

THE INFLUENCE OF OBSERVER INTERACTION
IN SHAPING TEACHER'S CLASSROOM
PRACTICES AND BELIEFS

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CHAPTER I

INTRODUCTION

Background Information

One possible reason for the failure of innovative programs attempted in schools is that educators have not clearly delineated who shall assume responsibility for implementing the most acceptable learning environment in the classroom. It appears that teachers are the most vital link in the chain of educational transactions in the classroom.

The beliefs a teacher holds tend to dictate the way s/he organizes and operates the classroom and the manner in which s/he interacts with children. Teacher beliefs about children are developed through a complex process of interactions according to Eriksen and Fiske (1973). The task of teachers is to match their instructional behavior with their beliefs about children involved in the learning process (Wlodaroyzk, 1972).

The principal, as educational leader of his faculty, should provide leadership in helping teachers develop and strengthen classroom practices which are consistent with the staff's statement of beliefs. In promoting congruency between teacher beliefs and instructional style, the principal should be cognizant of (1) theories of leadership behavior and (2) effects of his behavior upon his staff. Billings (1970, p. 49) states that: "There seems to be a direct relationship between a teacher's willingness and ability to make a dramatic change and a principal's confidence and supportive attitude toward her.

Howsam (1960) and Tuckman (1969) postulate that teachers are more likely to accept and support change if they are an active part of the process through feedback and interaction rather than just an observer looking in on the arena of change. This would indicate classroom observation by the principal and interaction between teacher and principal might be a viable means of analyzing and/or possibly shaping classroom behavior.

Justification for the Study

This research project was an attempt to assess the effectiveness of principal-teacher interaction as a means of shaping teacher classroom practices in a school endeavoring to implement an open education model.

Emphasis should be focused on ramifications of congruency of teacher beliefs and practices before examination of the impact of principal-teacher interaction.

Chittenden (1973) implies the way a teacher behaves in the classroom, will be affected by beliefs about what s/he holds to be important and unimportant. He states that the belief systems of teachers become intervening processes between the philosophy a teacher may espouse and what she actually does. Brown (1968b, p. 24) refers to this discrepancy as an "unnatural split" between what teachers say they know and believe and what they actually do in the classroom. This is commonly referred to as the theory-practice dilemma.

Several investigators have examined this phenomenon. Oliver (1953) found that elementary teachers have educational beliefs congruent with modern philosophy, but when he observed these same teachers within the classroom setting he discovered little indication that teachers were

practicing their stated beliefs. In a similar study concerned with the congruency of student teachers' beliefs and practices with Dewey's philosophy (1968b), Brown stated:

That while teachers agree strongly with Dewey in their verbalizations about what practices should be employed in teaching, they are in much less agreement concerning the philosophical beliefs underlying those practices, and, consequently, fail to use those practices in the classroom (p. 10).

Theory and practice incongruency is by no means limited to any specific philosophy and accompanying educational practices. The problem or conflict is inherent in any theoretical structure which has associated practices. Conflicts exist not only in education but in political and religious areas as well (Purvis, 1971).

Because of theory-practice incongruencies, implementing a philosophically based open classroom model may present many various consequences for the teacher. A staff's desire to move toward an open classroom environment suggests that teachers first come to internalize trust, beliefs, and values that may be alien to personal beliefs and classroom practices. For example, according to Walberg (1971, p. 330), in the process of moving toward openness some of the beliefs a teacher must learn to value are:

- (1) The life of a child in school is not a preparation for the future, to live like a child is the best preparation.
- (2) Knowledge is a personal synthesis of one's own experiences and learning proceeds along many intersecting paths.
- (3) There is no set body of knowledge that must be transmitted to all.

So again, if the teacher is willing to accept these and other open education values as part of a personal beliefs system, then the obligation within the framework of the theory-practice cycle is partially fulfilled. When these beliefs are actually demonstrated in classroom practices then the cycle is complete.

In any event, if teachers hold certain beliefs which influence their practices, it seems that an examination of these beliefs and practices, through evaluation and observational techniques may be one way of promoting congruency between them. Observation and evaluation are means by which change may be given direction. In any event, the major concern of this investigation was to determine what impact observation and interaction techniques had in impeding change of teachers' personal beliefs and classroom practices.

Statement of the Problem

The central problem of this study was to assess the effectiveness of an observational system, with principal-teacher interaction as a means of shaping teacher classroom practices in a school endeavoring to implement an open education model. The investigator attempted to determine whether or not teacher beliefs and practices became more consistent with the staff's statement of beliefs as a result of the interaction process.

Specifically, answers to the following questions were sought:

(1) Do personal beliefs of elementary school teachers who have been observed with no principal-teacher interaction differ significantly after being observed with principal-teacher interaction.

(2) Do professed teacher practices of elementary school teachers who have been observed with no principal-teacher interaction differ significantly after being observed with principal-teacher interaction.

(3) Do actual teacher practices of elementary school teachers who have been observed with no principal-teacher interaction differ significantly after being observed with principal-teacher interaction.

Hypotheses

The following hypotheses stated in the null form were tested.

- H₀1: Personal beliefs of elementary school teachers who have been observed with no principal-teacher interaction do not differ significantly after being observed with principal-teacher interaction.
- H₀2: Professed teacher practices of elementary school teachers who have been observed with no principal-teacher interaction do not differ significantly after being observed with principal-teacher interaction.
- H₀3: Actual teacher practices of elementary school teachers who have been observed with no principal-teacher interaction do not differ significantly after being observed with principal-teacher interaction.

Definition of Terms

The following definitions are given to clarify terms that are used in this study.

Observational System - A classroom observation system which measures the teacher behavior level of agreement or disagreement with Dewey's fundamental philosophy of experimentalism (Brown, 1968).

Experimentalism - A philosophy espoused by John Dewey which views the primary purpose of education as one of training students in the processes of reflective thinking (or intelligent inquiry) and to apply them to the solution of mankind's problems.

Principal-Teacher Interaction - A process which takes place between two people as a method of sharing and discussing information.

Theory-Practice Dilemma - A discrepancy between what teachers say they know and believe in theory, and how they actually teach or behave in the classroom (Brown, 1968).

✓ Teacher Personal Beliefs - Perceived views of teachers which affects or influences their performance in the classroom.

Teacher Classroom Practices - Behaviors exhibited by the teacher in the classroom.

Open Education - An environment which takes into account physical, intellectual, social and emotional needs of young children while at the same time providing a learning situation which is informal and flexible.

Limitations of the Study

In assessing the results of the study, the following limitations were considered.

(1) This study was limited by the inherent weaknesses of the time series design. According to Wiersma (1969) for example, the most serious threat to the internal validity of a time design is the possibility of external events which are uncontrolled, giving rise to alternative explanations.

(2) The response data may not be generalized to a population other than the school from which it was drawn.

(3) Due to the limited number of subjects involved statistical procedures to detect affiliated relationships between variables were not feasible.

(4) A possible limiting factor of the investigation was the principal's expectations of teacher behavior affecting perception of observed classroom practices. This limitation is further compounded since

the principal involved was also the research investigator, thus, possibly increasing the bias in the internal validity of the study.

Summary and Organization of the Study

Chapter I has provided background information to the study. The purpose and need for the study, as well as the hypotheses to be tested, have been identified. The limitations have been stated and terms used frequently in this study are defined. The format for the succeeding chapters is as follows. Chapter II treats the selected, related literature which was reviewed for this study. Chapter III relates the methodology and design of the nature of this study. Chapter IV presents the analysis of data collected for this study. Chapter V presents the findings and makes recommendations in relation to these conclusions for further research.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

As stated in Chapter I, the purpose of this study was to assess the effectiveness of an observational system, utilizing principal-teacher interaction as a means of influencing teacher classroom practices in an open school. Congruency of teacher's beliefs and practices in terms of a common theoretical referent was also examined.

The survey of related literature has been divided into three areas: (1) literature related to the teacher's and principal's role in an open education model; (2) literature related to measuring classroom behavior by observation; and (3) teacher beliefs, behavior and attitudes.

Teacher's and Principal's Role in an Open Education Model

In many schools a move has been made to "open" or humanize educational programs. Regardless of the name attached to this change, it represents an attempt by educators to implement the teachings of social scientists in creating a human oriented enterprise. The implementation of open-concept education demands total belief on the part of all teachers in the natural eagerness of students to improve themselves (Riegle, 1973).

It is very important to distinguish the difference between "open

space" and "open education". Open space, a concept of leaving out internal walls so children might be free to work according to their interests and at their own rate is not open education. As mentioned in the definition of terms, open education involves the physical, intellectual, social and emotional needs of children while providing a learning situation which is informal and flexible. We must keep in mind that even though open space exists in many buildings advocating open education, it is not an important criterion for open education. In fact, according to Rothwell (1973), it can be a barrier.

Briefly examining the contemporary educational program reveals that the basic tenets of open-concept education are strikingly similar to those developed by McGregor (1957, p. 24). The open concept rests upon the following beliefs.

1. Students are not by nature passive, lazy, or resistant to organizational needs.
2. Indifference expressed by students is a result of negative experiences in the school organization.
3. It is the responsibility of teachers to make it possible for students to develop their characters for themselves.
4. The essential task of teachers is to arrange organizational conditions and methods of operation so that students can achieve their own goals.
5. Teaching is a process redundant of creating opportunities, releasing potential, removing obstacles, encouraging growth, and providing guidance.

"Simple to state but difficult to achieve" seems to summarize the five open education concepts. A child who is accustomed to being controlled is not likely to change instantly. His newfound opportunity to assume responsibility may go unutilized while he devotes his energies to the testing of the teacher's sincerity. Acceptance of the open-concept approach to learning does not ensure better education for children if it is accepted as a "passing innovation" "or gimmick", or implemented within

a traditional framework. The implementation of open-concept education demands total belief on the part of all teachers in the natural eagerness of students to improve themselves. Teachers must totally commit themselves in allowing students opportunities to develop self-control, self-direction, and individually-tailored educational experiences (Riegle, 1973).

The structure of the open classroom is complicated. First, it has as many elements as there are teachers and children in the classroom. No two elements are alike resulting in varying relationships between teacher and children. Secondly, the structure is flexible and dynamic. The relationship of each child to the teacher and to the class changes from day to day, and may change enormously in the course of a year. Indeed the nature of the whole class may change. Finally, the structure is organic, internal. It grows out of the needs and abilities of the teachers and children themselves (Holt, 1972).

Reschly and Sabers (1974), open education advocates, emphasize the democratic rights of children, the need to make classroom experiences consistent with natural developmental trends, the need to build the curriculum around children's interests and the long-range character-molding purposes of education as part of the program.

The open school is not a panacea nor, as some seem to think, a goal in itself. It is a collection of procedures with the specific goal of meeting the needs of modern youth and providing them with life skills in their world of future shock. It can begin when two teachers plan for one segment of thirty minutes a day. It can grow to be a highly complex, totally absorbing way of life for students, educators and the community. As one problem is solved, others emerge, at successively profound levels.

Teaching in open education can become a highly complex, sophisticated occupation, simultaneously frustrating and utterly satisfying (Forman, 1972).

In the open classroom the child is encouraged to realize his particular potential in his own way at his own rate. Thus he is more able to think for himself and to be guided by inner control. He is expected to work somewhat on his own and the expectation that he will be responsible leads him to actually be responsible. Children are allowed to move around and to cooperate with other children (Cadoret, 1972).

An open classroom in which both teachers and students are free to express what they feel is favored by Kohl (1969). In an open classroom teachers must enable students to explore and discover themselves. The teacher's role in an open school is one of an activator, guide and facilitator (Wiggins, 1973). He must be trusting, respectful, encourage cooperative problem-solving processes that humanize learning and help students to understand and accept the tentativeness of knowledge (Wendel, 1973). According to Travis (1974), the number of individual interactions the child has with the teacher and peers is a highly important aspect of life in the open classroom.

One of the many ways in which informal education departs from conventional teaching is that the open classroom teacher does not necessarily believe that there is a common body of knowledge, a curriculum that is suited to the needs of all children at any one stage of development (Richardson, 1972).

While the role of the teacher has been changing because of the open concept, the principal's role has not remained stagnant. The traditional behavior expected from a person in the position of principal is being

challenged and questions by those who are following an open education program. The principalship is undergoing changes in spite of some of the opposition by the "tribal elders" who seem to think "it has always worked, so why change?"

When the principal is involved in an open education concept program, he allows teachers, students, and parents to interact in the decision making process, respecting each member of the school family as a special individual with particular amounts of social, mental, and physical needs. He feels there should be a continuous flow of interaction between students, teacher, and all of the school personnel. The principal's supportive role is to help create the kinds of environment that will enable teachers to help youngsters grow and communicate and so to learn and by learning to become happy and mature individuals as responsible members of society (Horowitz, 1970).

No matter how hard teachers try to foster open forms of education in their school, bucking the "powers that be" is an unrewarding and often scary task. If forms of education are really going to change in a school, it will be up to the principal to set the tone and provide the leadership. Principals must encourage, lead, and indicate a personal desire to bring about teacher change from the traditional to the open concept.

Nathan (1973) presents various ways the administrator can facilitate change which include:

Investigate the availability of courses at universities and teaching center which have been established in many cities, duplicate helpful articles, encourage visits to other promising programs, participate in role-playing sessions at staff meetings, try to establish or reinforce the validity of a variety of approaches in your school, encourage teachers to use places and people beyond the building as learning resources, emphasize that teachers who try new ideas will

be penalized if the ideas don't work, encourage teachers to go beyond the usual text materials, encourage parents to visit and share (p. 16).

The principal can capture the spirit of openness if he makes a realistic and sincere commitment to change. Although the task is not an easy one, the process involved in helping teachers to work toward a more informal and flexible situation holds great challenge for the administrator, and the accomplishment brings great personal rewards.

As principals interact with teachers, striving to implement a humanistic method of working with children, they must examine their own philosophy and desires. The principal must be very realistic about his attitude to innovation. He must establish trust and confidence in his staff, between staff members, and between staff and children (Kuelthan, 1973). He must always be a contributor of his trust-confidence relationship, as he cannot isolate himself from the everyday occurrences of teachers and students.

Hertzberg and Stone (1971) point out the principal's role in an open education model by stating:

Open education is for the principal who can join his teachers (and lead them) in saying, I am committed to children, I care for them, I am not afraid of hard work. I am not afraid to fail, I can view the task realistically, and I am receptive to a range of ideas for working with boys and girls (p. 28).

Summary

The literature reviewed to this point has focused on the teacher's and principal's role in an open education model. It is extremely important that teachers and principal completely comprehend what philosophic views they are aspiring to reach. This can only be facilitated through open-ended interaction between teacher and principal. The process of

identifying goals and objectives toward a philosophical base took place early in the study.

Measuring Classroom Behavior Through Observation

Many times the terms observation and evaluation are confused or fused as one entity. From the outset it should be explained that in this study we were concerned with observing and measuring classroom behavior in terms of a common theoretical referent instead of evaluating teacher effectiveness.

Systematic observations of classroom behavior have not been very popular in educational circles. In some areas observation has been considered to be an invasion of privacy and has been resented and resisted by teachers and administrators. Of course, everyone has heard of the teacher who feels that the presence of an observer in a classroom is such a disturbing factor that the behavior seen cannot be regarded as typical of the behavior which goes on when an observer is not present (Brown, 1970).

Although this may be true when spasmodic visits into the classroom are made, the opposite effect takes place when systematic observations occur.

Brown (1970) expresses this feeling by stating:

When systematic observations have been incorporated into the every day programs of teachers, colleges and school systems, teachers and their administrators no longer regard them as incursions upon their academic freedom. Quite the opposite turns out to be the case. They discover that positive and meaningful feedback provided by systematic description and analysis of classroom behavior has a decidedly freeing effect. Accurate and reliable information opens doors long closed by doubt, fear and ignorance (pp. 3-4).

School children never were bothered much by the presence of an observer in the classroom. Teachers were bothered, so it turns out, primarily by the fear of the unknown. In the

old days, feedback to the teacher, if given, was inevitably bad or negative. Such is not the case with most of the new systems for recording and analyzing teaching.

Teachers are now provided with descriptive rather than evaluative feedback. Observational systems provide mirror images which say "This is what your classroom looked like. This happened; this didn't. A good observational system refrains from offering any opinion as to the "goodness" or "badness" of what is seen.

To measure classroom behavior, an observational system should record accurate, relevant behaviors which actually occurred, scored in such a way that the scores are reliable. Variances in scores yielded by a valid observational procedure reflect actual differences in behavior rather than differences in impressions made on varied observers (Brown, 1970).

Research reveals that to date there have been two approaches utilized in the construction of behavioral items for an observation system. One approach known as a category system restricts the observation to one aspect of classroom behavior. In this system a convenient unit of behavior is determined, then a manageable set of categories are constructed, and then every unit of behavior is classified into a category. The Flanders (1960, and Ober (1968) systems are examples of the category approach.

The other approach used in observation systems is known as a sign system. In this case, the observer works with a list of a number of specific acts of behavior which may or may not occur during a period of observation. The period of observation is broken into several substantial time periods, long enough to permit a number of behaviors to occur but short enough to avoid reliance upon recollection (Brown, 1968b). It is interesting to note that the category system seems best suited for measuring classroom climate or verbal interaction while sign systems can be most useful in examining behavior along comprehensive and relevant

dimensions. Both approaches have advantages and shortcomings. Whereas categories have the edge in recording sequence, signs have the edge in recording the scope of classroom behavior (Brown, 1970).

Simon and Boyer (1968) present summary descriptions of various classroom observation instruments just described, but in a different perspective. They classify instruments into two major areas: the effective domain--those instruments that measure predominantly the emotional climate of the classroom by coding how the teacher reacts to feelings, ideas, or actions of the pupil, and the cognitive systems--those instruments that consist of categories which differentiate between different kinds of teacher information, teacher questions or responses.

Summary

An observation system must produce information which can be fitted into a logically coherent philosophical theory. In other words, a systematic observation is--useless--and even harmful--unless we look at it consciously and deliberately in terms of meaningful and relevant philosophical dimensions (Brown, 1970). The Teacher Practices Observation Record (TPOR, Brown, 1968b) attempts to measure the agreement-disagreement of teachers' observed classroom behavior of a common theoretical referent. The TPOR instrument, and principal-teacher interaction was used as a means of shaping teacher classroom practices.

Teacher Beliefs, Behavior and Attitudes

The existence of inservice training programs in school systems throughout the country suggests that teacher behavior in the classroom is assumed to affect the education of children. It also appears that

training programs help to develop desirable attitudes which translate into desirable classroom behavior. Brimm, Tollett and O'Keefe (1974) maintain that inservice programs should help teachers examine their classroom performance.

The importance of the teacher's leadership is supported by the research of Anderson and his associates (1939; 1945; 1946) who concluded that classroom climate was primarily determined by the teacher patterns of integrative-dominative behavior. In other words, pupils in classrooms where integrative behavior was stressed tended to display more self-direction. Conversely, pupils in primarily dominative environments tended to be more conforming and dependent. Cogan's (1958) investigations into pupil's perceptions of teacher competence further support Anderson's work on the importance of the teacher in the classroom. He found a significant correlation between a teacher's perceived inclusiveness (analogous to Anderson's integrative) and pupil's productivity scores on two criterion measures.

The importance of considering teacher attitudes as well as behavior is stressed by Berliner (1969), Rubin (1971) and Allen (1971). Berliner (1969) suggests that the measurement of pre-post treatment differences in teacher behavior in a workshop may not be sufficient to indicate whether, in fact, learnings are transferred from training to classroom, or whether, in fact, the new behaviors are valued components of a repertoire of behaviors. Rubin (1971) refers to the teacher's sense of motivation and commitment. He suggests that:

How the teacher feels about something, how strongly, and in what order of importance, are tightly interwoven with his view of the educational process...The desire to perform at an optimum level is rarely stimulated when one does not believe in the worth of what he does (pp. 251-252).

According to Allen (1971), "personological" skills, how the teacher feels about himself and the behaviors he is expected to use in the classroom, are as important as performance skills.

In the past several years according to Fishbein (1972), questions such as (1) whether attitudes predict behavior and (2) whether changing attitudes lead to changes in behavior, have begun to attract a considerable amount of attention. While these questions have been raised periodically over the past fifty years, it is only recently that large numbers of investigators have answered them in the negative.

Most investigations of teacher behavior have been concerned with two dimensions: (1) establishing relationships between teacher behavior and characteristics of pupils or teachers, and (2) assessing teacher behavior change as the result of a training experience (Mitchell, 1972).

Few have sought to relate teacher behavior to teaching attitudes. Of a limited number of studies on the relationship of attitudes to behavior, only Vickery (1967) utilized an attitude-behavior theory framework on which to base the investigation. Attitudes and behavior in Vickery's study were measured by three instruments designed by Brown (1968b) to assess agreement-disagreement with Dewey's philosophy of education.

Vickery found that the level of consistency obtained among the three instruments was influenced more by change in behavior than by change in attitudes (Mitchell, 1972).

When Calabresa (1965) studied the interrelationship of teachers' personal beliefs, educational beliefs and classroom disciplinary practices with respect to experimental and traditional orientations, he found that:

1) Teacher self classification of beliefs indicated that personal beliefs were less experimental than were educational beliefs.

2) Observer classification of beliefs indicated that observers thought classroom practices were more related to personal beliefs than to educational beliefs (p. 58).

As Regan (1967) investigated the relationship between teacher beliefs, teacher classroom verbal behaviors and experts' views of selected child development principles, she found that:

Comparison of verbal behavior revealed and beliefs expressed indicated that the teachers revealed similar patterns of behavior regardless of any difference in belief or commitment. This supports the contention of critics of educational practice that gaps exist between educational theory and the classroom practice of teachers. Another important finding supported the need for more exploration in teacher education of what educational theories mean with respect to classroom practice (p. 79).

One question Brown (1968a) believes remains unanswered in many studies which attempt to relate attitudes and beliefs to teacher classroom behavior is: good or effective in terms of what value or philosophic position? Support for Brown's position comes in a statement made by the 1953 Committee on Teacher Effectiveness of the American Educational Research Association:

The simple fact of the matter is that, after 40 years of research on teacher effectiveness during which a vast number of studies have been carried out, one can point to few outcomes that a superintendent of schools can safely employ in hiring a teacher or granting him tenure, that an agency can employ in certifying teachers, or that a teacher-education faculty can employ in planning or improving teacher education programs (Barr, et al., 1953, p. 657).

Seven years later, Ryans stated:

Embarrassing as it may be for professional educators to recognize, relatively little progress has been made in supplementing this definition (teacher effectiveness) with the details that are necessary for describing competent teaching or the characteristics of effective teachers for a specific situation or cultural setting (Ryans, 1960, p. 2).

Williams and Jensen (1974) imply that philosophical objectives are

left implicit rather than explicit, with the result that the teacher has to guess at the intentions implied by a set of long-range goals, rather than being equipped with the ability to translate these goals into specific classroom behaviors. Amidon and Hough (1967) state:

that for a teacher to improve his teaching, three factors should probably be present; (a) the teacher should want to improve, (b) the teacher should have a model of the kind of teaching behavior that he wants to develop and (c) the teacher should get feedback regarding his progress toward the development of those teaching behaviors which he has conceptualized as his goal (p. 199).

Summary

The investigator included the three factors just presented while assessing the effectiveness of an observational system, utilizing principal-teacher interaction as a means of shaping teacher classroom practices so that they will become more consistent with the staff's statement of beliefs.

CHAPTER III

INVESTIGATION PROCEDURES

Chapter III will describe the research method, including instruments utilized in the study, the population from which subjects were drawn, and the procedure utilized in collecting data.

The purpose of this study was to assess the effectiveness of an observational system, with principal-teacher interaction as a means of shaping teacher classroom practices in a school endeavoring to implement an open education model. The investigator attempted to determine whether teacher beliefs and classroom practices became more consistent with the staff's philosophical position as a result of the interaction process.

In order to fulfill the requirements of this investigation, the teachers and principal developed a statement of beliefs (see Appendix A) describing the staff's philosophical position. The next task was to determine the congruency of the staff's philosophical beliefs with personal beliefs and practices held by teachers and their behavior observed in the classroom by the investigator. During the study, classroom observations followed by interactions with teacher-observer, were utilized as a means of shaping teacher classroom practices in focus with the staff's statement of beliefs.

An analysis of previous research studies was conducted in the areas of teacher's personal beliefs and behaviors, and practices observed in the classroom, plus a number of teacher attitude inventories. While

examining John Dewey's (1916) writings, one is led to presume that he would have advocated open education. As early as 1916 he was advocating making the curriculum relevant, student-centered, emphasizing individualism and personal feelings of children. Since the staff's stated beliefs reflected open education concepts, three instruments developed by Brown (1968b) measuring levels of agreement or disagreement with Dewey's philosophy of experimentalism, were selected.

Instrumentation of the Study

Personal Beliefs Inventory (Appendix B).

The PBI is an instrument that measures the teacher's level of agreement or disagreement with Dewey's fundamental philosophy of experimentalism (Brown, 1968b). In the forty item inventory there are twenty statements compatible with experimentalism and twenty which are not. Brown (1968b, p. 82) indicates that the range of possible scores for the PBI is from 0 to 200. A score of 0 would indicate that the respondent completely disagreed with all 20 statements compatible with experimentalism and agreed with all 20 statements which are not compatible with experimentalism. Brown (1968b, p. 100) reports that the Hoyt reliability coefficients for the PBI range from .55 to .78.

Teacher Practices Inventory (Appendix C)

The TPI is an instrument that measures the teacher's level of agreement with statements of teacher classroom practices based on Dewey's philosophy of experimentalism (Brown, 1968b). Of the forty statements in the instrument, twenty items are in conflict with Dewey's experimentalism and twenty are compatible. Like the PBI, the range of scores for the TPI

is from 0 to 200. High scores would indicate lack of agreement (Brown, 1968b, p. 88). Brown (1968b, p. 100) reports that the Hoyt reliability coefficients for the TPI range from .56 to .94.

Teacher Practices Observation Record (Appendix D)

The TPOR is a 62 item "sign" system of classroom observation which measures teacher behavior along the same theoretical dimensions as the belief scales, agree-disagreement with experimentalism (Brown, 1968b). With respect to Dewey's philosophy of experimentalism, 31 of the TPOR items are positive and 31 are negative. Brown (1968b, p. 103) states that a score of 0 indicates that the teacher's behavior is completely non-experimental as perceived by the observer, and that a maximum score of 186 would indicate completely experimental classroom behavior. A score of 94 and above indicates that observed teacher practices are more experimental than non-experimental, and a score of 93 or below indicates the opposite. The TPOR permits the investigator to compare scores with the TPI and PBI scores since all items in the instruments are within the same theoretical framework. Brown (1968b, p. 115) reports that the Mendenhall, within-observer reliability coefficients for the TPOR range from .48 to .62.

Population

In order to test the hypotheses and questions previously formulated, thirteen classroom teachers from an elementary school in Stillwater, Oklahoma, participated in the study.

An examination of this group reveals that five were members of a Primary team working with first and second-year students, five were

members of an Intermediate team working with third and fourth-year students, and three were members of an Upper team working with fifth-year students. Specialists in the building such as the reading resource specialist, physical education instructor, learning disabilities, special education and kindergarten teacher were not included in the study because of their dissimilarity in instructional responsibilities.

Collection of Data

A research design of the pretest-posttest, one-group Time-series Design, as described by Van Dalen and Meyer (1966, p. 281) was used. Data was collected from the subjects in the school system over a period of thirty-eight weeks, during the 1973-74 school year. Figure 1 shows the sequence of events and the overall research design.

Following is a description of the steps and procedures utilized in collecting data.

Phase I

Step 1. During the week of pre-school activities (August 20-24, 1973), the investigator administered the Personal Beliefs Inventory (PBI) and the Teacher Practices Inventory (TPI) to the staff (n=13). Both instruments were presented each time at a morning faculty meeting by the investigator. Inventories were placed first on the agenda and completed by teachers before other items of business were discussed. The investigator requested that staff members answer each statement according to their own personal beliefs instead of responding to "please" the investigator. Instruments were completed individually with no interaction taking place between subjects. Since the results of the inventories in

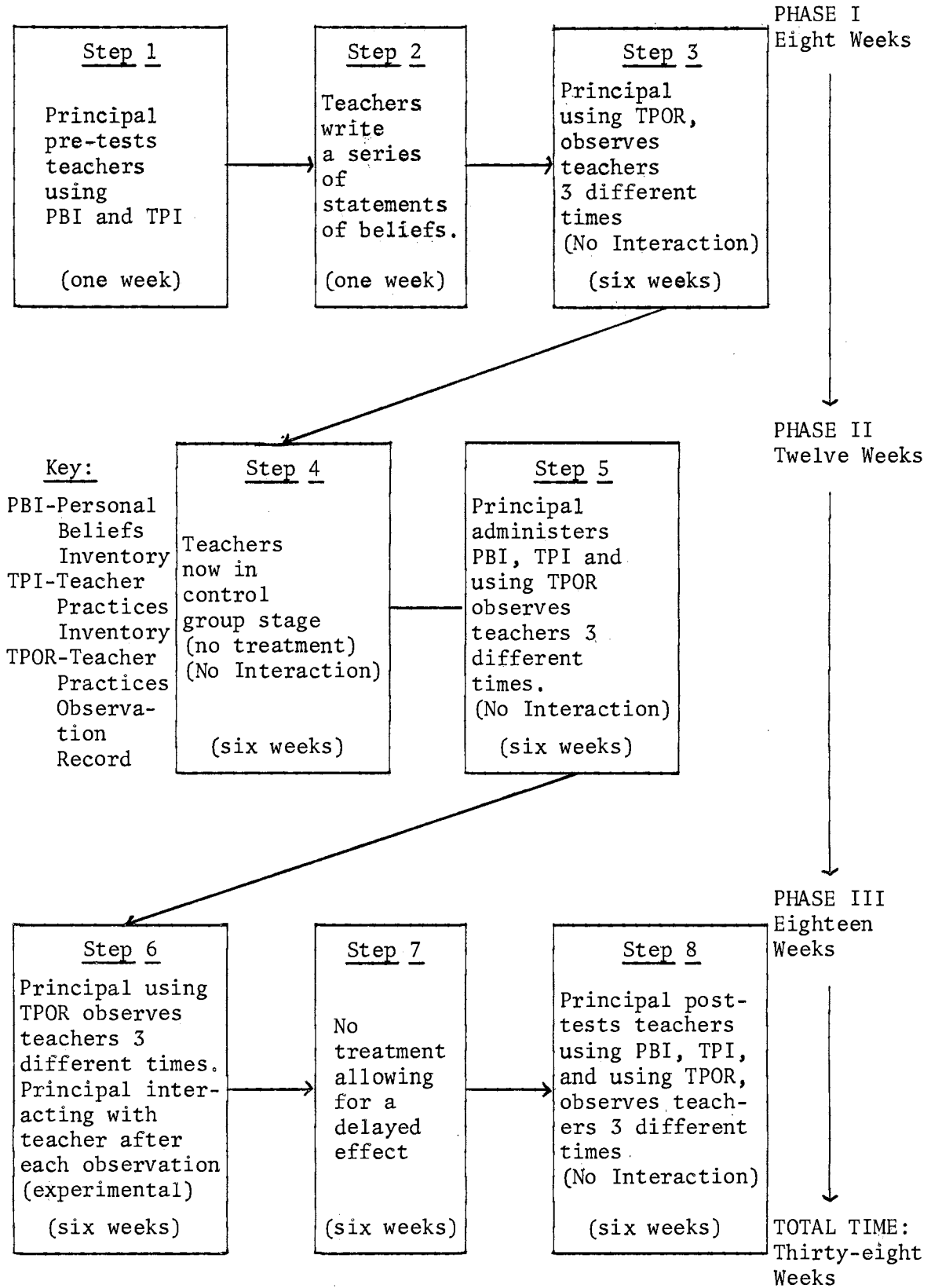


Figure 1. Sequence of Events in Data Collection: A Time Series Study

step one would serve as a baseline measurement, no details of the study or inventory scores were shared with teachers.

Step 2. Teachers and principal were involved in developing a series of belief statements expressing the staff's philosophical views. Statements focused on expected teacher and student practices and daily school experiences and relationships. Categories such as the nature of man, nature of learning, environment for learning (pupil's and teacher's role), perceived attitudes about parents and their role in the school, the purpose of school, type of organization, and others were included. The completed document (Appendix A) reflected Dewey's philosophical model of experimentalism and served as a stated theoretical base for the study.

Step 3. The investigator, using the Teacher Practices Observation Record (TPOR), observed all teachers three times. Each observation taking place in the teacher's classroom area required thirty minutes to complete. The TPOR instrument necessitated that the investigator observe five minutes, record five minutes, repeating this sequence three times. Although observations were never scheduled, subjects were observed on a rotating basis, in equal time intervals. This being the final step in gathering baseline data, the investigator did not share results of the observations with teachers during step three.

Phase II

Step 4. No treatment was projected during the "control" stage of the time series study.

Step 5. The investigator administered the PBI and TPI instruments to the staff at a morning faculty meeting. Inventories were placed first

on the agenda and completed by the teachers before other items of business were discussed. The investigator requested that staff members answer each statement according to their own personal beliefs instead of responding to "please" the investigator. Instruments were completed individually with no interaction taking place between subjects.

The investigator, using the TPOR, observed all teachers three times. Each observation taking place in the teachers classroom area required thirty minutes to complete. The TPOR instrument necessitated that the investigator observe five minutes, record five minutes, repeating this sequence three times. Although observations were never scheduled, subjects were observed on a rotating basis in equal time intervals. This being the final step in gathering baseline data, the investigator did not share results of the inventory or observation scores.

Step 6. The first portion of the treatment effect began when the investigator gave each teacher a copy of the Teacher Practices Observation Record (TPOR) at a morning faculty meeting. Teachers were requested to look over the instrument which had been and would be used to record their observed classroom practices. Teachers were also informed that following each of the three observations, they would have an opportunity to see the results of the observation and interact with the principal. Time did not permit any discussion of the TPOR at the faculty meeting.

Using the TPOR, the investigator observed all teachers three times. Each observation taking place in the teacher's classroom area, required thirty minutes to complete. The TPOR instrument necessitated that the investigator observe five minutes, record five minutes, repeating this sequence three times. Although observations were never scheduled, subjects were observed on a rotating basis in equal time intervals.

The interaction process between principal and teacher served as the treatment effect for the study, as part of step six. Following, is a procedure utilized after each TPOR was completed.

(1) The teacher was given an opportunity to view the instrument and see how it was scored.

(2) The teacher and investigator privately discussed tallies and scores, and areas which the subject's classroom practices were inconsistent with the staff's statement of beliefs. This analysis was possible because the odd numbered signs were negative statements indicating incongruency with stated philosophical beliefs of the staff. The even numbered signs were positive statements indicating congruency with stated philosophical beliefs of the staff.

(3) In most cases, teachers were basically interested in discussing odd numbered (negative) signs, as related to their classroom behavior.

(4) The principal and teacher then considered alternative instructional methods the teacher could employ in making practices more consistent with the staff's philosophical beliefs. For example, instead of immediately reinforcing a pupil's answer as correct or incorrect (negative sign No. 45 in the TPOR), a teacher may allow a student the privilege of deciding when the question has been answered satisfactorily (positive sign No. 46 in the TPOR).

(5) Any decisions on behalf of the teacher, in striving to make classroom practices congruent with the staff's philosophical beliefs was strictly on a volunteer basis. The teacher had to intrinsically make this decision.

Step 7. No treatment was projected during this stage. A time period was allowed to compensate for a delayed effect.

Step 8. The investigator administered the PBI and TPI instruments to the staff at a morning faculty meeting. Inventories were placed first on the agenda and completed by the teachers before other items of business were discussed. The investigator requested staff members to answer each statement according to their own personal beliefs instead of responding to "please" the investigator. Instruments were completed individually with no interaction taking place between subjects.

The investigator, using the TPOR, observed all teachers three times. Each observation taking place in the teacher's classroom area required thirty minutes to complete. The TPOR instrument necessitated that the investigator observe five minutes, record five minutes, repeating this sequence three times. Although observations were never scheduled, subjects were observed on a rotating basis in equal time intervals. The results of the two inventories and three recorded observations during step eight served as post-experimental data.

Summary

Chapter III described instruments utilized in the study, the population and procedure used in collecting data. Chapter IV will present the analysis of data collected for this study.

CHAPTER IV

AN ANALYSIS AND TREATMENT OF DATA

Introduction

This chapter presents the data obtained from the investigational procedures described in Chapter III. The data obtained in this investigation were used for the primary purpose of testing the following null hypotheses:

- H₀1: Personal beliefs of elementary school teachers who have been observed with no principal-teacher interaction do not differ significantly after being observed with principal-teacher interaction.
- H₀2: Professed teacher practices of elementary school teachers who have been observed with no principal-teacher interaction do not differ significantly after being observed with principal-teacher interaction.
- H₀3: Actual teacher practices of elementary school teachers who have been observed with no principal-teacher interaction do not differ significantly after being observed with principal-teacher interaction.

The subjects used in the study were thirteen classroom teachers of grade levels one through five, who comprised the faculty of one school. Data were collected from subjects by the observer, over a period of thirty-eight weeks, during the 1973-74 school year.

Data for the study were collected by having each subject: (1) complete a Personal Beliefs Inventory (PBI) at three specified stages of the study; (2) complete a Teacher Practices Inventory (TPI) at three specified stages of the study; and (3) observed in the classroom twelve times (30 minutes each) by the investigator, using the Teacher Practices Observation Record (TPOR). During the experimental segment of the study, each of the three TPOR observations, followed by principal-teacher interaction, served as the treatment effect in the study. The reader is referred to Chapter III for further information and clarification of the instruments and detailed methods of collecting data.

Personal Beliefs Inventory

The PBI was selected for this research project since it measured personal beliefs held by teachers in terms of agreement-disagreement with Dewey's philosophy of Experimentalism, and consistently reflected the staff's statement of beliefs.

Since the study employed a pretest-posttest, one-group time series design, the PBI was administered as a: (1) pretest and baseline indication of the control segment; (2) pre-experimental indication; and (3) posttest for the experimental segment.

Means obtained from the three Personal Beliefs Inventory (PBI) instruments are reported in Table I. A One-by-Three Repeated-Measures, Analysis of Variance design (Bruning and Kintz, 1968, pp. 43-47), was utilized to test the mean differences. This technique of data analysis was selected since it permits analysis of repeated measures on the same small group of individuals. A significant difference at the .05 level of confidence required an F of 3.40. The computed F was .688 also shown in

Table I; therefore, null hypothesis one is accepted. According to these findings it can be stated that personal beliefs of elementary school teachers, who have been observed with no principal-teacher interaction, do not differ significantly after being observed with principal-teacher interaction.

TABLE I
ANALYSIS OF VARIANCE SOURCE TABLE OF PERSONAL BELIEFS INVENTORY (PBI)
MEAN SCORES OF ELEMENTARY CLASSROOM TEACHERS

Source	SS	df	ms	F	p
Subjects	5931.33	12	-	-	-
Treatments	96.36	2	48.18	.688	N.S.
Error	1678.98	24	69.95		
TOTAL	7706.67	38			

\bar{X}_1 , PBI = 113.30 (n = 13).

\bar{X}_2 , PBI = 111.23 (n = 13).

\bar{X}_3 , PBI = 109.46 (n = 13).

Critical F (.05) = 3.40.

Teacher Practices Inventory

The TPI was selected for this research project since it measured teacher practice beliefs held by teachers in terms of agreement-disagreement with Dewey's philosophy of Experimentalism, and consistently

reflected the staff's statement of beliefs.

Since the study employed a pretest-posttest, one-group time series design, the (TPI) was administered as a: (1) pretest and baseline indication of the control segment; (2) pre-experimental indication; and (3) posttest for the experimental segment.

Means obtained from the three Teacher Practices Inventory (TPI) instruments are reported in Table II. A One-by-Three, Repeated-Measures, Analysis of Variance design was also utilized to test the mean differences. A significant difference at the .05 level of confidence required an F of 3.40. The computed F was .918, also shown in Table II; therefore, null hypothesis two is accepted. According to these findings it can be stated that professed teacher practices of elementary school teachers, who have been observed in the classroom with no principal-teacher interaction, do not differ significantly after being observed with principal-teacher interaction.

Teacher Practices Observation Record

The TPOR was utilized for this study since it measured teacher behavior along the same theoretical dimensions as the PBI and TPI belief scales. Although, the PBI and TPI instruments were completed by the teacher, the TPOR was used by the investigator to observe and record teacher behavior in the classroom.

Teachers were observed twelve times during the study with each observation requiring thirty minutes to complete. Interaction between principal and teacher after observations 7, 8, and 9, served as the major thrust for the treatment effect of the study. The reader is referred to page 28 for a detailed description how the TPOR investigations were

conducted and what took place during principal-teacher interactions.

TABLE II

ANALYSIS OF VARIANCE SOURCE TABLE OF TEACHER PRACTICES INVENTORY (TPI)
MEAN SCORES OF ELEMENTARY CLASSROOM TEACHERS

Source	SS	df	ms	F	p
Subjects	7471.44	12	-	-	-
Treatments	179.13	2	89.56	.918	N.S.
Error	2340.87	24	97.53		
TOTAL	9991.44	38			

\bar{X}_1 , TPI = 142.61 (n = 13).

\bar{X}_2 , TPI = 138.23 (n = 13).

\bar{X}_3 , TPI = 137.92 (n = 13).

Critical F (.05) = 3.40.

Scores of every three observations were totaled and averaged, serving as data at differentiated stages of the study as indicated in Figure 2. The mean of the first three observations (1, 2, 3), referred to as Group 1, served as a pretest, baseline indication of the control segment. The mean of the next group (4, 5, 6) referred to as Group 2, was used as a pre-experimental indication. During the experimental segment of the study, three observations (7, 8, 9), referred to as Group 3, served as the post treatment (TPOR) test. The last three (TPOR) observations (10, 11, 12) referred to as Group 4, served as post-experimental

data and as a method of determining if scores would drop following a six week period without treatment. Means obtained from the twelve Teacher Practices Observation Record (TPOR) are reported in Table III.

Group	TPOR's	Place in Time Series Design
1	1- 3	Pretest, baseline indication
2	4- 6	Pre-experimental
3	7- 9	Post-treatment
4	10-12	Post-experimental

Figure 2. Schedule and Grouping of Teacher Practices Observation Record (TPOR) Scores Utilized in the Time Series Design

A One-by-Four, Repeated-Measures Analysis of Variance design was utilized to test the mean differences. A significant difference at the .05 level of confidence required an F of 2.86. The computed F was 43.82. The significance of the overall F reported in Table III indicates that among the means of the four groups, at least two differ. The problem was to determine which specific groups of scores differed significantly.

While the t test is often used for making multiple comparisons after the F has been found to be significant, a more stringent test procedure is Duncan's multiple-range test (Bruning and Kintz, 1968, pp. 115-117).

TABLE III

ANALYSIS OF VARIANCE SOURCE TABLE OF TEACHER PRACTICES OBSERVATION
RECORD (TPOR) MEAN SCORES OF ELEMENTARY CLASSROOM
TEACHERS OBSERVED IN THE CLASSROOM

Source	SS	df	ms	F	p
Subjects	1,544.00	12	-	-	-
Treatments	8,479.92	3	2,826.64	43.82	.05
Error	2,322.00	36	64.5		
TOTAL	12,345.92	51			

\bar{X}_1 , TPOR = 104.61; (Group 1).

\bar{X}_2 , TPOR = 100.15; (Group 2).

\bar{X}_3 , TPOR = 129.53; (Group 3).

\bar{X}_4 , TPOR = 125.61; (Group 4).

Critical F (.05) = 2.86.

As presented in Table IV, the results of Duncan's multiple-range test shows that a significant difference in Teacher Practice Observation Record scores did occur between Groups 2 and 4, 2 and 3, 1 and 4, and 1 and 3. Null hypothesis three is rejected.

According to these findings it can be stated that actual teacher practices of elementary school teachers who have been observed with no principal-teacher interaction differed significantly after being observed with principal-teacher interaction.

Mean scores of the Personal Beliefs Inventory (PBI), Teacher Practices Inventory (TPI), and Teacher Practices Observation Record

(TPOR) were analyzed separately since the hypotheses, for this research project, did not require an investigation to statistically determine any correlation.

TABLE IV
DUNCAN'S MULTIPLE RANGE TEST APPLIED TO THE DIFFERENCES OF
ELEMENTARY CLASSROOM TEACHERS TPOR MEANS

<u>Group 2 vs Group 4</u>	(R*4 = 6.917)
$\frac{125.61 - 100.15}{}$	= 25.46 (significant)
<u>Group 2 vs Group 3</u>	(R3 = 6.703)
$\frac{129.53 - 100.15}{}$	= 29.38 (significant)
<u>Group 2 vs Group 1</u>	(R2 = 6.373)
$\frac{104.61 - 100.15}{}$	= 4.46 (not significant)
<u>Group 1 vs Group 4</u>	(R3 = 6.703)
$\frac{125.61 - 104.61}{}$	= 21.00 (significant)
<u>Group 1 vs Group 3</u>	(R2 = 6.373)
$\frac{129.53 - 104.61}{}$	= 24.92 (significant)
<u>Group 3 vs Group 4</u>	(R2 = 6.373)
$\frac{129.53 - 125.61}{}$	= 3.92 (not significant)

*R = minimum mean differences at .05 level.

TPOR means: $\bar{X}_1 = 104.61$; $\bar{X}_2 = 100.15$; $\bar{X}_3 = 129.53$; $\bar{X}_4 = 125.61$.

Brown (1968, p. 68), states:

The PBI, TPI, and TPOR instruments measure the teacher's levels of agreement-disagreement with Dewey's philosophy of Experimentalism. The TPOR items are identical to, or only slightly modified versions of the items of the Teacher Practices Inventory. This permits the investigator to compare TPOR scores with TPI and PBI scores within the same theoretical framework.

In conclusion, it seemed fitting to at least make a visual examination of the PBI, TPI, and TPOR mean scores. Before this could take place, the range score of the TPOR (0-186) had to be adjusted to correspond with the PBI and TPI ranges (0-200). This was accomplished by multiplying each TPOR mean score by 1.075 ($TPOR \times 1.075 = TPOR'$). This correction on the TPOR mean scores gave all three instruments a range of 0 - 200.

Figure 3 is a graphic representation how the means of the PBI, TPI, and TPOR shifted at various stages of this study. The reader must remember that TPOR scores reported on the graph have been adjusted (increased) and do not represent actual obtained scores reported throughout this study.

Summary

Chapter IV has presented the statistical analysis of data collected through the use of the Personal Beliefs Inventory (PBI), the Teacher Practices Inventory (TPI), and the Teacher Practices Observation Record (TPOR). The data were presented in tabular format with appropriate discussion concerning the statistical test of significance and the results obtained. Statistical confidence was demanded at the .05 level of confidence.

Chapter V will continue with a summary, conclusions, and recommendations of the present study.

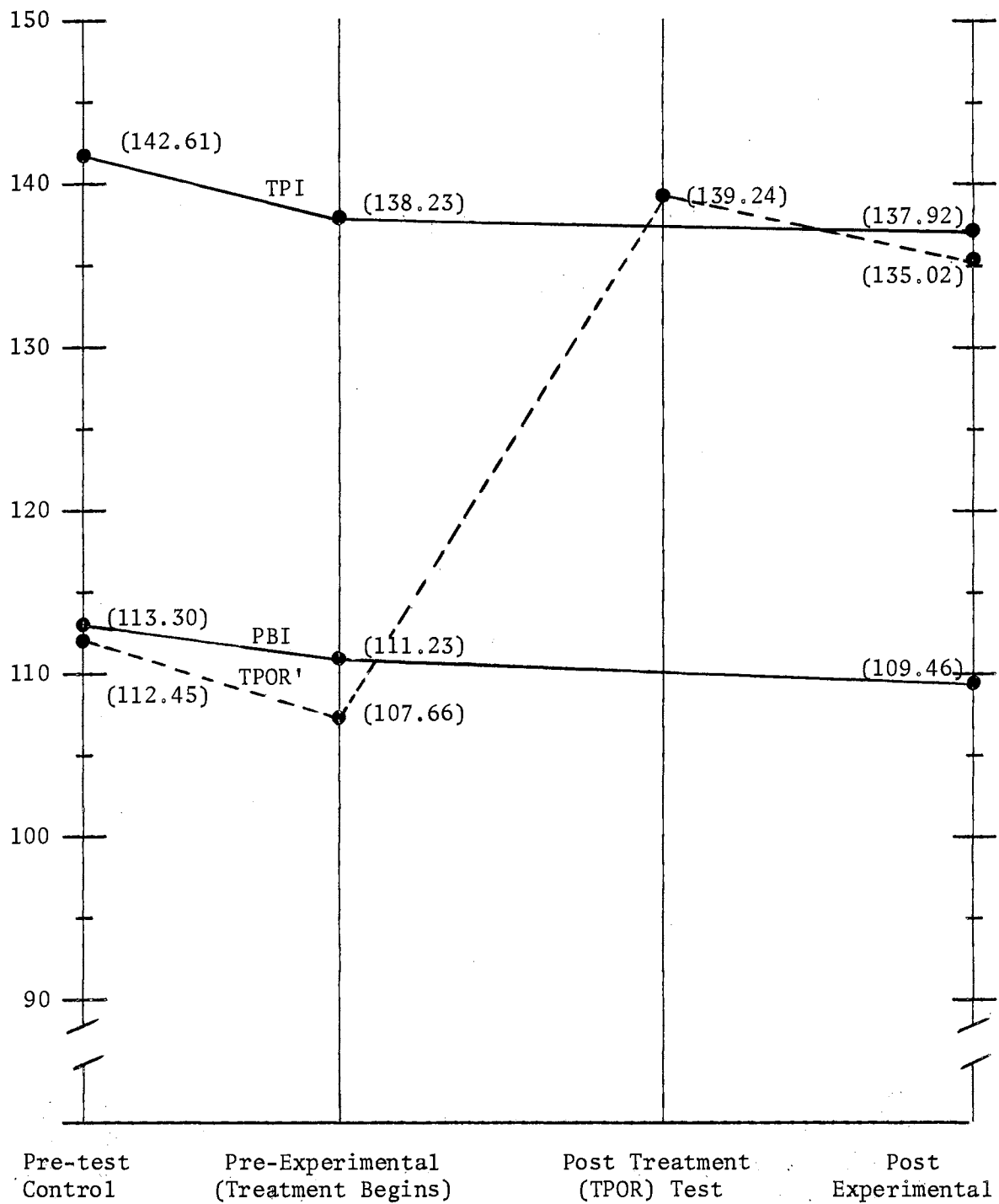


Figure 3. Graphic Representation of Personal Beliefs Inventory (PBI), Teacher Practices Inventory (TPI), and Teacher Practices Observation Record (TPOR') Means (n=13)

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This study was designed to assess the effectiveness of an observational system, with principal-teacher interaction as a means of analyzing and shaping teacher classroom practices.

Summary

The subjects, 13 elementary school teachers from one school, developed a statement of beliefs which reflected open education concepts and John Dewey's philosophy of Experimentalism.

Three instruments developed by Bob Burton Brown [the Personal Beliefs Inventory (PBI), the Teacher Practices Inventory (TPI), and the Teacher Practices Observation Record (TPOR)] were used to measure beliefs and behavior in terms of agreement-disagreement with experimentalism.

The major objective of the study was to test the following null hypotheses.

H₀1: Personal beliefs of elementary school teachers who have been observed with no principal-teacher interaction do not differ significantly after being observed with principal-teacher interaction.

H₀2: Professed teacher practices of elementary school teachers who have been observed with no principal-

teacher interaction do not differ significantly after being observed with principal-teacher interaction.

H₀3: Actual teacher practices of elementary school teachers who have been observed with no principal-teacher interaction do not differ significantly after being observed with principal-teacher interaction.

The data were analyzed through the use of a repeated measures, analysis of variance design to determine if significant difference existed. The Duncan's Multiple Range Test was utilized as a follow-up to determine which (TPOR) group scores differed significantly. Significance was established at the 0.05 level of confidence.

Findings

(1) Null hypothesis one was accepted. Personal beliefs of elementary school teachers who have been observed with no principal-teacher interaction did not differ significantly after being observed with principal-teacher interaction. The mean PBI scores of elementary school teachers did not differ significantly after treatment.

(2) Null hypothesis two was accepted. Professed teacher practices of elementary school teachers who have been observed with no principal-teacher interaction did not differ significantly after being observed with principal-teacher interaction. The mean TPI scores of elementary school teachers did not differ significantly after treatment.

(3) Null hypothesis three was rejected. Actual teacher practices of elementary school teachers who have been observed with no principal-teacher interaction did differ significantly after being observed with principal-teacher interaction. The mean scores of elementary school

teachers was significantly greater between Groups 2 and 4, 2 and 3, 1 and 4, and 1 and 3.

Conclusions

On the basis of the findings of this study the following conclusions appear justified.

(1) Observation and interaction techniques do not tend to influence reported personal beliefs of elementary teachers.

(2) Observation and interaction techniques do not tend to influence reported teacher practices of elementary teachers.

(3) It appears that revealing and discussing classroom observation scores tends to influence observed classroom practices.

Conclusions based on findings not stated in the formal hypotheses but appearing in the analysis of the data were:

(1) through the use of the TPOR, it is possible to observe and report teacher behaviors;

(2) it appears that principals through interaction with teachers, can influence classroom practices as measured by the TPOR; and

(3) it appears that teachers are willing to change classroom practices when principals and teachers share and discuss those common practices.

Recommendations for Further Research

The results and conclusions of this study can be substantiated through similar additional investigations on certain important variables affecting teachers' personal beliefs and behavior. Future study in the following areas would seem pertinent and important.

(1) A study using independent, outside observers to assess actual teacher classroom behaviors should be attempted.

(2) A replication of this study should be attempted with a larger sample enabling the use of more sophisticated statistical analyses.

(3) A study should be designed to reveal the effectiveness of principal-teacher interaction in shaping the beliefs and practices of teachers involved in open space or self-contained buildings. The structure of the building may be a significant variable.

(4) An investigation should be designed to assess the effectiveness of observer-teacher interaction in shaping teacher behavior so it will become consistent with the individual beliefs held by each teacher.

(5) A study should be designed to utilize teacher-selected techniques to measure and observe teacher behavior.

Theoretical Considerations

It is this writer's conviction that: (1) teachers hold the eventual key to the success or failure of any attempt to improve the learning environment for children in the classroom, and (2) educational theories couched in phrases not clearly identifying educational aims are virtually impossible to implement. With this in mind, the writer conducted this research project by involving his staff in developing a statement of beliefs, striving jointly to improve the learning environment with a strong thrust of principal-teacher interaction without utilizing mandarin methods of implementation.

An admonition to "shape teacher behavior" was an undertaking which required the writer to pensively consider how those involved in the study would respond. Questions and remarks that follow are some the writer is

still contemplating and examining.

Did teachers respond to the Personal Beliefs Inventory (PBI) and the Teacher Practices Inventory (TPI) the way they actually felt or in a manner they thought I wanted them to? Since the three scores of each teacher's inventories were rather consistent, I would like to believe they responded according to their perceptions of the inventory items.

During the early stages of the study, subjects were observed by the investigator with no principal-teacher interaction taking place. However, when observations were coupled with principal-teacher interaction, Teacher Practices Observation Record (TPOR) scores increased considerably. Did this change, in observed teacher behavior, actually take place or did the observer want or expect it to happen? Rosenthal's (1968) "Self-Fulfilling Prophecy" concept could have been a decisive variable biasing the results of the investigator's observation scores. Since there is no way of examining this dilemma, the question will remain unanswered.

The investigator frequently wondered what thoughts were going through the teacher's minds during the classroom observations and the principal-teacher interaction sessions. It appeared some teacher's enthusiasm diminished during the study, particularly during the three observation-interaction encounters.

When observations took place, did teacher behavior change as a result of the principal's presence or did the change come about because the teacher was intrinsically motivated by his personal beliefs? This question evolved as a result of the following encounter: "One day while observing in the classroom, a teacher was informally interacting with children individually and in small groups, using a soft voice. After the

observation period, with the principal out of the area and children involved in the same activities observed earlier, the teacher was found addressing the entire group formally, in loud overtones." Hopefully, the teacher did not "put on a show" for the principal, or did she?

I personally perceive that my presence in the classroom did pose a threat to some teachers, particularly those who scored low on the TPOR. The "teacher threat" syndrome is most unfortunate since the writer has conscientiously and consistently endeavored to remove this venomous menace in the teacher-administrator relationship.

Although these questions prevailed, many positive attributes emerged from the study. For example, the process of combining varied teacher beliefs into a common theoretical base, mutually agreed by all, was an encounter which brought this writer very close to his teachers. Many individual, team, and staff-wide discussions revealed some positive teacher "gut" feelings this dynamic group espoused. This experience was worth the entire study to me.

Before this study was initiated, a friend warned me how the staff could negatively react to "tactics endeavoring to shape teacher behavior." In his words, "the entire staff could turn against you if they so desired." It was gratifying to see that the staff did not display an inimical attitude toward observation, interaction or the study in any way. This was most important since the study would have been abandoned if this cooperative element had developed into one of resistance or revolt.

Teacher practices can be changed through the process of interaction. This seems true particularly when teachers are actively involved in the process of establishing educational goals which will help children.

encounter successful experiences at school. To provide consistent learning experiences for children in a responsive environment should be the basic tenent for examining teacher practices and beliefs.

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APPENDIX A APPENDIX A APPENDIX A

Statement of Beliefs

I. Purpose

Skyline Elementary School exists primarily to serve the youths of Stillwater and the society in which they live by aiding them to become responsible, perceiving, self-directing, self-educating individuals who are capable of making decisions and living with the consequences of these decisions and value judgments. In the evolution of a program to achieve this purpose, the following statements of beliefs serve as a basis. These beliefs focus on the individual student and teacher and his daily school experiences and relationships.

II. Beliefs

Capacity

Each youth has capacities for learning which are not fixed; but vary from individual to individual; thus, the inner nature of each student has some characteristics in common with others and some which are unique.

Success

Each student is entitled to meet with a feeling of some success and accomplishment in his daily experiences. Success is more likely to occur if children can interact in diverse groups with teachers using varied materials, techniques, and learning styles.

Self-direction

As pupils work out solutions to problems, sometimes under teacher guidance, they develop the ability to use the rational powers and the intellectual tools with which they could be self-propelling and self-directing during a lifetime of learning.

Respect and Responsibility

Youths need to develop an attitude of respect for oneself, for peers and for others. This attitude should be intrinsic for it is a very vital factor in the freedom involved in open space learning environment. This learning environment must include a sense of security and trust that will encourage the pupil to develop the attitudes of respect and responsibility.

Process

Teaching must be consistent with what is known about human growth and development and how learning takes place. Emphasis should be placed not so much on what pupils should learn but how and when they should learn. Concern should be not only with responses, but also with the processes that lead to the responses.

Schools should be so structured that the staff can arrange content to match the learning sequences of the individual child and design social situations for children which enhance the dignity of each child.

III. Nature of Learning

The most important factor in an educational program is the learner. How he learns must be considered in the evolution of a program. The following are agreements on the nature of learning:

Self-image

How a child feels about himself is reflected in his work. Therefore, a positive self-image is a desirable condition for learning.

Goals

Learning takes place when the experiences are meaningful in terms of the goals of the learner. Learning is usually related to the purposes of the learner rather than to purposes of adults.

Involvement

The student must become involved in the curriculum to gain from it. Unless the learner desires to learn, learning is not likely to occur. Interest, motivation, and readiness are among the factors that influence learning. Motivation is both intrinsic and extrinsic. Forces inside a student can move him toward a goal or away from it. The teacher can no longer be considered the storehouse of knowledge, one ready to impart all knowledge a child will ever need. Instead, a teacher is a facilitator, one who stimulates an interest in children to do research, to satisfy a curiosity, and to learn more about his world environment.

Adaptation

The school should be receptive to change, encouraging the child to internalize the concept that lifelong learning is essential to successful involvement in society.

Experiences

Tasks should be provided for the child which are appropriate and which would cause him to move at his optimum rate. Each child needs to have successful experiences without being labeled or typed. Learning takes place through discussion, observation, interaction, writing, reading and listening. Not all learning can be measured by paper and pencil.

Creativity

Creativity should be encouraged and stimulated. A receptive

climate which is responsive to divergent as well as convergent thinking is a necessary factor in the development and stimulation of creative thinking. Positive experiences which encourage the learner to explore and to develop initiative and self-confidence are a prerequisite to creativity. Conversely, experiences of criticism, failure, discouragement, and frustration lead to behavior which ceases to be purposeful, integrated, and rational.

Behaviors

Behaviors which are reinforced are more likely to recur. The type of reinforcement which has the greatest value is the kind one gives oneself--the sense of satisfaction in achieving goals.

IV. Setting for Learning

Flexible organizational patterns of the school are important factors in the determination of flexible classroom arrangements. We believe that the emotional climate of the school and the classroom should be conducive to healthy self-concepts for teachers and youngsters and that the learning climate should foster search, creativity, and open-endedness as well as scholarship. The school should provide a responsive, supportive, positive environment which encourages every child to want to learn. The social milieu of the school should include every child as a worthy individual and member of a group and not develop outcasts or isolates.

Decisions

When persons (students, teachers, administrators, and parents) are affected by a decision they should have a part in making the decision.

Tasks

Some of the decision making typically relegated to the schedule or the administration should be assumed by teachers. Curriculum development should include an ongoing process of evaluation based on continual diagnosis of the child's level of development, prescription of appropriate experiences in order that he may progress, and constant search for alternatives to better meet the child's needs. Teachers should capitalize on the psychological strengths of each student by assessing attitudes toward school and feelings of self confidence as they guide him toward realistic goals. Time for these and other professional activities must be provided.

Teaching Arrangements

The team planning and teaching approach has been implemented to help teachers accomplish goals jointly they could not attain alone. Team teaching occurs when two or more teachers accept joint responsibility for teaching a group of children. Each member of a teaching team serves as a resource person for that phase of the program for which she is best prepared.

Inquiry

A common thread that should run through the curriculum is the spirit of inquiry which seeks to capitalize on the student's innate curiosity and the excitement of the search. The method of inquiry does not expose the child to questions or routine situations to which other people have already worked out the answers. It is a method by which students are taught to formulate questions, to bring questions into a productive order, to search in a variety of places and in a variety of ways, to organize ideas into principles and concepts, and to test the reliability of their judgments.

V. Resources

The resources of the school should be constantly updated both from human and technical standpoints. Future change should proceed toward better use of existing facilities, specialists and staff members. Parents should also be involved as resource personnel.

Multi-sensory, Multi-level Materials

Teachers recognize that learning takes place through the development of the senses and need to provide students with experiences in this area. They also need to furnish materials which vary considerable in complexity and which would allow each student to move at his own pace.

Technological Aids

Electronic and technological devices are being created. Their uses must be studied and evaluated carefully, along with currently used mechanical aides, as additional approaches to educating youngsters.

Costs

Recognition should be given to the relationship of new program to increased cost.

People

People who are knowable, knowledgeable, and skilled in the art of teaching can enrich learning situations. Beyond the scholarly approach these people need to develop a sense of self awareness as well as needing to be social and human beings who are sensitive to their peers and students.

(1974)

Terms:

Convergent = to bring, come closer

Divergent = to branch off and move further away

Diverse = not alike; plainly different

Extrinsic = a factor created outside a person's inner control

Facilitator = one who helps, to make easier

Innate = seems to be born from within, natural

Intrinsic = a factor created within a person

Optimum = the condition which is the best or most favorable.

APPENDIX B APPENDIX B APPENDIX B

PERSONAL BELIEFS INVENTORY

Form A - B

This is a study of what people believe about a number of basic philosophical questions. The best answer to each statement below is your personal belief. Many different and opposing points of view are presented here. You will find yourself believing some of the statements, not believing some, and uncertain about others. Whether you believe or do not believe any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin by writing 0, 1, 2, or 3, 4, 5, depending on how you feel in each case.

- | | |
|-------------------------|----------------------------|
| 0. I AGREE VERY MUCH | 3. I DISAGREE A LITTLE |
| 1. I AGREE ON THE WHOLE | 4. I DISAGREE ON THE WHOLE |
| 2. I AGREE A LITTLE | 5. I DISAGREE VERY MUCH |

- ___ 1. Change is a basic characteristic of nature, and man has some measure of control over this change by using his intelligence.
- ___ 2. Knowledge is truth to be accepted, held, and treasured for its own sake.
- ___ 3. A statement of fact may be both true and untrue depending on the standpoints and conditions of the observations.
- ___ 4. To know something is to know the inner nature of things, i.e., as they really are prior to investigation.
- ___ 5. Man doesn't have a "spirit" which is separable from his body and the material world.
- ___ 6. Questions of value and moral judgment ought to be open to experimentation and scientific inquiry.
- ___ 7. All "truths" are relative.
- ___ 8. Man gains knowledge by having things impressed upon his mind.
- ___ 9. Truth exists ready-made somewhere; the task of the scholar is to find it.
- ___ 10. Practice is subordinate to knowledge, merely a means to it.
- ___ 11. Learning is an application of mental powers to things to be known.
- ___ 12. Man's destiny is in the hands of a supernatural power.

Mark each statement in the left margin by writing 0, 1, 2, or 3, 4, 5, depending on how you feel in each case.

- | | |
|-------------------------|----------------------------|
| 0. I AGREE VERY MUCH | 3. I DISAGREE A LITTLE |
| 1. I AGREE ON THE WHOLE | 4. I DISAGREE ON THE WHOLE |
| 2. I AGREE A LITTLE | 5. I DISAGREE VERY MUCH |

- _____ 13. The mind is a group of "contents" which come from having a certain material presented to it.
- _____ 14. "Mind" is purely intellectual and cognitive; bodily activity is an irrelevant and intruding physical factor.
- _____ 15. The ends and laws which should regulate human conduct have been determined by the superior intelligence of an ultimate Being.
- _____ 16. Knowledge is the sum total of what is known, as that is handed down by books and learned men.
- _____ 17. What something may be when totally independent of any observer or frame of reference is a scientifically meaningless question.
- _____ 18. The mind is formed from without, as one molds and shapes a piece of clay.
- _____ 19. Man's primitive impulses are neither good nor evil, but become one or the other according to the objects for which they are employed.
- _____ 20. There is no spiritual realm which lies beyond man's experience in the natural world.
- _____ 21. What is morally right and wrong ought to be decided on warranted evidence--the findings of empirical science.
- _____ 22. Knowledge is the result of theoretical insight on the part of scholars.
- _____ 23. There can be no final, absolute ends to which all men aspire.
- _____ 24. The mind turns outward to truth; the emotions turn inward to considerations of personal advantage and loss.
- _____ 25. The use of the scientific method can be extended to solve the problems of men in the area of values and moral judgments.
- _____ 26. Man is capable of managing his own destiny in an understandable and predictable natural world.
- _____ 27. The mind possesses faculties for remembering, imagining, reasoning, willing, and so forth, which are developed by exercise and discipline.

Mark each statement in the left margin by writing 0, 1, 2, or 3, 4, 5, depending on how you feel in each case.

- | | |
|-------------------------|----------------------------|
| 0. I AGREE VERY MUCH | 3. I DISAGREE A LITTLE |
| 1. I AGREE ON THE WHOLE | 4. I DISAGREE ON THE WHOLE |
| 2. I AGREE A LITTLE | 5. I DISAGREE VERY MUCH |

- _____ 28. What is right and good at one time and place may not be right and good for all times and places.
- _____ 29. You can never prove that any fact is unconditionally true.
- _____ 30. The senses and muscles are merely external inlets and outlets of the mind.
- _____ 31. Man's destiny is determined by circumstances of nature which are beyond his control.
- _____ 32. Knowledge is artificial and ineffective in the degree in which it is merely presented as truth to be acquired and possessed for its own sake.
- _____ 33. Man's choices are good only if they prove successful in helping him live with some degree of security and equilibrium in the world of nature.
- _____ 34. Reaching a condition in which there were no more problems would be the ideal life.
- _____ 35. In the absence of a moral code supported by absolute authority, bodily appetite and passion overpowers intelligence.
- _____ 36. Questions of value and moral judgment ought to be open to experimentation.
- _____ 37. Learning is the sum of impressions made on the mind as a result of presentation of the material to be known.
- _____ 38. Nothing is or can be unchanging, absolutely certain.
- _____ 39. The nature of a thing is determined by what it does, or can be used for; it is what it becomes with intelligent use.
- _____ 40. Questions of values and morals should be taken out of their traditional supernatural setting and put in a naturalistic setting.

APPENDIX C APPENDIX C APPENDIX C

TEACHER PRACTICES INVENTORY

Form A - B

This is a study of what people believe is good teaching. Each statement below describes teacher practice -- something a teacher might do in a classroom. Many different and opposing kinds of teacher practices are presented here. As you read these statements, you will find yourself agreeing with some, disagreeing with some, and uncertain about others. The best answer to each statement is your personal belief or opinion.

Mark each statement in the left margin by writing 0, 1, 2, or 3, 4, 5, depending on how you feel in each case.

- | | |
|-------------------------|----------------------------|
| 0. I AGREE VERY MUCH | 3. I DISAGREE A LITTLE |
| 1. I AGREE ON THE WHOLE | 4. I DISAGREE ON THE WHOLE |
| 2. I AGREE A LITTLE | 5. I DISAGREE VERY MUCH |

- ___ 1. Gives students opportunity to select facts and information which they consider appropriate to the question.
- ___ 2. Usually has all students working on the same page of the same book at the same time.
- ___ 3. Makes students emphatically aware that they are here to study and learn.
- ___ 4. Once work has begun, insists that students remain in their places and concentrate on the task at hand.
- ___ 5. Asks the kind of questions that students should be able to answer if they have studied the lesson.
- ___ 6. Makes a direct presentation of the subject matter to be covered.
- ___ 7. Permits students to go ahead with plans based on foresight, observation, and consideration of several alternatives -- even when sure their judgment is mistaken.
- ___ 8. Makes "doing something" with a thing, rather than the thing itself, the center of students' attention.
- ___ 9. Focuses attention on what the students do or say, rather than on what the teacher does or says.
- ___ 10. Makes the acquisition of knowledge and skills the center of students' attention and effort.

Mark each statement in the left margin by writing 0, 1, 2, or 3, 4, 5, depending on how you feel in each case.

- | | |
|-------------------------|----------------------------|
| 0. I AGREE VERY MUCH | 3. I DISAGREE A LITTLE |
| 1. I AGREE ON THE WHOLE | 4. I DISAGREE ON THE WHOLE |
| 2. I AGREE A LITTLE | 5. I DISAGREE VERY MUCH |

- ___ 11. Has students compare the value of alternative courses of action and pass judgment on their relative desirability.
- ___ 12. When one student fails to answer a question, asks another student to supply the correct answer.
- ___ 13. Encourages students to suggest what might be done -- to make "hypothetical leaps" into the unknown or untested.
- ___ 14. Encourages students to put their suggestions to a test with such remarks as "You'll never know unless you try it."
- ___ 15. Tells students where to start and what to do to accomplish the task at hand.
- ___ 16. Organizes learning around questions posed by the teacher or the textbook.
- ___ 17. Faithfully follows a planned schedule in order to get in the number of minutes each week allotted to each subject in the curriculum.
- ___ 18. Gives students a wide choice in how they answer questions.
- ___ 19. Provides a model to show students exactly what their work should be like when it is finished.
- ___ 20. Gives students a free rein in devising and inventing proposals for what might be done to clear up troublesome situations.
- ___ 21. Engages students in dramatizations, music, art, and other creative activities.
- ___ 22. Uses a set standard to judge the work of all students in the class.
- ___ 23. Insists that students face up to the realities of unpleasant predicaments and plights they get themselves into.
- ___ 24. Accepts material in the approved textbook as a reliable measure for the appropriateness of information brought in by students from other sources.
- ___ 25. Lets students become involved in ugly or distressing aspects of subjects.

Mark each statement in the left margin by writing 0, 1, 2, or 3, 4, 5, depending on how you feel in each case.

- | | |
|-------------------------|----------------------------|
| 0. I AGREE VERY MUCH | 3. I DISAGREE A LITTLE |
| 1. I AGREE ON THE WHOLE | 4. I DISAGREE ON THE WHOLE |
| 2. I AGREE A LITTLE | 5. I DISAGREE VERY MUCH |

- _____ 26. Frequently asks students to choose among several alternatives.
- _____ 27. Sticks to questions which can be answered by looking in the textbook or other references readily available in the school.
- _____ 28. Limits physical activities to the gym or the playground.
- _____ 29. Asks students to work on their own problems, rather than something made a problem only for the purpose of conveying instruction in some school subject.
- _____ 30. Gives students a chance to discover by experiencing actual effects whether their choice of this rather than that idea was a judicious one.
- _____ 31. Urges students to put everyday things to uses which have not occurred to others.
- _____ 32. Gives students a number of starting places and a number of different ways of getting at what is to be done.
- _____ 33. Provides approximately the same materials for each student in the class.
- _____ 34. Shows students the most economical and efficient way to get a job done, and expects them to do it pretty much that way.
- _____ 35. Allows students to move freely about the room while engaged in purposeful activity.
- _____ 36. Quickly tells students whether their answers are "right" or "wrong."
- _____ 37. Calls for the undivided attention of the group and scolds those who do not respond.
- _____ 38. Asks the students to help decide when questions have been satisfactorily answered.
- _____ 39. Encourages students to adventure into "deep water," to tackle problems that appear to be "over their heads."
- _____ 40. Motivates students to greater intellectual effort by rewarding them with grades, marks, prizes, or privileges.

APPENDIX D

TEACHER PRACTICES OBSERVATION RECORD

The directions for the use of the Teacher Practices Observation Record are as follows:

The Teacher Practices Observation Record provides a framework for observing and recording the classroom practices of the teacher. Your role as an observer is to watch and listen for signs of the 62 teacher practices listed and to record whether or not they were observed, WITHOUT MAKING JUDGMENTS AS TO THE RELATIVE IMPORTANCE OR RELEVANCE OF THOSE PRACTICES.

There are three (3) separate 10-minute observations and marking periods in each 30-minute visit to the teacher's classroom. These are indicated by the column headings I, II, III. During period I, spend the first 5 minutes observing the behavior of the teacher. In the last 5 minutes go down the list and place a check mark in Column I beside all practices you saw occur. Leave blank the space beside practices which did not occur or which did not seem to apply to this particular observation. Please consider every practice listed, mark it or leave it blank. A particular item is marked only once in a given column, no matter how many times that practice occurs within the 10-minute observation period. A practice which occurs a dozen times gets one check mark the same as an item which occurs only once.

Repeat this process for the second 10-minute period, marking in Column II. Repeat again for the third 10-minute period, marking in teacher practice and record in the column headed TOT. There may be from 0 to 3 total check marks for each item.

TEACHER PRACTICES OBSERVATION RECORD

Tot	I	II	III	Teacher Practices
				A. <u>Nature of the Situation</u>
				1. T makes self center of attention.
				2. T makes p center of attention.
				3. T makes some thing itself center of p's attention.
				4. T makes doing something center of p's attention.
				5. T has p spend time waiting, watching, listening.
				6. T has p participate actively.

Tot	I	II	III	Teacher Practices
				7. T remains aloof or detached from p's activities.
				8. T joins or participates in p's activities.
				9. T discourages or prevents p from expressing self freely.
				10. T encourages p to express self freely.
				B. <u>Nature of the Problem</u>
				11. T organizes learning around Q posed by T.
				12. T organizes learning around p's own problem or Q.
				13. T prevents situation which causes p doubt or perplexity.
				14. T involves p in uncertain or incomplete situation.
				15. T steers p away from "hard" Q or problem.
				16. T leads p to Q a problem which "stumps" him.
				17. T emphasizes gentle or pretty aspects of topic.
				18. T emphasizes distressing or ugly aspects of topic.
				19. T asks Q that p can answer only if he studied the lesson.
				20. T asks Q that is not readily answerable by study of lesson.
				C. <u>Development of Ideas</u>
				21. T accepts only one answer as being correct.

Tot	I	II	III	Teacher Practices
				22. T asks p to suggest additional or alternative answers.
				23. T expects p to come up with answer T has in mind.
				24. T asks p to judge comparative value of answers or suggestions.
				25. T expects p to "know" rather than to guess answer to Q.
				26. T encourages p to guess or hypothesize about the unknown or untested.
				27. T accepts only answers or suggestions closely related to topic.
				28. T entertains even "wild" or far-fetched suggestion of p.
				29. T lets p "get by" with opinionated or stereotypical answer.
				30. T asks p to support answer or opinion with evidence.
				D. <u>Use of Subject Matter</u>
				31. T collects and analyzes subject matter for p.
				32. T has p make his own collection and analysis of subject matter.
				33. T provides p with detailed facts and information.
				34. T has p find detailed facts and information on his own.
				35. T relies heavily on textbook as source of information.
				36. T makes a wide range of informative material available.
				37. T accepts and uses inaccurate information.

Tot	I	II	III	Teacher Practices
				38. T helps p discover and correct factual errors and inaccuracies.
				39. T permits formation of misconceptions and over-generalizations.
				40. T questions misconceptions, faulty logic, unwarranted conclusions.
				E. <u>Evaluation</u>
				41. T passes judgment on p's behavior or work.
				42. T witholds judgment on p's behavior or work.
				43. T stops p from going ahead with plan which T knows will fail.
				44. T encourages p to put his ideas to a test.
				45. T immediately reinforces p's answer as "right" or "wrong."
				46. T has p decide when Q has been answered satisfactorily.
				47. T asks another p to give answer if one p fails to answer quickly.
				48. T asks p to evaluate his own work.
				49. T provides answer to p who seems confused or puzzled.
				50. T give p time to sit and think, mull things over.
				F. <u>Differentiation</u>
				51. T has all p working at same task at same time.
				52. T has different p working at different tasks.

Tot	I	II	III	Teacher Practices
				53. T holds all p responsible for certain material to be learned.
				54. T has p work independently on what concerns p.
				55. T evaluates work of all p by a set standard.
				56. T evaluates work of different p by different standards.
				G. <u>Motivation, Control</u>
				57. T motivates p with privileges, prizes, grades.
				58. T motivates p with intrinsic value of ideas or activity.
				59. T approaches subject matter in direct, business-like way.
				60. T approaches subject matter in indirect, informal way.
				61. T imposes external disciplinary control on p.
				62. T encourages self-discipline on part of p.

VITA

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Candidate for the Degree of

Doctor of Education

Thesis: THE INFLUENCE OF OBSERVER INTERACTION IN SHAPING TEACHER'S
CLASSROOM PRACTICES AND BELIEFS

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Education Association, Oklahoma Elementary Principals
Association.