, eight moderately controlling, eight moderately autonomous, and eight highly autonomous solutions.

The psychometric properties of the Problems in Schools Questionnaire are quite good and are fully reported elsewhere (see Deci et al., 1981). Briefly, the internal-consistency estimates (Cronbach's alpha) obtained for the HC, MC, MA, and HA subscales were 0.70, 0.69,



0.63, and 0.76, respectively. Also, if the four subscales truly represent points along a continuum, then a given subscale should correlate more strongly with adjacent subscales than with distant ones. One should also expect negative correlations between the highly controlling and highly autonomous subscales. The work of Deci et al. (1981) confirms these expectations.

## Data Collection

This investigation used two primary sources of data: questionnaires (TFQ and the Problems in Schools Questionnaire), which were administered on four occasions during a 5-year period, and teacher interviews, which took place after the last questionnaire administration.

## Administering the Questionnaires

The author of this report assumed primary responsibility for distribution and collection during each administration of the instruments. In May 1982, the TPQ and the Problems in Schools Questionnaire were mailed to all third- and fourth-grade teachers in the targeted school district. If a teacher chose to respond, he/she was to return the completed questionnaire to the building secretary. Responding teachers would subsequently receive an honorarium of \$10 from the IRT. One hundred eight of the original target population (120 teachers) responded.

One year later, each respondent still teaching in the school district (100 of the 108) was again asked to respond to the two

questionnaires. For this administration ten additional items were added to the TFQ. These items (see Items 31 through 40, Appendix A) were designed to identify recent changes in each teacher's environment that might account for a change in goal orientation. It was thought that graduate studies, changes in teaching assignment (grade level or building change), behavior of students, and supportiveness of parents might influence teacher goal orientations. Question 40 was open ended, asking teachers to describe recent significant experiences that might have affected their attitudes about teaching.

One year later (May 1984), the questionnaires (along with the ten additional items accompanying the TPQ) were readministered to the same teachers. Eighty-eight teachers responded to this third administration. For all three administrations, data-collection procedures were essentially identical, and in each case respondents received the \$10 honorarium.

In Spring 1986, the questionnaires (TFQ and Problems in Schools Questionnaire) were administered to 20 teachers from the original sample. Five of these teachers had exhibited the greatest stability in their goal orientations on the 1982, 1983, and 1984 administrations of the questionnaires. The other 15 exhibited major shifts in goal orientations between the 1982 and 1983 administrations of the questionnaire. One purpose for this final administration of the questionnaires was to assess to what degree the changes in goal orientation persisted over time. A second purpose was to identify which environmental factors and personal characteristics seemed to be associated


with stability in goal orientations and which seemed to be associated with major shifts in goal orientations.

#### Teacher Interviews

Following the fourth administration of the questionnaires, telephone interviews were conducted with the 15 teachers who showed the greatest shift in goal orientation. The primary purpose was to gain further insight regarding the causes of major shifts in goal orientation. Interviews followed a commonly structured format both in terms of sequence and questions asked. However, specific probes varied in response to the uniqueness of each teacher's responses. Before telephoning a teacher, the teacher's four TFQ profiles (1982, 1983, 1984, and 1986) were studied. In addition, demographic data (grade level taught, building, supervisor, years of teaching experience, amount of education, and so on), as well as answers to Questions 31 through 40 of the TPQ, were studied in an attempt to generate a complete profile of the teacher during the 1982 to 1986 time interval.

Each telephone interview commenced with an expression of appreciation for responding to the questionnaire and an inquiry as to whether the teacher was willing to spend 15 minutes discussing the TPQ results. Every teacher was very willing to do this. A debriefing session followed, during which the teacher was told the purpose of the TPQ and given descriptions of the common goal orientations (content, task demands, and interpersonal). This was followed by an attempt to help the teacher recall the setting in which he/she had taught during the 1981-1982 school year. Once oriented to that year, the relevant



TPO profile (May 1982) was described. The subject was then asked if he/she felt it was an accurate indicator of his/her goal orientation at that time and, if not, what would have been a more accurate description. The teacher was then oriented to his/her teaching position for the following year (1982-1983), including any changes that had taken place in teaching assignment. The new TPQ profile (May 1983) was presented, and the teacher was asked if he/she knew why he/she had made such a major shift in orientation. Whether a teacher was able to identify causes or not, probes were then made to determine if certain factors in the environment had contributed in any way to the change in goal orientation. These probes were based on teachers' responses to Items 31 through 40 of the TPQ (professional development, change in grade level, change in administration, change in building, change in quality of students, and so on). In addition, teachers were asked if they felt their goal orientations had been influenced in any way by the primacy of a goal established by a new superintendent of schools who had been hired during the time interval between the 1982 and 1983 administrations of the TPO. This administrator was very emphatic about establishing as the number-one districtwide priority an increase of at least 10% in student scores on the Michigan Educational Assessment Program (MEAP). Teachers were also asked if societal pressures, the mass media, and the Commission on Excellence in Education had had any influence on their goal orientations.

The interview proceeded in a similar fashion for the 1984 and 1986 administrations of the TPQ. First the context for the school year was established, then the teacher's relevant TPQ profile was described, and finally, if there had been a shift in TPQ profile, probes were made to determine the causes for change.

All interviews were conducted by the author of this report. During each interview, careful notes were taken on all relevant information. At the conclusion of the interview, these notes were read back to the teacher to verify their accuracy. In every case, the teacher confirmed the accuracy of the interviewer's notes. A complete copy of the teacher interview schedule is found in Appendix B.

#### Research Questions

I. How stable are teacher goal orientations? This question is asked because it is important to determine the degree to which changes in goal orientation are feasible. The primary implication is that if goal orientations are essentially fixed and turn out to be related to teacher effectiveness, teacher training centers may want to use the goal orientations of teacher candidates as one criterion in the selection process.

2. How lasting are the shifts that <u>do</u> occur in teacher goal orientation? If changing a teacher's (or teacher candidate's) goal orientation is important, then the permanence of the change is also important. The research literature seems to indicate that many changes of this type are only temporary (Gabel & Rubba, 1979; Moore, 1975). Therefore, it is important to determine what kinds and/or



lengths of experience are associated with goal-orientation shifts that are relatively permanent.

3. What personal factors are associated with goal-orientation stability? Does educational background, years of teaching experience, or gender of a teacher relate in any way to shifts in goal orientation? Answers to these questions may help determine the wisdom of investing time, money, and energy trying to change the goal orientations of a certain group of teachers.

4. What environmental factors are associated with goalorientation stability? For example, does a change in building principal create a shift in teacher goal orientation? Does a change in teaching assignment bring about a shift in goal orientation? Are shifts in goal orientation associated with teacher participation in workshops, inservice training, or university coursework? Is a change in central administration likely to influence goal orientation? For example, in the school district in which this study was based, a new superintendent was hired during the time period between the first and second administrations of the questionnaires. He established that a 10% increase in student MEAP scores would become the primary instructional goal of the school district. Did this pronouncement create a districtwide shift in teacher goal orientation? These questions are of great interest to teacher trainers, teacher supervisors, school administrators, and others interested in influencing teacher thinking.

 Is the stability of teacher goal orientation related to the control-autonomy dimension tapped by the Deci et al. (1981) Problems



in Schools Questionnaire? In other words, does a teacher's position along the control-autonomy continuum predict the teacher's goalorientation stability? This question is important because if one type of teacher (e.g., controlling) is highly resistant to change, this knowledge can be used to determine the utility of investing time, money, and energy trying to change those teachers.

# Data Analysis

The data analyzed in the study came from the following sources: 1. The responses of 74 teachers to the May 1982 administration of the two questionnaires.

 The responses of 74 teachers to the May 1983 administration of the two questionnaires.

 The responses of 74 teachers to the May 1984 administration of the two questionnaires.

 The responses of 20 teachers (5 very stable, 15 showing major shifts in goal orientation) to the June 1986 administration of the questionnaires.

 Interview data (July 1986) from 15 teachers who made major shifts in goal orientation.

Research Questions 1 and 2 deal with the overall stability of goal orientation for the sample of 74 teachers, and the permanence of the goal-orientation shifts when they occurred. For these questions the stability of a teacher's goal orientation from one testing to the next was quantified in the following manner: Sum the differences



between the three sets of scale scores and divide that sum by two. This quotient, which hereafter is called a change index, represented the net shift in number of items on the TPQ. For example:

		198	2		<u>198</u>	3	<u>Shift</u>	<u>Change</u> Index	
	c	ΤD	IP	C	τD	IP	C ID IP	TIMEX	
Teacher A:	3	18	1	5	15	2	2 + 3 + 1 = 6	6 - 2 = 3	
Teacher B:	5	7	10	0	12	10	5 + 5 + 0 = 10	10 <del>:</del> 2 = 5	

Teacher A had a change index of 3, representing a net shift of three items (three away from TD: two went to content, one to interpersonal). Teacher B showed a net shift of five items (five away from content; all five went to task demands). Therefore, the higher the change index the greater the shift in goal orientation. Maximum stability would, of course, be represented by a score of 0. Note that the change index indicates the magnitude but not the direction of the change in goal orientation.

Four change indices were computed for each teacher: one for the change that occurred between May 1982 and May 1983, a second for the change between May 1983 and May 1984, a third for the overall change between May 1982 and May 1984, and a fourth, called the variability index, which is the sum of the first two indices. Interview data were used to identify those environmental factors that seemed to be associated with goal-orientation shifts that persisted and those shifts that were only temporary.



Test-retest reliabilities were computed to determine the degree of correlation between the 1982 and 1983 scale scores, between the 1983 and 1984 scale scores, and between the 1982 and 1984 scale scores. Internal consistency estimates (coefficient alpha) were also computed for the scale scores of each test administration and subsequently compared to the test-retest reliabilities in order to better assess the degree of goal-orientation stability.

Research Question 3 raises the issue of relationships between changes in teaching environment and change in goal orientation. Statistical correlations were run to see if the environmental changes identified by teacher responses to Items 31 through 39 of the TPQ for a given year correlated with concurrent change indices. Teacher responses to TPQ Item 40 and teacher interview data were analyzed in a more qualitative fashion to assess the factors that these teachers specified as causes of major shifts in their goal orientations.

Regarding Research Questions 4 and 5, statistical correlations were computed to determine if any of the following factors correlated with the TPQ change indices: gender, grade level taught, years of teaching experience, level of formal education attained, and total autonomy score on the Problems in Schools Questionnaire. Interview data were qualitatively analyzed to assess whether any trends existed that might suggest some tentative answers and meaningful avenues for further study. The results of these and other previously mentioned analyses are presented in the next chapter of this report.



#### CHAPTER IV

# **RESULTS**

Data were gathered to find answers to the five questions of interest in this study. In this chapter, each question will be presented, together with pertinent data and analyses of these data.

# Question 1: How stable are teacher goal orientations?

Overall, teacher goal orientations appear to be relatively stable. Although most teachers exhibited some year-to-year shifting in their TPQ profiles, very few made major shifts. Table 2 illustrates this by showing the numbers of teachers who exhibited the various change indices. The change index for a teacher was computed by summing the changes in the three scale scores of the TPQ and dividing that sum by two. This quotient represents the net shift (maximum = 22) in number of items on the TPQ. Of those few teachers who made major shifts in goal orientation, most (12 out of 15) eventually reverted to their original goal orientations. These reversions can be viewed as supportive evidence for the stableness of teacher goal orientation. Data on these reversions will be presented in response to Question 2 later in this chapter.

Another piece of evidence supporting the contention of stability of goal orientation is as follows. Those teachers with the most



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Change Index (No. of Items)	No. of May May	Teachers 1982- 1983	89	Cumulative %	No. of Teachers May 1983- May 1984	89	Cumulative %
22		0	0.0	0.0	0	0.0	0.0
21		0	0.0	0.0	0	0.0	0.0
20		0	0.0	0.0	0	0.0	0.0
19		0	0.0	0.0	0	0.0	0.0
18		0	0.0	0.0	0	0.0	0.0
17		_	1.4	1.4	0	0.0	0.0
16		0	0.0	1.4	0	0.0	0.0
15		0	0.0	1.4	1	1.4	1.4
14		2	2.7	4.1	0	0.0	1.4
13		0	0.0	4.1	0	0.0	1.4
12		2	2.7	6.8	0	0.0	1.4
=		_	1.4	8.1	1	1.4	2.7
10		2	2.7	10.8	0	0.0	2.7
6		4	5.4	16.2	ŝ	4.1	6.8
8		4	5.4	21.6	1	1.4	8.1
7		3	4.1	25.7	9	8.1	16.2
9		8	10.8	36.5	٩	12.2	28.4
5		2	2.7	39.2	11	14.9	43.2
4		5	6.8	45.9	9	8.1	51.3
3	-	8	24.3	70.2	10	13.5	64.8
2	-	5	20.3	90.5	17	23.0	87.8
-		9	8.1	98.6	7	9.5	97.3
0		_	1.4	100.0	2	2.7	100.0
	1	1-			7		
lotal	-	4			14		

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"clear-cut" goal orientations, that is, those who reported a strong preference for just one type of goal (content, task demands, <u>or</u> interpersonal), were found to maintain their preferred goal orientations throughout the course of this study. As can be seen in Table 3, the eight teachers in the sample of 74 who had the most clear-cut orientations all maintained their goal preferences, with three of the teachers (Nos. 56, 80, and 70) moving in the direction of even greater preference for their chosen goal type.

Teacher Number	May C	TD	982 IP	Ma <u>n</u> C	7 19 TD	983 IP	May C	TD	984 IP	May 1982 Preference	May 1984 Preference
86	22	0	0	17	3	2	21	0	1	Content	Content
101	0	0	22	2	5	15	0	0	22	Interpersonal	Interpersonal
47	0	0	22	0	0	22	5	1	16	Interpersonal	Interpersonal
78	1	0	21	2	2	18	7	3	12	Interpersonal	Interpersonal
56	2	1	19	1	1	20	0	0	22	Interpersonal	Interpersonal
80	2	2	18	5	5	12	0	1	21	Interpersonal	Interpersonal
70	2	2	18	4	1	17	0	1	21	Interpersonal	Interpersonal
14	3	18	1	6	16	0	9	12	1	Task demands	Task demands

Table 3: Profiles of Teachers Having the Most Clear-Cut Goal Preferences

Table 4 presents the overall stability (test-retest reliability) of the scale scores. The figures in the column on the right (0.623, 0.618, and 0.731) represent a relatively high degree of stability considering the 2-year time interval between test administrations. Note that there is lower test-retest reliability between the 1982 and 1983 scores (0.576, 0.456, and 0.730) than there is between the 1983



and 1984 scale scores (0.807, 0.679, and 0.771). Although it is sheer speculation, it may be that the newly hired superintendent's goal of a substantial increase in student scores on the Michigan Educational Assessment Program created the higher degree of instability during the 1982-83 school year. Another possible explanation for the increased stability between the 1983 and 1984 scores might be that with repeated testing the memory effects became greater; thus the apparent increase in stability is actually increased error due to memory effects.

Scale	May 1982 to May 1983	May 1983 to May 1984	May 1982 to May 1984
Content	0.576	0.807	0.623
Task demands	0.456	0.679	0.618
Interpersonal	0.730	0.771	0.731

Table 4: Stability of Scale Scores: Test-Retest Reliability

The test-retest reliability appears to be somewhat greater in the interpersonal scale than in either the content scale or the task demands scale. The same trend can be seen in the internal consistency estimates (coefficient alpha) found in Table 5. While it may be difficult to assess the reasons for the differences among the three scales, it may be that teachers tend to feel more strongly (either positive or negative) toward interpersonal goals. Note that back in Table 3, six of the eight "clear-cut" preferred interpersonal goals and maintained that preference throughout the study.

Scale	May 1982	May 1983	May 1984	Average
Content	0.832	0.832	0.847	0.837
Task demands	0.784	0.823	0.844	0.817
Interpersonal	0.914	0.920	0.943	0.926

Table 5: Internal Consistency Estimates: Coefficient Alpha

Table 6 lists the 1982 to 1984 test-retest reliabilities found in the right-hand column of Table 4, together with the average internal consistency estimates found in the right-hand column of Table 5. Although reasonable people might interpret these data differently, this writer believes that the 1982 to 1984 test-retest reliabilities are sufficiently close to the average internal consistency estimates to warrant using these data as further evidence in support of stability of teacher goal orientation.

Scale	1982 to 1984 Test- Retest Reliability	Internal Consistency	Difference
Content	0.623	0.837	0.214
Task demands	0.618	0.817	0.198
Interpersonal	0.731	0.926	0.195

Table 6: Comparison of Test-Retest Reliability to Internal Consistency Estimates



In summary, the frequency distribution of teacher change indices (Table 2), the stability of the profiles of teachers having clear-cut goal orientations (Table 3), the relatively high degree of test-retest reliability (Table 4), together with the fact that these reliabilities are quite close to the internal consistency estimates (Table 6) all point to the conclusion that teacher goal orientation is a relatively stable construct.

# Question 2: How lasting are the shifts which do occur in teacher goal orientation?

Fifteen teachers who made <u>maior</u> shifts in goal orientation between May 1982 and May 1983 were administered the questionnaire in June 1986 (also May 1984) to determine if the changes persisted over time. Table 7 presents the 1982, 1983, 1984, and 1986 profiles for each of the 15 teachers. It appears that five of the teachers (the first five listed) exhibited a relatively high degree of permanence in their new orientations. In other words, their 1986 profiles continued to differ from the original 1982 profiles by at least eight items (see right-hand column of Table 7). The eight teachers at the bottom of the table appear to have shown very little permanence in the original change. Their 1986 profiles appear quite similar to those they originally held in 1982, with all eight teachers showing a preference for the same goal orientation they preferred in 1982.

Interviews were conducted with the 15 teachers to determine what events and experiences contributed to the goal-orientation shifts. One of the purposes of the interviews was to determine what kinds and

ank	Teacher No.	1982	1983	1984	1986	Scale Showing Greatest Change 1982 → 1983	Overall Change in That Scale 1982 * 1986
-	61	18-4-0	4-18-0	3-19-0	4-16-2	Content	14 items
2	29	2-7-13	8-10-4	6-16-0	7-15-0	Interpersonal	13 items
3	28	8-11-3	20-0-2	21-1-0	20-1-1	Content	12 items
4	50	5-4-13	7-12-3	9-13-0	9-12-1	Interpersonal	12 items
5	19	4-5-13	3-17-2	8-13-1	5-13-4	Task demands	8 items
9	6	3-9-10	1-17-4	3-15-4	6-15-1	Task demands	6 items
7	4	4-5-13	10-7-5	15-3-4	7-8-7	Interpersonal	6 items
8	107	5-1-16	4-10-8	7-10-5	3-6-13	Task demands	5 items
6	93	5-14-3	19-2-1	12-8-2	7-10-5	Content	2 items
0	10	10-8-4	17-5-0	15-7-0	12-9-1	Content	2 items
=	37	16-6-0	9-12-1	11-11-0	14-7-1	Content	2 items
12	87	14-8-0	4-18-0	8-12-2	12-10-0	Content	2 items
13	04	10-11-1	3-1-18	3-16-3	10-12-0	Interpersonal	(-1) items <sup>a</sup>
14	48	4-7-11	11-8-3	9-9-3	1-9-12	Interpersonal	(-1) items <sup>a</sup>
15	80	13-7-2	4-5-13	7-7-8	17-5-0	Interpersonal	(-2) items <sup>a</sup>

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lengths of experience might be related to permanence in goalorientation shifts. Eight of the 15 teachers cited year-to-year changes in the characteristics of their students as the primary cause of the shift in goal orientation. Five of the eight teachers indicated they had been given classes with many discipline problems, one teacher had been given his best class in years, one had been given an "impossible" class due its size (36 students), and another had been given an assignment in special education.

Of the remaining seven teachers, one was unable to identify a cause for his goal-orientation shift. Each of the other six cited a different factor as the primary cause of goal-orientation shift. These were: pressure from a colleague, influence of a student teacher, change in attitude resulting from university coursework, the educational experiences of high school- and university-age sons, emotional stress resulting from a personal problem, and the influence of inservice training workshops recarding the "effective schools."

Table 8 lists the 15 teachers according to the apparent permanence in their goal-orientation shifts, along with the teachers' explanations for what caused the shift.

The most frequently mentioned cause, characteristics of students, does not appear to be associated with permanence in goal-orientation shifts. Although the response of Teacher 50 (ranked 4th) seems to contradict this, during the interview this teacher indicated that it was a "very difficult" class in 1982, which caused her profile for that year (preference for interpersonal) to be different from her



normal profile (preference for tasks-demands goals). Therefore, what appeared to be a shift to a new profile in 1983 was simply a reversion to an original (pre-1982) profile.

Rank	Teacher ID No.	Primary Cause
1	61	Pressure from a teaching colleague
2	29	High school and university experiences of sons
3	28	In-service training on effective schools
4	50	Characteristics of students
5	19	Emotional stress from a personal/legal problem
6	9	Experiences with a student teacher
7	4	Characteristics of students
8	107	Characteristics of students
9	93	University coursework
10	10	Unknown
11	37	Characteristics of students
12	87	Characteristics of students
13	40	Characteristics of students
14	48	Characteristics of students
15	8	University coursework

Table 8: Persistence of Change in Goal Orientation Compared to Cause of Change

Teacher 19 (ranked 5th) also indicated that her 1982 profile was an aberration due to a personal emotional problem she was having during that school year. Therefore, her change in goal orientation between May 1982 and May 1983 was also a reversion to her pre-1982 profile.

Because these teachers (ranked 4th and 5th) were simply reverting to prior "stable" profiles, and because by 1986 the teachers ranked 8th through 15th had all reverted to their 1982 orientations, it is only the teachers ranked 1st, 2nd, 3rd, and possibly 6th who might provide answers to what kinds of experiences cause permanent change in goal orientation.

Teacher 61 (ranked 1st) showed a dramatic shift from preferring content goals in 1982 (18-4-0) to preferring task-demands goals in 1983 (4-18-0). When first asked about this, she had no idea why the change occurred. She believed that the 1983, 1984 (3-19-0), and 1985 (4-16-2) profiles were very representative of her feelings but was not sure why she would have been expressing such an interest in content goals before 1983. It was much later in the interview while responding to a question about the Michigan Educational Assessment Program that she suddenly realized why her 1982 profile showed a "content" orientation. As a third-grade teacher she had been especially sensitive to the complaints of a fourth-grade teacher regarding the lack of math and reading skills held by incoming fourthgrade students. Because of this she concentrated her efforts on teaching math and reading skills, and in May 1982 her responses to the



TPQ showed this priority (18-4-0). When she returned to her job in September 1982, she discovered that the fourth-grade teacher had retired. No longer feeling pressure from fourth-grade teachers to concentrate on preparing her third-grade students for fourth-grade math and reading, her "true" priority emerged, and in May 1983 her responses to the TPQ indicated a preference for task-demands goals (4-18-0). She maintained this priority during the 1984 (3-19-0) and 1986 (4-16-2) testings.

Teacher 29 (ranked 2nd) had 16 years of teaching experience before her 1982 profile, which indicated her preference for interpersonal goals (2-7-13). While being interviewed, she mentioned that some of this emphasis was a result of the priority placed on affective education during the time the school district was becoming racially integrated. She believed that the primary reason she shifted her priorities to an emphasis on task demands in 1983 (8-10-4), 1984 (6-16-0), and 1986 (7-15-0) was the experience one of her sons was having at a large university. He enrolled at the university during the 1982-83 school year and experienced much difficulty adapting to the academic demands. At about the same time, another son started experiencing difficulty fulfilling teachers' expectations in his high school classrooms. She said this made it very clear to her that academic preparation was a very important responsibility for elementary school teachers, and that is why she made and had maintained the shift to a task-demands orientation.

Teacher 28 (ranked 3rd) had 15 years of experience before responding to the 1982 administration of the TPQ. Her 1982 profile (8-11-3) indicated she had a slight preference for task demands. Her profiles in 1983 (20-0-2), 1984 (21-1-0), and 1986 (20-1-1) indicate she shifted to a very strong content orientation. During the interview she expressed surprise when told of her 1982 profile (8-11-3), for she believed she had always held a strong content orientation. About the only thing she could think of which might have affected her goal orientation was her participation in some in-service workshops on effective schools. However, she was not sure if the workshops were held in 1981-82 and caused a temporary shift to task demands, or were held in 1982-83 and caused a permanent shift to content.

Teacher 9 (ranked 6th) had 16 years of experience before her May 1982 response to the TPQ. Her 1981-82 profile (3-9-10) showed a slight preference for interpersonal goals. During the 1982-83 school year, a student teacher working in her room for a 10-week period made quite an impact on her. Through discussions with and observations of the student teacher, Teacher 9 became increasingly aware that the students seemed much happier and more productive when teaching was geared to giving them skills and helping them become successful. As a result the teacher started placing less time and emphasis on activities related to affective goals. Her profiles in 1983 (1-17-4), 1984 (3-15-4), and 1986 (6-15-1), when compared to her original profile (3-9-10), are indicative of this shift in emphasis.



In summary, in this study, permanence in goal-orientation shift was infrequent, but when it did occur, it was associated with the teacher being exposed to the relatively long-term influence of a significant proximal adult; the examples were a colleague, student teacher, and son in college.

#### Question 3: What personal factors are associated with goal-orientation stability?

Data on only three personal factors were gathered. These were oender (64 female, 10 male), amount of education (see Table 1), and years of teaching experience (see Table 1). Statistical correlations were run to see if these factors correlated with goal-orientation stability. Neither gender nor amount of education significantly correlated with the TPQ change indices. However, there was a statistically significant correlation between years of teaching experience and the changes in goal orientation which occurred between May 1982 and May 1983. Contrary to what one might expect, it was the more experienced teachers who were more apt to change their goal orientations. The positive correlation, which was .203, is statistically significant at the .05 level. During the following year, between May 1983 and May 1984, changes in goal orientation did not show a statistically significant correlation with teacher experience. However, the relationship was positive, thus showing some support for the significant findings of the preceding year.


# <u>Question 4: What environmental factors are</u> <u>associated with goal-orientation stability?</u>

Statistical correlations were run to determine if relationships existed between responses to Items 31 through 39 of the TPQ and concurrent goal-orientation change indices. There were no significant relationships found for Items 31 (participation in university coursework), 32 (receipt of an advanced degree), 33 (teaching in a different building), 34 (teaching at a different grade level), 35 (having students of a different ability level), 37 (having students with a different level of student skills), 38 (having a different level of support from parents), and 39 (having a student group with a different level of cohesiveness). The only statistically significant correlation occurred with Item 36, which asked:

36. On the average, which class created more discipline problems? a. this year's class b. last year's class c. they were about the same

The selection of 36(a.), "this year's class," had a statistically significant correlation ( $\underline{r}$  = .2267,  $\underline{p}$  < .05) with the changing of one's goal orientation (between May 1982 and May 1983). However, the 1983-1984 results were nonsignificant. Because of the statistical significance of the 1982-1983 results, further analysis was conducted to determine if the direction of goal orientation shift might correlate with responses to Item 36. Interview data strongly suggested that teachers faced with severe classroom discipline problems often make major shifts toward an interpersonal goal orientation. A subgroup analysis was conducted on these teachers who scored less than 11 on the



interpersonal scale (55 of the 74 teachers in 1982 and 58 of the 74 in 1983). The subgroup (rather than the entire sample) was chosen in an attempt to reduce the influence of "ceiling effect" on the likelihood of finding significant results. Correlations were run to see if responses to Item 36 correlated with change in interpersonal goal orientation. Results showed a positive (0.2006) though nonsignificant (p = .071) correlation between the selection of choice 36(a.) and increased interpersonal orientation in 1983. However, in 1984 there was essentially no correlation (.0305). Based on these data, it would not be wise to predict that a given teacher will shift to a more interpersonal goal orientation when faced with severe classroom discipline problems.

Correlations were also run to see if the grade level being taught was related to propensity to change. Results were nonsignificant.

Interviews conducted with 15 teachers who showed major goalorientation shifts between May 1982 and May 1983 shed some light as to what factors teachers identify as affecting their goal orientations. Early in the interview, each teacher was asked what he/she believed to be the primary cause(s) of the goal-orientation shift. If the teacher did not identify student characteristics, building administrators, the district superintendent's goals, the mass media or society, or educational experience of his/her own children as having an influence on goal orientation, near the end of the interview teachers were asked (a) did they feel their goal orientations have been changed by any of



these factors, and if not, (b) did they feel these factors could have a future effect? Table 9 represents a summary of their responses. It is evident that change in the characteristics of a classroom group is a major factor in bringing about shifts in goal orientation. There appeared to be a pattern in direction of shift and its cause. Of the eight teachers who attributed their shifts in goal orientations to student characteristics, five shifted to an interpersonal orientation and all indicated their classes were loaded with discipline problems. Of the two teachers who shifted to a task-demands orientation, one said he had his best class in years, while the other said she had a very large class of 36 students and could only babysit with them. The one teacher who shifted to a content orientation had been given a special education assignment which she disliked very much. She was unable to explain why this new teaching assignment changed her to a content orientation.

Ten of the 15 teachers believed that a building administrator could cause them to shift their goal orientations. A very frequent qualification was that it could only happen if they respected the administrator. Two of the teachers added that if a district wanted to get them to change their emphasis, they would insist that time, money, and resources be made available to teachers before implementing the program. Three of the teachers believed that the veteran teaching staffs in their buildings were so cohesive that a new building principal would have to shift in their direction rather than they shift in the principal's direction.

	Student Character- istics	Building Adminis- trator	District Superin- tendent	Mass Media/ Society	Educational Experiences of Own Children
Have contributed to a change in goal orientation	ω	2	2	2	2
Could contribute to a future change	5	œ	2	-	4
Probably not contribute to a future change	o	η	Ξ	12	2
Undecided	2	-	0	0	γ <sup>a</sup>

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<sup>a</sup>Had no school-age children.

The new superintendent was very vocal in his demands that the district's scores on the Michigan Educational Assessment Program (MEAP) be raised by at least 10%. Because the MEAP included fall testing of fourth-grade students, the teachers in this sample, most of whom taught third or fourth grade, were very much implicated by the superintendent's directive. In May 1982, before the hiring of the new superintendent, the content scale was selected 556 times (see Table 3). In May 1983, after the hiring of the new superintendent, the content scale was selected 594 times, an increase of 6.8%. This increase may have been a result of the superintendent's influence. However, even though the superintendent maintained a staunch advocacy of improved MEAP scores for the following year, in May 1984 teachers selected the content scale only 577 times; this represents a decrease of 2.9% from the preceding year. As can be seen in Table 10, the district-wide shift was primarily toward a task-demands orientation (total increase of 24%) and away from an interpersonal orientation (down 27.7%). Whether or not the superintendent may have played a role in creating this shift will be discussed in Chapter V.

The last two factors displayed in Table 9 are the influence of the mass media/society and the educational experiences of one's own children. As can be seen, most teachers (12 of 15) do not believe that the mass media and societal trends have much effect on their own goal orientations. However, six of the eight teachers who have school-age children indicated that the educational experiences of their children can and do create shifts in their goal orientations.

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	May 1982	May 196	33	May 198	84	
-	Frequency of Selection	Frequency of Selection	% Change	Frequency of Selection	% Change	% Change 1982-1984
Content	556	594	+6.8	577	-2.9	+3.8
Task demands	534	583	+9.2	662	+11.9	+24.0
Interpersonal	538	451	-16.2	389	-13.7	-27.7
Total	1,628	1,628		1,628		

In sum, it appears that the factor most commonly responsible for goal-orientation shifts is the attitude/behavior of students in the classroom. Of secondary importance are the educational experiences of the teacher's own child(ren) and the influence of a respected building administrator.

#### <u>Question 5: Is the stability of teacher goal orientation</u> related to the control-autonomy dimension tapped by the <u>Deci et al. (1981) Problems in Schools Questionnaire?</u>

Statistical correlations were computed to determine if changes in goal orientation were related to <u>concurrent</u> changes in the controlautonomy dimension tapped by the Deci et al. (1981) Problems in Schools Questionnaire. This was done to determine if a directional change (increase or decrease) on the content scale, the task-demands scale, or the interpersonal scale correlates with a concurrent directional change in a teacher's total autonomy score. Sets of correlations were run for changes that occurred during two 12-month time periods (May 1982 to May 1983 and May 1983 to May 1984). All results were nonsignificant with the possible exception of an increased interpersonal orientation being positively correlated with an increase in autonomy-granting. Between May 1983 and May 1984, the positive correlation between the two was .23 (p < .05). During the preceding year (between May 1982 and May 1983), the correlation for the change that took place was not significant. However, the direction of the relationship was positive (.10), which is consistent with the results found in 1983-84. Therefore, there is limited support for the

contention that an increase in interpersonal goal orientation is associated with an increase in autonomy-granting.

For the same two time periods, correlations were also run to see if changing one's goal orientation was related to one's position on the control-autonomy continuum (total autonomy score); that is, to determine if one type of teacher ("controlling" or "autonomygranting") is more likely than another to undergo a change in goal orientation. The TPQ change index for 1983-84 was significantly related to total autonomy score (.2157, p < .05). Based on this, one might conclude that "autonomy-granting" teachers are more amenable to making changes in their goal orientations. However, for the preceding year (1982-83), the correlation between the total autonomy score and TPQ change index was not only nonsignificant, but also negative (-.1053). Thus, the 1983-84 correlation coefficient, although statistically significant, is probably not meaningfully significant.

#### Summary

The data presented and analyzed in this chapter suggest some interesting possibilities for further discussion and future study. First, teacher goal orientation appears to be a relatively stable construct. Although a few teachers did make major shifts in goal orientation, very few of these shifts were permanent, and when they were, they tended to occur via the influence of a significant and proximal adult. Surprisingly, it appears that it is the most experienced teachers who tend toward more frequent shifts in goal orientation. In addition, there was a district-wide shift in goal



orientation. Further discussion and interpretation of these and other results will follow in Chapter V.

# CHAPTER V

# DISCUSSION, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

In this chapter, results presented in Chapter IV are linked to past research and are further discussed. Conclusions are presented along with their implications for educational processes. In addition, limitations of this study are put forth and discussed. Finally, several recommendations for future research are proposed.

#### Discussion

In this discussion of results, particular attention is paid to the following three issues:

 Do the results of this study portray teacher goal orientation as a relatively stable construct or as an easily modifiable variable?

 What are the apparent causes of shifts in goal orientation at an individual as well as a collective (district-wide) level?

 Why do highly experienced teachers tend to have less stable goal orientations than teachers with less experience?

One of the major purposes of this longitudinal study was to assess the stability of teacher goal orientations. Based on the data gathered and analyzed, it appears that teacher goal orientations in the population are relatively stable. Although there was much

literature which indicated that teachers' attitudes could be changed (Adams, 1982; Fuller, 1969; Gabel & Rubba, 1979; Kremer & Moore, 1978; Mahan & Lacefield, 1978), these studies were planned attempts to deliberately change the attitude of teacher candidates and relatively inexperienced teachers. Most attempts were successful, but only in producing temporary change. The results of these studies appear somewhat consistent with the present study: that is, some changes are taking place, but most are temporary. What may be different about the present study is that no organized intervention was taking place save for the superintendent's dictum recarding an increase in student scores on the Michigan Educational Assessment Program (MEAP). What effect, if any, this had on teachers' goal orientations is unknown. What is known is that the entire teacher sample made a directional shift in goal orientation between May 1982 and May 1984. In Table 10, previously presented, it can be seen that there was a 24% increase in preference for task-demands goals and a 28% decrease in selection of interpersonal goals. It may be that the superintendent's goal of a 10% improvement in MEAP scores may have been having a greater effect on teacher goal orientation than the teachers wanted to admit (or were themselves aware of). The teachers were given several opportunities to gite the effect of the superintendent: All teachers were asked to respond to Item 40 of the TPQ, an open-ended question which asked: "If you had any significant experiences during the past 12 months which may have affected your attitude about teaching, please respond below."



In the 1983 responses to this question, only 5 of the 80 responding teachers complained of the school district's emphasis placed on testing. In 1984, only 4 of the 88 responding teachers voiced similar complaints. However, none of these nine teachers indicated that he/she had made a shift in goal orientation which accommodated the testing emphasis.

Recall that 15 teachers were interviewed in 1986. At this time they were specifically asked about the possible influence of the superintendent's stand. Two teachers indicated that the superintendent's goal had affected them, and two others said that although the superintendent had not affected them, they believed he had affected other teachers. It is quite possible the teachers were underestimating just how much they were being influenced by the superintendent. Several teachers indicated that the pressure was on the building administrators, not on them; however, it seems logical that building administrators would transfer at least some of the pressure to the teachers. The superintendent's goal created two additional notso-subtle changes in the teachers' environment. For the first time ever, the school calendar was changed to have classes start the week before Labor Day, and the school district moved its MEAP testing date back 1 week. The effect was that fourth-, seventh-, and tenth-grade teachers had 2 additional weeks in which to prepare students for the test. It is possible that logistical changes such as these made a definite statement to teachers as to the seriousness of the district's position.



It would appear that the school district's emphasis on raising MEAP scores may have been a primary cause for the decrease (-27.7%) in selection of interpersonal goals. However, with the emphasis on test scores, why did the teachers shift their goal orientations primarily in the direction of task-demands goals (24% increase), rather than to content goals, which showed an increase of only 3.8%? It is possible the teachers believed that success on the basic math and reading skills measured by the MEAP is much more closely linked to such "task demands" skills as following directions, working neatly and carefully, and getting work done on time, than it is to a student's academic ability and achievement. One example of a task demands alternative that these teachers might find attractive is found in Item 2 of the TPQ where: a teacher might select as an ideal student one who . . . completes all work on time, neatly and accurately.

Another reason for the shift to task-demands goals may be that the teachers in the sample were encountering classroom groups of students who were better socialized than the students of previous years. The data from the teacher interviews (as well as responses to TPQ Item 40) suggest that teachers tend to shift to a task-demands orientation when they encounter "good" classes, and to an interpersonal orientation when they encounter classroom groups with severe discipline problems. There is support for teachers shifting their goal orientations when confronted with the realities of the classroom, both in the case of student teachers (Paschal & Treloar, 1979) and experienced teachers (Gabel & Rubba, 1979; Moore, 1975). In each study



teachers spent a minimum of 4 weeks in workshops and classes during which significant changes in attitude occurred. However, the changes did not persist once the teachers had been in the classroom for a relatively short period of time (3 months to 1 year).

The issue of permanence in goal-orientation shifts is rather difficult to analyze. It is tempting to dichotomize the goalorientation shifts into those that are temporary and those that are permanent. However, it is with some reservation that any shift should be considered permanent. In this study, the 15 teachers who made major goal-orientation shifts during the first year were monitored for the following 3 years. Of the 15, only four had changes which persisted for the 3 years; of these four, two may have been reversions to prior goal orientations. This is because neither of these two teachers seemed too sure about her goal orientation before the initial administration of the TPQ. As for the two teachers who seemed to adopt totally new goal orientations between the 1982 and 1983 administrations of the TPO, both seemed very committed to their new orientations and, therefore, based on the interview with each, it appears that each has made a permanent shift to a new goal orientation. Of the two, one attributed her change to the academic problems her teenage sons were having in high school and college, while the other indicated she changed after observing the dramatic successes her student teacher was having. Although these shifts seem permanent in the minds of these two teachers, it seems possible that if they were confronted with classroom groups having major discipline problems,



these teachers might shift back to their original emphasis on interpersonal goals.

To satisfy a need for cognitive economy, it is often tempting to dichotomize or categorize factors in the environment. Examples in the present study include: describing goal-orientation shifts as being either temporary or permanent, and describing teachers as those who shift (in goal orientation) and those who do not. It may make more sense to view the situation as that of all teachers trying to establish and maintain an equilibrium between their goal orientations and their roles in the classroom. As long as the teachers' lives and teaching environments are stable, goal orientations tend to remain stable. However, as teachers encounter stress which upsets the equilibria, they adjust their goal orientations to alleviate the stress, and new equilibria get established. The stress is not necessarily good or bad, but may stem from a variety of sources, including those listed in Table 9. Teachers have different thresholds in how they perceive and react to stress; therefore, two teachers having identical goal-orientation profiles may not make the same shift in response to a given type of stress. However, it certainly seems possible that given the right set of circumstances, any teacher will undergo a shift in goal orientation.

As previously mentioned, it was discovered in this study that experienced teachers tended to have goal orientations which were significantly less stable than those of relatively inexperienced teachers. This appears to contradict research which shows that trait



stability increases with age (Fishbein & Ajzen, 1975). How can this apparent contradiction be explained? One possible explanation is that these experienced teachers represent a very select group of "survivors." Their survival as teachers can be traced to their capacity to adjust to the many contextual variables in the system. This capacity has enabled them to be tolerant of, and tolerated by, a wide variety of administrators, colleagues, students, and parents, thus reducing their frustration levels considerably. It may be that it is these teachers who continue to be very sensitive to changes in their environment and are ready and willing to adjust their goal orientations accordingly.

The finding that experienced teachers tend to make adjustments in their goal orientations based on how they perceive the needs of their students would not surprise Francis Fuller. Fuller (1969) formulated a concern theory based on interviews, questionnaires, and observations. In this theory Fuller purported that teachers move through three stages of concern: (a) concern over how they are perceived by others, (b) concern over teaching tasks and discipline, and (c) concern for the impact of their instruction on the students. Fuller contends that it is the last concern which characterizes the thinking of the mature and highly experienced teacher. It is these teachers who are sensitive to the impact they are having on students and, more important, have the repertoire of knowledge, skills, and techniques which enable them to make the necessary adjustments.



# Conclusions

The results of this study lead to the following general conclusions:

First, teacher goal orientation is a relatively stable construct.

Second, student behavior is a primary cause of the major shifts that do occur in teacher goal orientation.

Third, highly experienced teachers tend to make more frequent shifts in goal orientation than do teachers with relatively little experience.

It should be stressed, given the size and homogeneity of the sample, that these conclusions should be viewed as tentative, especially with regard to generalizability. However, for this sample of teachers, major shifts in goal orientation were quite rare, and those that did occur seldom persisted, as most of these teachers reverted to their original orientations.

The fact that so many (8 of 15) teachers who made major shifts in goal orientations attributed their change to the behavior of students is somewhat surprising. It is well known that teachers adjust their plans and activities to meet the needs of individual students and groups of students, but that a group of students can make such a major alteration in teacher thought regarding something as fundamental as educational goals is certainly surprising. Possible implications of this and other results are presented in the next section.



# Implications

There were some teachers who were making major shifts in goal orientation in response to year-to-year differences in their students. Quite often a dramatic shift was made to an interpersonal goal orientation in response to classroom discipline problems. It would seem the more time and energy spent attending to discipline problems, the less spent on the academic preparation of students. This would be to the detriment of the academic growth of students, including those students who had no part in creating the discipline problem. It is those students, and they make up a sizable majority in a given classroom, who are being penalized by not being provided with sufficient opportunity for academic growth. If this persists from year to year as students move through a school system with a relatively unsocialized cohort, what might the cumulative effects on those children be? If teachers, in response to discipline problems, are prone to major shifts in goal orientation, the implication for parents interested in finding opportunities for optimal academic growth is that they should take great care in not enrolling their children in school districts reported to be experiencing many discipline problems. The implication for building administrators is that if they are interested in maintaining a high level of academic growth among students, they should make every attempt to see that each teacher is provided with training and support necessary to prevent discipline problems from becoming the primary focus of teacher thought and action in the classroom.



The fact that the most experienced teachers appear to be willing to change and do change, should be of great interest to school districts, administrators, and teacher trainers. The implication is that providing professional-growth opportunities for teachers may be a wise investment, if done properly. Even though most of the change taking place in this study seemed to be reactive and temporary, proactive and more permanent changes appear to be feasible as well. Those changes that were proactive and seemed to have a high degree of permanence were usually due to the influence of an adult respected by the teacher. It also seemed the adult had to have a relatively continuous presence in the life of the teacher for an extended period of time. Because participation in workshops outside the school did not seem to bring about lasting change, it may be that the most effective way of improving instruction is to have everyone, including administrators, participate in the training programs, with mechanisms for long-term monitoring, evaluation, and feedback built into the process. It would seem that via the support and guidance of a respected building administrator, the probabilities for a more permanent growth will be greatly enhanced.

### Limitations

One factor which limits the value of this study is the absence of a goal-orientation profile representing the prototype of the ideal (maximally effective) teacher. Which of the three types of goals examined is most important? Are they equally important? Kremer (1981) argues that some balance is necessary. He proposes that



teachers with clear-cut goal orientations be identified and that ways be found to change their focus of teaching in the direction of greater balance between the orientations. In the present study most of the teachers who indicated a strong preference for one of the three types of goals examined (i.e., content, task, and interpersonal) maintained that preference throughout the study. No attempt was made to get them to balance the goal preferences. Unless and until more work is done which permits valid and reliable judgments as to the desirability of various profiles, the value of the results of this study is somewhat limited.

A second limitation in this study is that the generalizability of the findings is restricted due to size, homogeneity, and nonrandomness of the sample. Of the original 120 teachers in the target population, 108 responded at least once and 74 responded all three times. The target population came from a single school district; most were female, highly experienced (all had at least 4 years of experience and over 85% had more than 10 years of experience), and well-educated (more than 75% had master's degrees). No data were gathered regarding the 12 teachers (of the original 120) who failed to respond to the initial administration of the questionnaire, so no comparisons can be made. Data are available on the 34 teachers (of the 108) who responded only once or twice. These 34 teachers appear to be quite similar to the sample of 74 in gender-ratio, experience, education, grade level taught, and range of goal orientations. Therefore, althouch the sample is nonrandom, its demographic characteristics

suggest it is fairly representative of the target population. The findings of this study may well apply to other populations, but only to the extent that the characteristics of other school districts and teacher populations are similar to what is portrayed in this study.

Although the instrumentation used in this study was carefully developed through pilot studies, item analysis, and reliability coefficients, the ipsative nature of the TPQ scale scores may have limited the probability of finding significant results. Because the scale scores were ipsative, it was not really possible to rank the teachers in terms of goal priorities (Clemans, 1956). That is, the fact that a teacher has the maximum score (22) on one of the scales does not necessarily mean that he/she places a particularly strong emphasis on those goals. The teacher might be very apathetic and not really committed to any goals. On the other hand, a very intense and dynamic teacher who scores very low on that same scale might, in fact, consider goals in all three areas very important and put much energy and emphasis on having students achieve in each area.

Based on this, one can only make intra-individual comparisons, such as: Teacher 80 (2-2-18) thinks that interpersonal goals are more important than content and task-demands goals, or Teacher 17 (8-7-7) thinks that all goals are equally important. If one had evidence that all teachers have about the same <u>total</u> reserve of energy and emphasis to be spread among the goals, then it could be argued that the profiles can be used to make comparisons between teachers.

The ipsative nature of the TPQ creates another dilemma if, as Kerlinger and Kaya (1959) concluded, "progressivism" and "traditionalism" are two relatively independent, orthogonal factors. This position has been challenged by some (Wehling & Charters, 1969: Wolf & Engel, 1978) and supported by others (Adwere-Boamah, Dalay, & Jones, 1982; Sontag & Pedhazur, 1972). However, whatever degree of independence that exists between the content, task demands, and interpersonal scales will probably be destroyed by using the forced-choice format. Because of this the TPQ might pick up a change on one of the three scales when none actually occurred. For example, a person with a 4-9-9 profile one year may decide that content goals should be made much more important the following year, but also that task-demands goals and interpersonal goals are as important as ever. The new profile 16-3-3 suggests that the teacher now has a decreased emphasis on task-demands and interpersonal goals, when in fact the teacher may emphasize them as much as ever. It is the ipsative nature of the instrument which dictates that if one scale is to change another must also change, even if they are theoretically independent.

# Recommendations for Future Research

Although the TPQ exhibited desirable psychometric properties, the ipsative nature of the scales made ranking the teachers on the basis of their scale scores somewhat suspect. This may have severely decreased the probability of finding significant relationships between goal orientation and teacher effectiveness. In the future, the TPQ could be revised to remove its forced-choice format and the ipsative



nature of the scales. This could be done by selecting a wide variety of statements representing preferences for each of the three goal orientations and having teachers respond to each on a Likert-type scale. (Work in this direction is currently underway.) This would give not only an expression of goal preferences, but also a measure of the <u>intensity</u> of preference for each goal orientation. Based on this, teachers could be ranked in several ways, and statistical analyses could be used to see how these preferences relate to indicants of teacher effectiveness.

Another line of inquiry might be expanding the research effort to include a more heterogeneous population of teachers, with the possible inclusion of teacher candidates (preservice teachers). For example, the instrumentation might be used in a longitudinal study in which it is administered to a cadre of teacher candidates at the onset of their professional training. Readministration would occur just before and after student teaching. and after (for example) the first, third, and fifth years of teaching. These data could be used to study, among other things, the short-term and long-term effects of teacher training programs.

Another line of research which merits consideration might be an attempt to identify how goal orientations get established. Through the use of instrumentation and interviews of teacher candidates, successful probes might be possible.

In sum, the line of inquiry started here points in a variety of directions for increasing the knowledge base regarding teacher


classroom goals. The fact that this study suggests that some teachers can and do change should serve as an inducement to continue this line of research, and is certainly some cause for optimism in the enterprise of improving teacher effectiveness.



APPENDICES

APPENDIX A

TEACHER PRIORITIES QUESTIONNAIRE



# PLEASE RETURN THIS QUESTIONNAIRE TO THE BUILDING SECRETARY WITHIN 24 HOURS. THANK YOU.

Before responding to this questionnaire, please provide the following information by checking the appropriate boxes and filling in blanks where indicated. Your responses to this questionnaire will remain confidential. To allow for possible follow-up, however, and also to process your honorarium, we need your name, address, and social security number. The additional information requested below will help us in analyzing the data.

Nam	Addres							
1.	Social Security Num	ber						
2.	Sex:	(	)	Male	(	)	Female	
3.	Present Position:	(((	))))	2nd grade 3rd grade 4th grade	(((	))))	5th grade 3rd-4th combination Other	
							please specify	

Teaching experience (as of the end of this academic year) years.

#### 5. Amount of education

- ( ) Bachelor's degree
- ( ) Bachelor's degree plus additional credits
- ( ) Master's degree
- ( ) Master's degree plus additional credits
- ( ) Doctor's degree

As you respond to the questionnaire, please keep the following in mind:

There are no <u>right or wrong answers</u> to these items; they concern matters of value or preference upon which teachers disagree. Tell us what you think about each item.

For each item, select the <u>one response</u> which comes closest to what you think. Do not select more than one response.

#### Answer every item.

NOTE:

Respond to Part I of the questionnaire (items 1 through 39) on the answer sheet provided. Write only your social security number at the top of the answer sheet. (Ignore all other requests for personal information which appear on the answer sheet.)

Respond to Part II of the questionnaire on the questionnaire itself. Follow instructions provided at the beginning of Part II.

Thank you for your time and cooperation.



1. What do you see as the biggest problem in American education today? a. school finance b. declining enrollment c. disciplinary problems with students 2. Which of the following best describes your image of an ideal student? a. completes all work on time, neatly and accurately b. very thoughtful and caring for the needs of others c. does excellent work on the basics (reading, writing, and math) 3. Which of the following affective goals should teachers try hardest to accomplish? a. getting students very excited about learning new things b. getting students to work on their own c. getting students to cooperate with one another 4. If you could omit one of the following subjects from your teaching load, which would it be? a. reading b. mathematics c. science 5. Some classes are better than others. Think of an especially good class that you've had. What made it good? a. the class readily grasped ideas and new content b. the class was close knit and got along socially c. the class got right to work, managing its time well 6. Which of the following is most essential to successful teaching at the elementary school level? a. ability to communicate knowledge at a level that students understand b. ability to create a cooperative atmosphere in the classroom c. ability to foster student initiative in responding promptly and accurately to work assignments 7. What kind of reputation would you most like to have with your teaching colleagues? a. that my students learn to care about one another b. that my students develop excellent study skills c. that my students really learn the subject matter 8. What type of community would you prefer to teach in? a. suburban b. inner-city

c. rural

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- Which is most apt to contribute to your feeling that you had a really good day?
  - a. all students seemed to learn something new
  - b. all students stayed "on task" for the day
  - c. the students were especially helpful to each other
- 10. Which statement comes closest to one you might make?
  - developing positive attitudes toward others is more important than learning subject matter.
  - b. our educational system must ensure that all students develop the basic skills necessary for promotion to the next grade level
  - c. developing skills necessary for finding answers to questions is more important than learning specific content
- 11. Which of the following attitudes is most important for third and fourth graders to develop?
  - a. taking responsibility for doing their assignments
  - b. respect for others
  - c. interest in learning what is taught
- 12. Which of the following affective goals for students do you consider to be the most important?
  - a. to get students to value reading
  - b. to get students to be able to decide for themselves what is good use of their time
  - c. to get students to think about how their actions influence others
- 13. Which of the following reasons would you most like parents to give for selecting you as their child's teacher?
  - a. children in your room really learn how to study
  - b. children in your room really learn reading, math, and writing
  - c. children in your room really learn how to make friends and get along with other people
- 14. In your classroom, which type of student tends to be viewed as a leader by his/her peers?
  - a. the good athlete
  - b. the attractive, well-groomed student
  - c. the high achiever
- 15. Of the following, which is the most important means of motivating students?
  - a. displaying work
  - b. building on intrinsic interests
  - c. using tokens as rewards



- 16. Which would you most prefer to hear your principal say about you?
  - a. your students learn how to learn
  - b. your students develop a good understanding of the subject matter
  - c. your students learn the social skills necessary for being productive members of a group
- 17. Which best describes your overall emphasis in teaching?
  - a. I concentrate my efforts on helping my students achieve grade level mastery (or above)
  - b. I'm mostly concerned with developing interpersonal skills which prepare each student to be a responsible member of society
  - c. I tend to emphasize the development of work skills and study habits which aid students in their learning
- 18. Which student behavior is most apt to cause you to alter your instructional pace?
  - a. fatigue
  - b. boredom
  - c. confusion
- 19. What kind of reputation would you most like your classes to have with the building administrator?
  - a. my students develop excellent study skills
  - b. my students get excellent instruction in the basics (reading, writing, math)
  - c. my students are well-behaved and respectful
- 20. Which of the following subjects do your students have the greatest difficulty with?
  - a. science
  - b. math
  - c. social studies
- 21. Which of the following teaching colleagues would you most admire?
  - a. one whose students develop the ability to take responsibility for their own learning
  - b. one whose students always seem to learn the content necessary to prepare them to continue at the next grade level
  - c. one whose classroom groups work harmoniously on cooperative learning tasks
- 22. When you are remembered by your students twenty years from now, what would you most like it to be for?
  - a. that I got them to learn many important and worthwhile things
  - b. that I cared about them, and taught them to respect the rights of others
  - c. that I taught them to take responsibility for their own actions, and to become independent workers



- 23. Which of the following subjects received too little emphasis in elementary schools today?
  - a. math
  - b. reading
  - c. science
- 24. Which of the following do you consider most important for an elementary teacher to accomplish?
  - a. fostering basic skill acquisition in reading, writing, and math
  - b. getting students to take responsibility for doing their work carefully and getting it in on time
  - c. fostering cooperation and positive interaction between students
- 25. Of the various things you do, which of the following do you consider most important?
  - a. getting students interested in learning
  - b. getting students to take pride in their work
  - c. fostering students' respect for others
- 26. Which of the following statements most accurately describes the <u>best</u> class you've ever had?
  - a. the students really liked and cared for each other
  - b. the students worked very well independently
  - c. the students grasped the subject matter easily
- 27. Some goals for students like the following are not primarily academic. Which do you consider to be the most important?
  - a. for students to experience satisfaction in learning new content
  - b. for students to take responsibility for completing classroom work
  - c. for students to learn how to interact positively with one another
- 28. Which is most apt to contribute to your feeling that you had a really good day?
  - students were extremely courteous and cooperative with one another
  - b. students were very interested in what they learned that day
  - c. the students who usually do not complete work assignments turned in their work on time and it was carefully done
- 29. Which of the following is most important for your students to learn?
  - a. good work habits
  - b. respect for the rights of others
  - c. basic academic skills



30. If you could choose, which student would you select for your class? a. one who is very respectful and kind to others b. one who is eager and anxious to learn c. one who has the skills needed to take responsibility for his/her own learning 31. Have you received graduate credit for any coursework taken during the past 12 months? a. yes b. no 32. Have you received a master's or doctoral degree within the past twelve months? a. yes b. no 33. Are you teaching in the same building as you did last year? a. yes b. no 34. Do you have the same grade-level assignment that you had last year? a. yes b. no 35. On the average, how does the achievement level of your current students compare with that of the students you taught one year ago. (If you are teaching at a different grade level this year, equate your current students' achievement level with the expectations you had for them at the start of this school year.) a. this year's class is higher b. last year's class was higher c. they were about the same 36. On the average, which class created more discipline problems? a. this year's class b. last year's class c. they were about the same 37. On the average, which group of students had better study skills? a. this year's class b. last year's class c. they were about the same

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- 38. Which group of parents was more supportive of your efforts to help students?
  - a. the parents of this year's students
  - c. the parents of last year's students
  - c. I received the same amount of support from both groups
- 39. On the average, which group of students was more cohesive, with members of the class getting along really well with each other?
  - a. this year's class
  - b. last year's class
  - c. they were about the same
- 40. If you had any significant experiences during the past 12 months which may have affected your attitude about teaching, and feel comfortable telling us about them, please respond below.



APPENDIX B

TEACHER INTERVIEW



## TEACHER INTERVIEW

### Preparation:

- Study a. Demographics such as gender, grade level, and years of experience.
  - b. Answers to TPQ Questions 31-40 for 1983, 1984, and 1986.
  - c. TPO profiles for 1982, 1983, 1984, and 1986.

## Interview Process:

- A. Introduction
  - 1. Put the subject at ease by:
    - a. Thanking him/her for participating.
    - b. Expressing a desire to share some results with him/her.

## 2. Debriefing

- a. Describe and discuss with the subject the three types of goals (content, task, interpersonal).
- b. Emphasize that all three types of goals are legitimate.
- c. Inform the subject that he/she (like most teachers) made some shifts in goal orientation from one year to the next; express interest in trying to identify some factors which may cause teachers to change their goal orientations.
- B. Discuss each year with the subject
  - 1. 1981-82
    - Orient the subject to the setting by reviewing building, grade-level assignment, and administrator for the year.
    - b. Once oriented to the year, describe to the subject his/her TPQ profile for the spring of that year. Take the time to explain what the profile means in terms of goal preferences, and redefine (giving examples) the three types of goals.

 $\underline{Probe}$ . Does the subject believe the 1981-82 TFQ profile was an accurate representation of his/her goal orientation at that point in time?



- 2. 1982-83
  - Reorient the subject to his/her school setting for the year.
  - b. Describe the 1982-83 TPQ profile and how it was substantially different from that of the preceding year.

<u>Probe</u>. Does the subject have any ideas as to why such a dramatic change took place?

- Give him/her time to think.
- Make further probes to get more detail to answers.
- Ask subject if he/she can think of additional causes for for the change.
- c. At this point use pertinent information in answers to TFQ Questions 31-40 (professional-growth experiences, change in teaching assignment, changes in students) to formulate probes.

<u>Probe</u>. Did any of the changes mentioned in TPO Items 31-40 have any effect on the subject's goal orientations?

- 3. 1983-84: Repeat the above process (1982-83).
- 4. 1985-86: Repeat the above process (1982-83).
- C. Additional probes

<u>Probe</u> ]. Did the superintendent's goal of a 10% increase in scores on the Michigan Educational Assessment Program affect the subject's goal orientation?

<u>Probe 2</u>. Have such well-publicized issues as the report of the Commission on Excellence or the "back to the basics" movement had any effect on the subject's goal orientation?

<u>Probe3</u>. Have the educational experiences of the subject's children had any effect on his/her goal orientation? If the subject has had no children (or only has children below school age), does he/she think the educational experience of one's children can affect teacher goal orientation?

- D. Closure
  - Verify the accuracy of notes taken during the interview by reading them back to the interviewee.
  - 2. Give an expression of thanks for cooperating in the interview process.



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