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## A study of principal leadership style adaptability and teacher use of effective teaching skills

Dorothea Mabe Shannon  
*College of William & Mary - School of Education*

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**A study of principal leadership style adaptability and teacher  
use of effective teaching skills**

Shannon, Dorothea Mabe, Ed.D.

The College of William and Mary, 1987

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**A STUDY OF PRINCIPAL LEADERSHIP  
STYLE ADAPTABILITY AND TEACHER USE  
OF EFFECTIVE TEACHING SKILLS**

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**A Dissertation  
Presented to the  
Faculty of the School of Education  
The College of William and Mary in Virginia**

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**In Partial Fulfillment  
Of the Requirements for the Degree  
Doctor of Education**

---

**by  
Dorothea Mabe Shannon**

**April 1987**



A STUDY OF PRINCIPAL LEADERSHIP  
STYLE ADAPTABILITY AND TEACHER USE  
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by

Dorothea M. Shannon

---

Approved April 1987 by

William F. Losito  
William F. Losito, Ph.D.

James M. Yankovich  
James M. Yankovich, Ed.D.

Robert J. Hanny  
Robert J. Hanny, Ph.D.  
Chairman of Doctoral  
Committee

#### DEDICATION

This dissertation is dedicated to the following individuals: my husband, George, for his encouragement, support and patience, and to my parents, William and Virginia Mabe, for their confidence.

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A STUDY OF PRINCIPAL LEADERSHIP  
STYLE ADAPTABILITY AND TEACHER USE  
OF EFFECTIVE TEACHING SKILLS

## Chapter 1

### Introduction

"The next few years will present us with the best opportunity we will have during this century to improve American Education." - Ernest Boyer

The 1980's have evolved as an era of school reform in response to such reports as Nation at Risk from the National Commission on Excellence in Education (1983), High School: A Report on Secondary Education in America by Ernest Boyer (1983), A Place Called School by John Goodlad (1984), and Horace's Compromise: The Dilemma of the American School by Theodore R.Sizer (1984). These reports and books paint a painful picture of American schools gone soft, of drab teachers in drab facilities, and teaching goals substantially different from those in curriculum documents (Cawelti, 1983; Francke, 1983).

In light of the recent reports dramatizing the plight of American schools, educators are expected to address the critical issues of curriculum, students and learning, teachers and teaching, school organization and management, leadership, and quality. In response to the problem, school districts initiated school improvement programs based on studies of school effectiveness (Cohen, 1983; Good and Brophy, 1985; Purkey and Smith,



1983); staff development (Joyce and Showers, 1980); principal leadership (Dwyer, Lee, Rowan and Bassert, 1983); and effective teaching practices (Brophy, 1979; Guskey, 1985). This increasingly convergent research is detailed in identifying factors related to school improvement, but, attempting to put these strategies into practice is at once simple and complex.

There are many schools around the country where careful, thoughtful efforts to improve schools have been implemented, accruing benefits to students, teachers, and the school as a whole (Loucks, 1983). Many of these improvement plans have combined research on effective teaching skills and staff development programs. Ultimately these staff development efforts are effected by the quality of leadership in a school building.

There appears to be sufficient evidence in the existing body of literature to determine effective teaching skills, the appropriate way to implement a staff development program and the importance of administrative leadership. There is, however, a need to link these three constructs and determine if there is a relationship between the success of a staff development program in effective teaching and principal leadership.

### Theoretical Rationale

This study is based on the premise that the principal's leadership style adaptability is a key to the implementation of a staff development program, specifically a staff development program in effective teaching skills. To support this, three constructs must be examined - effective teaching skills, staff development, and leadership.

### Research on Effective Teaching

Historically, teaching practices are said to be traditional and reflective of the culture of each country (Gage, 1963). Teachers tend to model their former teachers and it is difficult to find evidence that teachers teach the way they were trained. Gage (1963) points out that formal teaching methods were derived from philosophical traditions such as was seen in the work of Froebel and later manifested in Gestalt and clinical psychology. Greenhoe (1941), Brookover (1953, 1955), Warner, Havigurst, and Leob (1944) suggest a teacher's social class may affect how he teaches (Gage, 1963).

Until recently, it was very difficult to make generalizations about effective teaching practices from the research on teaching and learning. Many of the early studies were done in the laboratory with animals and college students (Gage, 1963). In addition, the experimental variables that were manipulated were learner

rather than teacher variables.

Fortunately, research on instruction over the last fifteen years has given teacher educators a body of research literature which bears a relationship to real classroom life (Griffin, Barnes, O'Neal, Defino and Hukill, 1984). According to Rosenshine and Furst (1973), this research has followed the "descriptive-correlational-experimental" loop of first describing teaching skills, then relating the teaching skills to student growth and finally testing the teaching skills in a controlled situation.

Researchers observed and analyzed which teaching behaviors characterized "effective" and "ineffective" teachers (Good and Grouws, 1979; Brophy and Everston, 1974; Stallings, 1975; Anderson, Evertson and Emmer, 1980). Effective teachers have been identified as those whose students had consistently higher residual gain on achievement tests. As research evolved and a structured methodology of systematic observation and non-evaluative record of classroom events was utilized by researchers, some teacher behaviors were found to be congruent with higher student achievement especially in the areas of reading and mathematics at the elementary level (Good and Grouws, 1979; Anderson, Evertson and Brophy, 1979).

The teaching behavior-student achievement research

forms a base on which to build a structure of teacher effectiveness (Medley, 1979; Gage, 1984). Studies have included different grade levels and address different aspects of classroom life: academic learning time (Fisher, et al, 1979); classroom management (Kounin, 1970; Brophy, 1983; Emmer, Evertson, Stanford and Clements, 1983); influencing student behavior through teacher feedback (Brophy, 1981); teacher expectations (Brophy and Good, 1974); and instruction-functions of teaching (Good, 1983; Rosenshine, 1983). In addition, studies have tied certain teaching strategies to student achievement.

If in the research and literature successful teacher practices are studied, common functions can be identified and several models of effective instruction emerge. Rosenshine (1986) put together ideas from many studies in his analysis of teacher effectiveness and developed a list of six major functions of teaching:

1. Daily review, checking previous day's work and reteaching (if necessary).
2. Presenting new content/skills.
3. Initial student practice.
4. Feedback and correctives (and recycling of instruction, if necessary).
5. Independent practice so that students are firm and automatic.

6. Weekly and monthly reviews, reteaching if necessary.

It is possible to make the above list four, six, or eight functions. Madeline Hunter (1976) suggests:

1. Anticipatory set (focus the students' attention, provide a very brief practice on previously achieved and related learnings, or develop a readiness for the instruction that will follow).

2. The objective and its purpose.

3. Instructional input.

4. Modeling.

5. Checking for understanding.

6. Guided practice.

7. Independent practice.

Hunter's essential elements of teaching are supported by psychological research on human learning. Similar functions have also been developed by Good and Grouws (1979).

These teaching functions represent what Gage (1978) calls "the scientific basis for the art of teaching." Thus, certain teaching practices seem to make a difference and a reality - based, research - derived process is now available to disseminate to teachers.

#### Research on Staff Development Models

Knowing that certain teacher behaviors influence

student achievement, how can one best train teachers in these functions? What model does the training literature point to as being the most successful? What should be the schedule of training? How large should workshop groups be? Which learning activities enable teachers to use new techniques in their classes? What should participants do between workshops?

While it is not possible to state conclusively that one inservice design is superior to another, it is possible to draw from the research and literature certain elements that should be included for effective presentation;

1. Conduct training sessions (more than one) two or three weeks apart (Berman and McLoughlin 1978; Stallings, Needels, and Stayrook, 1978; Anderson, Evertson and Brophy, 1979).

2. Include presentation, demonstration, practice, and feedback as workshop activities (Stallings, 1982; Joyce Showers, 1980, 1981, 1982).

3. During training sessions, provide opportunities for small-group discussions of the application of new practices and sharing of ideas and concerns about effective instruction (Holly, 1982; Evertson and others, 1982; Stallings and others, 1978).

4. Between workshops, encourage teachers to visit each others' classrooms, preferably with a simple,

objective, student-centered observation instrument. Provide opportunities for discussions of the observation (Roper, Deal and Dornbusch, 1976; Berman and McLoughlin, 1976; Sparks, 1983b).

5. Develop in teachers a philosophical acceptance of the new practices by presenting research and a rationale for the effectiveness of the techniques. Allow teachers to express doubts about or objections to the recommended methods in the small group. Let the other teachers convince the resisting teacher of the usefulness of the practices through "testimonies" of their use and effectiveness (Doyle and Ponder, 1977; Mohlman, Coladarci and Gage, 1982).

6. Lower teacher's perception of the cost of adopting a new practice through detailed discussions of the "nuts and bolts" of using the technique and teacher sharing of experiences with the technique (Sparks, 1983b; Shavelson and Stern, 1981).

7. Help teachers grow in their self-confidence and competence through encouraging them to try only one or two new practices after each workshop. Diagnosis of teacher strengths and weaknesses can help the trainer suggest changes that are likely to be successful and, thus, reinforce future efforts to change (Sparks, 1983b).

8. For teaching practices that require very

complex thinking skills, plan to take more time, provide more practice, and consider activities that develop conceptual flexibility (Joyce and Showers, 1980; Showers, 1983).

These research derived practices have been demonstrated to be effective elements of staff development programs.

#### Research on Leadership

Research on innovation in schools has concluded that the principal is a key to the success or failure of implementation and institutionalization of planned change in schools (Miles and Huberman, 1982; Crandall and associates, 1982). Specifically, the research literature attributes the successful implementation to the strength of the principal's leadership and management style when working with teachers (Crandall and Associates, 1982; Leithwood and Montgomery, 1982; Gali, 1982).

The concept of leadership is a many faceted one surrounded by confusion. One reason for this is that the idea of leadership evolves in most part from the particular perspective one holds. As Lipman has written:

In much of the literature the myth is perpetuated that leadership is unitary in nature. Hence, one tries to identify it, describe it, capture it, exercise it, rate it, and above all, correlate and predict it. And all the while, the simple "it" is a



very complex "them".

McCoy and Shreve (1981) describe the early leadership research as being focused on the determination of the most effective leadership traits, characteristics, and leadership style(s). This research was trying to determine a "one best way" -- a way which could be modeled and hence produce effective leadership.

Later research became directed toward the complexity of leadership and interrelatedness of the variables of the leader, the followers, the environment, and the organization's goals and objectives (McCoy and Shreve, 1981). Situational/contingency leadership theory resulted from this research. Some believed that it was necessary to match a style to fit a situation (Fielder, 1977). Another viewpoint suggested finding a leader with a specific style which would meet the needs of the situation at that time or structuring the style to the maturity level of the followers (Hersey and Blanchard, 1977; Argyris, 1977). Research during this time shows the complexity of the leadership and the dependency of effectiveness upon the interaction and the interrelatedness of many variables and the leader's ability to adapt style. Three factors can be concluded from the review of literature:

1. leadership is a complex phenomenon and

2. effective leadership is dependent on a leader's behavior with the followers during interaction.

3. leadership style adaptability is a crucial determinant of effectiveness.

The concept of leadership as related to school effectiveness and, more specifically, the success or failure of a planned staff development program is very important to this study. The identification of a principal's leadership adaptability in schools where staff development is institutionalized can provide knowledge and ultimately strategies for school improvement.

#### Statement of the Problem

The purpose of this study was to identify the degree of principal leadership style adaptability and teacher use of effective teaching skills in schools where a staff development program in effective teaching skills has been institutionalized. Although leadership is considered an important characteristic of effective administrators, few attempts have been made to examine a principal's leadership style adaptability where an instructional skills program is utilized. The previously cited research (Crandall and associates, 1982; Leithwood and Montgomery, 1982; Gall, 1982) indicates a need to examine principal leadership style adaptability and teacher use

of effective teaching skills.

In the present study, teachers were asked to complete a standardized instrument, Leader Effectiveness and Adaptability Description, designed to determine the perceived leadership style, range and adaptability of the principal (Hersey and Blanchard, 1973). In addition, trained observers collected information, from on-site visits, on the degree of use of effective teaching skills by teachers. The data was analyzed by using t-test and analysis of variance.

#### Hypothesis

The null hypothesis tested in this investigation was:

Null Hypothesis - In a school division where a staff development program in effective teaching skills has become institutionalized, teacher use of effective teaching skills will not be significantly different in schools with significantly different degrees of principal leadership style adaptability.

#### Design

The major purpose of this study was to identify the degree of principal leadership style adaptability and teacher use of effective teaching skills in schools where a staff development program in effective teaching skills has been institutionalized.

The causal-comparative research design was used for the present study since the variables studied were principal leadership style adaptability and teacher use of effective teaching skills. Borg and Gall (1983) state "the causal-comparative method is aimed at the discovery of possible causes for a behavior pattern by comparing subjects in whom this pattern is present with similar subjects in whom it is absent or present to a lesser degree" (p. 257). This method is also referred to as ex post facto research since causes are studied after they have presumably exerted their effect on another variable (Borg and Gall, 1983).

Subjects for this study came from a large urban school division with an institutionalized staff development program in effective teaching skills as identified by Huberman's (1982) predictors of institutionalization. In phase one data on principal leadership style adaptability was obtained from the Leader Effectiveness and Adaptability Description (Hersey and Blanchard, 1973) as completed by teachers. In phase two teacher use of effective teaching skills was obtained through classroom observations by trained observers using the Instructional Skills Observation Instrument developed by Patricia Wolfe (1982). The data on leadership style adaptability was analyzed using

t-tests, and the data on teacher use of effective teaching skills was analyzed using analysis of variance.

#### Limitations

The findings and recommendations of this study concerning principal leadership style adaptability and teacher use of effective teaching skills are limited because the researcher does not know whether leadership style adaptability is the cause of teacher use of effective teaching skills or just a contributing factor. Causal-comparative research does not imply a cause-effect relationship.

This study was conducted in a naturalistic as opposed to an experimental setting. Therefore, many variables that might have been controlled in the laboratory, were not controllable in this study. When interpreting the results of this study the following limitations must be considered:

1. The small sample size and selection of the sample,
2. The lack of generalizability to other school districts of other geographical areas and sizes,
3. Reliability and validity of observational data,
4. Reliability and validity of the instrument to determine leadership style adaptability,
5. Lack of control over the staff development program with respect to:

- a. the varying ability of trainers,
- b. time lapsed since teachers were trained,
- c. the evolution and change in the training model over ten years.

6. The lack of long-term data on the use of effective teaching skills,

7. The use of only elementary teachers in mathematics classes, and

8. The lack of control over such variables as age, sex, tenure, skill, and experience.

#### Definition of Terms

The following terms have been defined to contribute a clear understanding of the concept of this study.

Staff development is defined as any activity that systematically attempts to help teachers improve skills (Sparks, 1983).

Teaching is defined as the constant stream of professional decisions that affects the probability of learning, decisions that are made and implemented before, during, and after interaction with the student (Hunter, 1984).

Effective teaching skills is a systematic method for presenting material in small steps, pausing to check for student understanding, and eliciting active and successful participation from all students (Rosenshine,

1986).

Leadership, is the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation (Hersey and Blanchard, 1982).

Leadership style is the behavior pattern that a person exhibits when attempting to influence the activities of others as perceived by those others (Hersey and Blanchard, 1982).

Leader's style range is defined as the extent to which a person is able to vary his leadership style (Hersey and Blanchard, 1982).

Leader's style adaptability is the degree to which leaders are able to vary their style appropriately to the demands of a given situation (Hersey and Blanchard, 1982).

Institutionalization is defined as the presence of organizational conditions that indicate the innovation's being "built in" to the school or district (Huberman, 1982).

#### Overview

The remainder of this dissertation will be organized into four chapters. Chapter 2 will review the research related to the problem. In Chapter 3, the methodology of the present study will be presented, including descriptions of subjects, instruments, and techniques used. A presentation of the findings and results of the

study will be contained in Chapter 4. Chapter 5 of this dissertation will present and discuss the conclusions and implications for further research.



## Chapter 2

### Review of Related Literature and Research

A review of literature and research related to the problem of the study is presented in this chapter. The review is divided into four sections: (1) research on effective teaching; (2) research on staff development; (3) research on institutionalization, and (4) research on the development of the study of leadership.

#### Effective Teaching

Effective teaching research 50 years ago offered interesting information but was of little help to the classroom teacher. Generally, studies conducted during the 1930's focused on teacher presage characteristics such as age or schooling. However, research over the last 15 years has focused on interactions between teachers and students and bears a relationship to real classroom life (Rosenshine, 1980).

In building a description of effective classroom practices the research has followed the "descriptive-correctional-experimental" loop conceptualized by Rosenshine and Furst (1973). The paradigm contains at least these elements:

1. development of procedures for describing teaching in a quantitative manner;
2. correlational studies in which the descriptive variables are related to measures of student growth;

3. experimental studies in which the significant variables obtained in the correlational studies are tested in a more controlled situation. (Rosenshine and Furst, 1973, p.25)

Hundreds of descriptive instruments have been developed and researchers have observed and analyzed which teaching behaviors characterized "effective" and "ineffective" teachers. For example, Good and Grouws (1979) in the Missouri Mathematics Program studied teachers who consistently obtained more mean classroom achievement than did other teachers who were teaching similar students under similar circumstances. As a result, Good and Grouws were able to identify sets of classroom behaviors that consistently differentiated relatively effective from ineffective teachers. It was determined that effective fourth grade mathematics teachers presented information more actively and clearly; were task-focused; were basically nonevaluative and created a relatively relaxed and pleasant learning environment; expressed higher achievement expectations and had fewer behavior problems (Good, 1982).

Brophy and Evertson (1974) in The Texas Teacher Effectiveness Study observed teachers and students in a variety of settings for periods of time and recorded their behaviors. From these observational records,

teacher behaviors which related to student learning as measured by standardized tests were identified. An operational definition of the effective teacher emerged from this line of research: The effective teacher is the teacher whose students had consistently higher residual gain on achievement tests.

Similarly, many correlational studies have been performed. The Texas Junior High School Study (Evertson, et al, 1980) was a large correlational study of teacher effects on student achievement and attitudes in junior high school math and English classes. Sixty-eight seventh and eighth grade teachers (29 mathematics and 39 English) were observed in two sections of their subject areas using a variety of high and low inference measures. These data were used as predictors in a series of linear regression models to describe relationships between the classroom processes and two criteria: student achievement and student attitude. Relationships among teaching behaviors and student outcomes in mathematics and English classes support the elements of direct instruction, use of time, interaction styles and classroom management.

This teaching behavior-student achievement research forms a base for the final stage of the descriptive-correlational-experimental loop. In the past eight years our knowledge of successful teaching has increased

considerably due to the successful experimental studies, studies in which teachers have been trained to increase the academic achievement of their students (Rosenshine, 1983).

For example, in the study by Good and Grouws (1979), the results from the Missouri Mathematics Program (1973) were used to design a teaching program to test ideas in a field experiment. Forty teachers in grades 4-8 were divided into two groups. One group of 21 teachers was assigned to experimental conditions and received a 45 page manual which contained a system of sequential, instructional behaviors for teaching mathematics. The teachers read the manual, received two 90 minute training sessions, and proceeded to implement the key instructional behaviors in their teaching of mathematics. The control teachers did not receive the manual and were told to continue to instruct in their own styles. During the four months of the study all teachers were observed six times.

The results showed that the treatment teachers produced more student gain in test scores in mathematics than did the control teachers. The teachers in the treatment group implemented many of the key instructional behaviors. For example, the treatment teachers were much higher in conducting review, checking homework, actively

engaging students in seatwork, and making homework assignments.

Fitzpatrick (1982) in his *Organizing and Instructing High School Classes* research conducted a similar study involving ninth grade algebra and foreign language. Twenty teachers were divided into two groups and the treatment group received a manual explaining and giving teaching suggestions on 13 instructional principles. The treatment group also met twice to discuss the manual. All teachers were observed five times.

The results showed that the treatment teachers implemented many of the principles more frequently than did the control teachers. These teachers were higher in attending to appropriate student behavior, commanding attention of all students, providing immediate feedback and evaluation, having fewer interruptions, setting clear expectations, having a supportive environment, and overall student engagement time was higher in the classrooms of the treatment teachers.

Anderson, Evertson, and Brophy (1979) conducted an experimental investigation of teaching effectiveness in the First Grade Reading Group Study. In this study 22 principles of small group management were taught to a treatment group of first grade teachers who implemented them in their reading instruction. Both treatment and control teachers were observed and data were collected on

teaching behaviors. Classes in the treatment groups showed higher adjusted reading achievement at the end of the year, and many of the behaviors described in the instructional model were related to achievement.

Stallings (1984) carried out a four phase program in several districts in California, focusing on training secondary school teachers to improve reading skills of students. This study incorporated both descriptive and experimental research techniques. In phase I, the researchers observed in 46 classrooms to examine the relation between what teachers did to address reading problems and what students achieved. The result of this phase was the identification of specific instructional approaches that seemed to work. In phase II, the researchers used findings from phase I to work with 51 teachers, 26 were trained and 25 (the control group) received training only at the end of the experimental period.

The 26 teachers who were trained attended five workshops, held 1 week apart. Using pretest and posttest data, the authors found that the teachers who were trained did use the instructional activities and did achieve greater gains in student ability over the year. Of the 31 criterion variables (measuring the implementation of specific activities), the trained

teachers changed over the school year on 25, while the control teachers changed only on 3.

Putting together ideas from research studies, Rosenshine (1983), developed a list of six instructional functions:

1. Daily review,
2. Presenting new material,
3. Guided practice,
4. Corrections and feedback,
5. Independent practice,
6. Weekly and monthly reviews.

#### Daily Review

The idea of beginning a lesson by checking the previous days assignment appears in the experimental study of Good and Grouws (1979) and is found again in the work of Emmer, et al (1982). Each of these programs was designed for Grades 4-8. In primary grades, such checking and reteaching are explicitly part of the Distar program (Becker, 1977) and the ECRI program (Reid, 1978). In the ECRI program, 5 minutes a day are spent reviewing and introducing new words from stories in a reader. The students go over the word lists in unison until they are fluent. When students are reading fluently and easily at the rate of about one word a second, it is possible to review 150 words in less than 4 minutes (Rosenhine, 1986).

In the Missouri Math program (Good and Grouws, 1979) where daily review was included in the training manual given to the treatment teachers, the treatment teachers conducted review and checked homework 80% of the time, whereas the control teachers did this only 50% of the time. Although daily review is considered important, it is not a common practice (Rosenshine, 1983).

#### Presentation

Rosenshine (1983) reports recent research in Grades 4-8 has shown that effective teachers of mathematics spend more time in presentation of material to be learned. For example, Evertson, et al (1980) in their correlational study of Texas Junior High School teachers found most effective mathematics teachers spent about 23 minutes per day in lecture, demonstration, and discussion, compared with 11 minutes for the least effective teachers.

If the research of Brophy (1980) and Emmer, et al (1982), is studied, the following suggestions for effective presentation emerge:

- State lesson goals.
- Focus on one thought at a time.
- Teach in small steps, checking for understanding before proceeding.
- Give step-by-step directions.



- Model the behaviors by going through the directions.

- Organize material so that one point is mastered before going to the next.

- Avoid digressions (Rosenshine, 1986).

### Guided Practice

Guided practice or the monitoring of students by the teacher until they demonstrate that they are able to work on their own may be accomplished by: having a few students to the board, having every student work a few problems, having students give examples of the concept or by the teacher asking a large number of questions. The correlational and experimental studies of Stallings (1974, 1980) identified a pattern of factual question-student response-teacher feedback as most functional for student achievement.

During successful guided practice, two types of questions are usually asked: those calling for specific answers, and process questions, which call for an explanation of how an answer was found. In a correlational study of junior high school mathematics instruction (Evertson, Anderson, and Anderson, 1980), the most effective teachers asked an average of 24 questions during the 50 minute period, whereas the least effective teachers asked only 8.6 questions. The most effective teachers

asked six process questions per period, whereas the least effective teachers asked only 1.3. In Good and Grouwa (1979) experimental study teachers were taught to follow the presentation of new materials with guided practice, using high frequency of questions; in this study, students in the experimental groups had higher achievement than did students in the control group. (Rosenshine, 1986, p. 11 and 12)

In addition, these studies have shown that a high frequency of teacher-directed questions is important for acquisition of basic arithmetic and reading skills (Rosenshine, 1983).

Research has shown that teachers have a higher success rate with guided practice if material has been presented in small steps, directing initial student practice through questions, continuing practice until students are firm, overlearning, and frequent review with periodic checking for understanding (Rosenshine, 1983).

#### Correctives and Feedback

Students learn better with immediate feedback, and errors should be corrected before they become habitual (Rosenshine, 1986). There are four types of responses: correct - and quick and firm; correct - but hesitant; incorrect - but a "careless" error; and incorrect -

suggesting lack of knowledge of facts or a process (Rosenshine, 1983).

Anderson, et al (1979) suggests that when the student response is correct, quick, and firm, then the teacher asks a new question. This type of response usually occurs in the later stages of initial learning or in a review (Rosenshine, 1983). Anderson, et al (1979) and Good and Grouws (1979) determined that teachers should provide moderate amounts of process feedback to students who respond correctly but with hesitation during the initial stages of learning, while Stallings and Kaskowitz (1974) suggest teachers help students with incorrect answers in early stages of learning by providing hints and/or asking simpler questions (Rosenshine, 1983). Whether one uses hints or reteaches the material, the important point is that errors should not go uncorrected. When a student makes an error, it is inappropriate to simply give the student the answer and then move on. It is important that errors be detected and corrected early in a teaching sequence (Rosenshine, 1983).

#### Independent Practice

Once guided practice has been completed and successful, the students can move on to independent practice. Independent practice should be in the same material as guided practice and be continued for homework

(Rosenshine, 1986). The goal of independent practice is to provide overlearning and to provide sufficient practice so that students are quick, confident, and firm.

The most common context in which independent practice takes place is individual seatwork. Evertson, et al (1980) and Stallings, et al (1977) both stress the importance of student engagement during seatwork. Evertson, et al (1980) found that teachers whose classes are more engaged during seatwork prepared these classes for the seatwork during the demonstration and guided practice.

Four other ways in which independent practice can take place are:

1. teacher-led practice (Evertson, 1982 and Reid, 1978-82),
2. independent practice with a routine of specific practice as in the ECRI program,
3. student cooperative practice in groups (Rosenshine, 1983).
4. and through the proper use of homework (Feathersone, 1985).

#### Weekly and Monthly Reviews

The Missouri Mathematics Effectiveness Study (Good and Grouws, 1979) included periodic reviews. The review provides additional teacher checking for student

understanding, ensures that necessary prior skills are adequately learned, and is also a check on the teacher's pace. The Distar program (Becker, 1977) and the ECRI program (Reid, 1978-1982) also provide for extensive review. The need for massed learning, followed by spaced reviews, is also part of Hunter's (1981) program of increased teacher effectiveness (Rosenshine, 1983).

The research studies mentioned in the preceding sections all tied certain teaching strategies to student achievement. Thus, certain teaching strategies make a difference. A reality-based, research-derived content is now available to disseminate to teachers. The most effective way to disseminate these research findings is the critical task for staff developers. The next section addresses research in staff development.

#### Staff Development

Investigators of staff development are beginning to isolate and examine the critical variables which affect the implementation process. Berman and McLaughlin (1978) in the study of hundreds of federally funded change programs found that implementation was not consistent for all programs and varied with the context, the content, the process of presentation and the teachers themselves.

#### Context

Several researchers have found the general context within which a staff development program takes place

affects implementation (Berman and McLaughlin, 1978; Little, 1982). Context includes physical and/or organizational properties and influences in the setting such as prior change efforts, perception of the goals of the school, and availability of needed resources for change (Griffin, 1983).

For the past ten years, the influence of context on staff development has received considerable attention from researchers. The importance of context on staff development was supported in 1972 by Barth when he used the case study method to report on an attempt in an inner-city school to change from a traditional instructional and organizational approach to an open-education setting. The attempt failed and Barth explained the failure, in part, by acknowledging that the change agents lacked understanding of the school's history, the perceptions and expectations of the community, and the conventions of teaching and learning held by staff, students, and parents.

Berman and McLaughlin (1975 and 1978) expanded on the idea of contextual influence. After examining the implementation of hundreds of federally funded programs, the researchers concluded the major factor affecting success of the program was support from both principals and superintendents.

Several studies support the concept that leadership behaviors have a substantial influence on staff development success. Gross, Giaquinta, and Bernstein (1971) noted the importance of supportive leadership in effecting change. Ten years later Liberman and Miller (1981) emphasized the importance of the principal as an instructional leader in bringing about improved teaching, and Stallings and Mohlman (1981) found that teachers improved most where principals were supportive and gave clear and consistent communications. The administrator becomes the "gatekeeper of change."

Little (1981) related the importance of context in her ethnographic study of the effects of staff development on the prevailing climate and types of interaction in the school. She found that such variables as the nature of the principal's interaction with teachers, what beliefs about teaching were enacted by the teachers and principals, and the power of the school context played a part in the success of staff development.

Griffin (1983) has summarized context variables that have been related to change efforts as successful or not. He includes the following:

1. the norms of the setting (institutional regularities),

2. the history of the organization,
3. perceptions and expectations of school personnel regarding practice,
4. perceptions and expectations of community members,
5. mutual adaptations of the school and the desired change,
6. ability of leaders to analyze the characteristics of the setting,
7. knowledge of the organization and its parts by leaders,
8. coordination of organizational variables by leaders,
9. supportive leadership,
10. adult-adult interactions (including the principal), and
11. flexibility in use of time and space. (p. 424)

#### Content

The process of disseminating research findings to teachers begins with content. Content of staff development is the body of knowledge, skill, and/or attitudes that is meant to be introduced into the school setting. What should be taught to teachers is a critical question for those in charge of staff development programs. As noted previously, there is a wealth of information from research on teaching knowledge that can



form a major portion of the content of staff development.

Barnes (1981) reviewed studies of teaching and presented major findings from recent large-scale, classroom-based studies. The studies primarily involved instruction in mathematics and reading. She discusses findings concerning the learning environment, management of student behavior, classroom administration, prevention of misbehavior, reaction to misbehavior, preparing students for lessons, student practice, evaluation of student learning, teacher interaction with students, and organization of instructional activities. Barnes concludes with a profile of an effective teacher based upon these studies.

Brophy (1983) and Rosenshine (1983 and 1986) both reviewed effective teaching literature which uncovered strong links between certain teacher actions and desirable student outcomes. Studies have identified specific classroom management practices, instructional techniques, and expectations that appear to help many students raise their reading and math test scores (Brophy, 1982). Group or team learning approaches have also been found to enhance student learning (Slavin, 1980), and Aspy and Roebuck (1982) found teachers' level of interpersonal communication skills relate positively to student attitudes and learning.

### Process

The process of staff development refers to how content is disseminated to the participants and to decisions and actions that are related to planning, implementation and evaluation of both content and the delivery system (Griffin, 1983).

Recent research offers answers to such questions as: what kinds of training processes help teachers, what should be the schedule of training, how large should workshop groups be, which learning activities enable teachers to use new techniques in their classrooms, and what should participants do between workshops (Sparks, 1983)?

Most research on instructional improvement has indicated that inservice programs consisting of a single session are largely ineffective (Lawrence, 1976). Most staff development programs that have an impact on teaching behavior are spaced over time (Berman and McLaughlin, 1978).

Berman and McLaughlin (1976) introduced the concept of "mutual adaptation". This four year, two phase study for the Rand Corporation provided survey data on 293 change - agent projects, and intensive analysis of 29 projects. The study analyzed the effects of specific federal policies on local change processes. The first phase focused on strategies and conditions promoting

change in the schools; the second phase focused on factors influencing the sustaining of change. The findings strongly suggest the importance of the role of the teacher in the change process and indicate the significance of site-to-project effects in the process of mutual adaptation of the school and the intervention. As teachers tried out new practices, they adapted and modified them to fit their unique situations. Berman and McLaughlin found that where these adaptations occurred over time, the likelihood of successful implementation was greater.

One staff development schedule that seems to be effective is a series of four to six three-hour workshops spaced one or two weeks apart. Stallings, Needels, and Stayrook (1978) used this schedule in their study of teacher effectiveness. As a result, teachers improved their behavior on 25 out of 31 classroom management and instructional practices. The experiments of Anderson, Evertson and Brophy (1979) also demonstrated teacher changes resulting from two or more training sessions separated by at least one week.

Research by Stallings (1982) and Joyce and Showers (1980, 1981, 1982) found the importance of selecting the training activities used during staff development. Stallings included five steps in her model: pretest,

inform and discuss, guided practice and feedback, and post test. Joyce and Showers suggested four components: presentation, demonstration, practice, and feedback. Later coaching was added.

The I/D/E/A project studied change in eighteen schools for five years. Bentzen (1974) analyzed the study and noted several types of school processes that were associated with schools in which there was widespread involvement in change. Using both qualitative and quantitative methods, these researchers discovered when the group works effectively the members talk about school issues, act on the issues, follow through on decisions, and reflect on the effects of the action. Bentzen believed that these processes were central to the willingness and ability of school people to effect changes in their own behaviors and in their schools. This process of dialogue, decision making, action and evaluation reflected the school's openness to change.

The literature also indicates that certain processes of staff development are associated with positive outcomes. These effective processes include: voluntary participation; teacher-administrator teaming; teachers serving as trainers; participative governance; coaching; situation-specific supporting materials; availability of technical assistance; and systematic attention by teachers to identifying and acting on problems they

perceive as being important ones (Griffin, 1983). According to Sparks (1983), researchers have found that using most, if not all, of these strategies in a staff development program will lead to implementation of the inservice content.

Several researchers have suggested that certain teacher attitudes and cognitive styles can also affect the implementation process (Sparks, 1983; Shavelson and Stern, 1981). Some investigators through interview and questionnaires have attempted to understand the attitudes underlying the process of teacher change (Sparks, 1983b; Driscoll and Stevens, 1985). Thus, the teachers themselves may be a critical variable in the implementation process. By understanding teacher attitudes and perceptions, some researchers have suggested that communication could be enhanced and there could be higher levels of implementation of staff development content. Even though these research derived practices have been demonstrated to be effective elements of staff development programs, few accounts present concrete evidence of its effect on teachers and students (Wade, 1985). In recent meta-analysis of in-service education, Wade points out that there is no magic formula for effective in-service programs. For maximum effectiveness Wade (1983) suggests the following:

1. Plan programs in which elementary and secondary teachers can participate in training together whenever appropriate.
2. Encourage teachers to become involved in state-, federal-, or university-initiated programs.
3. Offer incentives for participation, such as enhanced status or college credit, whenever possible.
4. Encourage independent study and self-instruction as alternatives to the traditional workshop format.
5. Suggest that instructors set clear goals and take major responsibility for the design and teaching of the class rather than encouraging participants to assume these roles.
6. Use instructional techniques such as observation, micro teaching, video/audio feedback, and practice as alternatives to lecture, discussion, games/simulations, and guided field trips. (p. 71)

The need for more research on staff development is expressed by Sparks (1985) when she suggests a need for micro-analysis of various studies to provide much needed detail and clarification. This indicates that while there is research on staff development models and in-service education, "there is still much work to be done in the area" (Sparks, 1985).

### Institutionalization

The most important piece of research to date on institutionalization is found in the Study of Dissemination Efforts Supporting School Improvements (Crandall and associates, 1982). This is a comprehensive three-year examination of a broad spectrum of federal and state dissemination activities. The study examined four distinct levels of the educational system: federal, state, external agent, and local. At the federal level 15 programs in the U. S. Department of Education were selected for in-depth analysis. At the state level, the study examined the dissemination activities in ten states. In the ten states a close look was taken at 146 school and school districts. However, this research effort went one step further and conducted an intensive field study of twelve sites drawn from the survey sample and varying along six dimensions: program sponsorship, geographic region, setting (e.g., rural, small city), year of initial implementation, current status (ongoing, expanding, dwindling), program type and program content.

The conceptual model underlying the field research roughly paralleled that of the survey, although it was directed more at latent issues and conflicts characterizing the everyday life of the school as well as the transformations undergone by the innovations as teachers other than the initial cadre took them up. The

34 research questions forming the basis for field study data collection generally overlapped and mapped well onto the main foci of the survey. The research questions dealt with many aspects of the school improvement process: the innovations themselves; the local context; the assistance provided; "transformations" in the innovation, the user, and the school; and the intermediate and final outcomes of the effort, including institutionalization. Field researchers visited local sites three to seven times for a total of four and one-half to eleven days. Across all 12 sites, data were collected through 440 formal and informal interviews, 75 observations and review of 259 documents. Raw survey data were also fed into later fieldwork (Crandall, 1982).

It was through the analysis of the data obtained in this study that enabled the researchers to look carefully at factors that predicated institutionalization and develop models. Data analysis proceeded from transcribed field notes to individual case reports then on to cross-site analyses. A variety of conventional and experimental techniques for formatting, reducing, displaying and analyzing sets of qualitative data -- including casual and cluster analyses -- were applied to the field study data set (Crandall, 1982).

Miles (1983), one of the primary researchers,



described institutionalization as being either high or low, based on the "casual network" he drew from the 12 sites. These institutionalization scenarios played themselves out in four different patterns. (1) The strongest and most frequent was that of mandated, stable use, where there was an explicit system-wide commitment for continued use of the innovation, and provision to stabilize that use. (2) Without such a commitment at the system level, there was a second scenario where strong assistance and support combined to develop user mastery and commitment, hence stability and moderate to high institutionalization. In this scenario, administrative pressure during implementation was not influential and was, in fact, counterproductive (Crandall, 1982).

It was also clear that institutionalization could fail, either by (3) vulnerability, where administrators had not done enough to guard the innovation against resistance or environmental turbulence, or by (4) indifference, where administrators simply did not care enough to supply the assistance and protection the innovation needed if it was to survive (Crandall, 1982).

Looking at these four scenarios, Miles and associates (1982), extracted a list of twenty key variables that seemed to be involved, examining them in a sites-by-variables, predictor-outcome matrix to see how each contributed to high or low results. They then

assembled the most crucial into a general model. The empirical study showed, in brief, that institutionalization must be approached by providing supports and by warding off threats (Miles, 1983).

Miles explains the Data-Grounded Model of Institutionalization in the following manner: "The story begins with the administrative commitment." That's a necessary, but not the only condition for high institutionalization. Miles' analysis suggests clearly that high administrative commitment tends to lead to both administrative pressure on users to implement the innovation, along with administrative support, which often shows up in the form of assistance to users. Both the pressure and the assistance tend to lead to increased user control. The harder people worked at the innovation, the more committed they grew; that commitment was also fueled by increasing technical mastery of the innovation.

Commitment and mastery both lead toward increasing stabilization of use; the innovation has "settled down" in the system. That stabilization is also aided if administrators decide to mandate the innovation, which also naturally increases the percentage of use to something approaching 100 percent of eligible users; that in itself decisively

encourages institutionalization. But here is one more critical factor. Where administrators were committed, they also took direct action to bring about organization change - changes beyond those the stabilized innovation had already brought. In particular, they worked at the "passages" and "cycles" by altering the structure and approach of inservice training, wiring the innovation's requirements into job descriptions, making new budget lines, appointing permanent coordinators for the innovation, and making sure that the needed materials and equipment would continue to be available in succeeding years. (Miles, 1983, p. 18)

Miles continues: All these supports for institutionalization made empirical sense in our sites. But the lesson of our low-institutionalizing sites is that positive supports are not enough. It's necessary to ward off threats to the durability of the innovation. In our sites, these threats arose from two sources. First, there was environmental turbulence, usually in the form of funding cuts or losses, but sometimes in the form of shifting or shrinking student populations. Second, we saw career advancement motivation, the genuine desire of professionals to move on the new

challenges. Both served as threats to institutionalization, because they destabilized both program staff and leadership. So job mobility, whether driven by advancement motivation or by funding cuts is a threat to institutionalization. The innovation must be buffered, protected against these threats or it will become highly vulnerable. Once again, organizational change is critical. If structural and procedural changes have occurred, vulnerability is reduced. (p. 18, 19)

Miles concludes that what is required for institutionalization is strong attention of administrators to stabilizing and supporting the innovation, extending its use to a large group, and making provisions to protect the innovation against the threats of personnel turnover that are endemic in schools. Making clearcut changes in organizational structure, rules, and procedures seems essential both to stabilize the innovation and to buffer against turnover (Miles, 1983).

#### Leadership

From the literature available on change and innovations in the school, we know the principal is a key to the success or failure of a program. In order to understand why one principal's behavior is more effective

than another's, it is necessary to look at the research literature on leadership. From this body of knowledge, it is possible to gain insights into effective leadership.

The following sections will define leadership, discuss theories of leadership, and trace the progress of the development of leadership studies.

#### Definition of Leadership

Leadership has been defined in a variety of ways based on how the concept of leadership and its functions were viewed. Some definitions focused on leadership as group process, the personality of the leader, the exercise of influence, the art of inducing compliance, the leader's acts or behaviors, a form of persuasion, an instrument of goal achievement, an effect of interaction, a differentiated role, or the initiation of structure (Stogdill, 1974).

The number of definitions available demonstrates that there is little congruence as to a general definition of leadership which could be accepted by all. The following definitions are typical examples:

To lead is to engage in an act that initiates a structure-in-interaction as part of the process of solving mutual problems (Hemphill, 1967).

Leadership is power based predominately on personal characteristics, usually nominative in nature (Etzioni, 1961).

The leader is the individual in the group given the task of directing and coordinating task-relevant group activities (Fielder, 1967).

Leadership in organization involves the exercise of authority and the making of decisions (Dubin, 1961).

Leadership is the initiation of a new structure or procedure for accomplishing an organization's goals and objectives or for changing an organization's objectives (Lipham, 1964).

Leadership is the process of influencing the activities of an organized group toward goal setting and goal achievement (Stogdill, 1950).

In describing the nature and meaning of leadership, Daniel Katz and Robert Kahn (1966) identify three major components of the concept: 1) an attribute of an office or position; 2) a characteristic of a person; and 3) a category of actual behavior. A principal or superintendent occupies a leadership position. There are other individuals in school organizations who are not in formal positions of authority, yet who do possess and do wield influence and power. However, individuals who occupy a leadership position do not always use that power and influence, and there are those who exercise

leadership in one position or situation but not in others. Leadership also implies followers; there can be no leader without followers. Nevertheless, the situations under which different groups and individuals will follow vary considerably. Thus, the concept of leadership remains elusive because it depends not only on the position, behavior, and personal characteristics of the leader, but also on the character of the situation (Hoy and Miskel, 1978).

#### Theories of Leadership

One of the first theories attempted to explain leadership on the basis of heredity. The Great Man theory proposed that a leader was endowed with superior qualities that differentiated him from his followers and that it was possible to identify these qualities (Stogdill, 1974). This theory provided one of the earliest structures for defining and understanding leadership. In order to accomplish this, researchers, assuming the validity of the Great Man theory, gave rise to trait theories of leadership which explained leadership in terms of personality and leadership characteristics (Stogdill, 1974).

The search for personality has been remarkably unsuccessful. Many of the traits tentatively isolated as crucial in one study were contradicted in others. These

studies were also limited because of relationships of some of the personality traits differed depending on the type of measuring technique employed (Hoy and Miskel, 1978).

The study of leadership progressed from a simple view of the Great Man theory to a more complex view known as the Environmental theory. These proponents proposed that leadership was based upon the variables of the leader's interaction with people and with situational demands. Stogdill (1974) in his review of the relevant research stated: "The evidence suggests that leadership is a relation that exists between persons in a social situation, that persons who are leaders in one situation may not necessarily be leaders in other situations" (p. 64).

The next theory to develop was the Interaction-Expectation theory. Here the debate continued as to the inclusion/exclusion of social interaction as a variable. The factor which distinguished this movement was the manner in which a leader interacted with his followers and also the functions of the role of the leader. Debate centered around which style would be best: authoritarian versus democratic, task versus relations, theory X versus theory Y. Research studies were conducted and theories were developed solely for the purpose of determining which style would be best.



The Task Oriented movement viewed interaction between leader and follower as necessary to promote the goals of the organization. Followers were seen as servants with the sole purpose of accomplishing the task. Concentrating on the organization's needs and goals, this theory ignored the human nature of the members which made up the organization (Stogdill, 1974).

Frederick Taylor's time and motion studies of the early 1900's focused on improving efficiency through task analysis and provision of monetary incentive work plans for employees (Hersey and Blanchard, 1973). Similarly, Douglas McGregor's Theory X emphasized control of people as necessary to accomplish the organizational goals (McGregor, 1957). In both of the studies, people were not seen as viable resources but just as a means to be manipulated and directed, to achieve an end.

On the other side, the people oriented movement placed emphasis on the importance of human interaction as a factor of leadership. Associated with this movement and forming the basis of their assumptions were the theories and research of Elton Mayo and the Hawthorne Studies (Roethlisberger, 1941), McGregor's Theory Y (McGregor, 1957), the Human Relations Movement, and a Democratic Style of Leadership (Hersey and Blanchard, 1972).

According to the people oriented movement, management must now direct itself toward creating opportunities, releasing potential, removing obstacles, encouraging growth, and providing guidance for the individual. Not only has management's role toward its people changed, but also the interaction role of the employee with management has changed. Through this democratic style structures are established to provide participation in decision making by employees (McCoy and Shreve, 1981).

The research which followed after the two dimensional research described above has taken on a more sophisticated look at leadership. This research recognizes the complexity of leadership and is characterized as showing leadership styles together rather than diametrically opposed.

In 1939 the first major empirical research study on the effects of various styles of leadership were reported by Lewin, Lippitt and White. Even though the authors reported positive findings in support of one leadership style alone, the study was significant in that it was the first empirical evidence that provided for the acceptance and recognition that attributes of various styles could have positive effects on the organization and the people (McCoy and Shreve, 1981).

With the Michigan Leadership Studies (Katz, Macoby

and Morse, 1950) and the Ohio State Leadership Studies (Shartle, Stogdill, and Campbell, 1949), the description of leadership changed from the one best style concept. These studies identified two separate factors in style, task and relations, as both playing a significant part in determining a leader's style.

The Michigan Studies identified the factor as employee orientation and production orientation. These two terms paralleled the leader behavior continuum of democratic/relationship and authoritarian/task proposed by other researchers.

The Ohio State Leadership Studies gathered data about leader behavior through the Leader Behavior Description Questionnaire (LBDQ). These studies identified the two factors as initiating structure and consideration. A person's style was still classified but more detail was provided as the individual was described as high to low in consideration and high to low in initiating structure.

The research of Robert Blake and Jane Mouton (1967) also recognized the two dimensional factors of describing style. Their Managerial Grid proposed five leadership styles based on the two dimensions of the Ohio Studies. These researchers also developed a model of leadership style which described an individual style in varying degrees of the two factors.

Even though researchers have described leader behavior as fitting different dimensions, the old conflict of "which is best or ideal" was still prevalent. Now the difference was that researchers were suggesting an equal mix of task orientation and human relations was the best style.

Another phase of research on leadership focused on a collaboration of the best of all movements to provide the most effective leadership possible. This phase can be characterized by two statements: effectiveness can be learned, and effective leadership is contingent or situational.

Research theories differed in how to attain effectiveness. Fielder (1977) believed that it was necessary to fit the right person to the demands of the situation at a given time. His Contingency Model of Effective Leadership emphasized accurately diagnosing the situation and the true dimensions of leader member relations, task structure and position power, and then matching a leader whose style of behavior would be effective in that situation. Fielder stressed that an individual should become aware of his style, develop it and through diagnosis of a particular situation, be able to determine his own degree of effectiveness. If a situation was not congruent with an individual leader's

style behavior, he then proposed certain strategies which the leader could employ in order to influence the situation toward a direction more congruent to his/her style resulting in higher leader effectiveness (McCoy and Shreve, 1981).

Argyris, Vroom, Hersey and Blanchard held another viewpoint. They felt it was necessary to determine the needs of the situation and then have the leader adapt to the needs of the situation at that given time.

Argyris (1957) developed an Immaturity-Maturity Theory which proposed that there existed eight changes taking place in a maturing adult. In reference to leadership training, Argyris proposed that a leader would be able to change his style of behavior in order to better meet the needs of maturing individuals.

Using Argyris' basic theory, Paul Hersey and Kenneth Blanchard built a model for understanding and improving leadership. Their model used the task interpersonal dimension and added the dimensions of leader adaptability and effectiveness. This supported the fact that there was no single, all purpose leader style, but rather that successful leaders must be able to adapt their behavior to meet the demands of the maturity level of the followers.

This model represented an attempt to provide leaders with an awareness that leader behavior was not static but

must be continually adapted to meet the constantly changing needs and maturation of the followers. Effectiveness was dependent upon this continuing adaptation of style behavior on the leader's part (McCoy and Sherve, 1981).

Victor Vroom and Phillip Yetton proposed that leaders could improve their effectiveness through training in a decision-making model. Through their research, they developed a prescriptive, decision-making model with which leaders could become trained in order to improve their effectiveness (Vroom and Yetton, 1973). Vroom and Yetton believed that leaders could learn to behave differently through training in decision making.

The above research and theories of Argyris, Fielder, Vroom and Yetton, and Hersey and Blanchard supported the beliefs that effectiveness could be learned. Each provided models for leader skill development through leadership training. Leadership training recognized the need for both structure and interpersonal dimensions for effective leadership. This understanding of the complexity of leadership indicated that leadership behavior is dependent on the behavior of both the subordinates and superiors of that leader. The behavior of these members of the organization was dependent on both personal and organizational motivational factors.

Therefore, leadership behavior had to include response to the human nature and motivational forces present in any given situation.

Insights into human motivation for leadership was provided by Abraham Maslow and Frederick Herzberg. Maslow presented a hierarchy of needs of the individual. He looked at the development of the individual as being based on a progression through a hierarchy of needs an individual seeks to fulfill. The progression started with physiological needs, followed by safety, love, esteem and finally, self-actualization.

Frederick Herzberg (1968) went a step further with his Motivation Hygiene Theory and related employee motivation specifically to work. Herzberg collected data on factors which brought satisfaction and dissatisfaction to workers on their jobs. Based upon his findings, he determined that two kinds of needs affected a person's satisfaction/dissatisfaction on the job -- hygiene factors and motivators. Hygiene factors included such things as money, status, and security. Motivators included responsibility, achievement, professional growth, and recognition.

With this insight on worker motivation, leadership theorists have been able to provide further support for the acceptance of one situation as being distinct from another and also the recognition that leadership was more

complex with attention needed for more variables; that all leadership situations would not be the same at all times (McCoy and Shreve, 1981).

Leadership research and theory have indicated a recognition of the evolving complexity of the leadership phenomenon. It has been determined that it is not a leader's style, characteristics, or traits alone which will increase effectiveness. One must also look at how a leader interacts with the individual within the organization (McCoy and Shreve, 1981).

Owens (1976) makes this statement about leadership: Leadership is a highly dynamic relationship between an individual and other members of a group in a specific environment. What counts is not so much the traits that the leader may or may not possess as it is the kind of thing he does. The focus, therefore, is not so much upon the generalized effect of the leader-group relationships (that is called leadership) as it is upon the way in which the leader exercises his influence (that is leader behavior). (p 125)

#### Summary

This chapter attempted to examine the literature for those studies relating to this study. In summary, the following observations can be made.



Effective instructional practices have been identified through research as having a significant impact on student achievement gains. These practices are best conveyed to teachers through a staff development model which embraces the presentation, demonstration, practice, feedback and coaching process. In order for staff development to become institutionalized, administrators must give strong attention to stabilizing and supporting the program and protecting it against threats. Finally, a principal's leadership style must adapt to the demands of a situation.

## Chapter 3

### Methodology

The purpose of this study was to identify the degree of principal leadership style adaptability and teacher use of effective teaching skills in schools where a staff development program in effective teaching skills has been institutionalized.

Null Hypothesis - In a school division where a staff development program in effective teaching skills has become institutionalized, teacher use of effective teaching skills will not be significantly different in schools with significantly different degrees of principal leadership style adaptability.

Chapter 3 contains an explanation and description of the methodology used to accomplish this purpose. The following sections are included: subjects, description of the instruments, design and procedures, and data analysis.

#### Subjects

The population of the study included elementary principals and teachers in a urban school system in the state of Virginia with an institutionalized staff development program for effective teaching skills. The population was limited to the schools of elementary principals who had been assigned to their respective

schools for one year or more. The restricting of the population of principals was designed to eliminate those variables associated with the adjustments to a new school and to unfamiliar patterns of behavior of supervisory personnel. The selection of the principal population was made by requesting the Director of Staff Development in the school district to identify elementary principals of schools with a K-5 grade span. It was determined 11 principals in the school division met the selection criterion of having been assigned to their respective school for one or more years.

Classroom teachers who had successfully completed the division-wide staff development program in effective teaching skills comprised the teacher population to be observed. The selection of these teachers was made by asking each principal to identify, for the researcher, those teachers who met this requirement. A maximum of 15 teachers were identified in each school to be observed and rated during the second phase of the study.

A letter describing the present study and an approval letter from the school division's Department of Research was mailed to each of the 11 principals. (See Appendix A) In the covering letter, the principals were told that the research study consisted of two phases. The first phase required the completion of the Leader

Effectiveness and Adaptability Description (LEAD) by teachers. If their school was selected, teachers who had completed the effective teaching skills program would be observed during the second phase.

It was anticipated that all 11 schools would participate in the first phase of the study. The school identified as having a principal with the highest leadership adaptability and the school identified as having the principal with the lowest leadership adaptability would then participate in the second phase of classroom observations.

After several follow-up phone calls, three schools agreed to participate. The other eight schools did not elect to participate because seven were involved in self studies for school evaluation and accreditation. One school principal indicated he was retiring and did not want his school to be a part of the study. It was then decided to include all three schools who had agreed to participate in the second phase of the study. Further attempts to get the eight non-participating schools to complete only phase one of the study were not successful.

Principals in each participating elementary school were asked to randomly select a maximum of 15 teachers to complete the Leader Effectiveness and Adaptability Description instrument. Then the elementary principals

were requested to identify all teachers in their schools who had completed the staff development program in effective teaching skills. The researcher selected a maximum of 15 teachers to be observed from the identified group. Selection of teachers was done in a random manner but in a way that facilitated observation.

#### Instrumentation

Two instruments were used in this study. To measure principal leadership adaptability, the Leader Effectiveness and Adaptability Description, developed by Hersey and Blanchard (1973), was used. To measure teachers use of effective teaching skills, the Instructional Skills Observation Instrument, developed by Wolfe (1982), was used.

#### Leader Effectiveness and Adaptability Description

The LEAD-Self and LEAD-Other instruments, developed by Hersey and Blanchard (1977), were developed to measure three different aspects of leaders in terms of the situational leadership theoretical model:

- .leadership style (primary and secondary)
- .style range (i.e. which leadership styles characterized the range of managerial behavior)
- .style adaptability (the ability to alter style to adapt to varying maturity levels).

The LEAD contains twelve work-related situations. The twelve situations represent three instances of four

maturity states: low maturity, low to moderate maturity, moderate to high maturity, and high maturity. Four alternative actions represent the four basic styles of leader behavior: high task-low relationship, high task-high relationship, high relationship-low task and low relationship-low task. Respondents are requested to select the style which most closely describes the behavior of the principal in a given situation. A copy of LEAD is found in Appendix B.

The original pool of items for the LEAD was derived from structured interviews and discussions with managers, expert managerial consultants, and followers. The interviews and discussions were conducted by two organizational development experts. These broad-based sources generated 48 possible items. The 48 item pool was then analyzed by a committee consisting of professors, experts, trainers of management and organizational behavior, as well as managers and practitioners. Item eliminations and revisions were based upon the content of the item and the extent to which the item represented the corresponding aspect of the Situational Leadership Model. The resulting item pool consisted of 12 situations across four maturity states. (Greene, 1980, p.4)

Standardization procedures and normative information were reported by Greene (1980). The LEAD-Self was standardized on the responses of 264 managers from North America. Three types of scores for each style and adaptability measured are provided by the LEAD: raw scores, percentile ranks, and normal curve equivalent (Greene, 1980).

The 12 item validities for the adaptability score ranged from .11 to .52, and 10 of the 12 coefficients (83%) were .25 or higher. Eleven coefficients were significant beyond the .01 level and one was significant at the .05 level (Greene, 1980).

Stability data reported by Greene (1980) was moderately strong. In two administrations across a six-week interval, 75% of the managers maintained their dominant style and 71% maintained their alternate style. The coefficients were both .71 and each was significant ( $p < .01$ ). The correlation for the adaptability scores was .69 ( $p < .01$ ).

"The logical validity of the scale was clearly established. Face validity was based upon a review of the items and content validity emanated from the procedures employed to create the original set of items" (Greene, 1980, p. 1).

Greene (1980) conducted several empirical validity studies. Correlations with demographic/organismic variables of sex, age, years of experience, degree and management level, were generally low, indicating the relative independence of the scales with respect to these variables. In another study by Greene (1980), a significant ( $p < .01$ ) correlation of .67 was found between the adaptability scores of managers and the independent ratings of their superiors.

#### The Instructional Skills Observation Instrument

Patricia Wolfe (1976) developed the Instructional Skills Observation Instrument to examine the teacher's ability to effectively apply the instructional skills elements of set, instruction, guided practice, and independent practice. This instrument is based on the Madeline Hunter training model and reflects the elements taught in an effective teaching skills training program.

The instrument has been constructed to assist the observer to objectively decide whether certain elements are included in a lesson. Observers must decide if there is a need for the use of an element, if so, is it acted upon and, if used, is it used effectively. On the ISOI each instructional element is broken into several components which receive ratings from zero (low) to four (high). The total points possible is 88. In this study



the degree of effective teacher use of these skills was operationally defined as the total score which the observed teacher received on the instrument. The ISOI was found to be applicable to all content areas, all age groups or ability levels, and all sizes of instructional groups or various classroom organizations (Stallings, 1984).

Jane Stallings (1984) reported use of the Instructional Skills Observation Instrument to assess teacher implementation of the Napa County Instructional Skills Program over a period of four years. The interrater agreement among the observers using the ISOI during the 1st year was .83. Interrater agreement is computed by dividing the larger's score of an observer by the smaller score of an observer (Borg and Gall, 1983) and should not be confused with interrater reliability. The ISOI was revised before being used to collect the data for the second, third, and fourth years of the Napa Study.

While the instrument is widely used in the literature, no studies were found updating reliability and validity characteristics. A copy of the ISOI is found in Appendix C.

#### Design and Procedures

The variables in the present study were principal leadership style adaptability and teacher use of

effective teaching skills. The principal's leadership style adaptability was derived from the Leader Effectiveness and Adaptability Description (Hersey and Blanchard, 1973) as perceived by teachers. The teacher use of effective teaching skills was obtained from the Instructional Skills Observation Instrument (Wolfe, 1982) as recorded by trained observers.

The variables of this study were not susceptible to experimental manipulation therefore necessitating a causal-comparative study (Borg and Gall, 1983).

T-test and analysis of variance were used to test the null hypothesis. Specifically, the t-test was used to determine the statistical significance in the means of the leadership style adaptability variable and analysis of variance was used to determine whether teacher use of effective teaching skills differed significantly.

In the first phase of the study each of the three principals of the elementary schools involved in the study was sent by mail a package which contained the LEAD instrument, self-addressed, stamped envelopes, and an appropriate cover letter. The LEAD instruments were identified by a code known only to the investigator. Instructions were printed on the front cover of the instrument and a letter to each teacher was attached. (See Appendix D)

Each principal was requested to select fifteen teachers to complete the instrument. The researcher specifically asked the principal to randomly place the instrument in teacher mailboxes. The research instrument was then to be returned by the teacher to the investigator in the self-addressed stamped envelope. In order to minimize the nonresponse bias, one follow-up phone call was made to each principal at the end of three weeks. The principals were asked to encourage teachers to assist the researcher in her study. Forty-seven percent of the LEAD instruments were returned completed and used in this study.

During the second phase of the study, each principal was contacted again and asked to provide schedules for all teachers who taught mathematics and who had completed the training program for effective teaching skills. Teachers were not identified by name.

The investigator scheduled a maximum of 15 observations in each school during a two week period. School principals were notified of the day observations were to take place but did not know the teacher or class period. Forty observations were completed but only thirty, or 75%, were used in the study. Six observations were not used because students were being tested, two because of fire drills, and two because the classes were interrupted for special programs.

The observers were two graduate students at The College of William and Mary in the School of Education. Both had taught school previously. One had been trained in the Madeline Hunter Model of effective instruction. Observer training in the effective teaching skills program and use of the ISOI took place on two separate dates. After viewing a videotape of a teacher interrater agreement was .97. During the actual classroom observation, both observers rated the same teacher, interrater agreement was .94.

#### Data Analysis

The LEAD instruments completed by respondents were scored by the methods prescribed by its authors, Hersey and Blanchard (1973). The total raw score on the Instructional Skills Observation Instrument for each teacher was determined by summing the ratings on each of the four skill areas.

The scores from the LEAD instrument were analyzed by using a t-test using the Statistical Package for Social Sciences (Nie, Hull, Jenkins, Steinbrenner and Bent, 1975), to determine if there was a significant difference in the leadership adaptability of the principals. The ISOI scores were analyzed by analysis of variance using SPSS (Nie, et al., 1975), to see if there was a statistically significant amount of

variability between the groups of teachers using effective teaching skills at each school.

This chapter has presented the methodology used in this study. The next chapter presents a discussion of the findings of this study.

## Chapter 4

### Findings

The results of the analysis of the data of this study will be presented in chapter 4. The findings will be presented as they relate to the following null hypothesis:

Null Hypothesis - In a school division where a staff development program in effective teaching skills has become institutionalized, teacher use of effective teaching skills will not be significantly different in schools with significantly different degrees of principal leadership style adaptability.

#### Selection of Subjects

The population of the study included elementary principals and teachers in an urban school division in the state of Virginia with an institutionalized staff development program for effective teaching skills. The population was limited to the schools of elementary principals who had been assigned to their respective schools for one year or more. This restricting of the population of principals was designed to eliminate those variables associated with the adjustments to a new school and to unfamiliar patterns of behavior of supervisory personnel. The selection of the principal population was made by requesting the Director of Staff Development in

the school division to identify elementary principals of schools with a K-5 grade span. It was determined 11 principals in the school division met the selection criterion of having been assigned to their respective school for one or more years. Three of these schools agreed to participate in the study.

Classroom teachers who had successfully completed the division-wide staff development program in effective teaching skills comprised the teacher population to be observed. The selection of these teachers was made by asking each principal to identify, for the researcher, those teachers who met this requirement. A maximum of 15 teachers were identified in each school to be observed and rated during the second phase of the study.

Fifteen teachers, randomly selected, in the three schools were requested to complete the Leader Effectiveness and Adaptability Description (LEAD) which described the behavior of their principal in different situations. Twenty-one, 47%, teachers responded with completed forms.

The 12-item instrument measured separate aspects of leaders: leadership style, range and style adaptability. Style adaptability scores were used in this study. Data collected from the LEAD was scored for leader style adaptability using directions from the authors, Hersey

and Blanchard (1973). The data provided three types of scores for the adaptability measure: raw scores, percentile rank and normal curve equivalent (NCE). The raw scores were computed by summing the response values which correspond to the option selected for each situation.

The raw scores may be converted to corresponding percentiles based upon a standardization process completed by John Greene (1980). The normal curve equivalents represent deviation standard scores derived from the cumulative frequency distribution of raw scores (Greene, 1980). The NCE is a normalized standard score with a mean of fifty (50) and a standard deviation of 21.06 (Greene, 1980). The leadership style adaptability scores for each school are displayed in Tables I, II and III.



Table I

Leadership Adaptability Scores for School A

Raw Score	Percentile	Normal Curve Equivalency
12	67	59
14	81	68
10	52	51
13	73	63
19	98	93
16	89	76
6	26	36
Mean = 12.86		N = 7

Table II

Leadership Adaptability Scores for School B

Raw Score	Percentile	Normal Curve Equivalency
0	3	10
8	38	44
10	52	51
-1	2	7
8	38	44
5	21	33
4	15	28
Mean = 4.86		N = 7

Table III

Leadership Adaptability Scores for School C

Raw Score	Percentile	Normal Curve Equivalency
4	15	28
1	4	13
-7	1	1
13	73	63
15	85	72
10	52	51
5	21	33

Mean = 5.85

N = 7

The raw score data from the LEAD were analyzed for statistical significance by using the t-test for difference of means according to the second edition of the Statistical Package for the Social Sciences (Nie, et. al., 1975).

Table IV presents the t-test analysis of the data from School A and School B. The mean adaptability score for School A was 12.857 with a standard deviation of 4.180 and a standard error of 1.580. The mean adaptability for School B was 4.8571 with a 4.180 standard deviation and standard error of 1.580. The t-value was 3.58 with 12 degrees of freedom and is significant at the .004 level of confidence.

Table IV  
Results of the Comparisons of Means for  
Schools A and B Using the t-Test

	Mean	Standard Deviation	Standard Error
School A	12.8571	4.180	1.580
School B	4.8571	4.180	1.580

t = 3.58

df = 12

p .004

Table V presents the results of the t-test analysis of data from School A and School C. The mean adaptability score for School A was 12.857 as opposed to 5.8571 for School C. School A had a standard deviation of 4.180 and standard error of 1.580 while the standard deviation for School C was 7.581 with a standard error of 2.865. The t-value was 2.14 with 12 degrees of freedom and is significant at the .05 level of confidence.

Table V  
Results of the Comparisons of Means for  
Schools A and C Using the t-Test

	Mean	Standard Deviation	Standard Error
School A	12.8571	4.180	1.580
School C	5.8571	7.581	2.856

t = 2.14

df = 12

p .05

Table VI presents the t-test analysis of the data from School B and School C. The mean adaptability score for School B was 4.857 and 5.857 for School C. This yielded a t-value of -0.31 with 12 degrees of freedom which is significant at the .77 level of confidence.

Table VI  
Results of the Comparison of Means for  
Schools B and C Using the t-Test

	Mean	Standard Deviation	Standard Error
School B	4.8571	4.180	1.580
School C	5.8571	7.581	2.856

t = -0.31

df = 12

p .765

The results of the three t-tests indicate that the principal of School A has a statistically higher leadership adaptability score than the principals of either School B or School C.

Teachers in the three schools, who had completed the staff development program in effective teaching skills, were randomly selected to be observed. Fifteen observations were scheduled in each school, a total of forty observations were completed but, as discussed in Chapter 3, only thirty (75%) were acceptable for use.

The Instructional Skills Observation Instrument (ISOI) was used by the classroom observers to record the teachers' use of effective teaching skills. The interrater agreement on the ISOI during observer training

was .94. During actual classroom observation the interrater agreement was .97.

Data collected from ISOI was scored using the criteria set forth in the instrument manual by the author, Patricia Wolfe (1982). The data provided raw scores in four specific areas: set, instruction, guided practice, and independent practice. Total possible points a teacher could receive on the ISOI was 88.

Table VII presents teacher observation scores from the three schools. The raw data were analyzed by using a one-way analysis of variance according to the second edition of the Statistical Package for the Social Sciences (Nie, et. al., 1975). This was to determine whether the schools differ significantly among themselves.

Table VII

Instructional Skills Observation Instrument Scores

School A	School B	School C
87	57	79
87	79	60
75	53	54
70	60	73
82	82	62
80	72	52
87	72	54
83	73	56
70	66	65
69	60	53

N = 30

Table VIII presents the results of the analysis of variance of School A and School B. Data analysis reveals a significant difference in the use of effective teaching skills. The f-ratio was 7.438 which is significant at the .0138 level of confidence.

Table VIII

Results of the Comparisons of Means for  
School A and B Using the Analysis of Variance

	Degrees of Freedom	Sum of Squares	Mean of Squares
Between Groups	1	616.05	616.05
Within Groups	18	1490.9000	82.8278

F-ratio = 7.438

p .0138

Table IX presents the results of the analysis of variance of Schools A and C. Data analysis from School A and School C show a significant f-ratio of 24.46 at .01 level of confidence.

Table IX

Results of the Comparisons of Means for  
School A and C Using the Analysis of Variance

	Degrees of Freedom	Sum of Squares	Mean of Squares
Between Groups	1	1688.9	1688.9
Within Groups	18	1242.5	69.027

F-ratio = 24.46

p < .01

Table X presents results of the analysis of



variance between School A and C. Table X shows that there is no significant difference in the use of effective teaching skills in School B and School C. The f-ratio is 2.447 and is significant at the .135 level of confidence.

Table X

Results of the Comparisons of Means for  
School B and C Using the Analysis of Variance

	Degrees of Freedom	Sum of Squares	Mean of Squares
Between Groups	1	217.80	217.80
With Groups	18	1602.0000	89.0000

F-ratio = 2.447

p <.1351

The above results leads this researcher to reject the null hypothesis as stated.

Chapter 4 has summarized the findings of the study. In Chapter 5, conclusions will be drawn based on these results and implications discussed.

## Chapter 5

### Conclusions and Implications

This chapter will present a review of the findings and conclusions drawn from these findings. Implications of the study with regard to school leadership and future research will be discussed. The chapter includes the following sections: introduction, limitations, conclusions, implications, and summary.

#### Introduction

This study was undertaken to investigate principal leadership style adaptability and teacher use of effective teaching skills in a school division with an institutionalized staff development program in effective teaching skills.

A review of the relevant literature and related research revealed that research on effective teaching has evolved from descriptive studies characterizing effective and ineffective teachers (Good and Grouws, 1979; Brophy and Evertson, 1974; Stallings, 1974); to correlational studies relating teaching skills to student growth (Evertson, et. a., 1980); and finally to the experimental testing of the use of effective teaching skills in controlled situations (Good and Grouws, 1980; Fitzpatrick, 1982; Anderson, Evertson and Brophy, 1979; Stallings, 1980). From these studies, successful teacher

practices have been identified and models of effective instructions developed.

Research in the field of staff development established certain elements that should be included in a training program (Stallings, 1982; Joyce and Showers, 1980, 1981 and 1982). In addition, studies found that the implementation of a staff development program varied with content, context, the process of presentation, and teachers themselves (Berman and McLaughlin, 1978).

A survey of literature concerning leadership theory revealed effective leadership is dependent on a leader's behavior with followers during interaction and on leadership style adaptability (Hersey and Blanchard, 1977; Argyris, 1977; and Fielder, 1977). Furthermore, research on innovations in schools has concluded that the principal is a critical variable in the success or failure of implementation of planned change in schools (Miles and Huberman, 1982; Crandall and associates, 1982).

Two instruments were selected to test the hypothesis in this study: a measure of leadership style adaptability, Leader Effectiveness and Adaptability Description, developed by Hersey and Blanchard (1973) and a measure of effective teaching skills, Instructional Skills Observation Instrument, developed by Wolfe (1982). A sample of 11 schools in an urban

school division was selected as the sample population. The principals of the subject elementary schools were requested to participate. Several follow-up phone calls were made to those who did not respond positively. A total of three schools agreed to participate in the study. Forty-seven percent of the teachers responded to the LEAD instrument, and 75% of the observations were usable. Some observations were not used because teachers were testing, fire drills interrupted observations or class periods were shortened because of special programs.

Analysis of the test data shows that there was a statistically significant difference in leadership style adaptability of principals, with School A having a higher degree of adaptability. In addition, a statistically significant difference was found in teacher use of effective teaching skills, with School A having the greater use of skills. More detailed discussion of the findings will be provided in the conclusion section of this chapter.

#### Limitations

The findings and recommendations of this study concerning principal leadership style adaptability and teacher use of effective teaching skills are limited because the researcher does not know whether leadership style adaptability is the cause of teacher use of

effective teaching skills or just a contributing factor.

This study was conducted in a naturalistic as opposed to an experimental setting. Therefore, many variables that might have been controlled in the laboratory, were not controllable in this study. When interpreting the results of this study the following limitations must be considered:

1. The small sample size and selection of the sample,

2. The lack of generalizability to other school districts of other geographical areas and sizes,

3. Reliability and validity of the observational instrument,

4. Reliability and validity of the instrument to determine leadership style adaptability,

5. Lack of control over the staff development program with respect to:

- a. the varying ability of trainers,

- b. time lapsed since teachers were trained,

- c. the evolution and change in the training model over ten years.

6. The lack of long-term data on the use of effective teaching skills,

7. The use of only elementary teachers in mathematics classes, and

8. The lack of control over such variables as age, sex, tenure, skill, and experience.

In designing this study, the researcher had the opportunity to conduct the study in the school division where she is presently employed. In order to reduce bias it was decided to select a school division which met design requirements but where the researcher was not known. The school division selected is the eighth largest division in Virginia. It was anticipated that the size of the school division would allow for a sufficient sample size.

However, this attempt to reduce bias resulted in other threats to the design. Specifically, in securing approval from this school division, there was reluctance on the part of principals to participate because of the sensitive system of leadership and the fact that the study may reflect negatively on a principal's leadership. Additionally, teachers may be reluctant to assess their principal's leadership because of the possibility of the principal discovering the results; and, the process used to select teachers who assessed principal leadership made follow-up difficult, if not impossible. These reasons greatly reduced the sample size.

Borg and Gall (1983) suggest "it is desirable to have 15 cases in each group to be compared in causal-comparative research" (p. 251). However, they also

concluded "it is virtually impossible to obtain the cooperation of all subjects selected in volunteer samples". The inability to secure information from subjects has presented a major threat to this study.

#### Conclusions

The present study was conducted in an urban school division in Virginia that had a division-wide staff development program in effective teaching skills. This effective teaching skills program had been in place for 10 years and met the requirements for institutionalization according to Miles (1982).

The participants included elementary principals and elementary teachers. No inference should be made beyond those variables included in the study, namely, principal leadership style adaptability and teacher use of effective teaching skills. The findings presented should not be generalized to other types of staff development programs and will need to be supported by further studies in other areas of staff development.

The following null hypothesis was tested in this study:

Null Hypothesis - In a school division where a staff development program in effective teaching skills has become institutionalized, teacher use of effective teaching skills will

not be significantly different in schools with significantly different degrees of principal leadership style adaptability.

As indicated in Chapter 4, the null hypothesis was rejected. The findings show that the greater the principal's leadership style adaptability, the greater the use of certain teaching skills by teachers and the lower the principal's leadership style adaptability, the lower the use of certain teaching skills by teachers.

Leadership style adaptability is defined as the degree to which a person is able to vary his leadership style to meet the demands of the situation and the needs of the subordinates in order to accomplish the organizations task. A review of the relevant literature and related research supports the conclusions of the study that leadership style adaptability is critical in determining a leader's effectiveness, which in turn may effect certain teacher practices.

The work of Tannenbaum and Schmidt (1973) proposed that a leader is able to adapt his style in relation to both the orientation of the subordinates and the situational factors. The Michigan State and Ohio State Leadership Studies (Katz, Macoby, and Morse, 1950) included both task and relations as factors determining a style. Based on these studies Blake and Mouton (1967) incorporated the factors of task and structure as two



dimensions within an individual's style. Fielder's (1977) situational/contingency theories of leadership demonstrated that there was no all-purpose style of leadership but rather that effectiveness was dependent upon the situational factors and the people involved. Therefore it was possible for a leader to adapt his style at a given time in order to be effective in a situation and with those people involved in the situation (McCoy and Shreve, 1981).

Hersey and Blanchard (1977) and Argyris (1977) proposed that a leader must be aware of different maturity levels of followers in regard to accepting responsibility for task achievement. In order to be effective with different people in the situation, a leader must adapt to their needs (McCoy and Shreve, 1981).

The findings of this study reported that three principals did have varying degrees of leadership adaptability which indicated these principals may have different abilities to diagnose a situation and vary leadership style accordingly.

Research in the fields of staff development and effective teaching skills has uncovered strong links between desirable student outcomes and teacher actions. Studies of teacher effectiveness have identified

instructional techniques that appear to raise reading scores (Anderson, Evertson and Brophy, 1979, 1982; Reid, 1978-82) and math scores (Good and Grouws, 1979 and Fitzpatrick 1981, 1982). From these and other studies Rosenshine (1983, 1986) developed six instructional skills which serve as a guide for discussing the general nature of effective instruction.

With the content of staff development readily available, the context or environment which ensures the success of staff development presents a question. The importance of context of staff development was brought out in a study by the Rand Corporation (1978) when Berman and McLaughlin examined federally funded programs and concluded a major reason for success was support from principals.

Lieberman and Miller (1981) emphasized the importance of the principal as an instructional leader in bringing about improvements in teaching. Stallings and Mohlman (1981) found that teaching improved most in schools where the principal was supportive of teachers. Little (1981) in a study of the effects of staff development found success most likely in an atmosphere of collegiality.

Crandall and associates (1982) found that the institutionalization and continued use of an innovation, such as a staff development program, depended on

principals guarding against vulnerability, resistance to environmental turbulence and indifference. Programs fail where the administrators do not care enough to supply the assistance and protection of the innovation.

From these studies it was inferred that a staff development program focusing on a teacher's use of effective teaching techniques would depend on the principal's ability to adapt his leadership style and provide the assistance and support necessary to ensure successful institutionalization of the program.

The findings of the present study appear consistent with the research findings regarding the effect of principal leadership on the teacher's use of effective teaching skills. The findings of the present study suggest that principals with higher leadership style adaptability will tend to have teachers who are trained to use effective teaching skills using these skills to a greater degree than those teachers where the principal is less adaptive.

The present findings also tend to support previous research, (Crandall and associates, 1982), which suggest the need for "forceful leadership" accompanied by support and commitment and the ability for administrators to "lay off from close supervision, giving teachers a chance to adapt and extend." This indicates the need for

principals to adapt their leadership styles to the situation and maturity level of teachers to ensure a greater commitment to the use of an innovation, or in this case, effective teaching skills.

Stogdill (1974) in reviewing the research in leadership found that the leadership of principals was significantly related to test achievement of followers. He states that leadership styles produce differential effects on the behavior of followers. Thus, what a principal does during the implementation of an innovation, can, and does, impact on the behavior of his followers, which in turn, impacts on the success or failure of the innovation.

Novotney (1971) states: "to be an effective leader the principal must be knowledgeable of the range of leadership behavior available, the priority responsibilities of his role, and the nature of the forces influencing his actions" (p. 38). Therefore, the effectiveness of a principal is dependent upon his knowledge of the organization, his specialized technical knowledge and skills and his ability to adapt his leadership to meet the needs of different situations.

The implementation and continued use of a planned innovation such as effective teaching skills is dependent upon the leadership of the principal. The results of the present study tend to support this conclusion.

### Implications

Based on the findings and conclusions of this study there are implications for administrative practice and further research.

#### Implications for Educational Practice

The results of this study appear to indicate that the degree of leadership adaptability is associated with the degree of teacher use of effective teaching skills. Furthermore, the literature on leadership contains many arguments that principal leadership is the key to successful implementation of an innovation or change. Therefore, this implies that educational administrators should be able to assess their leadership style, determine their leadership range and understand that effectiveness is dependent upon the individual's style adaptability. Training should be provided for skill development in adapting one's leadership style to meet the organizational demands and needs of teachers. Principals need to be aware that leader behavior is not static, but must be continually adapted to meet the continually changing needs of the organization and effectiveness is dependent upon the leader's continuing adaptation of leadership style. School systems that are attempting structured programs in teaching effectiveness might well include training in leadership skills, if such

a need exists, for principals.

#### Implications for Future Research

Any implications for future research drawn from this study must be made in full recognition of the various limitations. Conclusions may be developed considering only this sample population of elementary school personnel in an urban setting. Although the data collected were considered reliable for analysis, the sample size was small. These two limitations indicate a need to replicate the study in a rural school division as well as other urban divisions using larger samples to allow for greater generalizability of the results. Additionally, only elementary principals and teachers were involved in the present study. Therefore, replication of the study procedures should be employed with other supervisor-subordinate settings (e.g., high school principal--teacher) to determine if the same findings occur.

Another limitation was the lack of control over the staff development program with respect to: the different number of trainers, time lapsed since teachers were trained, and the inability to maintain a pure training model. Further research is needed to reveal the various influences these factors have on teacher use of effective teaching skills.

An additional limitation was the lack of control of

variables of age, tenure, experience, and gender. More research needs to be undertaken to reveal the influence of these factors on leadership style adaptability and on teacher use of effective teaching skills. Research is also needed using the instruments of this study (LEAD and ISOI) to enhance the reliability and validity of those instruments. Finally a long term study is suggested to assess the effect of principal leadership on teacher use of effective teaching skills.

This study looked at principal leadership style adaptability and teacher use of effective teaching skills learned through a staff development program. Other studies to examine principal leadership and staff development programs in areas other than effective teaching skills are needed.

#### Summary

The present study attempted to test the null hypotheses:

Null Hypothesis - In a school division where a staff development program in effective teaching skills has become institutionalized, teacher use of effective teaching skills will not be significantly different in schools with significantly different degrees of principal leadership style adaptability.

The findings and conclusions of this study concerning principal leadership style adaptability and teacher use of effective teaching skills are limited because of certain design characteristics and this researcher does not know whether leadership style adaptability is the cause of successful utilization of effective teaching skills or just a contributing factor. However, it is believed that the study does add to the theory base and the literature on staff development, instructional skills, and leadership, and provides a basis for future research.

The findings of the present study suggest that the leadership style adaptability of school principals has an affect on whether a teacher uses effective teaching skills learned through a staff development program. This indicates that principal leadership style adaptability is important to the success of a staff development program.



**Appendix**

## Appendix A

Dear

My name is Dorothea Shannon and I am currently completing doctoral studies at The College of William and Mary. I have received permission from the Research and Evaluation Department of your school division and the endorsement of the Coordinator of Staff Development, to conduct a research study in your elementary schools.

My study focuses on teacher behaviors. Specifically, the skills in the teacher effectiveness program as they relate to the leadership style adaptability of principals.

I am seeking your cooperation in conducting this study which will be in two phases. During the first phase, to take place during the last two weeks of January, a sampling of your teachers will be asked to complete the Leader Effectiveness and Adaptability Description (LEAD-Other) questionnaire. Based on the results of the first phase, certain schools will be selected to participate in the second phase.

If your school is selected for participation in the second phase, trained observers will come to your school and observe all regular classroom teachers, grades 1-5, who teach mathematics. Observations will last from thirty to sixty minutes. The observers will use the Instructional Skills Observation Instrument which is a low inference, non-judgemental check list. I assure you that the observers will be unobtrusive and not disturb classroom instruction. These observations will be scheduled for the first two weeks of February.

Assurances:

1. Data collected concerning individuals will not be shared with anyone, including school principals, teachers, central office staff or readers of the dissertation.
2. Individual participants, schools or the school system will not be identified by name in the dissertation or any reports that come from the dissertation.

3. Data will not be collected from students and students will not be affected by the study.

Because of these assurances, it will be impossible for me to share with you or the central office staff any results while the study is in progress. Once the study is completed, I will be happy to share the conclusions with you.

If you have any questions, don't hesitate to contact me at (703) 775-5023 or (804) 493-8407. I look forward to hearing from you.

Cordially,

Dorothea Shannon

Attachment

Dear Mrs. Shannon:

I agree to participate in your study and I understand that teachers in my school will complete the LEAD-Other questionnaire and may be observed.

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School

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Principal's Signature

**PLEASE NOTE:**

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

P. 103-107 Leader Effectiveness and Adaptability Description

P. 109-112

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Appendix C

INSTRUCTIONAL SKILLS  
OBSERVATION INSTRUMENT

developed by  
Patricia Wolfe

## Appendix D

January 22, 1987

Dear Respondent:

My name is Dorothea Shannon and I am conducting a study on Principal's Leadership Style Adaptability and Teacher's Use of Effective Teaching Skills. The Study will examine leadership styles, ranges and adaptability of principals in schools where a staff development program in effective teaching skills exists. The information that you provide will contribute to a better understanding of leadership as it relates to staff development.

The Research Department of your school division has approved this study and you have been randomly selected to participate in this phase. I would like you to help by filling out the enclosed survey and returning it in the self addressed envelope.

I seek information on how you perceive the leadership of your principal. The survey describes twelve situations and you will respond by selecting an action which you think would most closely describe the behavior of your principal in the situation presented.

Thank you very much.

Cordially,

Dorothea Shannon

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VITA

Dorothea Mabe Shannon

Birthdate: June 25, 1950

Birthplace: Max Meadows, Virginia

Education: 1987 College of William and Mary  
Williamsburg, Virginia  
Doctor of Education

1981 College of William and Mary  
Williamsburg, Virginia  
Certificate of Advanced  
Study in Education

1977 Old Dominion University  
Norfolk, Virginia  
Master of Science in  
Education

1971 Radford University  
Radford, Virginia  
Bachelor of Science in  
Education

Professional Experience:

Present Assistant Superintendent  
for Instruction  
King George County Public  
Schools  
King George, Virginia

1984-86 Principal  
King George Elementary  
School  
King George, Virginia

1982-84 Assistant Principal  
King George Elementary  
School  
King George, Virginia

1980-81 Teacher  
King George Middle School  
King George, Virginia



1975-80 Teacher/Reading Specialist  
Yorktown Intermediate  
School  
Yorktown, Virginia

1971-75 Teacher  
Oakdale School  
Norfolk, Virginia

A STUDY OF PRINCIPAL LEADERSHIP  
STYLE ADAPTABILITY AND TEACHER USE  
OF EFFECTIVE TEACHING SKILLS

Dorothea M. Shannon, Ed.D.

The College of William and Mary in Virginia, April 1987

Chairman: Professor Robert Hanny

Purpose

The purpose of this study was to identify the degree of principal leadership style adaptability and teacher use of effective teaching skills in schools where a staff development program in effective teaching skills has been institutionalized.

The null hypothesis to be tested was: In a school division where a staff development program in effective teaching skills has become institutionalized, teacher use of effective teaching skills will not be significantly different in schools with significantly different degrees of principal leadership style adaptability.

Method

The population of the study included elementary principals and teachers in a large urban school division in Virginia. This school division was selected because the staff development program in effective teaching skills was ten years old and met the requirements for institutionalization. The principals had been assigned to their schools for a year or more and teachers had been trained in the division-wide staff development program in effective teaching skills.

Teachers at three schools completed Hersey and Blanchard's Leader Effectiveness and Adaptability Description which measured the principal's leadership style adaptability. The adaptability scores were analyzed using t-tests. Teachers who had completed teacher effectiveness training were observed and rated using the Instructional Skills Observation Instrument by Wolfe, which measured use of effective teaching skills. These scores were analyzed by using one-way analysis of variance.

Findings and Conclusions

The t-test revealed a significant difference in principal leadership style adaptability in School A and B

and School A and C. Analysis of data collected by observers by using analysis of variance showed a significant difference between School A and B and School A and C in use of effective teaching skills. This lead to the rejection of the null hypothesis.

The null hypothesis was rejected at high levels of confidence. It was concluded that the leadership style adaptability of school principals has an effect on whether a teacher uses effective teaching skills learned through a staff development program. This study suggests that when undertaking a staff development program principal leadership style adaptability may be considered an important contributing factor.