INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

Downloaded from SHAREOK. Persistent Handle URL: https://hdl.handle.net/11244/5449

UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

STAFF DEVELOPMENT PROCESS THAT RESULTS IN CHANGE: A TRAINING OF TRAINERS CADRE

A Dissertation

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

By

DOROTHY ANN CALDWELL

Norman, Oklahoma

1997

UMI Number: 9722338

Copyright 1997 by
Caldwell, Dorothy Ann

All rights reserved.

UMI Microform 9722338
Copyright 1997, by UMI Company. All rights reserved.

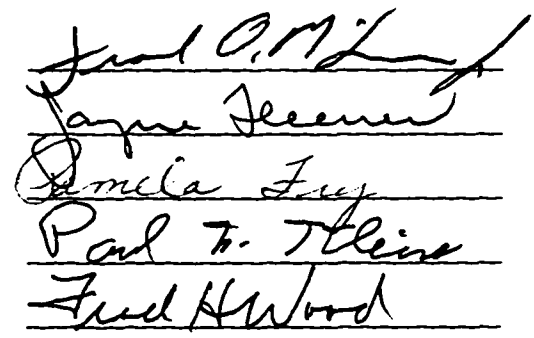
This microform edition is protected against unauthorized
copying under Title 17, United States Code.

UMI
300 North Zeeb Road
Ann Arbor, MI 48103

STAFF DEVELOPMENT PROCESS THAT RESULTS IN CHANGE: A TRAINING OF TRAINERS CADRE

A Dissertation APPROVED FOR THE DEPARTMENT OF INSTRUCTIONAL LEADERSHIP AND ACADEMIC CURRICULUM

BY



© Copyright by Dorothy Ann Caldwell

All Rights Reserved

ACKNOWLEDGEMENTS

It is because of the collective efforts of many people in my life that this opportunity has come to fruition. I wish to express my gratitude and show respect to those who have changed my life by their example, support, and inspiration.

To the "Wind Beneath My Wings", Dr. Judith Ann Barber and Dr. Robert L. Kidd, III, for planting seeds of greatness and for being the exemplary models you are. You are my guide.

To Dr. Frank McQuarrie, my Chair, for his guidance, patience, and belief in all humankind. Long before this project, you caught my attention by the dedication and model you set for staff development and its potential by being partners with public education and teacher induction.

To Dr. Fred Wood, committee member, for setting my mind in motion that staff development was the key to educational change.

To Dr. Paul Kleine, committee member, for being the guru of qualitative research, and who taught me to enjoy the journey of the challenges of working on a postgraduate degree while being realistic.

To Dr. Jayne Fleener and Dr. Pamela Fry, committee members, for stretching me to a new level of understanding life and curriculum.

To my staff at Jackson Elementary for being a substantial part of my learning curve, for pulling together and following our dream to make it come true, and for all you have given me as we have grown together.

To my colleagues, Dr. Nancy O'Brian, Dr. Johnelle Jones, Elaine Hale, and Dr. Teena Nations and the Norman Public Schools for helping me to learn and discover all that one can be.

To Dr. Kathy Taber, my companion study buddy, for all our professional growth, we are in this together. Your guidance and support have meant a lot.

To Dr. Steven O'Neal, my technical advisor, for helping me out with all my computer glitches.

To my friends who supported and cared about me along the way. Thank you for always being there.

To my parents, Leo and Alice Gagnon, for instilling a strong foundation of hard work, dedication, perseverance, and responsibility. Forever I will be grateful for the gifts you bestowed upon me.

Finally, to my children, Ashley and Michael, for helping us be a strong family by caring and supporting each other in our different endeavors, and for being the great kids you are. You have taught me about what matters most and how to stay focused on first things first.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....iv

ABSTRACT.....viii

I. INTRODUCTION.....1

Need for the Study.....6
Purpose of the Study.....7
Research Questions.....10
Definition of Terms.....10
Limitations of the Study.....11
Summary.....12

II. REVIEW OF THE LITERATURE.....14

School Improvement.....19
Staff Development.....24
Quality of the Staff Development.....28
New Staff Development.....30
Models of Staff Development.....33
Personalizing Staff Development.....36
Expanded Functions of Staff Development.....37
The Future Needs of Staff Development.....38
Training of Trainers.....40
Purpose of Training of Trainers.....41
Teacher Leaders.....42
Implementation Pitfalls of Professional Development.44
Summary.....47

III. RESEARCH DESIGN AND METHODOLOGY.....49

Design of Study.....49
Research Questions.....52
Population and Sample.....52
Description of Study Settings and Sample.....55
Teachers' Experience with Teaching.....58
Professional Resource Opportunities-
Program Description.....58
Development of the Cadres.....60
Cadre Sessions.....60
Selection of the Cadre Participants.....61
Method of Collecting Data.....63
Observations.....64
Interviews.....66
Questionnaire.....67

Data Analysis Procedure.....67
Summary.....69

IV. ANALYSIS AND INTERPRETATION OF DATA.....71

Introduction.....71
Analysis of Results.....72
Major Findings.....72
Implementation of Assessment Concepts Observed....73
Implementation of Assessment Concepts.....77
Changes Made Since the PRO Cadre.....79
Teachers' Comments About the Benefits From the PRO Cadre.....83
Principals' Comments About Implementation of Assessment Concepts.....84
Themes.....86
Findings That Facilitate the Implementation Process.....87
Findings That Impede the Implementation Process.....96
Findings That Modify the Implementation Process....100
Summary.....102

V. SUMMARY FINDINGS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS.....105

Overview.....105
Summary of Findings.....105
Research Questions.....106
Research Question One Findings.....106
Research Question Two Findings.....112
Implications and Recommendations.....127
Providing Designated Time for Professional Development.....128
Creating a Core of Teacher Leaders.....130
Processes of Accountability and Assessment.....132
Designing a Structure for Follow-up and Maintenance.....134
A New Model.....134
Recommendations.....139
Recommendations for School Districts.....139
Recommendations Contributing to the Knowledge Base for Staff Development.....140
Summary.....140

REFERENCES.....142

Appendix A.....158
Appendix B.....160

STAFF DEVELOPMENT PROCESS THAT RESULTS IN CHANGE:
A TRAINING OF TRAINERS CADRE

ABSTRACT

The literature is inundated with information regarding school improvement and staff development and yet, few schools are implementing changes as a result of these processes. This qualitative study examined a training of trainers Cadre during and after training in the schools and classrooms of seven participants. The content focus of the Cadre was assessment.

Two research questions guided this study. The first one was concerned with the nature of implementation of the assessment concepts. The second question focused on the factors that facilitate, impede, and modify the implementation process. Changes that occurred as a result of the Cadre were the physical environments of the classroom, expansion of instructional strategies, student evaluation, and the teachers' confidence. Overwhelmingly, teachers felt they were better teachers. They understood the differences in learners, how to plan for instruction more clearly, and the need to provide a variety of choices and assessments to meet all students' needs.

Findings that facilitate the implementation process were: (1) provide time for professional development; (2) ensure district and principal support; (3) establish follow-up and maintenance procedures; (4) designate someone to be held accountable at all levels; (5) establish an environment conducive to change; (6) connect new information to present

teaching; (7) create a core of teacher leaders; (8) share ideas through dialogue and reflection; and, (9) have a belief in what you are doing.

The factors that impede the implementation process are: (1) failing to provide time for professional development; (2) omitting follow-up and maintenance; and, (3) change itself.

The one factor that modified implementation was being able to modify the concepts from the Cadre training to personal and site needs.

The implications and recommendations integrate previous learning with new findings. A new model is provided for a structure to ensure implementation of staff development. This model provides the image of how to impact change.

The training of trainers program provides an answer to staff development that is a continuous job-embedded process. It provides the flexibility and adaptability for our rapidly changing society to meet the demands on public education.

CHAPTER I

INTRODUCTION

Today, we are experiencing change at a rate never before imagined in history. Change is the single, most important factor affecting every part of life. Change is occurring so quickly, that we no longer have the luxury of adapting to it gradually. The future belongs to those who anticipate change and plan a sensible response to it (Cypert, 1995).

To live effectively in a changing world means integrating previous learning into our current-day lives. Individuals who are constantly learning and who strive for application of what is already known in a more effective way will be adaptable to the unpredictability of change. Why is change in some organizations, schools included, so difficult and seemingly unwelcomed, even when overwhelming evidence shows that the status quo is not working? Why does progress occur in some places and not in others? Questions like these have nagged educators for as long as educational change has been promoted.

There is an abundance of research which describes understandable ways of leading organizations and people into and through change. Successful transformation of organizations in the next decade will require the leader to recognize the size and complexity of the system they are

designing. Crucial problems of the past were problems of things, but the problems of today and tomorrow are problems of people and their interactions with one another (Gleick, 1987). With increased uses of technology, society becomes ever more dependent on cooperation and the responsible interaction of its citizens.

Building the capacity of the individual in an organization will be the challenge for leadership of the future. Recently several authors who write about leadership have described key points on how to develop the capacity of the people within organizations. Covey (1989) focuses on developing highly effective people. First, one builds his/her own capacity, the private victories. Then, people have the ability to develop public victories, in other words, the capacity to serve the organization in ideas like win-win strategies. Another emerging leadership style which develops relationships in organizations of partnerships and empowerment is stewardship (Block, 1993). No longer can only organizational needs be considered. Individual needs factor into accomplishing change. In new science, Wheatley (1992) expands on these two leadership concepts by discussing the underlying premises that give value to the relationships of the systems and of the importance of viewing the system holistically. Leadership and leading an organization are more complex than in the past.

Another important issue to be addressed in our rapidly changing society is how schools will be able to make these changes. Research indicates that staff development has become

a major force in educational development and reform (Fullan, 1994). For educational reform to take place, staff development needs to be integrated into a broad effort for school reform and not considered as the instigator of reform (Guthrie & Richardson, 1995). John Dewey (1938) set forth that true education is development and that development should be the focus of education. Staff development is a key element to adapting to the changes needed. Its purpose is to develop capacity. Integrating the needs of the past with the trends of the future changes the direction for staff development.

Shifting the image of staff development from an event to a process changes the paradigm. Staff development becomes more complex. There are stages to follow to ensure understanding and application. Wood (1989) designed a process known as the RPTIM model in staff development. The five stages are: (a) readiness, (b) planning, (c) training, (d) implementation, and (e) maintenance. Each stage contributes a significant part to the whole process. If any stage is not followed, the process is weakened. Traditionally, staff development has been a single-day event; it was not a process. The shift in paradigm where staff development becomes a process and not a series of single-day workshops made staff development more meaningful and effective. With the integration of individual development (cognition, attitudes, and skills) and organization development (norms, structures, and procedures), the effectiveness of staff development focuses more on learning. Learning is a self-

regulated process of resolving inner, cognitive conflicts that often become apparent through concrete experiences, collaborative discourse, and reflections (Zahorik, 1995). This constructivist framework challenges teachers to create environments in which they and their students are encouraged to think and to explore. To understand constructivism, educators must focus attention on the learner. Staff development in all its forms--training, practicing, or reflecting--provides opportunities for learning. Instead of training being given to teachers, professional development becomes a continuous process of learning.

Although different models of staff development have emerged over the recent years, student learning failed to improve in most settings. Indications showed that staff development is a major force in educational development, yet there are limited data to support this theory. There are negligible resources allocated for staff development and a lack of a system of accountability. "Surveys in Educational Leadership showed that 28 percent of schools spent nothing on staff development" (Fullan, 1994 p. 49).

Accountability has been a driving force in education (Guskey, 1994). However, the degree to which accountability has been applied to the process and the results of staff development has varied. For many years, there has been growing pressure from politicians, legislators, state-level administrators, and even local school boards to make education "teacher proof." Public opinion holds that some teachers are not competent. Home schooling and charter

schools are rapidly growing because of the concern that public schools are not teaching students. Standardizing materials and teaching methodologies provide an answer for some to these concerns. Another means for addressing these concerns of stakeholders for public education is adding an assessment component to staff development to provide some credibility. Just as teachers are pressed to make assessment an integral part of the instructional process, so must evaluation be an integral part of the staff development process. Adding an assessment component to the process of staff development presents an answer to the paradox of the public demand for more control. Results-oriented professional development can provide a means for accountability to improve schools (Guskey, 1994).

Changing mental images of staff development requires a major task for professional developers. The ideas of systemic reform and building relationships are changes from past practices. Systemic reform involves building new conceptions about instruction (e.g., teaching for understanding and using new forms of assessment) and new forms of professionalism for teachers (e.g., building commitment to continuous learning and problem solving through collaboration). To implement changes in staff development and organizational reform, it has been necessary to find principles that parallel these structures. Given these premises, a constructivist philosophy of emphasizing collaborative problem solving and personal expression; having a meaningful context for learning; and placing the learner at the center of the learning experience

integrates the knowledge gained from the literature. These changes shifted the way staff development was defined and how the processes were developed. Restructuring changes the roles, structures, and other mechanisms that enabled new cultures to thrive (Fullan, 1996). Senge (1990) stated that, at a minimum, it takes five to seven years for a change to filter through and become the norm in an organization. Senge also argued it can take up to 20 years for some of those "the way it was" to be gone from the system.

Given the complexity of our society and its problems, adaptability, the ability to change form while staying true to one's core identity, is a key element in finding solutions for the ways to prepare our students for tomorrow. Staff development is a major force for educational development and reform. Changing the model to one that is process-oriented, developing the capacity of its people while addressing organizational needs, and is results-oriented will meet the educational demands of the future.

Need for the Study

The literature is inundated with information regarding school improvement and staff development, and, yet, few schools are implementing changes as a result of these processes. A review of literature indicated that staff development had become a major force for educational development and reform (Fullan, 1994). McNergney and Carrier

(1981) indicated that, "Teachers who are growing are becoming more open, more humane, more skillful, more complex, more complete pedagogues, and human beings" (p. 1).

Another reason why staff development needs to be examined relates to the public investment in improving schools. Schools allocate resources for staff development. Although there are school districts that fail to allocate money for staff development, there are many dollars and much time spent on staff development. However in many cases, teaching and learning remain much the same. In a time of limited resources, questions of how schools can best utilize their resources need to be addressed. In a school district where the expectation is that staff development is an integral part of the job, where information is readily available, and where many of the major components of effective schools research for school improvements are utilized, then why is there little change in what happens with students?

There is a need to examine the specific components that facilitate, impede, or modify the process of implementation in the classroom or in the school.

Purpose of the Study

The purpose of this study is to examine the implementation process of a training of trainers staff development program at the school and individual classroom

level of the trainers. Specifically, the factors which facilitate, impede, and modify a training of trainer process are examined.

With the new demands of accountability and changes in staff development, four administrators from a Midwestern school district attended a state training of trainers program. These administrators decided this state training of trainers program could provide a framework to design a more comprehensive and adaptable training of trainers program for their district. It took three years of planning and designing to create a framework. In 1993 the Professional Resource Opportunity (PRO) became a reality. The goal of the PRO Cadre was to ensure quality staff development that would meet state, district, school, and individual needs by developing teacher leaders at each site in this school district.

The model was designed to facilitate and support a climate that encouraged staff development efforts on site. Each year, a new Cadre of teacher leaders was developed, and a new content area was selected for the Cadre. The content area was chosen based on the district's needs and with principal input. The district provided the financial support for training, substitutes, and materials.

Yearly, each school in this district elected a teacher representative to become a staff developer for this district and his/her own school. During the 1993-1994 school year, the first training of trainers Cadre began. The training had three phases. The first phase emphasized group processing, change, effective staff development practices, traits of

adult learners and ego development, and learning styles. The second phase of the training was the content area. Learning styles was the content area for this first training. McCarthy's (1987) 4MAT learning styles were emphasized. The third phase of the program included training the Cadre members how to make presentations and presented ideas of how to begin implementation. Specific strategies for implementation were decided by each school to reflect the site-based management philosophy of the district and the goals established by each school. There was a varying degree of implementation due to the degree of principal involvement, school and staff involvement, and teacher intent and beliefs. From this first training, all schools in the district had an awareness presentation on learning styles during the 1993-1994 school year.

The second Cadre of teachers was elected at the end of the 1993-1994 school year and served as the population for this study. The first phase of their training was held during the summer of 1994. The second phase, which is the content area, was held throughout the 1994-1995 school year. The content for this Cadre was assessment. The desired results of this phase of the PRO training was to have some changes in the way teachers think and use assessment in their classrooms and schools. The final, or third, phase of this Cadre was held in November, 1995.

Utilizing the training of trainers Cadres, staff development could be flexible by integrating components that met the needs of the district, the school, and individuals.

Although staff development is a process that takes time, this study focuses on the beginning phases of a learned concept. Research for this study focuses on the implementation of this training of trainers program in schools and classrooms. There was a need to examine the specific components that facilitate, impede, or modify the process of implementation in the classroom or in the school.

Research Questions

The following questions guided this study for the researcher to identify factors involved in the implementation process.

1. What is the nature of implementation of assessment concepts resulting from the training of trainers program at the school and classroom levels?
2. What are the factors that facilitate, impede, or modify implementation of assessment concepts resulting from the training of trainers program at the school and classroom levels?

Definition of Terms

Assessment--The content focus for the second Cadre of training of trainers. Four principles for assessment development guided the training of trainers process: (1) sound assessment is based on authenticity; (2) assessment must be a continuous, ongoing process; (3) assessment must be

a multifaceted, multidimensional process to reflect the complexity; and (4) assessment must provide opportunities for collaborative reflection by both teachers and students (Valencia, 1990).

Change--The process that affects individuals and groups when involved with receiving new information. This process is known as the CBAM Model (Hall, 1986).

Paradigm shift--A shift in thought defined by a new set of rules and regulations within certain boundaries.

PRO Teacher Cadre--The group of elected teachers from each site for participation in a training of trainers program that was developed by a Midwestern school district.

Staff development, professional development, and inservice--These terms are used synonymously in this paper. An intentional process to bring about change that is designed to promote personal and professional growth.

Limitations of the Study

Qualitative research is an interpretation provided by the researcher. Qualitative research centers around the generalizability of the findings and possible over-interpretation of the findings. A case study can oversimplify or exaggerate a situation. The results of the qualitative

research are not necessarily transferable to another situation, but the results may be able to provide some possibilities for the future. Qualitative research looks for possibilities instead of proving facts.

The researcher's bias can be a strength and a weakness of the case study method of research (Merriam, 1988). This researcher is employed as a principal in the school district where the study was conducted. None of the research was done at the school where the researcher is employed. This researcher is looking for emerging patterns that could be significant in the school district and for contribution to the knowledge in staff development.

Summary

Staff development is an integral part of developing schools of the future. Though many major theories were reviewed, the work of Fullan (1994), Sparks (1994), Wood (1989), and Guskey (1994) set the theoretical framework for this study. Staff development is an intentional process to bring about change. Change is occurring so quickly. Designing a staff development program that could meet changing needs was the intent of this Midwestern school district. Establishing a training of trainers program changes the paradigm of staff development from a workshop teachers attend to a continuous process of learning that becomes job embedded. Staff development becomes more meaningful.

Investing in the capacity of the people and understanding the relationship of the system are underlying premises for organizational change. Training of trainers Cadres develop teacher leaders as well as develop the capacity of others. Relationships build, and teachers become empowered. Having a training of trainers program allows school districts the flexibility of continuous improvement which meets the needs of the district, school, and individuals. The adaptability of a system is the key to capitalizing on truly making the changes needed for education to thrive in the twenty-first century. The training of trainers program provides this opportunity for education.

This study examines the implementation process of a training of trainers staff development program at the school and individual classroom level of the trainers.

Chapter II

REVIEW OF LITERATURE

This study investigates the interaction of a staff development training of trainers Cadre and the implementation of assessment content at six sites. The literature review for this study examines the research related to school improvement, staff development, and training of trainers programs. Searches were made using data bases from Educational Resources Information Center (ERIC). Yearbooks and books from major national professional organizations related to staff development are also reviewed. Other resources utilized are books about school improvement and journal articles from relevant publications. After reviewing the literature, major topics were chosen to be included in this literature review.

To understand the effects of the implementation process of a training of trainers program, in-depth knowledge of related issues to school improvement, staff development, and training of trainers programs must be completed. Thus, these areas are examined in this review. The review of the research in these areas provided important findings, practices, models, and programs that serve to guide this study.

The next section of this chapter provides a background with change and staff development in education. This section

is followed by review of the literature directly related to school improvement, staff development, and training of trainers programs.

For years educators have been involved with change and staff development. Staff development is an intentional process designed to bring about change. However, there has been little or no accountability of its effectiveness. The history of education reveals numerous attempts to ensure that all teachers would learn certain innovations. What is less certain is the depth of that learning and whether this learning is remotely connected to student growth--the ostensible intent of education and efforts to improve it (Schmoker, 1996). Schools improve when purpose and effort unite. Major changes required to reform schools cannot be accomplished without professional development and cannot be accomplished with outdated models of professional development. Cuban (1990) described two types of school reform efforts: incremental changes, which focused to improve the existing school structures, and fundamental changes, which focused to transform and permanently alter the existing school structures. Fullan (1991) noted that, unfortunately, the incremental changes were easier to bring about than the fundamental changes. In fact, incremental change alone could leave the core of the problem untouched. Lasting change includes both incremental and fundamental change.

Fullan (1987) stated that school improvement and staff development are intimately related. The effective schools research, completed during the 1980s, shifted from staff

development efforts to school improvement processes. Although efforts began to look at the larger picture, staff development focused more on the organization and little attention on the individual. Ideas like strategic planning and site-based management became the focus of staff development.

Later in the 1980s, accountability became the big concern for staff development. Districts spent untold dollars on outside experts who were expected to cure the district woes. Questions of effectiveness seldom arose (Hirsh & Ponder, 1991). Inservice workshops were judged on the criterion of having attended the workshop, not whether the information was received or used. Accountability was based on teachers' meeting the state mandates for staff development.

Using Joel Barker's term, a paradigm shift is needed in staff development and its focus and effectiveness. Sparks (1994) stated that there are three powerful ideas at work reforming staff development. One idea is "results-driven education" which attempts to improve performances by the students, the staff, and the organization. There should be a link between the staff development and school achievement (Stalling, 1989). A key to establishing this link is leadership that keeps everyone focused on improved student learning. This is a move away from managing schools. Staff development is driven by a clear strategic plan that sets goals to improve student learning.

The second idea is "systems thinking." Contexts which involve organizations must develop along with the individuals

within them (Guskey, 1994). Contexts, like the people who shape them, must be dynamic. Reform should be beyond piecemeal efforts. Education is a complex, interrelated process. The teaching and learning process is a complex endeavor which is embedded in highly diverse contexts. This combination of complexity and diversity made it difficult, if not impossible, for researchers to come up with universal truths (Guskey, 1993; Huberman, 1992). Each part of the organization affects the whole. Improvement in one area may be detrimental in another area. Recognizing the importance of contextual differences compels professional developers to consider more seriously the dynamics of systemic change and the power of systems. The entire system must be considered as changes occur. As Peter Senge (1990) stated, change causes a ripple effect throughout the whole organization.

Constructivism is the third component of Spark's contention for staff development shifts. Constructivist believe that learners build knowledge structures rather than merely receive them from teachers. From a constructivist perspective it is critical that teachers guide student activities and provide various forms of examples rather than telling and directing. Staff development would entail action research, conversations with their peers, and reflective practices.

As these shifts in staff development began to develop in the 1990s, more changes were being demanded in public education. Educational reform had created new challenges for American schools. This movement required greater teacher

professionalism. Standards for teachers were being established. Along with these changes came the development of standards which created new expectations for students. Assessment as a means of student evaluation was becoming a part of many school districts. Teachers were expected to play new roles as part of the systemic reform effort. Inside the classroom teacher roles were changing; teachers learned to act as coaches and facilitators for students' learning. Outside of the classroom, teachers assumed collaborative team-building and decision-making roles. Even with all these efforts, schools remained fairly traditional, maintaining the status quo.

Never before had there been a greater recognition of the importance of professional development for teachers. Every proposal to reform, restructure, or transform schools emphasized professional development as the primary vehicle in efforts to bring about needed change (Guskey, 1994). Professional development included organizational development as well as individual development. With this increased emphasis came heightened awareness about the quality and effectiveness of professional development in facilitating systemic change in education.

Systemic change happens through the school improvement process. Through strategic planning, an outline of the needs of the organization and individual is created.

School Improvement

This section focuses on the relationship between school improvement and staff development. Fullan (1990) indicated that staff development must be part of an overall strategy for professional and institutional reform that has as its goal school improvement. Strategic planning develops specific incremental goals for three to five years into the future, gradually expanding on what is successful in that context and offering support to those engaged in the change (Fullan 1992; Louis & Miles, 1990). Cuban (1984) referred to historical success of curriculum reform as "pitiful." School organizations have not been fertile ground for innovations suggested from either within or without (Cuban, 1990; Sarason, 1990; Adler, 1982; Fullan & Miles, 1992; Miles, 1992). The only innovations that survived were those that were highly structured in nature and easily monitored, such as the Carnegie unit (Pogrow, 1996).

Educators can benefit substantially from emphasizing both short-term and long-term results. Long-term, system-transforming change relies on "immediate successes," which are "essential if people are to increase their confidence and expand their vision of what is possible" (Schaffer, 1988, p. 60). Incremental, measurable improvement must occur. Schaffer calls this action-oriented effort the "breakthrough strategy." It accounts for the difference between vision that is realized and vision that only exists on paper. This strategy is a principle ignored by educators at great cost.

School improvement encompasses many factors, such as effective teaching practices, student learning, and staff development. Student learning is unlikely to improve without a change in participants' knowledge, skills, practices, and, eventually, their attitudes and beliefs (Guskey, 1986). Other key components that favor results and improvement are: teamwork, goals, and the use of data. Individually, they have limited impact; combined, they constitute a powerful force for improvement (Schmoker, 1996). However, school improvement also focuses on how these important factors of school life interact and change. More specifically, Hopkins (1990) stated:

> School improvement is concerned, therefore, with defining the internal conditions of schools that predispose them to high student achievement, and defining the process whereby this infrastructure is established. (p. 44)

Fullan and Miles (1992) wrote in an examination of school reform:

> The literature focused on improvement processes that needed to be in place to ensure implementation of new content. School improvement involved collective, innovative action, and constant assessment of this action. (p. 68)

Garten and Valentine (1989) asserted that teachers' knowledge of effective school research and how it affects their own teaching is critical to school improvement. Learning about the need for staff development helps faculties grapple with the relationships among curriculum implementation, staff development, and the focus of school improvement energy when the more effective strategies are selected (Joyce, Wolf, & Calhoun, 1993). Not only does it

help teachers understand the changes being made but it also lets them know what is expected of them and identifies specific areas for professional growth. Changes must be seen as a process, and school leaders must be willing to invest in the intellectual capital of those individuals who staff the schools (Wise, 1991). Teachers' professionalism happens when it is validated by commitment and support from the building principal, central office, and trusting teachers to take control of their own professional growth (Ponticell, 1995).

Gene Maeroff (1993) wrote that teams are vehicles for increasing efficiency, effectiveness, and motivation. Rosenholtz (1991) also found a reciprocal relationship between goals and collegiality: "Isolation undermines the development of shared instructional goals" (p. 17). The lack of clear goals is perhaps one of the major reasons school improvement is still only "inching along" (Maeroff, 1994, p. 52). Goals give teamwork meaning. Csikszentmihalyi (1990) discovered that people would not work eagerly and imaginatively toward goals they do not regard as their own. When schools are judged solely on the basis of a few annual, one-size-fits-all measures, alienation of practitioners is viable.

Michael Fullan (1991) not only emphasized the importance of data to evaluate and monitor progress and results, he also stressed the role of data gathering:

> Gathering data...is also crucial. The success of implementation is highly dependent on the establishment of effective ways of getting information on how well or poorly change is going in the school or classroom. (p. 87)

Deming (1982) saw, like few others, that measurement had power for revealing opportunities for improvement and for generating ideas and releasing energy in the service of quality. We must take advantage of data's capacity to prompt collaborative dialogue.

An emphasis on results is central to school improvement. Accountability demands require that influence on student outcomes be a principal focus in evaluating staff development programs. To get desired results, assessments must be based on standards. All results—good or bad—are ultimately good, because they provide feedback that guides, indicates what to do next, and how to do it better. Feedback, then is synonymous with results (Schmoker, 1996). "We fail," wrote Wiggins (1994), "to regularly adjust performance in light of ongoing results" (p. 18). Peters (1987) said that "what gets measured gets done" (p. 480). Most would agree that if people are held accountable for a practice they will usually do it. Regular monitoring, followed by adjustment, is the only way to expect success. There also needs to be an ongoing concern with the real impact educators are having with teaching and learning.

Resulting initiatives for educational improvement propel the students into more active states of learning; and the greater activity of the students, in turn, stimulates the educators to engage in more study and develop more vigorous learning environments (Joyce, Wolf & Calhoun, 1993). Otherwise, after all extensive training, even the most promising innovations often dissipate into insignificances

(Schmoker, 1996). The educational system has failed to work "smarter than harder," thus limiting improvement opportunities.

Continuous, incremental improvements are the real building blocks of sweeping systemic change. Incremental improvements are crucial to the school improvement process. Schools need to adopt the spirit of "kaizen," a Japanese word that connotes an ongoing spirit of concern with incremental but relentless improvement (Schmoker, 1996). The cumulative impact is dramatic. Educators do not always need to see dramatic progress; steady growth is sufficient for providing psychic satisfaction and a sense of forward movement (Csikszentmihalyi, 1990). Peters (1987) concluded that the small, tangible steps route to strategic breakthroughs is the only implementation strategy that continually delivers dramatic results.

After examining the school improvement reform literature, Joyce, Wolf, and Calhoun (1993) found common elements among schools that were effective. These were:

1. All had focused on specific student-learning goals. None had only general goals, such as to make test scores go up.

2. All had employed procedures tailored to their goals and backed by rationales grounded in theory or research or a combination of these.

3. All had measured learning outcomes on a formative and summative basis, collecting information about student gains on a regular basis and not leaving evaluation to a yearly examination of post hoc information derived from standardized tests only.

4. All had provided substantial amounts of staff development, in recognition that the initiative involved teacher and student learning of new

> procedures. The staff development targeted the content of the initiatives specifically. (p. 72)

These similarities in school improvement efforts should serve as standards in assessing a school initiative to begin some school reform. In order for school improvement to take root, continuous incremental steps need to be implemented and assessed. This happens by being involved in a staff development process that has certain critical attributes.

Staff Development

Educational reform requires teachers not only to update their skills and information but also to totally transform their role as teachers. It establishes new expectations for students, teachers, and school communities that some educators may not be prepared to meet. Professional development is a key tool that keeps teachers abreast of these current issues in education, helps them implement innovations, and refines their practice. Sparks and Loucks-Horsley (1990) defined staff development as those processes that improve the job-related knowledge, skills, or attitudes of school employees. Their emphasis was on teacher development. Guskey and Spark's (1991) definition of professional development or staff development is a multidimensional process that encompasses all aspects of training, from readiness activities, practice and coaching, through follow-up and support activities.

This section focuses on the impact and importance of staff development to school improvement. It was developed

from the current and long-standing literature that had an impact on focusing schools to improve student learning.

The idea of staff development came into common use by the mid-1970s. The scope of content offered through workshops widened in the 1980s. Although a "field" of staff development emerged, most workshops continued to be relatively short, with little follow-up; and evaluation indicated poor levels of implementation of the content. Also, these workshops often presented teaching skills in isolation from curriculum content (Joyce, Wolf, & Calhoun, 1993). When educators recognized there was a problem with this fragmentation, researchers shifted their attention to training and staff development. Research on staff development was highly productive after this time. Educators created procedures that could ensure substantial degrees of implementation of curricular and instructional innovations, at least on a temporary basis. Staff development was seen as an innovation. From this came the realization that innovation is a constantly evolving, multidimensional process rather than a mechanical, linear sequence of events (Elmore, 1990; Fullan, 1990; Fullan & Stigelbauer, 1991; Baldridge & Deal, 1983; Leithwood & Jantzi, 1990). As the 1990s proceeded, staff development led to a more complex view of the change process. Hall and Loucks (1978) noted the following assumptions about change: (a) change is a process, not an event, (b) change is made by individuals first, then organizations, (c) change is a highly personal experience, and, (d) change entails developmental growth in feelings and skills.

Because educational organizations are designed to be stable rather than dynamic, even the simplest substantive change requires that the innovators have to deal not only with the innovation itself, but create conditions that will sustain the innovation. The context can quickly disappear if it is not maintained (Joyce, Wolf, & Calhoun, 1993). Initiatives for change are not ends in themselves. The need to change usually appears self-evident. Lectures and textbooks do not motivate students; active student involvement produces more authentic learning. Change requires altering the culture of the schools. Change is a long-term, continuous process. Understanding that the process for school improvement is long and complex relieves some anxieties of expectations of immediate changes.

Teachers learn when they perceive a personal need for change. Change is more effective when teachers combine new information with past experience and research. Teachers are more willing to look at and change classroom practices when they are instrumental in designing and taking charge of their own professional growth activities. Collegiality is important to the process of change. Sustained, substantive, and structured collegial interactions enhance mutuality and support risk taking. It is the nature of the interaction that is important, not how long they have worked together.

Some other major issues to consider when addressing change are: (a) change requires a balance between top-down and bottom-up processes, (b) a balance between districtwide and building-specific is needed in staff development plans,

and, (c) expect a different pace of implementation for elementary and secondary sites due to greater organizational barriers to change (Holcomb, 1995).

Changes in education are very complex--changing behaviors and attitudes requires much support and energy. Joyce & Showers (1996) described four significant dimensions that are perceived to be the substantive innovation for school renewal:

1. The dimension of content or substance of innovations (curriculum, instruction, and technology) defines how the student's learning environment will be changed, including the models of learning that will be used.

2. The dimension of procedures for mobilizing energy and providing support creates the common understandings and the organizational moves necessary to generate collective activity and cooperative problem solving.

3. The dimension of staff development describes the system for learning new curricular, instructional, technological, and organizational procedures.

4. The dimension of cultural change defines the social relationships and understandings that generate the self-renewing organization and all the other dimensions to function in an appropriate social matrix. (p. 17)

Staff development was important to the change process (Berman & McLaughlin, 1978) and the effective school research (Brookover, 1978; Edmonds, 1979). There had been a shift from a deficit model of staff development, emphasizing remediation, to a developmental model, emphasizing growth. This model was based on the nature of adult learning and developmental stages (Hall, 1986). Because the problem of implementing strong and responsive systems of staff development had not fully been solved, the understanding of

staff development as a dimension of school renewal was still evolving (Joyce, Wolf & Calhoun, 1993). Professional development shifted its emphasis from working on teachers to working with teachers toward improvement of teaching and learning for all students.

In order for staff development to make a difference, it must be ongoing and supported over a period of time for long-term change. It must also get to core beliefs about teaching practices. The path of least resistance has persisted as acceptable practice. Compounding this is the fact that two-thirds of today's teachers have been in the classroom for more than 10 years. Teacher practices only changed when staff development programs presented opportunities for teachers to (a) examine their own beliefs, (b) provide practical arguments about their teaching, and (c) meet with other teachers to discuss their teachings (Richardson, 1995). Staff developers have occasionally disregarded the extent to which a teacher's designs for learning are expressions of his or her own style and vision for the classroom life. As Shroyer (1990) noted, for staff development programs to effectively change educators' beliefs and behaviors to support school improvement, professional development planners must take into account what change means to the organization, as well as the people within the organization.

Quality of the Staff Development

Many studies and research reviewed indicate that a variety of processes and conditions are necessary for

lasting, significant educational improvement; for example: a clear vision and goals, a multi-year process, strong instructional leadership, appropriate technical assistance, early success, sustained interaction among stakeholders, and staff development for everyone involved (Stringfield, Billig, & Davis, 1991).

The mentality of staff development requires a change from quick-fix workshops to sustained meaningful changes, whereby teachers collaborate and engage in rigorous examinations of teaching. Treating teachers as professionals who are responsible for their own learning is central to staff development (Joyce & Showers, 1988; Loucks-Horsley et al., 1987).

Carl Glickman (1981) stated that a purpose for staff development should be to get teachers to think. Teachers would apply what they have learned and staff development would encourage adult cooperation, personal reflection, feedback, and ongoing dialogues (1990). But Costa and Garmston (1985) stated teachers have few, if any adult audiences. The isolation prevents them from receiving valuable feedback which might assist in problem solving. Some of the activities for teachers to collaborate are "learning clubs" (support groups) and cognitive coaching (collegial dialogues). Both activities support and sustain success to implementation efforts. Staff development should encourage educators to be more critical, self-analytical, and reflective (Kraft, 1995). Kraft went on to say that practical

staff development approaches without self-study and reflection actually cause teachers to be deskilled, to limit their improvement.

New Staff Development

The dominant staff development task of the decade of the 1990s was to modify the structure of the work place. The school work place is both the most crucial and the most complex of domains in which the possibilities for teachers' professional development can be played out (Little, 1992). The nature of the complex work of teaching "cannot be accomplished by even the most knowledgeable individuals working alone" (Little, 1990, p. 520). Teacher isolation has been identified as a major deterrent to purposeful change in schooling (Hopfengardner & Leahy, 1987; Zimpher & Rieger, 1988; Carnegie Corp., 1986).

Teamwork is perhaps the most effective form of staff development. It addresses an essential social dimension of improvement. Successfully implementing innovative procedures is "very much a social process" (Fullan, 1991, p. 84).

As Hargreaves and Dowe (1989) stated, teachers need a true collaborative culture. To build "cultures of learning" in the schools is the challenge facing staff developers in the 1990s. Culture is a conscious pattern of values, actions, and artifacts subject to assessment and change. Cultures of collaboration are absolutely central to teachers' daily work. Collaboration is fundamental in a learning culture (Garmston, 1991).

Schools of tomorrow will become centers of learning, serve a dramatically changed clientele, and adopt new learning and instructional goals. However, the vast majority of existing schools are not structured or organized to fulfill these new responsibilities (Shanker, 1990). In a learning culture, collaborative creativity is fundamental, and success is measured by the wisdom of the group and the synergy (Garmston, 1991). In the business of teaching and school improvement, intellectual capital-ideas, fresh solutions, and effective teaching methods tend to be the most precious commodity (Schmoker, 1996).

Staff development practices can change teaching practices, enhance student learning, and reform school culture. Effective staff development that results in true school improvement addresses all critical attributes of change (Hirsh & Ponder, 1991). Change in schools means finding effective ways to accomplish professional and personal growth in teachers and administrators. Meaningful change occurs only when those who work in and with schools have the opportunity to develop the attitudes, beliefs, knowledge, and skills necessary to translate new ideas and concepts into meaningful and specific plans for change and to incorporate them into their day-to-day routines. As Bruce Joyce (1990) observed, whether better-designed curriculums will be implemented, the promise of new technologies realized, or visions of a genuine teaching profession take form depends to a large extent on the strength of the growing professional development programs. If fostering teacher

growth is important, more than the content of staff development must be changed. The methods of teaching that content must also be changed.

Staff development is self-reflective and creative learning for all participants in the school. Teachers are professionals and involved in the decision making of the organization. A dominant task of staff development is to modify the structure of the workplace. When teachers, along with principals and others, develop as caretakers of learning communities, and as collaborators, problem seekers, action researchers, and designers of responsive student-centered curriculums, then students work harder, more meaningfully, and with more satisfaction than ever before (Garmston, 1991).

Successful staff development efforts require a substantial amount of ownership, participation, and time for participants (Levine & Broude, 1989). The belief that you change teacher behavior with one-shot training still prevailed even after decades of new knowledge regarding staff development as an ongoing process. This practice, more than any other, has worked to discourage teacher participation in workshops (Hirsh & Ponder, 1991). Bridging individual and organization development by whole-faculty study groups helps the entire staff integrate and implement effective teaching and learning practices (Murphy, 1995). As each teacher in the school improves, the whole school improves. When all staff members of a school plan, learn, and practice good teaching procedures together, it is easier for improvement initiatives to be put in place and also to be better focused,

articulated, and integrated (Murphy, 1995). Fitting new practices and techniques to unique on-the-job conditions proves to be an uneven process that requires time and extra effort, especially when beginning (Berman & McLaughlin, 1978; Joyce & Showers, 1980). Guidance, direction, and support with pressure are crucial when these adaptations are being made (Baldridge & Deal, 1975; Fullan, 1991).

By integrating components of a few staff development models that have key attributes of lasting change, there is the likelihood of having a greater impact on the teaching and learning process.

Models of Staff Development

Sparks and Loucks-Horsley (1990) organized staff development strategies into five models: (a) individually-guided staff development, (b) observation/assessment, (c) involvement in a development/improvement process, (d) training, and (e) inquiry.

Sparks and Schiff (1986), the Triangle Model of Staff Development, included staff development, curriculum and instruction, and organizational change. They viewed the model as an ongoing process for school improvement and evaluation. It is a comprehensive organizer for staff development.

Using the career lattice model, staff development took on a variety of roles: teacher as learner--learning new skills from an expert, visiting other classrooms, or course work; knowledge production--action research or collaboration; peer observation/coaching--helping others master a skill or

strategy; teacher preparation--helping prospective teachers or collaboration with others for an inservice presentation; monitoring--support; leadership--helping in a variety of settings. These roles required new ways of looking at how staff development occurred. By having a new perspective of how staff development can be, issues such as the different stages of teachers' careers, adding choice, and meeting the needs of the individual and the school can be addressed (Christensen, McDonnell, & Price, 1988).

Wood (1989) designed a model for staff development known as RPTIM that has five stages: readiness, planning, training, implementation, and maintenance. Each stage is important for the next phase. The first stage was known as readiness or the need for staff development must be established. The next stage is the planning in which plans are written collaboratively with all the players involved in the process. The third stage is the training. Next is implementation which is the application of the information gained in the training. It addresses how the theory is implemented in practice. The final stage is the follow-up and maintenance. Wood states that there must be activities planned after the training to provide support. If efforts stop after training, then 90 percent of the staff development investment is lost (Hirsh & Ponder, 1991). Joyce and Showers (1988) documented that 10 percent of the teacher transfer new learning to the classroom. In fact, Joyce indicated it may take up to 20 follow-ups and coaching sessions to ensure the successful implementation of a particular teaching strategy. Follow-up

should be a part of the plan, not an after thought. Until appropriate attention is given to follow-up, staff development will continue to lack impact.

The commonalities of many staff development programs are: stages or phases that are broken down into more specific areas of concern; a conception that significant change takes time and planning; and the inclusion of all stakeholders in the process of school improvement.

Both Wood and Kleine (1987) and Sparks and Loucks-Horsley (1990) agree upon some important staff development practices that are found in the literature over the last three decades:

* programs conducted in school settings and linked to schoolwide efforts;
* teachers participating as helpers to each other and as inservice planners;
* an emphasis on self-instruction with differentiated training;
* teachers in active roles that they have chosen;
* an emphasis on demonstration, feedback, and ongoing training; and
* ongoing assistance and support when requested.

The research on staff development revealed many similar practices and commonalities. The key is to find key elements that have the greatest impact on teaching and learning.

Personalizing Staff Development

The current inservice training and day-long workshops are not enough, said Boyer (1984), "The time has come to recognize that continuing education must be an essential part of the professional life of every teacher. Excellence in education will be achieved only if we invest in the education of teachers in the classroom" (p. 179). In A Place Called School, John Goodlad (1984) stated, "That professional development should be an integral part of the work week, not an add-on or occasional after-school event" (p. 187). Job-embedded staff development is where teachers and administrators within the district offer training and ongoing support in acquiring new knowledge and skills (Sparks, 1994). As staff development becomes more job embedded, there is less need for outside consultant. The teacher leaders and administrators assume more responsibility.

Too often, professional development has focused primarily on helping teachers and administrators develop isolated skills and strategies for improving one or another aspect of the educational process. This condition was largely a result of the reductionist approach to education; that is, all aspects of schooling had been viewed as simply a composite of discrete skills and bits of information that could be taught separately with hope that they would somehow be put together into a coherent and meaningful whole. As a result, professional development tended to be fragmented and

had not reflected the complex relationships and interdependency among all aspects of the educational process (Hixson & Tinzmann, 1990).

Expanded Functions of Staff Development

Realizing the complexity of staff development, many components need to be addressed to distinguish the value of the learning from the training attended. New functions within the context of new priorities will change the face of professional development. These functions include (a) expanding the knowledge base, (b) learning from practice, (c) developing new attitudes and beliefs, (d) providing opportunities for self-renewal, and (e) collaborating with, and contributing to, the growth of others.

If innovations are to succeed, they must include precise descriptions of how these innovations can be integrated. That is, each new innovation must be presented as a part of a coherent framework for improvement (Guskey, 1990).

Many common forms of staff development have resulted in implementation in as few as 10 percent of the classrooms, whereas certain tested designs for workshops that included follow-up in the workplace improved use to 90 percent or more (Fullan, 1990). Calhoun's studies (1991, 1992) indicated that nearly all schools need facilitation and technical assistance if they are to progress to unified action that affects instruction and student learning. It is imperative, therefore, that improvement be seen as a continuous and ongoing endeavor (McLaughlin & Marsh, 1978).

The early stages of implementation are complicated, because the problems encountered at this time are often multiple, pervasive, and unanticipated. Miles and Louis (1990) pointed out that developing the capacity to deal with these problems promptly, actively, and in some depth may be "the single biggest determinant of program success" (p. 60). Joyce and Showers (1988) suggested that support should take the form of coaching--providing practitioners with technical feedback, guiding them in adapting the new practices to their contextual conditions, helping them to analyze the effects of their efforts, and urging them to continue despite minor setbacks. Coaching should be personal, practical, on-the-job assistance that could be performed by consultants, administrators, or other professional colleagues. Simply offering opportunities for practitioners to interact and share ideas with each other also can be valuable (Masserella, 1980; McLaughlin & Marsh, 1978).

The Future Needs of Staff Development

Professional development in the 21st century focuses on achieving meaningful learning for all students. An information-dominated society will require adults who are prepared for a lifetime of inquiry, analysis, collaborative learning, problem solving, and decision making. Alternative assessment methods will reflect new learning goals. There will not be a reliance on standardized tests as the primary vehicle for assessing students or the effectiveness of teachers and schools. One such district that implemented

these changes is the Norwalk, California schools. This district realized there had to be changes in policy, budget, and time allocation for any change effort to become embedded in the structure (Munger, 1995). To support that end, the board of education increased the number of early dismissal days to twice a month. Using the research on effective staff development (Joyce & Showers, 1995), the professional development team (i.e, administrators and team leaders) developed the long-term staff development program for implementation. As the district moved from implementation to institutionalization, it developed an approach which was job embedded, linked to instruction, had widespread use, and provided continuing assistance (Fullan, 1990). In order to link accountability for the staff development initiative to the implementation of cooperative learning in the classroom, each teacher on the evaluation cycle was required as part of his or her formative evaluation to have the administrator observe one formal cooperative learning lesson (Munger, 1995).

As was true for virtually all other segments of society, the content and context of schooling was changing rapidly and at an ever-accelerating rate. Accordingly, professional development was less and less an objective to be achieved, but, instead, a continuing journey--one that must be undertaken, in part, by individuals operating within the context of their own unique needs and circumstances (Hixon & Tinzmann, 1990).

Staff development is the crucial element in the school improvement process to bring about needed change for schooling. The problem for schools is the complexity of the system and to find staff development that ensures the needs for individual schools are considered. In the research in the early 1990s, there have been a number of school districts utilizing training of trainers programs to meet the needs of individual districts. The training of trainers programs could provide the needed flexibility to personalize staff development so that it accommodates organizational and individual needs.

Training of Trainers

Staff development efforts that utilize training of trainers have been able to offer extensive opportunities for growth and renewal. A school involved in improvement efforts should immediately form--and prepare--a core group (cadre) to facilitate change. This cadre, composed of teachers, building administrators, and district personnel will develop the capability to provide service to teachers, schools, and district. The cadre serves in a leadership role and as an operational model. It facilitates the collegiality and new learning. The cadre is the facilitator of the transformation.

Collegiality among teachers, as measured by the frequency of communication, mutual support, and help is a strong indicator of implementation success. Virtually every research study on the topic has found this to be the case (Fullan, 1991). The nature of the complex work of teaching

cannot be accomplished by even the most knowledgeable individuals working alone (Little, 1990). Joyce (1992) pointed out that a major function of whole-faculty study groups is to provide companionship and sharing to boost implementation of new instructional strategies. Teamwork is perhaps the most effective form of staff development. Business literature, such as Total Quality Management's principles of quality circles and participatory management, supports this notion if one looks into the movements. Collaboration works. It addresses an essential social dimension of improvement. Successfully implementing innovative procedures "is very much a social process" (Fullan, 1991, p. 84).

The self-renewing school or district provides colleagueship. Reflective teachers (Schön, 1982) connected to reflective faculties (Schaefer, 1967) connected to district councils (Joyce, 1977), all supported by the Cadre, eliminated the isolation inherent in the present organizational structure while respecting individual differences.

Purposes of Training of Trainers

Taber (1996) listed four benefits of training of trainers programs: (a) it expands the staff development capabilities within a district because the number of trainers in a district is increased and the money being spent on outside experts is reduced; (b) it improves instruction which leads to increased student achievement; (c) it provides the

development of teacher leadership; and, (d) it provides teachers with opportunities for personal growth and improvement (p. 13).

The training of trainers offer alternative ways to design staff development as well as ways to develop teacher leaders.

Teacher Leaders

Teachers are an integral part to education reform. The emergence of teacher leaders began with the National Writing Project some 22 years ago. Teachers had been open to the methods of inservice training from the writing project because there was a development of a professional community. Many other curricular areas had begun such projects. Teachers joined their colleagues for mutual support and learning in a professional gathering. The National Writing Project required teachers to get involved by making informed decisions about where to go and how to get there.

Teacher-centered professional development programs resulted in moving away from packaged frameworks. Teacher networks could bridge between abstractions as standards and the concrete day-to-day reality of the classroom. The success depended upon the independence from outside agendas. This allowed the development of ownership and professional safety. Teachers were sources of expertise. Once they were honored for their theories, other teachers began to explore new ideas.

The reform movements that lasted are ones that were open and inclusive. Programs could gain more from emphasizing the principle of inquiry rather than from focusing on information. Teachers were the best resource and hope for rethinking and reshaping education (Smith, 1996). Teacher beliefs were important foundations for thinking about teachers as learners. Teachers brought to school settings rather specific images that influenced what they did and why they did it, and what they believed could and should be changed or refined in teaching practice (Pajares, 1992; Ponticell, 1995).

Learning about growing in teaching involves the construction and reconstruction of practical theories and knowledge (Clandinin, 1986). The organizational and professional contexts in which teachers work makes a difference in their readiness to learn and grow in a particular school setting. Organization supports and peer interactions created an "occupational ethos" that shaped not only what teachers chose to do in their classrooms (Cuban, 1984) but also what teachers chose to learn (Joyce & McKibben, 1982). Organizational supports and peer interactions provided a particular context for teacher learning (Ponticell, 1995). Working collectively in schools was the best way to improve them (Fullan & Hargreaves, 1991).

Critical issues to be faced when designing staff development for school improvement extend beyond just the

choice of a specific training of trainers program. Issues from the past history of staff development need to be taken into consideration.

Implementation Pitfalls of Professional Development

The most recent wave of educational reform, evolving from school improvement, to restructuring, to systemic change caused staff development to shift its emphasis from improving curriculum and instructional strategies at the classroom level to empowering for change at the building and district levels (Holcomb, 1995). True change required the commitment of multiple players; school improvement now included teacher leadership along with building administrators. The challenge was to remain engaged, while shifting the central office role from directing to providing ongoing support and assistance. Typically, the research was in agreement on the need that all the levels of a system work together to ensure effective staff development and, thus, school improvement. A good rule of thumb was that the organization, as a whole, managed one major initiative each year or two, the faculty about one each year, and the teacher about one additional initiative a year. The long history of officially "adopting" sweeping changes in one curriculum area after another and failing to achieve implementation needs to be ended (Joyce, Wolf, & Calhoun, 1993).

The design of the work place affected the implementation of an innovation. The work place must allow for practice (immediate and sustained), sharing, feedback, and follow-up

of the implementation. School reform efforts sometimes failed because inadequate attention was given to all stages of an improvement process. Few persons can move from a professional development experience directly into implementation with success. In fact, few will even venture into the uncertainty of implementation unless there is an appreciation of the difficulties that are a natural part of the process (Fullan & Miles, 1992). Time should be set at both the beginning of the school year and throughout the school year (Donahoe, 1993). Joyce and his colleagues (1993) found that successful teams meet regularly--weekly, monthly, or quarterly--to discuss progress towards goals. A school may want to delay initiatives until it can "afford" the time and other resources to implement them properly (p. 38).

As Guskey (1994) stated that it was rare to find professional development endeavors that evaluate the implementation of these guidelines. In an interview with Goldberg (1996), Ted Sizer stated, "It is exceedingly difficult to change schools--and particularly in a volatile environment where assessment system, political control, and collective bargaining were in flux" (p. 687). The missing ingredient for most schools that did not succeed was sustained support from every level of governance. Another reason that restructuring had failed so far was that there was no underlying conception that grounds what would happen within new structures. Restructuring had caused changes in participation, in governance, and in other formal aspects of the organization; but in the majority of cases, it had not

affected the teaching-learning core and professional culture (Berends, 1992; Fullan, 1993b). To restructure is not to reculture (Fullan, 1993b). Training programs emphasized listening and respecting the local culture. Goldberg (1996) stated the word implement is the wrong word. People should be challenged to think differently about learning and teaching.

Another problem facing school improvement, was the tendency of school districts to take on more than they could manage. Fullan (1991) warned that attempting too many initiatives at one time can result in "massive failure" (p. 71). Improvement requires time for planning, training, and constructive dialogue. In the name of patience, many initiatives got so bogged down in endless planning that they "have disappeared in the implementation" (Joyce, Wolf, & Calhoun, 1993, p. 6).

Peter Drucker, (1985) in Innovation and Entrepreneurship, wrote the following conclusions regarding the fate of new ideas:

> Ideas that become successful innovations represent a solution that is clearly definable, is simple, and includes a complete system for implementation and dissemination; successful innovations start small and try to do one specific thing; and knowledge-based innovations are the least likely to succeed and can succeed only if all the needed knowledge is available. (p. 123)

Restructuring in schools isolated all of Drucker's principles. Process learning approaches, in which teachers are left to invent their own methods, violate the first principle (Pogrow, 1996).

Professionals at all levels generally oppose radical alterations to their present procedures. Hence, the probability of implementing a new program or innovation depends largely on the judgment of the magnitude of change required for implementation (Doyle & Ponder, 1977).

Summary

The review of literature provided an overview of the history of staff development and implementation into practice. School improvement is a strategic process that provides a framework to establish necessary changes for the schools of tomorrow. Through this school improvement process, staff development must ensure that all parts of the organization are integrated and move away from the fragmented, single-initiative approaches. It is designed around the needs of the organization as a whole. Staff development needs are established through this strategic planning process. As this planning occurs, a need for staff development is established. The purpose for staff development changes. Staff development's focus shifts to continuous learning that is job embedded. The complexity of the processes of change and of staff development has resulted in little implementation for schools. With the development of training of trainers program, schools have been more successful with their staff development initiatives. The training of trainers programs changed the nature of professional development by providing the ongoing support and

experts at the work place. It allowed for more flexibility within the system. From the research on staff development, training of trainers programs appear to provide a more viable approach toward implementation.

Though much is written on staff development, often with paradoxical ideas, the research was limited on the implementation of staff development. The RPTIM Model (Wood, Killian, McQuarrie, & Thompson, 1993) outlined a specific stage for implementation. But, as Guskey (1994) stated, it is rare to find a professional development effort today that is designed and implemented with thorough attention to these guidelines or factors. He continued to state that it is rarer still to find professional development endeavors that evaluate the implementation of these guidelines in terms of effects on student learning. Finding answers to implementation will allow schools to change and adapt to the future needs of education.

The research conducted showed the process of evolution of staff development and the needs of today for tomorrow's schools. Success will be the capacity to utilize the current information in staff development and school improvement to ensure schools are developing for the needs of the twenty-first century.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The first section of this chapter presents the design of the study followed by the research questions. This section is followed by a description of the population, the school setting where the study was conducted, the selection of the sample, and the PRO Cadre training of trainers program. In this description, details of the program, development of the Cadres, and selection of the Cadre participants are presented. Finally, the methods of collecting data and data analysis are reviewed.

Design of Study

Methodological decisions faced in social research are complex. Qualitative design provided the researcher with alternatives for describing, interpreting, and explaining the operation of educational phenomena within the school setting. Schools are social systems. Qualitative research is an approach to studying problems and processes in education. "These studies are characterized by the investigation of a small, relatively homogeneous, and geographically bounded study site" (Goetz & LeCompte, 1984, p. 17); by use of participant observation, supplemented by field notes (Wilson, 1977); by creation of data from field notes (Bogdan & Biklen,

1992); and by a preoccupation with interpretive description and explanation of the culture, life ways, and social structure of the group under investigation (Wolcott, 1988). Case study (Borg & Gall, 1989) provides a complete picture of the environment possible, new insights, and an opportunity to be involved in the context or the setting. Qualitative research is used for evaluation, for descriptive research, and for theoretical inquiry. The outcomes of educational qualitative research contributed to the improvement in educational and school practices in several ways.

Case study analysis is appropriate for intensive, in-depth examination of one or a few instances of some phenomena. It is differentiated from other research designs by what Cronbach (1975) called interpretation in context. Case studies are a form of descriptive, non-experimental research, describing data over a period of time. The case study design addresses the problem of relevance in the social context. The case study appeal is the understanding that all of the variables can not be separated (Yin, 1984). The main focus is the problem statement at hand.

According to Merriam (1988), the decision to focus on qualitative case studies arose from the fact that researchers were interested in insight, discovery, and interpretation. By concentrating on a single phenomenon or entity, the researcher can uncover the interaction of significant factors characteristic of the phenomenon. Borg and Gall (1983) emphasized that observational case studies usually focus on some part of an organization. Yin (1984) noted that case

studies, unlike experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, did not represent a "sample", and this researcher's goal is to expand and generalize theories (analytical generalization) and not to enumerate frequencies (statistical generalization).

The search for understanding for this study is to utilize the holistic pattern of meaning. Each system has its own complexities. The focus of the study is confined to the research problem while emphasizing the unity and wholeness of the system. The investigator uses a case study design in order to gain an in-depth understanding of the situation and its meaning for those involved. The interest is in process rather than outcomes, context rather than a specific variable, discovery rather than confirmation (Yin, 1984). The researcher became the main research instrument as she observed, asked questions, and interacted with research participants (Glesne & Peshkin, 1992). The case study method had the potential for the researcher to gather extensive data that could lead to further studies. This type of research offers the greatest promise of making significant contributions to the knowledge base and practice of education (Merriam, 1988). Skager (1971) stated, "Acquired knowledge inevitably leads to changes in beliefs, objectives, and practice" (p. 14). The data collected should be able to answer the research questions and more.

Research Questions

Qualitative research questions are not framed by operationalizing variables; rather they are formulated to investigate topics in context in all their complexity (Bogdan & Biklen, 1992).

The purpose of this study is to examine the implementation process of a training of trainers staff development program at the school and the classroom level of the trainers. The following research questions guided this study:

1. What is the nature of implementation of assessment concepts resulting from the training of trainers program at the school and classroom levels?
2. What are the factors that facilitate, impede, or modify implementation of assessment concepts resulting from the training of trainers program at the school and classroom levels?

The following sections include the population and sample, selection process, goals of the Cadre, expectations, background, and general concepts of the PRO Cadre.

Population and Sample

The population for this study consisted of 26 participants from a training of trainers program,

Professional Resource Opportunity (PRO), conducted in a suburban school district in a Midwestern state. Each of the 26 participants were interested in examining assessment procedures, the focus of this Cadre, as an alternative to traditional paper-pencil forms of evaluation. The PRO Cadre II used in this research study is the second Cadre developed utilizing the training of trainers program. The training began in June, 1994. Each Cadre had three phases. The first three-day session taught the participants about group processing skills, learning styles, information about adult learners and ego development, team building, and the change process. The second phase focused on the content area designated for that Cadre. The content focus for Cadre II was assessment. This phase extended throughout the 1994-1995 school year. The first session of phase two was held November, 1994, when the first questionnaire, known as the pre-test, was given to all 26 participants in PRO Cadre II. This phase of the training of trainers took place in two separate, two-day sessions. The final phase of the training of trainers program was held in November, 1995. This phase was also held in two separate two-day sessions. The purpose of this session was to integrate what was learned in the previous phases and prepare the participants for the actual teaching at their sites and in their classrooms.

Each Cadre participant was to conduct a January, 1996, inservice on assessment at his/her site. Beyond that designated date, it was up to each school to develop its own plan for the implementation of assessment.

This Cadre had two researchers from this Midwestern school district who were involved in doctoral research related to the second Cadre. Participation in this Cadre was part of their research. The first researcher was concerned with the changes in attitudes and beliefs that happened during the three phases of training. The second researcher completed this study which focused on factors that facilitate, impede, or modify the implementation process into the school or the classroom. The two research studies were designed to provide valuable data concerning staff development and the implementation process of the training of trainers program.

The sample consisted of seven classroom teachers. The selection of the seven teachers was in conjunction with another researcher who developed a companion study that preceded this one. The companion study (Taber, 1996) examined changes in the beliefs and attitudes of these Cadre teachers during staff development. Taber's study detected noticable changes in the participants' attitudes and beliefs toward assessment. This study examines factors which affected the implementation process. For both studies, it was decided that the sample should include schools that have different clientele, reputations, and cultures.

To diversify the sample, the following characteristics were addressed: (a) two elementary teachers were chosen from a large and a small school from different locations in this district and that had different socioeconomic populations; and (b) five secondary teachers (two middle school, two mid-

high, and one high school teacher) were chosen who taught social studies or science at the different levels and had different locations and socioeconomic populations. Due to changes in personnel, the two middle school teachers in this study were from the same school. The other middle school participants either came after the training began or were specialists such as a learning disability teacher rather than classroom teachers. Therefore, there are seven teachers from six sites for this sample population.

Description of Study Settings and Sample

This study was conducted during the 1995-1996 school year. The school district was in the process of changing its school configuration. During the time of the study, the school district had 14 elementary (grades K-5), three middle (grades 6-8), two mid-high schools (grades 9-10), and one high school (grades 11-12). The changes would affect the secondary configuration. Instead of three middle schools, there would be four middle schools. The mid-highs would become part of the high school configuration, and the two high schools would include the ninth through twelfth grades. One of the middle school campuses would become the site of the new high school. Construction for a major addition at this site began in 1995. Renovation of the present building began in the fall of 1996. The two middle school teachers who were part of this sample were at this school.

The two K-5 elementary schools involved in this study consisted of a larger, higher socioeconomic school population

and a smaller, rural school with a low to middle socioeconomic population that had been annexed into this district in 1986. The larger school had approximately 500 students, 34 teachers, and one administrator. The students were from a high socioeconomic area of this suburban town. Historically, this school has had a reputation for high achievement test scores and a strong parent volunteer program. This school was chosen for this study because of its long-term emphasis on high test scores and that it is one of the largest elementary schools in this district. The smaller rural school population was unlike the rest of this suburban school district population. This school serves families who live outside the city limits in a country setting. With only 270 students, 22 teachers, and one administrator, this east side school has had a declining population which has resulted in losing teachers each year. The two elementary schools were chosen because of the diversity in size and populations.

The middle school had approximately 1,050 students, 52 teachers, and three administrators. Teacher turnover had been high for the past three years, because a new administrator had emphasized the middle school philosophy of being more student-centered. This school had both a high and low socioeconomic population. The other two middle schools had more homogeneous socioeconomic populations--one had a high socioeconomic population and the other a low socioeconomic population. The sample middle school was built during 1970s with the open-school concept design. In recent years, there had been additions which included closed classrooms and

closed spaces within the original building. Declining budgets in this Midwestern school district resulted in the three middle schools losing 30 teachers, approximately ten at each site, during the 1995-1996 school year. This resulted in a loss of team planning for these teachers. There had been a strong emphasis on staff development and developing teacher leadership prior to the major cutbacks at this middle school involved in this study.

With all the budget cuts and changes ahead for the middle schools, the climate of the middle school with the teachers in the sample, as well as the other middle schools, was an issue of concern. This middle school will become the second high school in the 1997-1998 school year. There was much contention in this school as a result of physical changes and loss of personnel.

The two mid-highs were chosen to represent diversity at the secondary level. These schools represent the east-west split that exists in the community. The west-side school students come from more affluent families and the east-side school students come from lower income families. Parental participation is strong at the west-side school. Parental involvement for the east-side school is an issue that is continuously being promoted so these students can also have the advantages of parental involvement. The west-side school has approximately 100 more students than the east-side school.

The sample included the one high school which had a representative in this study. This was the first year for the

high school to participate in the Cadre. This school chose not to be involved the first year. The high school had 1,600 students, 100 teachers, and five administrators. It is located in the center of town.

Teachers' Experience with Teaching

One elementary teacher had six years of teaching experience, and the second had 18 years. The teacher with 18 years had taught in another district for seven of those years.

Both middle school teachers had three years experience at this middle school. One teacher had taught one additional year in this district and three years outside the district.

The mid-high teachers varied in their experience. One of the teachers had taught four years and the other 23 years with eleven years in this district.

The high school teacher had been in the school district for seven years. In addition to the teaching experience, this teacher spent one semester as an administrative intern at a middle school.

Professional Resource Opportunities

Program Description

The PRO Cadre's training of trainers program goal is "to support and enhance district and site programs targeted toward quality classroom instruction and overall school improvement" (Norman, 1993). The expectations of the PRO

Cadre are to provide a structure for maintaining a Cadre of teachers trained to work with staff members at each site in research-based strategies that contribute to student learning demonstrated by:

1. Requiring PRO teachers to complete (a) a base session in adult learning, research-based staff development, and effective presentation skills, (b) a session in a designated content area, and (c) a follow-up session on the integration of basic training with the content area and the development of a delivery plan;
2. Supporting the program at the district level with emphasis on site needs;
3. Encouraging teachers to assume leadership roles at their sites by providing peer assistance with instructional strategies;
4. Assisting sites with staff development needs and working collaboratively with staff and administration to implement and maintain the Cadre; and
5. Encouraging instructional coaching. (pp. 1-2)

The PRO Cadre is a district structure for delivery of professional development. The Cadre provides the flexibility and adaptability to site needs while maintaining the integrity of research-based knowledge and processes. The Cadre teachers are to assist the sites by having a core group of teacher leaders to help with school improvement goals and professional development needs.

Development of the Cadres

To date, there are four Cadres. The first Cadre focuses on learning styles. Bernice McCarthy's (1987) 4MAT learning styles is emphasized because of the depth and application of the information. 4MAT is the only learning styles study that connects the knowledge of the differences in the way people learn to the lesson plans of teaching. Also, this district invested in four administrators becoming nationally trained trainers in 4MAT. The first Cadre began in the 1993-1994 school year. The second Cadre, the focus of this study, was trained as peer trainers in the area of assessment. The sessions began in the 1994-1995 school year and concluded in the fall of 1995. In the spring of 1995, the third Cadre on technology began; then in the fall of 1995, it was announced that the fourth Cadre on Service Learning would begin in the spring of 1996.

By the time the research had begun for this study, each site had PRO Cadre teachers who had participated in the first phase of the technology Cadre. Therefore, when the research findings are discussed, the impact of this larger group of teacher leaders will be noticed because the third Cadre had begun while the assessment Cadre was still developing.

Cadre Sessions

Each Cadre included three phases. Phase I topics included adult learning, research-based staff development, learning styles, group processing, and effective presentation skills. This phase lasted three days.

The focus of Phase II was the content area; for Cadre II, which is this study was assessment. Phase II was scheduled as two separate, two-day sessions.

The final phase, Phase III, was designed to assist in the integration of Phase I and Phase II, as well as providing follow-up strategies for implementing and maintaining. Phase III happened in two separate, two-day sessions. There was an expectation given from the district for implementation at the site. The minimal expectation was an overview at each site. For instance, with the PRO Cadre II, after the final November session, each school was to conduct a January inservice on assessment. The professional day was a three-hour session with an expectation that at least one hour was to be spent on assessment. At the sites selected for this study, four sites spent the three hours on assessment, one spent two, and the other planned two, but it extended training on assessment into the third hour.

Selection of the Cadre Participants

The selection process for the Cadre included volunteer teachers who expressed an interest in participating and had been active personally at their sites with staff development.

Teachers had to meet the following criteria to be considered as a participant in the PRO Cadre training of trainers:

* Teachers who were interested in the content area of the Cadre informed the principal and faculty of their interest to participate in the Cadre.

* Faculty elections were held from all the names submitted. (The elementary schools chose one teacher. The secondary schools chose two teachers. The rationale was that the number of teachers in secondary schools is larger than at the elementary schools).
* Teacher(s) chosen submitted an application that has personal data, as well as position statements about teaching and staff development.
* Principals submitted the PRO teacher's name(s) and application(s) to the Director of Staff Development.
* The training schedule was given to the PRO teacher and principal. The district allocated the funding for the training and substitutes needed for the teachers.

At the first training, June 14, 1994, participants were introduced to two researchers, who were also elementary principals in this district. After explaining the purpose of the research, volunteers from the participants in PRO Cadre II were sought. The reason for the two researchers was that one would be doing the research of the PRO Cadre II during the training phase and that the other researcher would be doing research on the implementation process after the training. Each researcher was doing the research for dissertation purposes.

By the completion of Phase I of the training, volunteer forms were returned to the researchers. Participants for the study were selected in collaboration with the other researcher who developed a companion study which preceded

this one. Two elementary participants, two middle school participants, two mid-high school participants, and one high school participant were selected. One elementary school was considered a large school in the district and the other a smaller school. The secondary level teachers were chosen from similar content areas such as social studies and science. Originally, the sample for this study was to choose two different middle schools; but, because of personnel changes after the research began, it was necessary to choose middle school participants who had attended three phases of this training. This resulted in the two middle school participants being from the same school.

The sample for this study included the seven volunteer participants from six different sites.

Method of Collecting Data

Qualitative researchers begin by examining commonplace groups or processes as if they were unique; this allows the investigator to discern the detail and the generality that is necessary for credible description. Qualitative research techniques were used in the collection of data. Schooling is an abstract construct that is most readily operationalized in a natural, ongoing behavioral transaction. It is most directly accessible through observation and multiple data-collection strategies. In many circumstances, to meet the most desirable design, an amalgamation of two or more strategies is used.

The researcher used three tools for gathering information for the study: interviews, participant observations, and a pre/post questionnaire. Each form of data collection was used to answer the two research questions. The researcher was the primary research instrument as she observed, asked questions, and interacted with the research participants (Glesne & Peshkin, 1992).

The PRO Cadre II training began in June, 1994. At that time the research participants volunteered to be a part of the two research studies. The first study concluded in November, 1995, when this researcher began the collection of data. The researcher first observed the participants in their classrooms and then held an interview after the scheduled observation. The principals from the six sites were interviewed; these interviews provided the last piece of data collection.

Observations

Glesne and Peshkin (1992) stated the main outcome of participant observation is to understand the research setting, its participants, and their behavior. The naturalistic inquiry focused on the meaning in context. Naturalistic inquiry is a holistic, intuitive inductive study carried out in a natural setting that uses humans in their social situations as the primary source for data (Borg & Gall, 1989).

This researcher was a participant observer in two different types of settings. The first setting was observing

throughout the entire training sessions of the PRO Cadre II. The researcher collected documents that were given to the PRO Cadre participants. Merriam (1988) stated that documents are valuable in a qualitative study if they contain "information or insights relevant to the research question and whether they can be acquired in a reasonably practical yet systematic manner" (p. 105). The second setting was observing in the participants' classrooms for data collection of techniques gained from the PRO Cadre training.

Schooling is an abstract construct that is most readily operationalized in a natural, ongoing behavioral transaction. It is most directly accessible through observation and multiple data-collection strategies.

The researcher contacted the seven teacher participants to schedule a time to observe the classroom and school of each teacher. One full class period was scheduled for observation. The researcher was introduced in two of the classes. The researcher was seated in the back of the classroom and out of direct flow of instruction. Notes were taken about the teacher instruction and the interaction with students. Samples of teacher-made work were collected. Checklists (Appendix A) of signs of assessments that had been given during the training were marked. A physical description of each classroom was recorded. This included how the desks were arranged, words or signs on boards, equipment in room, supplies around the room, and any signs of student work displayed.

Interviews

Interviews, according to Bogdan and Biklen (1992) are used mainly in two ways: (a) as the primary source of data or (b) in conjunction with other data-gathering techniques such as observation. "The interview is used to gather descriptive data in the subjects' own words so that the researcher can develop insights on how subjects interpret some piece of the world" (Bogdan & Biklen, 1992, p. 63).

Interviews were held with the teacher participants and their administrator at their school sites. The purpose of the interview was to gain insight into each participant's perspective of what had occurred because of the PRO Cadre Training. The interviews were intentionally directed to seek certain information about the factors that affected implementation of learning from a staff development training of trainers program to the classroom.

The researcher felt these individuals had key information because of their knowledge level and involvement in their perspective schools. "Educational qualitative research's purpose is to provide rich, descriptive data about the context, activities, and beliefs of participants in the educational settings" (Goetz & LeCompte, 1984, p. 17). The interviews provided the researcher with the majority of the relevant information for this study.

Both the teacher and administrator interviews were guided by a set of questions (Appendix B) but the participants were encouraged to elaborate and expand beyond the questions. The researcher tape recorded the

conversations, as well as made written responses. The tapes were later transcribed.

Questionnaire

Each participant in the PRO Cadre took a pre-test on his or her knowledge of assessment in November, 1994. In March, 1996, each participant was sent the same test about assessment for completion that was returned to the researcher. This represented a post-test. The researcher was interested in how the participant's knowledge and/or understanding of assessment changed because of the PRO Cadre II training.

Data Analysis Procedure

Qualitative researchers seek to understand and interpret how various participants construct the world around them. Researchers begin with biases and preconceived notions about how people behave and think. "The research questions that investigators formulate are influenced implicitly or explicitly by the personal experience (Peshkin, 1982) and philosophies that shape their interest and the way they think" (Goetz, 1984, p. 41). Biases serve both positive and negative functions. Researchers have a value about the research.

Discovering and establishing units of analysis is a major task in processing qualitative data. One such analytic unit is looking for patterns to emerge in a process that Guba

(1978) calls convergence; figuring out which things fit together. The researcher looked for emerging patterns to make interpretations from the data collected. Conclusions or results were then interpretated from the data. Qualitative research reflects a more eclectic use of data.

The researcher analyzed the interviews and began noting similarities and differences. Certain patterns began to emerge. The researcher utilized the data to form some conclusions and patterns of meaning important to the research questions.

Formal observations by the researcher contributed to first-hand knowledge of the use of practices utilized from the PRO Cadre training. During these observations, notes were taken reflecting any items noted from the training that were used. A document from the training was used as a reference tool for a checklist. Also, any teacher-made documents were collected as documentation.

The pre- and post-tests were compared for any changes in knowledge. Also, this knowledge was used to see if any patterns emerged. This information was further documentation of the perceptions of the teacher participants during the interviews as well as for the observations by the researcher.

From all of this information--the interviews, the observations, and the pre- and post-tests--the research questions guided the summary of the data analysis to the findings and conclusions.

Summary

The final discussion in the research process is the art of interpretation and presentation. The summary of the research process is in the form of verbal description and explanation. The data are an accumulation of interviews, observations, and questionnaires.

Distinguishing among focus, purpose, or goal of this study and the questions investigated was an essential task to communicate both the study's conceptual significance and its empirical content. Qualitative researchers frequently develop or redefine such purposes as they proceed through the research activity. In qualitative research, the formulation of the questions and the problems are complicated by the variety of ways initial objectives are extended, modified, or redefined by such factors as selection difficulties and emergent analytical categories.

Qualitative research is a tool that offers hope to understanding the complexity of the many interactive processes that occur in a school. Past practices have been to break apart problems, to fragment the world, and to have a solution for all schools. Qualitative research views the school and the organization holistically. Holistic thinking is a systems approach to understanding that a change in one part of an organization affects all the other parts of the organization. Researchers may discover emerging patterns that

can transcend our schools to the future by understanding the interrelationships of all dimensions. The insights can be the trends to move schools to the twenty-first century.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

Introduction

The purpose of this qualitative study is to examine the implementation process of a training of trainers staff development program, the PRO (Professional Resource Opportunities) Cadre Teacher Program. Observations and interviews provided the data about the process of implementation. A pre- and post-questionnaire supported the findings from the observations and interviews. The analysis process discovered and established patterns that emerged from the data.

This chapter begins with an overview of the PRO Cadre training, followed by the data analysis. Data analysis was organized around the two research questions which guided this study. These questions were:

1. What is the nature of implementation of assessment concepts resulting from the training of trainers program at the classroom and school levels?

2. What are the factors that facilitate, impede, or modify implementation of assessment concepts resulting from the training of trainers program at the school and classroom levels?

Analysis of Results

The primary techniques used for this qualitative research study are observations and interviews. A pre- and post-test questionnaire was also administered to record any changes made in the participants' knowledge and application of assessment concepts.

Major Findings

The major findings for the two research questions are included in this section. This section will first describe the assessment concepts observed by the researcher. The next section will describe the implementation of assessment concepts and changes made since the PRO Cadre training. This section will be followed by the teachers' and principals' comments about the benefits and changes resulting from the Cadre. The last section will describe the themes that emerged from the factors that facilitate, impede, and modify the implementation process.

Educators use the term "authentic assessment" to define the practice of realistic student involvement in evaluation of their own achievements. Authentic assessments are performance-based, realistic, and instructionally appropriate (McTighe, 1994). The use of alternative assessments often reflects a fundamental shift in what schools value. Assessment tends to drive what schools teach and how they teach it. Creating the performance-based classroom requires

new skills and techniques. Some of the components associated with authentic assessment are: (a) using research-based instructional strategies that improve student thinking; (b) designing authentic tasks and scoring rubrics; and (c) using alternative assessments such as performances, exhibitions, products, and portfolios.

Implementation of Assessment Concepts Observed

This section provides examples of assessment concepts and teaching strategies observed by the researcher. The idea is to convey a holistic picture of teaching and assessment. "Changes in assessment came about because of changes made in philosophy and curriculum. Portfolios and authentic assessment are based on a holistic, responsive, and child-centered curriculum" (Hill & Ruptic, 1994, p. 5). The first section describes the classroom to provide an image of the environment which affects the implementation of the assessment concepts. Zahorik's (1995) research on the classroom environment concurs with the findings from this study.

> The classroom setting contains potential threats to implementation [of constructivist teaching] that must be reduced or eliminated if implementation is to occur. Three major threats or constraints are student expectations [engagement in activities, hands-on activities], content coverage [deep understanding of content and process], and evaluation [assessment tools rather than 'testing']." (pp. 37-39)

Classroom Environments and Teaching Strategies. This section provides examples of implementation of assessment concepts observed in the classrooms. For instance, one elementary

teacher who participated in this study team taught in one large area. The two classes are combined together as one large class. This class represented changes in instructional strategies as well as changes in the roles of the Cadre teachers. The teachers divided the teaching by subjects. Each of them chose the subjects they enjoyed the most to teach. One teacher becomes the "director of information" while the other is a resource. After instruction, the two became facilitators for all the students. Student writing as well as teacher-made bulletin boards surrounded the room. The teachers' desks were together so they would be face-to-face when seated at their desks. Student desks were in groups of four desks together. The physical environment was conducive for student interaction.

Another observation of signs of implementing assessment concepts was the high school science lab where students were dissecting lynx. Surrounding the room were tall, science lab tables with stools around them with motivational posters around the room. The teacher's desk was positioned in the back corner of the room and had family pictures and a boom box on it. Next to the desk was a big lounge chair and a bulletin board of students' pictures that had been given to her. The classroom was a friendly environment. Each table was given a lynx and the students were asked to label its parts (e.g., when examining the heart, they had to label the left aorta). The teacher asked the students to have her sign off as they completed each part. The teacher went from group to group interacting with the students, as well as listening to

their understanding of the designated assignment. This teacher remarked that what was happening differently in the science lab after the Cadre was the clarity of the expectations known by the students and having rubrics and checklists.

At the east-side mid-high, a social studies teacher, who was part of the sample, team-taught with a language arts teacher. The two classrooms were divided by a partition which was left open. These students stayed in this room for two class periods. The teachers integrated the subject matter. During my observation, the students were viewing a video on the Shakers during their social studies time. They had been studying Utopian communities. In their language arts class they had read Animal Farm.

As a result of participating in the PRO Cadre, these teachers put more emphasis on student products, authentic assessment. The students used computers in a new computer lab to produce brochures that had information reflective of this time period. The researcher collected samples of different brochures developed by the students for evidence of ways assessment concepts had been implemented in this class.

The other mid-high teacher observed in this study was a physical science teacher. His classroom was set up with long tables, science posters around the walls, a mobile hanging in the front of the room. The class began by the teacher lecturing. After the lecture, he explained that a culminating project for this unit would be the building of mobiles. Students were given rubrics and guidelines on the

requirements to build a mobile. Groups were formed to begin work on these projects. The observer collected the papers the teacher gave as samples of implementation of assessment concepts.

The middle school observed had two teachers participating in this study. The school was an open school. In one of the classes where the researcher observed, the teacher was lecturing and having a discussion period on map skills. Students had colored pencils marking map areas. This was in an open area space, divided from the other classes by cabinets. Student desks were grouped together. Student-made projects were displayed on the cabinets.

The other middle school class, at this same site, was less formal. For example, students sat around long tables rather than student desks bunched together. Students were working together on projects that were due. There was more interacting with students. Fishing poles and costumes (clothing items) were in one section of the room. The teacher was walking around to different students. This class was in a closed room.

Only one of the classrooms observed was arranged in a traditional style of designated rows and desks. Typically, a classroom using assessments is student-centered where there is active participation. Classroom arrangement of desks change to facilitate the interaction by grouping desks together or by having tables around which the students gather. The physical environment, as well as the teaching practices, reflected traditional teaching. The teacher

lectured from a teacher manual while the students followed in their books. Students went to the board to show their problems and answers. The teacher sat in her chair by her desk as students went to the board. The room was surrounded with teacher-made materials. The researcher did not observe authentic assessment practices being used during the observation.

Besides the assessment evidence gained from the researcher observing classrooms and schools, interviews revealed other ways that teachers had implemented assessment concepts learned from the PRO Cadre.

Implementation of Assessment Concepts

This Midwestern school district had an expectation that each site spend at least one hour of the January professional day on the assessment concepts learned from the Cadre. The sites varied how the assessment concepts were presented. Four of the sites, including the middle school with two sample teachers, adapted the assessment information to fit the needs of each site. One elementary teacher and the high school teacher made the comments, "we gave what the school system wanted" and "we basically had an outline that we went by and we went through the district book that we had."

One of the variations from the middle school was to show how different learning styles would benefit from different types of assessments. "It was tons of fun," was one remark. They made groups with all learning styles represented from

the 4MAT training and gave each participant a t-shirt with the design of their learning style. The example given was:

> One of the assessments was to construct a house and tie it into a simple thing, which was the Three Little Pig thing. A couple of tables had a paper/pencil test, another one had to build it out of straw and withstand a force from an electric fan. We had tooth picks and legos and we had some doing a reenactment and an interview. We would have teachers at other tables pointing to a table across from them saying "I would much rather be doing this". Yet they were maybe engaged in what other people might think was a fun activity. That really made the connection of the learning styles into assessment. What's fun for you might not be fun for somebody else in the form of an assessment, and so to be able to offer a lot of choices to students is a good thing. Teachers really got a lot out of that inservice particularly because we started making that connection of learning styles. There is a big growth there.

One of the elementary schools went on their first professional development retreat and spent the night together at another location east of town. They played the Change game Thursday night. This is a simulation of the change process to show the complexity of change, key people, the positions people play in the process, like resisters, and the importance of communication. Grumblings were initially heard. The change of mood was noticed when the comment was made, "Why can't we keep going, because we only got three of our pieces moved forward and now we know we can get five or six more of our pieces going?"

The game made some key points necessary for people to understand change and its complexity. An example was:

> There's Irene who's been here 45 years and she doesn't want to think of anything but desks in straight rows. All those different people that were in the game, they related to them in some fashion or another so that helped as we went further into our weekend.

Friday was spent on The Three Pig activity. This was an activity done during the training which made a point about how different learners feel. It also showed the importance of assigning value to projects given, not just assigning them. After this activity, questions arose such as, "How can I get my two grades a week in the grade book from doing this seemingly fun activity and so called learning?" The workshop was spent going over criteria and how to do performance-based criteria. The retreat format was in small group activities with hands on activities. This was new to this staff.

Other notable changes from the training came from the awareness of presentation skills and needs of differing learners. One participant remarked:

> Now I go into presentations with a different idea and I almost analyze other people's presentations thinking, "You know if you'd just let us work through this, you'd probably get a whole lot more done than just telling me something." Show me, tell me and just let me do it, just like the kids do.

Teachers from the two mid-highs spent most of their professional day with teams working on criteria and rubrics for their units which they already taught. The trainers connected it to their present teaching practices. They made the presentations fun and practical. The feedback they received from their peers was positive.

Changes Made Since the PRO Cadre

During the interviews, Cadre teachers indicated a variety of changes they had made in their teaching, in their planning, in instructional strategies, and in the evaluation

of student progress since the PRO Cadre. Listed below are some of the comments related to these themes.

Teaching. The teachers and the principals discussed the changes in teaching practices because of the PRO Cadre training. There was a feeling of enthusiasm during the interviews. Specific comments some of the Cadre teachers made are listed here.

> I'm a better teacher because I'm assessing kids in ways that reach everybody now. Each child has an opportunity to stretch themselves, [sic] because I'm teaching in more varied ways.
>
> I think what I'm doing in my class now is rubbing off on the person I teach with.
>
> I think some of the things that you could see me do with my classroom is not taking the easy way out all the time. The easy way is paper/pencil. It's time consuming to come up with authentic assessment, but I believe it's the best way to assess kids.
>
> I communicate more effectively. I seek connections in how students can use the information, that it is meaningful. I use products in all areas, my lesson plans are 4MATTED, and I use a variety of instructional strategies.

Teaching had changed for the participants in the Cadre. Some of the changes were more obvious than others.

Planning. Part of the changes the teachers noted in their teaching was how their planning had changed. They were more aware of how they were adjusting their teaching from the student feedback. An example would be that as they were kidwatching or monitoring students working, the teacher might notice students did not understand paragraphing. The teacher

would then plan a lesson to teach paragraphing. The student's need would guide the planning of the next lesson rather than as in the past when the next lesson would be chosen by the teacher's guide. As they plan, Cadre teachers design the criteria they will expect of the students. Comments that reflect the changes are given.

> It's given me a scope to look at student's knowledge, and where I need to go back and say alright, we evidently missed that we need to move back to that and get that down real well, the concept or idea.

> I've cleaned up my units. I have clearer rubrics and more examples of quality products. When I first started, the students would just do one like the example I have. I have realized I need to provide a variety of examples.

> I have asked my principal for help with ideas on how to make my lessons better.

Planning was developing what they would teach and how they would know if the students had achieved the objectives. Assessment was part of the process of planning.

Instructional Strategies. Teaching in a variety of ways was expanded because of the PRO Cadre. Lecturing was only one strategy teachers could use for teaching. Cadre teachers began to see a bigger picture of the relationship of teaching.

> I integrate more things and not just piecemeal my lessons.

> Kids are working together since our workshop.

> I've done role-playing. I've tried to do more real life situations with the students. I try to remember the multiple intelligences when I'm planning my lessons.

Cadre teachers were using instructional strategies that were varied. Lessons are made more meaningful and authentic. Students' needs are being addressed by providing a variety of strategies.

Evaluating Student Progress. A shift in evaluation practices began as Cadre teachers were using multiple assessment tools to evaluate students. Checklists, rubrics, projects, multiple-choice tests, and presentations were some of the ways teachers mentioned they were now using to assess students.

> I make little notes all the time. I talk to parents about what kids do isn't always reflected in a grade.
>
> I understand the different needs of my students and I try to offer some choices. I've added rubrics. I told the students up front what I was looking for and how many points this American Native unit would be worth. It was real interesting. The first time they worked with it, if it was for 30 points, well it was because they did it. That's when I realized I had to add points for more than just doing it but for the quality of the product too. We also had the students do presentations of these homes they built. The whole group took notes. A little bit of peer pressure, seeing other people and why they did that, talking to us about it then working together to some understanding of what we were expecting, what they could expect of themselves, and how to work together in groups. We pulled in several things besides assessment.
>
> I try to use a balance of multiple-choice tests and authentic assessment tasks to tap into different learning styles.
>
> I try do different types of assessments so that every learner had an opportunity for success. When you do certain things and other kids gripe when you do other things, so you never are going to make them all happy at the same time. Everyone had an opportunity for success and everyone had an opportunity to do something they enjoyed.

Evaluating student's understanding became more than pencil/paper tests. Evaluation practices were now a process and a result. Assessment was being used from the planning phase to the completion of products. It encompassed more than a final grade.

Teachers' enthusiasm was noticed as they shared the numerous ways their teaching had changed since the PRO Cadre sessions. These Cadre teachers felt they were better teachers and were able to meet more of the students' needs.

Teacher Comments about Benefits from the PRO Cadre

All the teachers in this study talked about how the Cadre had made them better presenters for inservices and faculty meetings. They had a better understanding of adult learners, learning styles, and presentation skills. Some of the Cadre members had presented workshops beyond their own buildings to the district and outside the district.

Many of the Cadre teachers talked about how it was necessary for them to make connections for the teachers with concepts they were already teaching. "We are making connection with what we are already doing at our school. For example, we have the nature trail and we have been doing more lessons using it."

Another comment that seemed to repeat itself was how much more sharing of ideas there had been since attending the Cadre. This happened during formal meeting times, while serving as a resource person, or just in conversation. Teachers were visiting each other's classrooms.

To reinforce the beliefs of the importance of utilizing performance-based assessment, one school decided to designate its computer lab as a production studio. The researcher observed students working in the computer lab on a language arts project. Each group was to make a slide presentation. The projects included transferring of clip art and adding music to the presentations about Julius Caesar. These projects were to be on display for the district site presentation. This is a process each site completed to be accountable for accomplishing the site goals established at the beginning of the school year. Excited by the expansiveness of the assessment activities from the use of computers, this school felt like there was no stopping what they could now produce. Another affirmation of the accomplishments with assessment this school made was a comment made by a district director after a site visit. The comment was, "It was unlike anything they had ever done before." The presentation was impressive.

Principals' Comments About Implementation of Assessment Concepts

Principals seemed to have a clearer picture if and how non-PRO Cadre teachers were utilizing assessment concepts. One mid-high principal said, "85 percent of my teachers based half of their final grade on authentic assessment tasks." The middle school principal thought that over half of his staff was using authentic assessment with the students.

A comment made from one PRO teacher when asked about implementation of assessment concepts in her school was:

> To be very, very frank, I don't know what other teachers are doing. I don't have any contact with, I mean I know what my social studies team does and I teach with some traditional teachers and not everything presented is always used, but I really have not an idea what other classrooms are actually utilizing since we really don't have access to observe. I don't ever have a time to peer coach or anything or go in and look and see what classes are doing.

One elementary school staff was overwhelmed with all that was expected and felt it was too abstract of a concept for much to happen without further help. "We needed to reevaluate what we were doing because our staff panicked," was one comment.

Feedback from the other elementary school indicated that the PRO Cadre had added new leadership and a new dimension to their school. Even though the process of assessment had just begun in this school, the principal was pleased with the responses from the teachers since the presentations on assessment from her Cadre teachers. Presentations were done by both the first and second Cadre trainers. Other assessment methods attemped were journals, portfolios, and the revamping of projects. Projects in the past had just been assigned to students. Now, criteria would be established in the beginning when a project is given, and the students are made aware of the expectations. The principal's comment about the progress:

> I think they've only had a brief introduction. I mean we haven't gone in depth as we're planning to go, so I couldn't say everyone would say, "Of course we do this this way because." I think they've opened their minds up and have gotten their feet a little bit wet and they're interested now to know.

The high school principal stated, "It has made an awareness of other ways to assess. The younger teachers are probably using some alternative assessments."

All principals concurred that the Cadre provided a core of teacher leaders who benefited the site processes of school improvement and staff development. Another comment made by all but two of the principals was that the training had improved the teaching of the Cadre participants (e.g., they have more tools, more instructional strategies, skills, and understanding of the teaching and learning process). The training stressed an understanding of different needs for different learners.

With the exception of the two schools, one elementary school and the high school, the sample schools paved a path of new learning regarding assessment and learning styles from PRO Cadre II. Implementation of assessment programs vary among the schools although there are common themes that emerged. The reasons behind the variation are discussed in the findings from Research Question Two.

Themes

The second part of the data analysis reflected common themes that are significant to understanding the implementation process of professional development. Certain factors were found to have made a difference in the ways each of these schools constructed meaning from the PRO Cadre II. The following research question structured the findings

reported in this section: What are the factors that facilitate, impede, or modify implementation of assessment concepts resulting from the training of trainers Cadre at the school and classroom levels?

Common themes that emerged from the structured interviews with the seven teacher participants and the six principals reveal factors that facilitate, impede, and modify the implementation process. The major findings for this second research question are included in this section.

Findings That Facilitate the Implementation Process

Changing beliefs, attitudes, and behavior is a long-term process. The first section describes how Cadre teachers began moving toward authentic assessment. This section provides ideas about securing the implementation process.

Time is Needed for Professional Development. The most discussed theme throughout the interviews was "time". The sample teachers and their principals indicated time was needed for professional development, practice, follow-up, maintenance, visiting other teacher's classrooms, dialogue, planning together, and faculty meetings to share ideas and support each other. It was mentioned that time for learning needed to be built into the master schedule. Also, the existing scheduled time needed to become "learning" time rather than "meeting" time.

Specific comments were made that emphasized the importance of time. Cadre teachers' comments were:

> Staff development was a major focus when we had it built into our schedule an hour every week during our team planning time. I don't know how we will find time to do it now with all the cutbacks and all the other things I
>
> am responsible for. Like this year, we have a new textbook series in social studies and we are all teaching an extra class now.
>
> Faculty meeting times need to be more learning times like SWAP meets, where teachers are sharing ideas and new practices they are trying.

For principals, time was the biggest consideration in facilitating implementation of the PRO Cadre.

> I've got to give that PRO teacher time, release time, and then the planning time, and actually letting them work together. We also gave up some faculty meeting time. I feel that is is a big part of my job to make sure those times are made available. It gets pretty hard sometimes.
>
> I think before this is ever going to be really successful, we are going to have to develop adequate time for these people to work with the staff.

Principals also mentioned how they scheduled time for communication to happen so that professional development was a focus.

> Through our curriculum review meetings, they all [the PRO Cadre teachers from all Cadres] have common planning so that we can have our curriculum review fourth hour.

Providing time to ensure staff development would be part of the teaching routines was an important issue discussed by all participants. The way to make that happen would be unique to each of the schools.

District and Site Support. Support was mentioned in reference to support from the district and the principal.

Comments from the interviews indicate that it is important for the principal to value the learning and the process. Some specific statements were:

> I mean, her [principal] making it something that is important to our school.
> Of course what helps the most is to have support of your administration. When you have your principal standing in front, when you have your principal say, "This is important," when they place a value on this training, that filters to my teachers. Having the support, the administrator will spring for the t-shirts, little things like that that show support of what you are doing from the people in power.
>
> She's given me the help, so that it wasn't all on my shoulders.

The comments about district support pointed out that the Cadre was established by the district and there was a need for a 'push' from the district. There is a fine line between encouraging and mandating change. The concern is that too much comes as top-down requirements, rather than finding a balance between district mandates and site needs.

> I think the district is very smart in training these Cadre teachers. I really praise them [the district] for putting the PRO Cadres in the schools because I think that is a first step of them following through with acquainting people with research and then showing them what needs to be happening in school. I think this is great to have everyone in the district going in the same direction, but everybody can make it fit their building because they are at their building and they know their building needs and they know the people there.

Principals' comments tended to be more indirect in their support:

> Principals have to set a model and an awareness and also have a climate to support what these Cadre teachers bring back to their sites.
>
> One thing I know for sure is my valuing their participation here and making sure that they know I do and that the staff recognized that I'm also a

> participant when this group of teachers is in the leadership role. I think the constant reassurance and providing them the time to do what they need to do. I think as a principal you just need to value it and be a facilitator of whatever they need to do to get it done and give it time.
>
> The support I gave as a principal was that I believed in what it could do and I put my PRO Cadre people in a different level of involvement. I raised them to a more prestigious position as far as doing workshops through the presentations, working with other teachers, being advisors, "You know, go see Susan."

Support was important for both teachers and principals. Finding the balance between district requirements and site needs was a concern. There was appreciation for the district development of the Cadres.

Follow-up and Maintenance. Follow-up and maintenance were other major issues addressed in the interviews. Principals and Cadre teachers alike felt this issue was of major concern. This district is well known for its emphasis on staff development. Information from one Cadre is presented, then the second Cadre material is presented. The third Cadre began which asked teachers to become involved with technology, followed by the fourth Cadre phase on service learning. Too much new information was presented to these sites. Providing new information is an asset in this district. Lack of follow-up and maintenance is the liability for any long-term results and learning.

> One of the things I've observed over my tenure here is that they do an excellent job of acquainting you with much of the current research and even past research and what really needs to be happening in school.
>
> A comment made by a principal about what was needed was to move from the cognitive level of awareness of new

> knowledge to practical application by coming back reviewing and showing them how to do it. Instruction is the key, curriculum is fixed. Application is the key to professional growth.
>
> It's kind of strange. Computers turn over and become antiquated, really you have to update your computers but we don't seem to realize that the teachers are the same way. We will invest in all kinds of things to make kids successful, but unless you invest in the people that are actually going to be in the classroom, renewing their skills, broadening their skills, then you are really not going to be very effective as a teacher and get through the instructional problems that you are going to have at your school.
>
> All good training, even if it was stuffy and new, I think it was good to go back through it again. It is always good to remind yourself of things, because we get pretty busy and we get pretty bogged down.

A final teacher's comment to the success of any staff development was an opportunity "to process and get feedback." Follow-up and maintenance was a huge concern because of the pattern in this district of providing information with limited planning for follow-up.

Accountability. Accountability was another component that Cadre teachers and principals felt needed to happen in order for staff development to materialize at any depth. What is emphasized is what gets results. Unless there is some process of accountability in place, teachers and principals feel like there would be little continued implementation of assessment concepts from the Cadre. The need was stated that somebody must be responsible and held accountable. As stated, this responsibility needed to be mutual, from the

administrator and the Cadre teacher. A variety of ways for this to happen were given:

> Expecting something from each department.
>
> Documentation from the PRO teachers and all the other teachers in our building.
>
> Attach inservice goals to individual evaluations. Expect teachers to demonstrate. Have teachers write goals from new material.
>
> Expectations up front, a little pressure.

Accountability was a factor that facilitated implementation when it happened. Cadre teachers and administrators discussed the need to develop some structure to hold people accountable.

Climate for Change. Climate issues that surfaced were whether teachers felt they could risk trying something new. Principals would need to be supportive of the process of learning with something new. Having an instructional leader with a vision of how to make schools a place for learning was a key factor discussed. The climate for change issue pertains to the learning environment for adults and children. If adults are in an environment that promotes learning, then the model is set for what is expected for students. Some of the key points to consider for the school climate theme were:

> A climate where teachers feel comfortable to apply what they have learned.
>
> Celebrate little steps of growth.
>
> Empowering teachers. They [Cadre teachers] were already the center of the school, but they had not been empowered to really have any kind of, it's not really authority, but any kind of power I guess, over other

> teachers to really affect other teachers. I gave them the opportunity to meet once a week to plan with other people, I think that had an effect on it. They could have easily come back here, if I had ignored them and not put them together and given them an opportunity to do this, they could have just turned out to be really good teachers in their own classrooms.
>
> A better climate, it lessens the referrals, more opportunities and choices for kids.

Cadre teachers were concerned about the environments that would support change. Risking to try new ideas caused teachers a variety of responses to uncertainty. An environment that was conducive to learning was desired by both adults and students.

Following are other ideas that emerged consistently throughout the interviews. These themes were also keys to facilitate the process of implementation.

Connect assessment concepts to things teachers are already doing. Teachers need to see the ideas presented during staff development as practical and meaningful. Teachers are more willing to invest in the idea. Some ways to connect it are when certain elements are present.

> Individualize the PRO teachers and program to your staff. See how it relates to the work and is meaningful to them.
>
> Show teachers how it is related to what they are doing in their classes. Integrate ideas.
>
> There is very little resentment for a meeting like that when it's got worth, when it's got quality content, and it's something you are going to be able to use to make your job easier or more exciting.

New ideas are valued if teachers can see the benefits of how it improves their present practices. Connecting

assessment practices to present practices enhanced implementation.

Sharing of ideas, talking with other teachers. During the interviews, Cadre teachers commented that the process of implementation was facilitated when teachers were given opportunities to share, visit with other teachers, and have time to dialogue. Their comments were to have time for:

> Working with other teachers, helping them at their level. Work in large groups then going out and sharing training in smaller groups or departments.
>
> Work closely with other teachers.

Sharing of ideas was of benefit for all the teachers. Teachers wanted time to be able to share and dialogue with other teachers.

Creating a core of teachers. Teachers learn best from teachers. Creating the PRO Cadre teams was the district's idea to enhance the possibilities of more quality professional development at sites. The PRO Cadre teachers and principals agreed that the teams would create a higher level of professional development. These teachers also agreed the district should not limit the Cadres to their own sites but seek out other possibilities to utilize the talent of these professionals. One such comment was, "Use us in meaningful ways, go beyond the PRO Cadre assignments. Train others outside the district. Create an awareness outside of our district of these Cadre teachers."

Principals' comments affirmed the need for teachers teaching teachers.

> I can get up and tell teachers I believe this, but until they have someone who is really in the classroom say the same things they aren't going to trust it. Just because I say it, doesn't give the trust unless I really practice it.
>
> The Cadre teachers are probably five times as effective as I could be by myself, and I know that. I have to provide the structure to pull it off. It causes theories and strategies to go into practice naturally as the PRO Cadre teachers teach to other teachers.

Creating the core of teacher leaders provided each site with site experts in a variety of concept areas. Teacher leaders were of value to all involved in the study.

Belief in what you are doing. Two Cadre teachers and two principals mentioned you must believe in what you are doing. There has to be a need.

> I wanted to be part of the assessment Cadre because I believe assessment is the way to make more students successful.
>
> The Cadre validated my kind of teaching.
>
> Well, I am one of those that thinks you can't have enough training and any time that you can get something new that rejuvenates you in your profession, it's wonderful. Staff development really gives us that chance to get rejuvenated, to pick up something new, get some of the latest technology.

When asked what facilitated the process of implementation for staff development, one high school principal stated, "It doesn't happen much." Believing in what you are doing facilitates the implementation process.

Nine factors facilitate the process of implementation: providing the time for professional development, ensuring district and principal support, establishing follow-up and maintenance as part of the staff development process, designating someone to be held accountable, setting up the environment to be conducive for change, connecting new information to present teaching practices, creating a core of teacher leaders, allowing teachers to share ideas, and having a belief in what you are doing.

Findings That Impede the Implementation Process

Often the findings that facilitate the implementation process are the same findings that impede the process when it was lacking. These findings are time and follow-up and maintenance. The major findings that impede the process of implementation are discussed next.

Time Needed for Professional Development. Time was the concern for both facilitating and impeding the implementation process. If time was not provided, then it impeded the process. When time was lacking there was often not time to: (a) learn, (b) practice, (c) plan, (d) present, (e) reflect, and (f) coach. Other ways time was mentioned as a concern related to assessment were: (a) using authentic assessment takes more time than paper/pencil tasks; (b) designing authentic assessment tasks is time consuming and, (b) using assessments requires better time management because it takes more time for students to develop.

A few other comments made about time that impeded the process of implementation were: (a) the timing in the teacher's career, like two or three years from retirement, or the timing of the dates of the professional development, i.e. close to finals week; (b) time out of the classroom, pressed for instructional time; and (c) time in getting training done. This Cadre didn't move fast enough. It extended into two calendar years. The time comments were strong. Many Cadre teachers and principals stated the same concerns:

> Lack of time. Teachers are satisfied with paper and pencil test, it's easy to grade, I spend enough time here I don't want anything to cause more time getting ready. Really if you have a properly set up assessment, it takes less time to grade than what you might think.
>
> We have a faculty of about one hundred people, it's pretty difficult to get to spend much time with each other.
>
> Time has been our biggest problem. Timing in two ways. First of all, getting the training done and getting them really into the classrooms and in with other teachers working with it, and then time for them to work with large groups of teachers, like all teacher inservice days and when you can have the whole group and really get down and do some good work with teachers.
>
> Again, time. Lack of professional time. It doesn't even need to be formal professional time. I think it's lack of time for teachers to be able to talk about things in their school day. They also need a balance of time to just sit and watch and really reflect on those kinds of things. Just not enough time for people to interact with each other. People that are not alike need to interact and share their ideas.
>
> I don't want to be away from my class. I'm hired as a teacher to teach it, you hired me for the professionalism I had, if you are going to train me some where else, take me some other time besides my classroom time.

> I think it is naive to think you can give somebody eight hours of training and then all of a sudden make them a real expert. It needs to be extended and daily reviewed and then time.
>
> We had fifty hours of training, and we are expected to come back to our buildings for three hours of staff development and that teachers should be using assessment. Time, how much time you spent on training us and how little time we have to train our faculties.

Time was a major factor in impeding the process of implementation. Time needs to be scheduled to ensure staff development will occur as well as receive the benefits of the learning.

No follow-up and maintenance. Follow-up and maintenance were talked about in ways that facilitated implementation when they are done. The problem is with little or no follow-up and maintenance, there is not evidence of lasting learning from the staff development.

> There's an assumption that it's going to breed itself instead of continue the training by cross-sharing to build a commitment across the district.
>
> [Reinforce] what you taught us next year, not just leaving us high and dry because I loose track of that. I need that reinforcement. That refresher course kind of thing. Then doing it again, and building on it year after year.
>
> Size is a factor. It is tough for two people to train 102, then to be able to follow-up with everybody.
>
> I think a vital component that we've got to do is the maintenance. I think that's a part that this district always drops. We do really great, like the 4MAT, and we get people all excited when they are out there, and then there is no follow-up or maintenance and it dies. Not from lack of interest and not from lack of desire of people to know more about it but because there is no structure to the maintenance.

When there is no follow-up or maintenance provided as part of the staff development process, there is little or no implementation. Cadre teachers and principals expressed concerns for no plan to continue each of the Cadres.

Change. The idea of change often inhibits people from accepting or becoming involved in new ideas. The challenge is for administrators to become involved alongside teachers. People are most comfortable in taking the path of least resistance, to keep the status quo.

> The people that balk at this are the people that balk at everything new, change. Fear of failure. Our school system throws a lot at us and has ever since I've been here and I think sometimes we feel like we're having the same thing thrown at us, it's just different wording.
>
> I think it's [assessment] such an abstract concept that it's real hard for them to understand. Most teachers are wanting 'here's a package, you go from point "a" to point "b", but I might be at point "c" and so you try to give them that leeway, but you know it's real hard for them to understand.'
>
> Sometimes there's a gig in a sense. I can't begin to tell you how much people hate to do surveys, but there seems to be a jump on the band wagon idea that again it's top down instead of bottom up.
>
> Although I may participate in your silly workshop inservice, you won't change me.

Change causes a variety of reactions. There are the groups of people who are innovators and will be part of the change. The majority of people involved in change will move along slowly. There is always the group of resistors for many reasons. A key to change is to understand the process and reaction of the participants. Most human beings are comfortable with the status quo.

The three findings that impede the process of implementation are: (a) when time is not provided for staff development, (b) follow-up and maintenance are not part of the process, and (c) change, moving from the status quo.

Findings That Modify the Implementation Process

Each person in the sample population came to the training with different experiences and ideas regarding assessment. Educators from two different sites mentioned that they had participated in previous assessment training prior to the Cadre. Two of the teachers had experiences teaching outside this district. Each site defined its own goals and had some autonomy. With these given differences, each school and trainer constructed their own knowledge from the experiences given. "Constructing knowledge by fitting new content into existing structures or by adjusting existing structures usually cannot be done quickly, nor can it be easily contained within arbitrary boundaries" (Zahorik, 1995, p. 38). Differing comments were made to show how modifications needed to be made.

Adaptability to Personal and Site Needs. Schools that indicated that the PRO Cadre provided them with some tools, strategies, and ideas that could be adapted to their sites had greater evidence of assessment practices in their classrooms and schools. Two schools that attempted to package the Cadre back to their schools made more comments about the

unlikelihood of assessment practices being integrated at their sites.

> Some reasons teachers won't change is that there is lack of ownership. This works for them. Why do I need anything else?
>
> I think the Cadre is wonderful. I think it is directive. Now it is much more focused in structure. Everyone knows there is a problem with the ways we are assessing and it needed to be dealt with. The idea of having those trained people to help relates to how I think staff development should happen.
>
> There needs to be a balance between site needs and district needs. It's great we are all going in the same direction.

Other comments made for modification of implementation are:

> We had general guidelines, the Cadre teachers are invaluable to me. I could ask them to do anything for me if it's related to their topic or not, because they are a general leader not just in one area.
>
> I think if teachers aren't given enough staff development in particular topics or areas, then they are less likely to pursue the use of that particular thing in their classroom because they simply don't know enough about it if the training is not accessible to them. If we train people in each building, then we have people in every building that can help train everyone else. A very efficient way. You used to do the big, huge meetings, and they are great for a get together, but true staff development, you've got to break down in those smaller groups.

A key factor is to modify staff development so that it is adaptable to differing needs. Expecting teachers or schools to implement a package deal results in little changes. This was the only factor mentioned to modify implementation.

Qualitative research methods of collecting data allow patterns to emerge from the findings. These patterns were organized by the themes that emerged that affected the implementation process of staff development.

Summary

This chapter represented the major findings of this qualitative study. The information provided analysis of the data and interpretation of the implementation of training of trainers staff development program, the PRO (Professional Resource Opportunities) Cadre Teacher Program. The data were organized from the research questions.

Question One focused on how and what had been done by the Cadre teachers regarding the implementation of assessment concepts since the PRO Cadre II. The researcher found that six of the seven classroom environments that were physically arranged for student interactions and involvement had more observable assessment concepts. Teachers' roles changed to become facilitators of learning rather than directors of information. Direct information was only a part of the instructional strategies used. Students were active participants in the learning. Students were working together as partners or groups. Evaluation became part of the teaching process. Criteria were established as part of the planning for instruction and given to the students as part of the delivery of instruction. Expectations were known at the beginning of the units. A variety of assessment tools were being utilized such as student projects and exhibitions.

Cadre teachers were accepting oral answers and kidwatching as evaluation strategies of learning. Overwhelmingly, Cadre teachers felt they were better teachers. They understood the differences in learners, how to plan for instruction more clearly, and the need to provide a variety of choices and assessments to meet all students' needs.

Question Two focused on the factors that facilitate, impede, or modify implementation of assessment concepts resulting from the training of trainers program at the classroom and school levels. The patterns that emerged to facilitate the process of staff development were: (1) providing the time for professional development, (2) ensuring district and principal support, (3) establishing follow-up and maintenance as part of the staff development process, (4) designating someone to be held accountable, (5) setting up the environment to be conducive to change, (6) connecting new information to present teaching, (7) creating a core of teacher leaders, (8) sharing of ideas and talking, and (9) having a belief in what you are doing.

The patterns that emerged that impede the process of implementation are: (1) failing to provide time for professional development, (2) omitting the stages of follow-up and maintenance in the process of staff development, and (3) adjusting to the idea of change, some people are just resistant to change.

Only one factor emerged under the factors that modify implementation and that was the issue of being adaptable to personal and site needs. The sites that modified the concepts

from the training of trainers PRO Cadre had identified more ways of implementing the assessment concepts than the sites that attempted to package the district training.

This chapter's findings document the patterns that emerged from the observations, interviews, and questionnaires.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Overview

This chapter provides a summary of the findings from this study, followed by a discussion of the research questions. The reported findings are addressed along with supporting literature. Next, the implications and recommendations of these findings are addressed. A new model for staff developed is presented. Finally, suggestions for further research are offered.

Summary of Findings

This qualitative study examined the implementation process of a training of trainers staff development program known as the PRO (Professional Resource Opportunities) Cadre. Observations and interviews provided the data about the process of implementation. Pre- and post-questionnaires revealed supporting evidence of the findings from the observations and interviews.

This case study was conducted in a Midwestern school district that had recently begun a training of trainers program. The population of the study was 26 PRO Cadre

teachers. The teachers included were one teacher from each of the 14 elementary school sites (kindergarten through grade five) and two teachers from each of the three middle schools (grades six through eight), two mid-high schools (grades nine and ten), and the one high school (grades eleven and twelve). As the sample for this study, seven teachers were selected from this population to participate.

The next section reviews the research questions by discussing the findings and connecting these findings to the literature. Collection of the data occurred from the researcher's observation of the seven participants, the interviews of these seven teachers and the six principals, and the pre- and post-questionnaires.

Research Questions

Two research questions guided this study. The research questions were:

1. What is the nature of implementation of assessment concepts resulting from the training of trainers program at the school and classroom levels?
2. What are the factors that facilitate, impede, or modify implementation of assessment concepts resulting from the training of trainers program at the school and classroom levels?

Research Question One Findings

This section presents the findings from the first research questions. The findings relate to the importance of

the classroom environment, changes in use of instructional strategies, changes in the process of evaluation of student progress, and personal changes in the Cadre teachers. The following sections report the major findings.

The importance of the classroom environment. The classroom environment sets the structure of how one can teach to facilitate the practices of assessment. "To motivate and engage students, teachers must create a classroom environment in which every student comes to believe, 'I count, I care, and I can'" (Dodd, 1995, p. 65). The constructivist framework challenges teachers to create environments in which they, and their students, are encouraged to think and to explore. To understand constructivism, educators must focus attention on the learner.

There were noticeable changes in the classroom environments of the Cadre teachers involved in this study who implemented assessment practices. The Cadre teachers' intent for instruction changed from presenting information to students to how the teacher can enable all students to be successful. The climate became more student centered. When students see what they are learning makes sense and is important, their intrinsic motivation emerged. This type of finding is directly related to Brandt's (1995) statement, "In classrooms where students can make choices about learning and have tasks of worth to explore, the need for punishments or rewards declines sharply" (p. 13).

Using assessment techniques causes changes in roles. Assessment requires student interaction and teacher facilitation of learning. As mentioned by Strong, Silver, & Robinson (1995), "Students who are engaged in their work are energized by four goals--success, curiosity, originality, and satisfying relationships" (p. 8).

Another component of the classrooms observed was how the organizational structures of the physical environments established the tone for instruction and involvement. The two sets of Cadre teachers who team taught discussed the importance of the physical layout of their classrooms, as well as the support and involvement with the other teacher. By changing the physical environment these Cadre teachers began to remove barriers that constrict the interaction and involvement of students and teachers.

Having the needed resources is another key element for using assessment concepts. The science teachers discussed the need for resources and equipment to implement experiments for assessment. From these changes, changes occurred in the physical layout of the classroom to accommodate the use of instructional strategies used with assessment.

Changes in instructional strategies used. All seven participants talked about how their teaching had changed because of the PRO Cadre. The teachers stated they changed the way they perceived the teaching-learning process. Dodd (1995) spoke to this. "As teachers look for new ways to interest students in learning, they are likely to find that

the search itself will re-energize their teaching" (p.66). These Cadre teachers saw a holistic picture of how planning, teaching, and assessing were all one process. Assessment helped to make instruction most effective when it produced sound information for sound decision making (Stiggins, 1994). Teacher knowledge and practices are primary factors influencing the relationship between staff development and improvements in student learning (Guskey & Sparks, 1996).

The Cadre teachers acknowledged how planning was done with the student's knowledge in mind and telling the student in the beginning what criteria was required. As Stephen Covey (1989) stated, begin with the end in mind. Assessment works best when students understand the achievement to be assessed well before assessment (Stiggins, 1994). Student interest escalated as these teachers changed their teaching practices.

One teacher provided an example of how teaching had improved. "I'm assessing kids in ways that reach everybody now. Each child has an opportunity to stretch himself because I'm teaching in more varied ways." This view reflected the overall sample of this study. This was supported by Andrade and Hakim (1995), "Children learn using their own language, learning styles, and thought processes, and at their own level of development" (p. 22).

Instructional strategies have changed with the teachers involved in this study. These teachers are setting criteria for students, providing connections in how students can use the information, making learning more meaningful to students, using more authentic assessments, teaching in teams,

facilitating rather than teacher-directed instruction, and using hands-on manipulatives for students. Cadre teachers have changed the instructional strategies by knowing more ways to teach and more ways to assess. This has changed their past practices to become more meaningful and more engaging for students.

Changes in the process of evaluation of student progress. Teachers in this study are now using a variety of methods to meet different learning styles. As shown from the pre- and post-questionnaires, a greater variance of assessment tools is being used. Traditional methods of evaluating students through paper-pencil tests or worksheets are no longer the predominant method used to evaluate student progress in most of these classrooms. Assessments can rely on a wide variety of methods, not just multiple-choice tests (Stiggins, 1994). Teachers are assessing student understanding through the use of products, processes, and performances.

Accomplishments that support this finding were, "I try to use a balance of multiple-choice tests and authentic assessment tasks to tap into different learning styles," and "I try to do different types of assessments so that every learner has an opportunity for success."

Evaluation of student progress is done during the learning process as well as at the end of a unit. Stiggins (1994) related that by stating, "Assessment and teaching can be one and the same. Perhaps the greatest potential value of

classroom assessment is its ability to make students full partners in the assessment process" (p. 15). Assessing student understanding is a tool for evaluation of student progress and for redirecting teaching. The purpose of evaluation changed to affect both the teaching and the learning. The written answers from the pre- and post-tests showed more elaboration and understanding of assessment. The results showed a higher percentage of Cadre teachers using assessment options in the post-test than the pre-test. These data supported the observations and interviews held.

Personal changes that occurred in PRO Cadre participants as teachers and trainers. Teachers reported they had changed as teachers and trainers as a result of participating in the Cadre. Their confidence in their teaching ability was mentioned because they were involving more students in the learning. Joyce, Wolf, and Calhoun (1993) explained why that happens. Resulting initiatives for educational improvement propel the students into more active states of learning; and the greater activity of the students, in turn, stimulates the educators to engage in more study and the development of more vigorous learning environments. By understanding their own learning styles, and the learning styles of others in the training, teachers had a better appreciation for the need to use a variety of instructional strategies. Two results from these changes were that discipline became less of an issue and students were more involved in learning. Another noticeable change noted by the Cadre teachers and principals

was the leadership role the teachers assumed and shared. These Cadre teachers became a resource for others in the building.

Taber (1996), who conducted the companion study to this study, noted personal changes the sample teachers had experienced during the Cadre. This study documented the changes that not only occurred during training but had continued through the implementation process, and also how such changes directly affected student progress.

Many changes occurred in the teaching practices of the sample teachers as a result of the training of trainers Cadre. Classrooms became more student centered by creating environments for student interaction and by teachers becoming facilitators of learning. Cadre teachers now have a larger repertoire of instructional strategies for use. Learning has expanded. Changes have been made in student evaluations. There are options beyond the paper-pencil tests. Overall, Cadre teachers feel more confident with themselves and with their teaching.

Research Question Two Findings

The findings from this study resulted in the following data collected to answer the second research question. This question was, What are the factors that facilitate, impede, or modify implementation of assessment concepts resulting from the training of trainers Cadre at the school and classroom levels?

These findings will be categorized by the factors that facilitate, impede, or modify the implementation process. The next section describes the factors that facilitate the implementation process.

Time is given for professional development. Time was a major variable that facilitated the process of implementation. Staff development is crucial for changes to occur. Guskey and Sparks (1996) commented that although many factors affect student learning, staff development in its many forms is essential to improving those factors that a school can directly influence. Schools exhibiting evidence of assessment practices provided time for professional development. Covey (1990) wrote that the way a person utilizies time is a result of the way that person conceptualizes and sets individual priorities.

Professional development requires time to be scheduled on the master schedule. When time was built into the master schedule and set as a priority, it was more likely that the teacher and school engaged in learning beyond the Cadre. For instance, prior to the budget cuts in 1995, the middle school in this study had double planning. During this double planning, one day each week was scheduled for staff development. The two teachers at this school discussed how much they learned from these opportunities. Some of the days were formal professional days with presentations. Many of the days were scheduled for teachers to share ideas and dialogue

with other teachers. The schools that scheduled times for staff development achieved greater observable changes.

There is never enough time in schools for teachers to do all that is required and expected of them. In order for professional development to occur in classrooms and schools, time must be scheduled in the working day for this purpose. Time is needed to learn, to practice, to adapt, and to accommodate the new learning.

District and site support. In the future, staff development will require a model of a comprehensive, multidimensional support system, moving away from the present fragmented idea of staff development as a one-day training session. The PRO Cadre exemplifies how Joyce and Showers (1996) envision staff development as a comprehensive service organization. "There are three components of a comprehensive, job-embedded staff development system: individual, collective, and district" (pp. 2-3). The PRO Cadre developed each of these three components of the system. The individual component is the specific teacher trainers developing an expertise. The collective is the teacher trainers bringing their expertise back to the sites and sharing with the site. The district's component is the support and direction. The implications of systemic reform is understanding holistically how each component affected the others. As Senge (1990) stated, changes in one part of the system have a ripple effect on the other parts of the system.

Comments were made from all the participants and principals about the need for district and site administrator support. By their participation, principals established a model of what is expected with professional development through their leadership. It is important for the teacher trainer to feel empowered as a leader in the school.

There was agreement among the Cadre teachers and most of the principals that the idea of the Cadre was valued because it shared a common direction for the district with autonomy at each site regarding implementation. There is the fine line between encouraging and mandating change. Change requires a balance between the district requirements and the site needs. By building a comprehensive, job-embedded staff development system, many of the past "top-down/bottom-up" issues can be avoided.

Besides the acknowledgement of support from the district and principals, resources need to be provided. Time and money are major resources required to ensure continued professional development.

Another issue discussed was whether the climate established at each site was conducive and supportive for change. Trusting teachers to take control of their own professional growth nurtures the change process (Ponticell, 1995). Cadre teachers noted examples of the support for learning. These examples included when principals provided time for learning--for processing new information--and opportunities to attend professional development seminars.

Commitment and support from the building principal and central office allowed teacher professionalism to develop. The data acquired from this research study concurred that support from the site and district is essential for implementation to occur.

Follow-up and maintenance. The school district where the study was conducted values disseminating the latest research related to teaching and learning. Cadre teachers and principals recognized the need for follow-up and maintenance after the initial training program. Establishing a structure for this follow-up would be an essential element for implementation. As Wood (1989) describes in the RPTIM model for staff development, follow-up and maintenance need to be built into the staff development process for changes to occur. Without the follow-up and maintenance, little change occurs. A major concern for this school district was that although training was abundant, and interest and desire high, a continued lack of follow-up and maintenance was noted. As stated in the findings, when the RPTIM process was followed, implementation was observed.

One principal suggested that the information "move from the cognitive level of awareness to practical application by coming back reviewing and showing them [teachers] how to do it. Application is the key to professional growth." A teacher's comment was that "the success of any staff development was an opportunity to process and get feedback."

All participants and principals in this study discussed the concern for follow-up and maintenance. These two stages of the process needed development to ensure the learnings of the Cadres were applied in the classrooms and in the schools. The sites wanted the district support to help with the time, resources, and direction. Developing a structure for the follow-up and maintenance for the Cadres seemed to be a major concern. The findings emphasized that a structure for follow-up and maintenance was an essential element to facilitating the process of implementation on a long-term basis.

Accountability. Accountability is another issue that Cadre teachers and principals believed to be of major importance for implementation of the Cadre.

> Society has begun to demand that schools deliver students who have learned--schools are becoming performance-driven institutions. This means educators will be held accountable for more than just providing opportunities for learning. We will be held accountable for the actual achievement of our students. (Stiggins, 1994, p. 20)

To ensure implementation, at least one person at each level would be held accountable. The Cadre teachers concluded that the district should appoint someone who would hold the school accountable. The teacher trainers agreed that the school administrator needed to have some process in place to hold the teacher trainers and the other teachers accountable.

Carrying accountability to the classroom, the Cadre teachers realized that setting criteria in the planning of instruction would hold the students accountable. They believed this same process needed to be part of the

implementation process. Accountability at each level contributed to the process needed to ensure implementation of assessment concepts at the classroom and school levels.

Climate for change. Providing a climate conducive for change is another factor important to facilitate implementation. Having an instructional leader with a vision of how to make schools a learning place surfaced as an important factor that facilitates change. The instructional leader's responsibility is to develop a climate that nurtures change.

Teachers need a climate to "play around" with new ideas and strategies while at the same time providing support for students to assume new roles as active learners. Ashby, Maki, and Cunningham-Morris (1996) mentioned, "For the school to be successful with its students, it first had to create for teachers the same conditions it sought to create for students" (p. 9). Climate conditions identified in this study were: (a) establishing an environment where teachers were willing to try something new; (b) ensuring the support of the administrators and district; (c) empowering teachers to make decisions; (d) taking risks; and, (e) providing feedback along with celebrations of little steps of growth.

Ultimately, in an environment where students, as well as teachers engage in learning, there is more learning taking place and less referrals or discipline problems. When this exists, students are engaged in learning and the purpose of school is served. In this study, the schools where the

principals were more involved with learning were the schools where more observable assessment concepts were implemented.

Connect assessment concepts to present teaching. From the findings in this study, in order for teachers to invest in new ideas, the concepts need to be connected in some practical, meaningful way to what they are already doing. Guskey (1990) supports these findings by his observations that if innovations are to succeed, they must include precise descriptions of how these innovations can be integrated. That is, each new innovation must be presented as a part of a coherent framework.

Ideas are abstract and may be difficult for some people to visualize the purpose. Teachers want ideas that make learning more practical, fun, and meaningful for students. When learning new concepts or ideas, teachers want to be shown how it is important to their roles. Seeing assessment as valuable to their jobs became of interest to those who initiated change. For instance, teachers mentioned the frustrations they felt with the present grading systems in education. They weren't sure what or how to do it differently, they just knew it wasn't working for many students. For many in this Cadre sample, assessment opened up new ideas and possibilities.

Sharing of ideas. Professional development expands beyond the giving and receiving of information. The opportunities to share information and dialogue with other

teachers are essential aspects of implementation. Dodd (1995) clearly stated that, "Recipes are useful for beginners who haven't yet had time to analyze how and why students engage in learning, but reflection is the key to understanding why some recipes work better than others" (p. 67). Teachers acknowledged the need for the large group presentation of information but wanted the next step in the process more personal. Working with other teachers that could help them at their levels of understanding was the next step they needed for implementation.

Teamwork was perhaps the most effective form of staff development. It addressed an essential social dimension of improvement. Successfully implementing innovative procedures was "very much a social process" (Fullan, 1991, p. 84). Teachers wanted the opportunity to share, visit with other teachers, and have the time to dialogue about the changes they were attempting.

Walen and DeRose (1993) found, "Professionalism is raised when teachers, with the support of their colleagues, are allowed to pursue areas for future growth" (p. 48). Teachers in this study confirmed the value of reflective practice by expressing the changes they had made in their own teaching since having the opportunities during the Cadre. As stated by the Cadre teachers, a highlight to their training was the time to work with their K-12 colleagues across the district.

Creating a core of teacher leaders. There was strong support for the idea that creating the Cadre teachers would create a higher level of professional development at each site. Leadership at all levels is vital to the development of the staff development system. Leaders need to build the capacities of individuals. As Covey (1990) acknowledged, principle-centered leadership focuses on people, not things. No longer can only organizational needs be considered. As Wheatley (1992) discussed, there is the paradox of the organizational needs for prediction and control and personal needs for freedom and autonomy. Joyce and Showers's (1996) response to meeting the changing needs of empowerment and relationship in an organization is to develop communities. These communities would meet district, site, and individual needs.

Teachers learn best from other teachers. The findings of this study indicated the Cadre members valued opportunities to work with other teachers, yet it rarely happened because time was not allocated. Coaching is a process that does not require teachers to follow a "formula," nor does it have a preconceived direction of what is the "right" instruction. This process should allow teachers to learn and reflect. Fullan and Hargreaves (1991) argued that working collectively in schools is the best way to improve them.

Principals and the Cadre teachers believed professional development would be enhanced by having more "experts" to share in the leadership. Also, it would divide responsibilities at the site and lessen the burden for the

principals who are in charge of professional development. Having a core of teacher leaders would result in personalizing the needs of each school and teacher.

Joyce and Showers (1996) referred to the need of building coaching teams. The Cadre, training of trainers, created a core of teacher leaders who would serve as teachers, mentors, and coaches.

Belief in ideas. Although only directly mentioned a few times, believing in the ideas or concepts involved in professional development is important to the implementation process. Teacher beliefs were important foundations for thinking about teachers as learners. Teachers brought to school settings rather specific images that influenced what they did and why they did it and what they believed could and should be changed or refined in teaching practice (Pajares, 1992; Ponticell, 1995).

These teacher participants volunteered to be involved in the assessment Cadre for a variety of reasons. Whether they realized the practices they were using had become obsolete for them or they simply were interested in learning more about assessment, teachers' priorities make a difference to the learning process. Teachers' beliefs have an impact on implementation.

In summary, this study identified nine factors that facilitate the implementation of assessment process from the training of trainers Cadre. Each of the factors were supported by the literature related to change, staff

development, and school improvement related to systemic reform.

The second group of findings related to Research Question Two are the factors that impede the process of implementation. The following sections describe these findings.

Time is not given for professional development. When adequate time is not provided for professional development, the initial time spent on an idea or concept becomes lost or left behind. Time was the number one issue that both facilitate and impede the process of implementation in this study. When time is designated for professional development, the process of new learning begins and continues. Fullan (1990) wrote that in his study staff development resulted in implementation in as few as 10 percent of the classrooms, while certain tested designs for workshops and follow-up in the workplace improved use to 90 percent or more. Teachers want the time to learn. Once they have a new concept, teachers need time to practice, dialogue, and reflect. When this doesn't happen, the process is impeded and becomes a short-term gain.

Utilization of assessment techniques takes more time to plan and implement. Stiggins (1994) confirmed that, "Typical teachers can spend as much as one-third to one-half of their available professional time involved in assessment-related activities" (p. 66). Cadre teachers' were concerned about how time would be provided to focus on assessment concepts. New

learning always requires more time than when something is routine. This is another way principals could be supportive. Understanding the learning curve, principals know that whenever there is new learning, giving more time to teachers to learn and process is crucial.

Another issue for the trainers was the amount of time and when it would be available to train their staffs. Although, the trainers had been given 50 hours of training, only three hours of professional development had been designated for sharing with their staffs. The larger the staff the more limitation of time for sharing became an issue. It was hard for a trainer to connect with 100 teachers with the initial ideas and then there be almost no professional time for teachers to learn, reflect, and dialogue the actual implementation.

No follow-up and maintenance. Without follow-up and maintenance, there is no evidence of lasting learning from the professional development. Joyce, Wolf, and Calhoun (1993) reported a long history of schools officially "adopting" sweeping changes in one curriculum area after another and failing to achieve implementation needs to be ended.

Over and over again, the concern surfaced that despite being presented with the latest research information, failure of implementation was due to little follow-up or maintenance. Teachers and principals stated it was not from the lack of interest or commitment but from a lack of structure for

maintenance. Follow-up and maintenance were crucial to sustaining the implementation process.

The idea of change. The status quo is comfortable for most people. Fullan (1996) stated that, "Systems have a better record of maintaining the status quo than changing themselves" (p. 423). The thought of change inhibits some people from accepting or even listening to new ideas. With any change, there are the resistors and the innovators. To live effectively in a changing world means integrating previous learning into the process of our current-day lives.

A variety of comments were given during this study and in the literature about the resistance of change. These comments emerge whenever new ideas and changes occur. The comments represent some of the stages people go through in the Concerns-Based Adoption Model of change (Hall, 1986). Typical comments speculate that education has a reputation for jumping on the new idea bandwagons and people tire of the latest innovation when they are not allowed time to implement and modify the last good idea. Other factors that were given that affect change are: (a) there are resistors to any new idea; (b) teachers who have a few years left to retirement are not interested; and, (c) faculties that have been together for a long time without any new growth, do not want change. Change can be threatening.

This study of the training of trainers Cadre on assessment showed there were three main factors that impeded the process of implementation. Each of these factors was

supported by related literature on change, staff development, and school improvement.

The third group of findings, those for Research Question Two, are the factors that modify the implementation process. The following section describes the one finding.

Adaptability to personal and site needs. The schools that indicated that the PRO Cadre provided them with some tools, strategies, and ideas that could be and were adapted to their site had greater evidence of assessment practices in their classrooms and schools. Staff development succeeds to the degree that schools can adapt to and capitalize on variability (Guskey, 1994).

The two schools which attempted to package and present the Cadre in their schools as it were presented during training made many comments about the unlikelihood of assessment practices being integrated at their sites. Schools, like teachers, need the ownership of an idea or concept and the ability to adapt it to their particular cultures.

The comment that "true staff development will break down in those smaller groups" was reflected throughout the interviews. Teachers need more time to personalize, to modify, and to reflect on the learning.

The idea of the Cadres was mostly well received because the expectations from the district were flexible and left up to each site to adapt and modify for their use. It was the

consensus that the system should be one that is flexible and adaptable to present and future needs.

In summary, this study identified one factor that modified the implementation process of the training of trainers Cadre on assessment. This finding was supported by the literature on change, staff development, and school improvement.

Implications and Recommendations

The implications and recommendations are submitted with the limitations of the findings from this case study. The review of literature in Chapter II indicates a growing body of research regarding the changing needs of staff development and the complexity of the systems involved. This is further evidenced by the findings of this study. These recommendations would be most appropriate for school districts that have developed training of trainers programs. School districts that already have school improvement processes in place may also benefit from these suggestions. All schools could benefit by establishing structures for follow-up and maintenance to sustain the learning needed for change.

Michael Fullan (1994) provided a key theoretical framework for understanding the complexity of staff development in educational development and reform. Change is a process. Key areas of importance in the implementation process found in this study are: providing designated time

for professional development, creating a core of teacher leaders, having processes of accountability and assessment, and developing a structure for follow-up and maintenance.

Providing Designated Time for Professional Development

A commitment to professional development is made by providing time for learning. The findings overwhelmingly supported the need to provide time for staff development. The value in professional development is seen by the instructional leaders and teachers who make learning a priority. What we value takes priority. Teaching is an energy-absorbing profession. Professional development can reenergize teachers. Unless school districts and school leaders tap into the potential of professional development, our schools will continue to be apathetic and drained of the energy needed to develop our students.

All educators have the same number of hours in the day; how the time is used makes the difference for the schools. Making the time for teachers to learn, practice, and modify new programs during the work day is essential to revitalizing our schools. In A Place Called School, John Goodlad (1984) stated, "Professional development should be an integral part of the work week, not an add-on or occasional after-school event" (p. 187).

Teachers need time to learn, to process, to dialogue, to visit other teachers, to reflect, and to make appropriate modifications. They need the formal time for professional development and the informal times to talk collaboratively.

Time should be set at both the beginning of the school year and throughout the school year (Donahoe, 1993). Joyce and his colleagues (1993) found that successful teams meet regularly--weekly, monthly, or quarterly--to discuss progress towards goals. These researchers suggested that a school may want to delay initiatives until it can "afford" the time and other resources to implement them properly (Joyce et al., 1993, p. 38).

A new mental image of staff development evolves as a continuous process. The notion of learning away from school is an old paradigm. Learning is an ongoing process that should be job embedded. At times this may happen away from the school, but the continuation of the learning is a process that occurs each and every day of teaching. It is the daily practice that sustains new learning and leads to better ideas. Given that constructivist teachers create environments in which they, and their students, are encouraged to think and explore, time must be provided to allow this to happen. In schools where time was designated, change occurred. Assessment practices were being utilized.

Using these premises for staff development, the best staff development would follow the constructivist philosophy emphasizing collaborative problem solving, personal expression, meaningful context for learning, and placing the learner at the center of the learning experience (Zahorik, 1995). This cannot happen at a workshop away from the classroom. It must be integrated at the center of the learning experience, the classroom and the school.

Designated days must be established for instructional purposes. In addition, time must be set aside for professional development and evaluation to ensure that learning is a continuous, ongoing process in the classroom and the school. Time must be given during faculty meetings for discussion of successes and failures. Principals must find resources to provide teachers the opportunity to observe other teachers and spend time sharing with peers and masters of learning.

School districts must begin investing in their professional people and provide time for teachers to learn better teaching methods, as well as be revitalized and recharged. Cadre teachers discussed the need for professional development but were concerned when they were going to have the time with their already heavily burdened days. School leaders must be willing to invest in the intellectual capital of those individuals who staff the schools (Wise, 1991). Today's model of staff development is one that emphasizes growth which can only happen when the commitment is made to provide the time necessary for learning and relearning to occur.

Creating a Core of Teacher Leaders

Schools improve when purpose, beliefs, and efforts unite. Teachers are an integral part of educational reform. An instructional leader is a key to providing focus and direction. The nature of the complex work of teaching "cannot be accomplished by even the most knowledgeable individuals

working alone" (Little, 1990, p. 520). An essential element to allow change to happen is developing a core of teacher leaders. These leaders will have specific areas of expertise to share and add to a staff or organization. The PRO Cadre trainers provided the expertise for school sites. The responses from the schools were very positive regarding the trainers at each site. Cadre teachers and principals were all in agreement about the benefits that the Cadre teachers provided.

Teachers value the expertise of others who understand teaching from their own perspective of the day-to-day lives of working with students. Outside experts and principals have knowledge that can be shared, but the key to implementation is having colleagues share and reflect their experiences of the entire teaching and learning process. This develops a climate of collegiality and support. As noted from the findings, the trainers also provide ongoing support and learning at their sites. Joyce and Showers (1988) suggested that support should take the form of coaching--providing practitioners with technical feedback, guiding them in adapting the new practices to their contextual conditions, helping them to analyze the effects of their efforts, and urging them to continue despite minor setbacks.

Developing the training of trainers Cadres allowed schools to: (a) expand staff development capabilities, (b) improve classroom instruction, (c) promote teacher leadership, and (d) provide the opportunity for personal growth and improvement (Taber, 1996). These leaders offer

alternative ways to design staff development. The expertise is on site as well as across the district.

Collegiality among teachers, as measured by the frequency of communication, mutual support, and help was a strong indicator of implementation success. Virtually every research study on the topic found this to be the case (Fullan, 1991). The Cadres created a core group of teacher leaders. The benefits of having the Cadres were acknowledged by each site.

Investing in the time and development of a training of trainers Cadre is worth the investment. Training of trainers programs provide the expertise and the flexibility needed for staff development. It provides the capability for schools to be adaptable to the changing needs for schools now and in the future.

Processes of Accountability and Assessment

As Guskey and Sparks (1991) stated, it is rare to find professional development endeavors that evaluate the implementation of staff development. If learning is a continuous process, then assessing the results along the way is essential to the process. "We fail," wrote Wiggins (1994) "to regularly adjust performance in light of ongoing results" (p. 18). Assessment guides the process towards the intended direction. It is monitoring and adjusting as results are present. It is the feedback and reflection of the learning. Assessment is the process to ensure success for the learner and achievement of the desired goals.

As trainers practice and implement new ideas, they need support. The district must be responsive by providing the necessary resources to ensure success. Having the support of the administrator is necessary for the day-to-day practices and changes.

One recommendation would be to have a tiered structure for accountability. At each hierarchical level there would be someone held accountable. The trainers need to be accountable to the district for performance and to the other teachers for development of the new learning. The principal needs to be accountable to both the district and the teachers including the trainers.

An emphasis on results is central to school improvement. All results--good or bad--are ultimately good, because they provide feedback that guide, project what to do next, and how to do it better. Feedback, then is synonymous with results (Schmoker, 1996).

Assessment and accountability are essential keys to an implementation process. They provide direction and assurance that the learning continues. Accountability should be designated on a tier system and somebody at each level should be accountable. The levels designate the person who is responsible and the responsibilities for which that person is accountable.

Evaluation needs to be an ongoing assessment of the project. Evaluation must be an integral part of the staff development process. Accountability is the ongoing process of evaluating the progress and process as well as designating

the people who will be accountable. A recommendation would be to design a structure and process for accountability and assessment of all staff development to ensure implementation.

Designing a Structure for Follow-up and Maintenance

One of the major issues discussed in the literature on staff development is the focus for staff development to be a continuous process. Continuous, incremental improvements are the real building blocks of sweeping systemic change. Incremental improvements are crucial to the school improvement process. Follow-up and maintenance are part of the process of staff development for implementation to occur. Yet, these stages in the process are often disregarded as noted by the participants in this study.

Synthesizing the literature and the findings of this study, a new model for staff development and schools is presented. Creating this mental image is important for change to occur.

A New Model

A new model is presented that integrates the findings of this study and the literature on school improvement, staff development, and change. The findings reveal the need to provide time for staff development. Time for new learning is needed as well as the time to practice, share, and reflect. Follow-up and maintenance are key issues to long-term changes. Developing a core of teacher leaders is essential for credibility and longevity for change. This model utilizes

the teacher leader, the Cadre trainers, as experts, coaches, and mentors. They are at each site, available to their peers and colleagues. Staff development is integrated into the routines of the school through planning times, faculty meetings, and designated professional days. Long-term planning is done through the strategic planning process for each site from the assessed needs of the staff. By having these Cadre trainers available, assessment and accountability become built into the process and model.

A structure that could be designated as a model for professional development to ensure implementation based on the limited findings in this study is to integrate the models of Nancy Atwell's (1987) writing workshop and Renzulli and Reis's (1985) Schoolwide Enrichment Model.

The Atwell (1987) writing workshop has four parts: the mini-lesson, writing workshop, group-share meeting, and the conference. The mini-lesson is teacher-directed with new information or with ways to clarify and modify previous lessons. The writing workshop is the time given to practice the writing, it is the heart of the writing class. It allows for the time to practice and adapt the new learning. The group-share meeting is another method to help writers improve their writing and learn from others. Two purposes of the group-share meetings are to bring closure to the workshop and to find out what others are learning. The class conference is "my new lesson plan, a way to quickly and comprehensively map where each writer stands each day" (p. 89).

This model fits essential components of the findings of this study. It takes staff development from the presentation of information to the application of the information. Time is allocated to practice the new information, as well as time to come together to share the new learning. The conference time is the ongoing assessment and accountability needed to ensure learning is taking place.

The Renzulli & Reis (1985) schoolwide enrichment model is a tiered level that represents the needs of all learners. Type I enrichment is general exploratory experiences. Type II enrichment provides a systematic and organized procedure for expanding the concept for those learners more interested. Type III enrichment is individual or small group investigations for learners who want to become an expert in a given area.

This model provides the image of how to begin implementing a change initiative by providing information to the whole faculty and finding the individuals or groups who are ready to move into Type II. By wanting more information, these individuals expand the concept.

The Cadre provided these opportunities. By becoming trainers, these teachers can share the information with their entire staffs. After the presentations, these teacher leaders find key groups of teachers who are interested in the concept presented. This begins the process of change by developing the interest and skills of the early adopters. The trainers then become closely involved with this core group providing support, information, and opportunities to share and reflect.

These sessions will be mini-lessons based on the group and individual needs. The model of the writing conference unfolds here. Teachers practice and come back together to share. They are then guided or directed on how to move forward based on their knowledge and understanding of the learning. It is an ongoing process of development.

In summary, during the conference time if the learner has not understood or needs redirecting the trainer refocuses to modify the learning. If the learner has a level of understanding, the next step would be to go back to the first stage, the mini-lesson. Maintenance would follow the same process when a concept had been implemented for a long enough period of time. The trainer could come in at the conference stage to assess where the learners are in the process and decide what direction is needed. Then, the trainer would refocus the learners with new information and proceed through the stages or steps.

Assessment and accountability are built into the process of learning. Incremental changes are made. Implementation will occur because the necessary components are integrated. Time is provided, a core group of teacher leaders are created, follow-up and maintenance are part of the process, and there is accountability and assessment built into the model. The essential components from this study and research provide a holistic picture of how implementation of staff development can occur. Then, staff development evolves to meet the district, school, and individual needs.

The implications and recommendations integrate previous learning with new findings. A new mental image is provided for a model of staff development which is designed after Nancy Atwell's (1987) writing workshop and Renzulli and Reis's (1985) Schoolwide Enrichment Model. Staff development is a continuous process which is job embedded. It is personalized, yet adaptable to meet the mandates. It reflects the constructivist ideas that knowledge can never be stable. Learning is a self-regulated process of resolving inner, cognitive conflicts that often become apparent through concrete experience, collaborative discourse, and reflections (Zahorik, 1995). The model is adaptable and flexible while staying true to the core purpose of staff development. It meets the new forms of professionalism that builds a commitment to continuous learning and problem solving through collaboration. Through the systemic reform of building new conceptions about instruction--teaching for understanding and using new forms of assessment--learning is enhanced. The restructuring changes the roles and structures that will enable change to thrive (Fullan, 1996). This model gives hope to new possibilities for implementation and meeting the needs of a rapidly changing society.

As the research from this investigation developed, the researcher became convinced there could be a new mental image proposed for staff development that integrates the new theories of learning. In an attempt to address professional growth for teachers and changes needed for schools of the twenty-first century, ways must be found to revitalize the

capacities and use the professionals within our schools. Developing a training of trainers Cadre makes that possibility a reality. Staff development is the key to reenergizing, restructuring, and reforming.

Recommendations

Based on this study, recommendations for further research were included at two levels. The first level of recommendations resulted from the study of this Midwestern School District and would be applicable to this district and other districts with training of trainers Cadres. The second level of recommendations contributes to the knowledge base of staff development.

Recommendations for School Districts

1. Design a structure for follow-up and maintenance. The model provided in this study is an example that would fit the Cadres.
2. Use trainer teams with feeder schools to create more continuity.
3. Implement assessment and accountability procedures. Identify people who will be responsible. Hire a program director who will facilitate the process of implementation at each site. This person would be a resource and a support for the change process. The structure for accountability would be this person's responsibility.

4. Provide resources and ideas for schools to find time to develop the intellectual capacities and revitalize the schools.
5. Design strategies that result in a longitudinal study of the results of the Cadre.

Recommendations Contributing to the Knowledge Base for Staff Development

The following recommendations are ideas and thoughts that emerged as the researcher was involved in this study.
1. Examine the flexibility and adaptability of training of trainers Cadres.
2. Continue to study staff development models that have resulted in successful implementation of new programs.
3. Design a study focusing on the point of view of the individuals rather than on the structural aspects of change that this study focused.
4. Conduct a study comparing private schools, charter schools, and public schools' successes with systemic reform. Are the issues related to change the same for these different arenas?

Summary

Though much is in the literature about staff development and the changes needed to produce desired results, the literature provided limited information on the factors involved in the implementation process. This study examined one training of trainers Cadre. The study of the Cadre

provided key findings related to the implementation process. The implications of the study will provide useful data for this Midwestern school district and other school districts to improve the processes already in place. It also provided findings that support the impact a training of trainers Cadre has for staff development. Training of trainers Cadre can be an effective key to developing staff development that is adaptable to the changing needs for systemic reform. Staff development is a key for educational reform, revitalization, and student learning.

REFERENCES

Adler, M. J. (1982). The paideia proposal: An educational manifesto. New York: Macmillan.

Andrade, A. M., & Hakim, D. (1995, September). Letting children take the lead in class. Educational Leadership, 53, (1), 22-24.

Ashby, D. E., Maki, D. M., & Morris, A. (1996, Winter). Organization development: Using data for decision making. Journal of Staff Development, 17, (1), 8-11.

Atwell, N. (1987). In the middle: Writing, reading, and learning with adolescents. Portsmouth, NH: Boynton/Cook Publishers.

Baldridge, J.V., & Deal, T. (1975). Managing change in educational organizations. Berkeley, CA: McCutchan.

Baldridge, V., & Deal, T. (1983). The dynamics of organizational change in education. Boston: Addison-Wesley.

Berends, M. (1992). A description of restructuring in nationally nominated schools. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.

Berman, P., & McLaughlin, M. (1978). Federal programs supporting educational change. Santa Monica, CA: Rand.

Block, P. (1993). Stewardship. San Francisco: Berrett-Koehler.

Bogdan, R., & Biklen, S. (1992). Qualitative research for education: An introduction to theory and methods. Boston: Allyn and Bacon.

Borg, W. R., & Gall, M. D. (1983). Educational research an introduction. New York: Longman.

Borg, W. R., & Gall, M. D. (1989). Educational research an introduction. New York: Longman.

Boyer, E. (1984). Reflections in the great debate of '83. Phi Delta Kappan, 65, (8), 525-530.

Brandt, R. (1995, September). Punished by rewards? A conversation with Alfie Kohn. Educational Leadership, 53, (1), 13-16.

Brookover, W. (1978). Elementary school social climate and student achievement. American Educational Research Journal 15, (2), 301-318.

Calhoun, E. F. (1991). A wide-angle lens: How to increase the variety, collection, and use of data for school improvement. Paper presented at the annual meeting of the American Educational Research Association, Chicago.

Calhoun, E. F. (1992). A status report on action research in the league of professional schools. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Carnegie Corporation of New York. (1986). A nation prepared: Teachers for the 21st century. New York: (ERIC Document Reproduction Service ED 268 120).

Christensen, J. C., McDonnell, J. H., & Price, J. R. (1988). Personalizing staff development: The career lattice model. Fastback Phi Delta Kappan.

Clandinin, D. J. (1986). Classroom practice: Teacher images in action. London: Falmer Press.

Costa, A. L., & Garmston, R. (1985). Supervision for intelligent teaching. Educational Leadership, 5, 70-80.

Covey, S. R. (1989). Seven habits of highly effective people. New York: Fireside.

Covey, S. R. (1990). Principled-centered leadership. New York: Fireside.

Cronbach, L. J. (1975). Beyond the two disciplines of scientific psychology. American Psychologist, 30, 116-127.

Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: Harper Perennial.

Cuban, L. (1984). How teachers taught: Constancy and change in American classrooms, 1890-1980. New York: Longman.

Cuban, L. (1990). Reforming again, again, and again. Educational Researcher, 19, (1), 3-13.

Cypert, S. (1995, February). The art of change. Insight--Making time for change, 20-24.

Deming, W. E. (1982). Out of the crisis. Cambridge: Massachusetts Institute of Technology, Center for Advanced Engineering Study.

Dewey, J. (1938). Experience and education. New York: The Macmillan Company.

Dodd, A. W. (1995, September). Engaging students: What I learned along the way. Educational Leadership, 53, (1), 65-67.

Donahoe, T. (1993, December). Finding the way: Structure, time, and culture in school improvement. Phi Delta Kappan 75, (4), 298- 305.

Doyle, W., & Ponder, G. (1977). The practical ethic and teacher decision-making. Interchange, 8, (3), 1-12.

Drucker, P. F. (1985). Innovation and entrepreneurship: Practice and principles. New York: Harper and Row.

Edmonds, R. (1979). Effective schools for the urban poor. Educational Leadership, 37, (1), 15-24.

Elmore, R. F. (1990). Restructuring schools. San Francisco: Jossey-Bass.

Fullan, M. (1987). Implementing educational change: What we know. Paper prepared for the World Bank. Washington, D.C.

Fullan, M. (1993a). Change forces. Toronto: The Falmer Press.

Fullan, M. (1993b). Innovation, reform and restructuring strategies. In G. Cawelti (Ed.), Challenges and achievements of American education. (1993 ASCD Yearbook), Alexandria, VA: Association for Supervision and Curriculum Development.

Fullan, M. (1993c, March) Why teachers must become change agents. Educational Leadership, 50, (6), 12-17.

Fullan, M. (1994). Teacher leadership: A failure to conceptualize. In D. Walling (Ed.), Teachers as leaders:

Perspectives on the professional development of teachers. Bloomington, IL: Phi Delta Kappa.

Fullan, M. G. (1990). Staff development, innovation, and institutional development. In B. Joyce (Ed.),Changing school culture through staff development. Alexandria, VA: Association for Supervision and Curriculum Development.

Fullan, M. G. (1991). The new meaning of educational change. New York: Teachers College Press.

Fullan, M. G. (1992). Visions that blind. Educational Leadership, 49, (5), 19-20.

Fullan, M. G. (1996, February). Turning systemic thinking on its head. Phi Delta Kappan, 77, (6), 420-423.

Fullan, M., & Hargreaves, A. (1991). What's worth fighting for? Working together for your school. Andover, MA: Regional Laboratory of the Northeast.

Fullan, M. G., & Miles, M. B. (1992, June). Getting reform right. What works and what doesn't? Phi Delta Kappan, 73, (10), 745-752.

Fullan, M. G., & Stigelbauer, S. (1991). The new meaning of educational change. Columbia: Teachers College Press.

Garmston, R. (1991, November). Staff developers as social architects. Educational Leadership, 48, 49-50.

Garten, T., & Valentine, J. (1989, May). Strategies for faculty involvement in effective schools. NASSP Bulletin, 73, 81-84.

Gleick, J. (1987). Chaos, making a new science. New York: Penguin Group USA, Inc.

Glesne, C., & Peshkin, A. (1992). Becoming qualitative researchers: An introduction. White Plains, NY: Longman Publishing Group.

Glickman, C. D. (1981). Developmental supervision: Alternative practices for helping teachers improve instruction. Alexandria, VA: Association for Supervision and Curriculum Development.

Glickman, C. D. (1990). Open accountability for the '90s: Between the pillars. Educational Leadership 47, (7), 38-42.

Goetz, J. (1984). Ethnography and qualitative design. Orlando, FL: Academic Press, Inc.

Goetz, J., & LeCompte, M. (1984). Ethnography and qualitative design in educational research. New York: Academic Press.

Goldberg, M. F. (1996, June). Here for the long haul: An interview with Theodore Sizer. Phi Delta Kappan, 77, (10), 685-686.

Goodlad, J. (1984). A place called school. New York: McGraw-Hill.

Guba, E. G. (1978). Toward a methodology of naturalistic inquiry in educational evaluation. CSE Monograph Series in Evaluation, 8. Los Angeles: Center for Study of Evaluation, University of California.

Guskey, T. R. (1986). Staff development and the process of teacher change. Educational Researcher, 15, (5), 5-12.

Guskey, T. R. (1990). Integrating innovations. Educational Leadership, 47, (5), 1-15.

Guskey, T. R. (1993, February). Why pay attention to research if researchers can't agree? The Developer, 3-4.

Guskey, T. (1994). Most significant advances in the field of staff development. Journal of Staff Development, 15, (2), 42-48.

Guskey, T. R., & Sparks, D. (1991). What to consider when evaluating staff development. Educational Leadership, 49, (3), 41-43.

Guskey, T. R., & Sparks, D. (1996, Fall). Exploring the relationship between staff development and improvements in student learning. Journal of Staff Development, 17, (4), 34-38.

Guthrie, L. F., & Richardson, S. (1995). Turned on to language arts: Computer literacy in the primary grades. Educational Leadership, 53, (2), 14-17.

Hall, G. E. (1986). Beyond the looking glass: Recommendations & critical warnings for teacher education practitioners, policymakers & researchers. Austin, TX: (ERIC Document Reproduction Service No. ED 270 451).

Hall, G. E., & Loucks, S. (1978). Teachers concerns as a basis for facilitating and personalizing staff development. Teachers College Record, (80), 36-53.

Hargreaves, A., & Dowe, R. (1989). Coaching as unreflective practice. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Hill, B. C., & Ruptic, C. (1994). Practical aspects of authentic assessment: Putting the pieces together. Norwood, MA: Christopher-Gordon Publishers, Inc.

Hirsh, S., & Ponder, G. (1991). New plots, new heroes in staff development. Educational Leadership, 49, (3), 43-48.

Hixson, J., & Tinzmann, M. B. (1990). What changes are generating new needs for professional development. Oak Brook, IL: North Central Regional Educational Laboratory.

Holcomb, E. L.(1995, Summer). To implement together, train together, Journal of Staff Development, 16, (3), 59-64.

Hopfengardner, J. D., & Leahy, P. E. (1987 November). Beyond induction: A collegial support system for experienced teachers. Paper presented at the National Staff Development Council Conference, Seattle, WA. (ERIC Document Reproduction Service No. ED 289 850).

Hopkins, D. (1990). Integrating staff development and school improvement: A study of teacher personality and school climate. Changing School Culture Through Staff Development, 41-70.

Huberman, M. (1992). Teacher development and instructional mastery. In A. Hargreaves & M. G. Fullan, (Ed.), Understand teacher development (pp. 122-142). New York: Teachers College Press.

Joyce, B. (Ed.). (1977). The urban-rural school improvement program. Syracuse, NY: Syracuse University, The Staff Development Dissemination Center.

Joyce, B. (1990). Changing school culture through staff development. Alexandria, VA: Association for Supervision and Curriculum Development.

Joyce, B. (1992). Cooperative learning and staff development: Teacher the method with the method. Cooperative Learning, 12, (2), 10-13.

Joyce, B., & McKibbin, M. (1982). Teacher growth states and school environments. Educational Leadership, 40, (3), 36-41.

Joyce, B., & Showers, B. (1980). Improving in-service training: The messages of research. Educational Leadership, 37, (5), 379-385.

Joyce, B., & Showers, B. (1988). Student achievement through staff development. New York: Longman.

Joyce, B., & Showers, B. (1995). Student achievement through staff development (2nd ed.). New York: Longman.

Joyce, B., & Showers, B. (1996, Winter). Staff development as a comprehensive service organization. Journal of Staff Development, 17, (1), 2-6.

Joyce, B., Wolf, J., & Calhoun, E. (1993). The self-renewing school. 1993 ASCD Yearbook. Alexandria, VA: Association for Supervision and Curriculum Development.

Kraft, N. P.(1995, Summer). The dilemmas of deskilling: Reflections of a staff developer. Journal of Staff Development 16, (3), 31-35.

Leithwood, K. A., & Jantzi, D. (1990). Transformational leadership: How principals can help reform school

cultures. School Effectiveness and School Improvement, 1, (4), 249-280.

Levine, S. L., & Broude, N. E. (1989). Designs for learning. In S.D. Caldwell (Ed.), A handbook of effective practices (pp. 70-82). Oxford, OH: National Staff Development Council.

Little, J.W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. Teachers College Record 91, (4), 509-536.

Little, J. W. (1992). Teachers' professional development in a climate of educational reform. Berkeley, CA: Consortium on Policy Research in Education.

Loucks-Horsley, S., Harding, C. K., Arbuckle, M. A., Murray, L. B., Dubea, C. & Williams, M. K. (1987). Continuing to learn: A guidebook for teacher development. Andover, MA: The Regional Laboratory for Educational Improvement of the Northeast and Islands; and Oxford, OH: National Staff Development Council.

Louis, L.S., & Miles, M.B. (1990). Improving the urban high school. New York: Teachers College Press.

Maeroff, G. I. (1993, March). Building teams to rebuild schools. Phi Delta Kappan 74, (7), 512-519.

Maeroff, G. I. (1994). On matters of body and mind: Overcoming disincentives to a teaching career. In D. Walling (Ed.), Teachers as leaders: Perspectives on the professional development of teachers. Bloomington, IL: Phi Delta Kappan.

Masserella, J. A. (1980). Synthesis of research on staff development. Educational Leadership, 38, (2), 248-251.

McCarthy, B. (1987). The 4MAT system. Barrington, IL: EXCEL, Inc.

McLaughlin, M. W., & Marsh, D. D. (1978). Staff development and school change. Teachers College Record, 80, (1), 70-94.

McNergney, R. F., & Carrier, C. A. (1981). Teacher development. (p. 1). New York: Macmillan.

McTighe, J. (1994). Performance-based assessment principles and practices. Frederick, MD: Maryland Assessment Consortium.

Merriam, S. (1988). Case study research in education a qualitative approach. San Francisco: Jossey-Bass Publishers.

Miles, M. B. (1992). 40 years of change in schools: Some personal reflections. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Miles, M. B., & Louis, K. S. (1990). Mustering the will and skill for change. Educational Leadership, 47, (8), 57-61.

Munger. L. (1995, Summer). Job-embedded staff development in Norwalk schools. Journal of Staff Development, 16, (3), 6-12.

Murphy, C. (1995, Summer). Whole-faculty study groups: Doing the seemingly undoable. Journal of Staff Development, 16, (3), 37-44.

Norman Public Schools (1993) PRO (professional resource opportunities) program. Norman, OK.

Pajares, M.F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. Review of Educational Research, 62, (3), 307-332.

Peshkin, A. (1982). The researcher and subjectivity: Reflections on ethnography of school and community. In G. Spindler (Ed.), Doing the ethnography of schooling, (pp. 20-27). New York: Holt, Rinehart, & Winston.

Peters, T. (1987). Thriving on chaos. New York: Alfred A. Knopf.

Pogrow, S. (1996, June). Reforming the wannabe reformers: Why education reforms almost always ends up making things worse. Phi Delta Kappan, (77), 10, 656-663.

Ponticell, J. (1995, Summer). Promoting teacher professionalism through collegiality. Journal of Staff Development, 16, (3), 13-17.

Renzulli, J. S., & Reis, S. M. (1985). The schoolwide enrichment model. Mansfield Center, CN: Creative Learning Press, Inc.

Richardson, V. (1995). Teacher change and the staff development process: A case in reading instruction. Columbia, NY: Teachers College Press.

Rosenholtz, S. J. (1991). Teacher's workplace: The social organization of schools. Columbia, NY: Teachers College Press.

Sarason, S. (1990). The predictable failure of educational reform: Can we change course before it's too late? San Francisco: Jossey-Bass.

Schaefer, R. J. (1967). The school as a center of inquiry. New York: Harper and Row.

Schaffer, R. H. (1988). The breakthrough strategy: Using short-term successes to build the high-performance organization. New York: Harper Business.

Schön, D. (1982). The reflective practitioner. New York: Basic Books.

Schmoker, M. (1996). Results, the key to continuous school improvement. ASCD Yearbook. Alexandria, Va.: Association for Supervision and Curriculum Development.

Senge, P. (1990). The fifth discipline: The art & practice of the learning organization. New York: Doubleday.

Shanker, A. (1990). Staff development and the restructured school. Changing school culture through staff development. Alexandria, VA: Association for Supervision and Curriculum Development.

Shroyer, M. G. (1990). Effective staff development for effective organizational development. Journal of Staff Development, 11, (1), 2-6.

Skager, R. W. (1971). Fundamentals of educational research. Glenview, IL: Scotts Foresman.

Smith, M. A. (1996, June). The national writing project after 22 years. Phi Delta Kappan, 77, (10), 688-692.

Sparks, D. (1994). A paradigm shift in staff development. Journal of Staff Development, 15, (4), 26-29.

Sparks, D., & Loucks-Horsley, S. (1990). Five models of staff development for teachers. Journal of Staff Development, 10, (4), 40-57.

Sparks, G., & Schiff, S. (1986). A triangle model of staff development. N.S.D.C. Developer.

Stalling, J. A. (1989). School achievement effects and staff development: What are some critical factors? Paper presented at annual meeting of the American Educational Research Association, San Francisco.

Stiggins, R. J. (1994). Student-Centered classroom assessment. New York: Macmillan College Publishing Company, Inc.

Stringfield, S., Billig, S., & Davis, A. (1991). Implementing a research-based model of chapter I program improvement. Phi Delta Kappan, (72), 600-606.

Strong, R., Silver, H. F., & Robinson, A. (1995, September). What do students want? Educational Leadership, 53, (1), 8-12.

Taber, K. (1996). The impact of a training of trainers program: A case study. Doctoral dissertation, University of Oklahoma, Norman.

Valencia, S. (1990) A portfolio approach to classroom reading assessment: The whys, whats, and hows. The Reading Teacher, 43, (4), 338-340.

Walen, E., & DeRose, M. (1993, October). The Power of Peer Appraisals. Educational Leadership, 51, (2), 45-48.

Wheatley, M. J. (1992). Leadership and the new science. San Francisco: Berrett-Koehler Publishers, Inc,.

Wiggins, G. (1994, July). None of the above. The Executive Educator 16, (7), 14-18.

Wise, A. E. (1991). On teacher accountability. In Voices from the field (pp. 23-24). Washington, D.C.: William T. Grant Foundation Commission on Work, Family and Citizenship and Institute for Educational Leadership.

Wilson, S. (1977). The use of ethnographic techniques in educational research. Review of Educational Research, 47, 245-265.

Wolcott, H. W. (Ed.). (1983). Teaching fieldwork to educational researchers: A symposium. Anthropology & Educational Quarterly, 14, (3), 171-212.

Wood, F. H. (1989). Organizing and managing school-based staff development. Staff development: A handbook of effective practices. Alexandria, VA: Association for Supervision and Curriculum Development.

Wood, F., Killian, J., McQuarrie, F., & Thompson, S. (1993). How to organize a school-based staff development program. Alexandria, VA: Association for Supervision and Curriculum Development.

Wood, F. H., & Kleine, P. (1987, October). Staff development and rural schools: A critical appraisal. Charleston, WV: Eric Clearinghouse on Rural Education and Small Schools, U.S. Department of Education.

Yin, R. K. (1984). Case study research: Design and methods. Newbury Park, CA: Sage.

Zahorik, J. A. (1995). Constructivist teaching. Bloomington, IN: Phi Delta Kappa Educational Foundation.

Zimpher, N .L., & Rieger, S. R. (1988, Summer). Mentoring teachers: What are the issues? Theory into practice, 27, (3), 175-182. (ERIC Document Reproduction Service No. EJ 383 206).

APPENDIX A

FRAMEWORK OF ASSESSMENT APPROACHES AND METHODS

Assessing Student Learning in the Classroom

ASSESSMENT APPROACHES

RESPONSES		*PRODUCTS*	*PERFORMANCES*	*FOCUSING ON PROCESSES*
SELECTED	CONSTRUCTED			
❑ multiple-choice ❑ true-false ❑ matching	❑ fill in the blank • word(s) • phrase(s) ❑ short answer • sentence(s) • paragraphs ❑ label a diagram ❑ "show your work" ❑ visual representation • web • concept map • flow chart • graph/table • matrix • illustration	❑ essay ❑ research paper ❑ log/journal ❑ lab report ❑ story/play ❑ poem ❑ portfolio ❑ art exhibit ❑ science project ❑ model ❑ video/ audiotape ❑ spreadsheet	❑ oral presentation ❑ dance/movement ❑ science lab demonstration ❑ athletic competition ❑ dramatic reading ❑ enactment ❑ debate ❑ musical recital	❑ oral questioning ❑ observation "kid watching" ❑ interview ❑ conference ❑ process description ❑ "think aloud" ❑ learning log

APPENDIX B

INTERVIEW QUESTIONS

Clearly, this is not an evaluation. If I am to truly learn anything from my research, I need to know what you really think and feel about the PRO Cadre 2.

1. Tell me about how long you have been a teacher, with this district and others, and how long have you been at this school.

2. Describe the process you went through to become a participant in the PRO Cadre. Were you selected, were you interested? What is the status of PRO Cadre trainers in your building? Did you get support from your peers?

3. You were selected by your staff to be a trainer for your school. The Norman PRO Cadre II was to prepare teachers to become experts in assessment. You spent three sessions learning about being a trainer and about assessment practices. The training ended last November. From the time the training began in your school, tell me what has happened. What are key events or things you think have happened? What have you been able to do as a result of participating in the cadre?

4. During our Cadre, the content focus was assessment. Having participated in the trainers of trainers program, what is your commitment to it?

5. In January, each trainer conducted an inservice for the site. What happened? Describe it.

6. As a trainer, how have you utilized any other assessment practices learned through PRO Cadre II training?

7. As a teacher, how have you utilized any other assessment practices learned through PRO Cadre II training?

8. What would I observe in your school that would be signs of using assessment you learned through the PRO II Cadre?

9. What would I observe in your class that would be signs of using assessment you learned through the PRO II Cadre?

10. Think back on all the things we have talked about, what facilitated the implementation of the trainer of trainers assessment concepts at your site?

11. What impeded the implementation of the trainer of trainers assessment concepts at your site?

12. How does the PRO Cadre II, and your experience since then, relate to your beliefs about staff development?

13. What were you hoping to get out of the PRO Cadre II? What did you get? What didn't you get that you wanted?

14. How do you see the future of the PRO Cadre being utilized to best meet the needs of staff development?