# ADMINISTRATIVE STRATEGIES IN AN AT-RISK 

ELEMENTARY SCHOOL: THE STRENGTH OF

WEAK TIES AND CHANGE (YOU CANNOT
CATCH THE DISEASE IF YOU ARE NOT EXPOSED TO THE GERM!)

By

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## CHAPTER I

## DESIGN OF THE STUDY

Wanted: A miracle worker who can do more with less, pacify rival groups, endure chronic second-guessing, tolerate low levels of support, process large volumes of paper and work double shifts ( 75 nights a year out). He or she will have carte blanche to innovate, but cannot spend much money, replace any personnel, or upset any constituency. (Evans, 1995, p 36)

Evans describes the plight of a principal charged with changing the current status of a school. First, a principal charged with changing a school must pacify rival groups of teachers, the dominant group, and the group new to the setting. Chronic secondguessing can be a challenge, as many teachers feel they know more about a setting than any administrator. With all these negatives, a principal is still expected to be innovative without increasing costs, and above all innovate without upsetting any constituency, be they teachers, parents, or board members. So finding a way to create change is a challenge faced by a principal.

We also know that change itself is multidimensional (Fullan, 1991). Three dimensions, beliefs, approaches, and materials must be affected. Alteration of theories or assumptions about programs, practices, and policies is change in beliefs. Change in approaches is use of new strategies or activities to accomplish learning. Change in materials is the use of new or revised materials allocated as resources. Fullan (1991) states all three, beliefs, approaches, and materials must differ from current practice if
change is to be institutionalized. Institutionalized change is that which increases a school's capacity for continuing improvements (Fullan, 1991).

To achieve change, professional practices currently in place must change. Teachers continue to use certain practices because they hold certain assumptions or beliefs about what is effective (Kagan, 1992). The reflections of their assumptions about teaching are reflected in the approaches and materials they use in their practice. If they believe children only learn in isolated silence, they use a teacher- centered approach and give children duplicated worksheets to complete alone, in silence. If however, teachers believe children learn best when actively engaged in a collaborative environment, teachers will reflect this belief in a collaborative approach addressing all learning styles. They will also reflect this belief using many hands-materials to be worked on by the children together with each other and/or the teacher.

Beliefs may be consciously held, or unconsciously held convictions (Kagan, 1992). Teachers arrive with their own beliefs about education, formed during their education. They believe what they were told to believe about education, and they teach the way they were taught (Cuban, 1984). Even individualized beliefs do not prevent the perpetuation of approaches and materials used in the classroom (Hargreaves \& Fullan, 1992; Lortie, 1975; Schuberts \& Ayers, 1992). Brody, Smith, and Burnett (1964) talk about teachers' use of knowledge. Replicative knowledge is that learned by repeating practices experienced, and repeating the practices unreflectively. Eraut (1994) decribed the classroom as a hot action place. Teachers must react to the "here and now" without time to reflect, so they tend to use replicative knowledge which they learned as students and routinized into their practice (Scribner, 1999).

Perhaps teacher isolation is the reason teachers do not change their beliefs about education and the approaches and materials they use. Teacher isolation goes back to the days of the one-room schoolhouse (Glickman, 1990). Teachers were the only adult entities in the building (Lortie, 1975). This isolation continues in schools today. Teachers have few opportunities to interact with colleagues (Fullan, 1991). In isolated cultures there is seldom a chance for teachers to be exposed to alternatives to the status quo (Bauch, 1982; Hargreaves, 1982; Fullan, 1991). Rosenholtz claims, "It is assumed that improvement in teaching is a collective rather than individual enterprise, and that analysis evaluation and experimentation in concert with colleagues are conditions under which teachers improve" (1989, p. 73). Fullan and Hargreaves follow this by saying this collaboration means teachers will become better and better at their jobs (1991). Therefore, when teachers work in environments that are not collaborative, their current beliefs about education, approaches engaged, and materials used are perpetuated; the status quo perpetuated.

## Statement of the Problem

We know many school administrators are faced with the task of changing existing school cultures and organizations. They are asked to reform curriculum and its delivery; refocus on all students, not just those in the mainstream; and, virtually across the board administrators are asked to improve student achievement (Fullan, 1997).

At the same time, we know that when new teachers join existing school organizations they must deal with the pressures to conform, the pressures exerted in both overt and covert ways by members of the dominant organization (Lortie, 1975; Schubert
\& Ayers, 1992). These pressures from members of the dominant organization serve to "orient" and induct into the school culture by creating new learning and knowledge in the new school members which support and facilitate the maintenance of the dominant existing school culture (Fullan, 1997).

Unfortunately, these two notions conflict. The need to change and the equally prevailing need to orient new faculty to an existing organization work at cross-purposes. Network analysis (Granovetter, 1983) and strength of ties (McPartland \& Braddock, 1981) would explain this anomaly through the development of ties within the school culture. Strong ties, explained as those ties with family and close friends, perpetuate the status quo and prevent change while weak ties, explained as those ties with acquaintances and/or friends of friends, promote change through learning between and among members of both groups.

## Purpose of the Study

The purpose of the study is to document the sources of professional practice as evidenced by instructional materials used, approaches engaged in, and the beliefs held by teachers in one school context (Fullan, 1991, 1997). Once documented these sources were analyzed through the lenses of Granovetter's strength of ties $(1973,1983)$ and Braddock and McPartland's network analysis (1981). The study evaluated the usefulness of these lenses for understanding the realities of change in one school context and describes other realities revealed. Qualitative interviews were conducted to reveal these realities.

## Theoretical Framework

The theoretical frameworks for this study are Perpetuation Theory (Braddock, 1980; McPartland \& Braddock, 1981; Wells \& Crain, 1994) and Granovetter's strength of ties (1973, 1983, 1986). Perpetuation Theory maintains black Americans who do not have the advantage of sustained experiences in desegregated settings early in life tend to maintain physical segregation throughout their life cycle because they are not afforded the opportunity to test their racial beliefs (McPartland \& Braddock, 1981). Braddock (1980) found black American students exposed to desegregation tended to attend predominantly white colleges, and they also had higher academic and occupational goals than segregated black American students.

Wells and Crain (1994) expanded Perpetuation Theory by linking it with network analysis. They found black American students exposed at an early age to desegregated schools tended to go to white dominated colleges, while black American students remaining in segregated situations tended to attend all black colleges. They found the desegregated students earned higher academic achievement and tended to form weak ties with white students. These weak ties carried over after college and often served as a network for entry into the white dominated job world. These same students achieved higher economic status than those remaining in segregated communities. Their analysis included Granovetter's strength of ties (Granovetter, 1973, 1983, 1986).

In describing ties, Granovetter (1973) notes that
...the strength of a tie is a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal service which characterize the tie. (p. 1361)

He also describes two distinct types of ties. Strong ties are those characterized by close relationships between individuals such as those with family members or close friends. Frequent interaction and the development of mutual sentiments further characterize strong ties. On the other hand, weak ties are characterized as those of acquaintances, or friends of friends. "Weak ties are more likely to link members of different small groups than are strong ones, which tend to be concentrated within particular groups" (Granovetter, 1973, p. 1376). Weak ties also afford individuals more opportunity for contact with other people and other people's ideas. Weak ties travel greater social distance than strong ties (Granovetter, 1973).

Teachers who form strong ties usually do so with other teachers holding similar beliefs and using similar approaches and materials. Unfortunately, the strong tie could prevent these teachers from learning from others in the same site. Weak ties afford teachers an opportunity to interact with many members of a faculty. This interaction enables them to see many teachers holding different beliefs, and using various approaches and materials in their practice. With weak ties the chance is more likely that teachers can learn new effective ways to improve their practice.

## Procedures

Qualitative interviews were used to gather the data in this study. Perpetuation Theory (Braddock, 1980, McPartland \& Braddock, 1981, Wells \& Crain, 1994) and Granovetter's $(1973,1983,1986)$ strength of ties served as interpretive lenses.

## Researcher

My background consists of 28 years as a classroom teacher before becoming a principal. I was fortunate to have experience in the self-contained elementary classrooms in grades three, four, five, and six. I was also provided opportunities to teach communication skills in grades six, seven, and eight. I spent five additional years teaching basic mathematics in middle schools to grades six and seven, and teaching prealgebra to grade eight. During those years I taught at various grade levels, and I taught in all socioeconomic levels. Ten years I taught in a private school where students had to be above grade level in order to gain admittance. The rest of the years were spent in public grade schools and middle schools in public schools. Most all of the public school experiences were in economically deprived areas of midwestern communities.

Based on my years of experience as a classroom teacher I brought biases to this study. I believe all students can learn regardless of their socioeconomic level. Students in child-centered classrooms learn much more than students in lecture or textbook driven classrooms. Students also learn more when they can collaborate with each other, and when they collaborate with teachers rather than being forced to work on worksheets in isolation and silence.

During all my years in the classroom, I had many opportunities to learn which methods of practice did the most for student learning. Once I had enough experience to believe all students could learn, I learned more effective approaches to use in the classroom. I also learned approaches and materials used in practice had to have relevance for students. Students also needed to be able to interact with others while
learning, and thus reflect on what they were learning. Activities done in isolated silence tended to create only short-term learning.

I believe teachers can learn also. Teachers can learn to implement better practices with help from administrators and other teachers. Professional development should be relevant to the needs of teachers, and should be offered at times when teachers are not exhausted, such as after school. Better practices need to be modeled for teachers, and teachers need a chance to try them and adjust them to meet the needs of their particular class and subject. Teachers also need to be given appropriate materials in a timely manner to implement better practices.

## Study Site

The study site was a midwestern elementary school in a low socioeconomic neighborhood. As principal of the site, I was charged with increasing student achievement and faculty cohesion. In other words, I needed to change things so that the students did better and faculty became happier and worked as a team!

I did not have the choice to remove teachers from the classroom if they were ineffective professionals. To do so would have taken the entire school year to document, recommend for non-renewal the following year, followed most likely by due-process hearings. The ineffective teachers were all tenured. During this entire time these ineffective teachers would still be in their classrooms. Their trust in me would be nonexistent, and their practices would remain the same or become even worse. The children in their classrooms only have one chance to be the ages they were. I did not have time to fire these teachers because of the students. They deserved the best
approaches and practices a teacher could give. I did not believe it was ethical to have students wait an entire school year to be exposed to teachers who believe they can learn. I had to change the teachers I was dealt.

During my doctoral studies at my university I learned leadership is best when done in non-threatening and collaborative ways. Collaboration thrives in an atmosphere of trust between leaders and followers. Teachers at the site awarded me credibility due to my many years of classroom experience in schools with the same demographics as their site. I needed to capitalize on this credibility to build trust and a school culture that would promote collaboration and innovation. I did not feel I could change beliefs, approaches, and materials by creating animosity with the dominant group.

It was the belief of district administration that the school site problem of student underachievement, and a lack of faculty cohesion existed because the beliefs, approaches, and materials used by the dominant group of teachers were so ingrained in the existing school culture that they did not promote effective teaching or student achievement. To establish a school culture, which promoted effective teaching and student achievement, the site studied needed to change beliefs, approaches, and materials used in the classroom setting by the dominant group of teachers. The establishment of weak ties across the faculty is speculated to have resulted in teacher learning, which promoted change in beliefs, approaches, and materials.

Since I have resigned from the site, I conducted interviews with members of the faculty, from both groups. These interviews were analyzed to provide evidence of collaboration and to note changes they experienced in their beliefs, approaches, and materials used in their practice.

## Change Strategies

I observed and recorded the beliefs, approaches, and materials used by teachers in two groups at the site prior to the study. Further, observations of interaction were observed to note patterns of collaboration. A network map provides a visual representation of these patterns. Opportunities to form weak ties (Granovetter, 1973) with many subjects at the site were offered to all teachers at the site.

Grade level meetings were held once a week with me during teachers' planning times. These meetings had teachers from both groups, the dominant and those new to the site. Teachers were assigned committee work with other teachers as part of their routine work. Social occasions, as well as unforeseen circumstances, provided other opportunities to form weak ties.

## Methodological Implications

This study provides responses to questions regarding the realities experienced by the groups of teachers in the study. Therefore, the method study was qualitative interviews. Rubin and Rubin say, "Qualitative interviewing is appropriate when the purpose of the research is to unravel complicated relationships and slowly evolving events. It is also suitable when you want to learn how present situations resulted from past decisions or incidents (Rubin, H.J. \& Rubin, I. S., 1995, p. 51)."

These interviews were conducted, "...trying to convey something about the world ...observed to the outside audience made up of those who are unfamiliar with that world (Emerson, Fretz, \& Shaw, 1995, p. 45)." Pseudonyms were used for all places and people mentioned in the interviews.

## Data Needs and Sources

The purpose of this study is to learn what learning took place between two groups of elementary teachers. The two groups were the dominant group and those new to the site. The learning was evidenced by answers to interview questions regarding beliefs, approaches used, and materials used in their professional practice.

## Data Collection

This study was conducted following the traditional school year, 2000-2001. Sources at the site, those in the dominant group, and those new to the site, will be identified. The interviews were conducted with members of both the dominant group and those new to the site during the 2000-2001 school year. Interviews took place after fears of reprisals from a superior were removed. Since I was no longer be the principal of the site, such fear should have been removed.

## Data Analysis

Another professional was asked to do periodic reviews of the data collected. Professor Dr. Adrienne Hyle served as this professional. The documentation should provide rich, thick description for others interested in the topic of change in similar locations and situations. The descriptions provided should provide confirmability and dependability to the study (Erlandson, Harris, Skipper, \& Allen, 1993).

As I reviewed, reexperienced, and reexamined all data collected I identified themes and patterns (Emerson, Fretz, \& Shaw, 1995) as they emerged from the interviews conducted. These themes and patterns were analyzed through the lenses of

Perpetuation Theory (Braddock \& McPartland, 1981) and network analysis (Granovetter, 1973). In conjunction with network analysis, strong and weak ties formed by the subjects in the study were analyzed. I did a literature review on the subjects of Perpetuation Theory, and network analysis prior to coding.

## Significance of the Study

It is the challenge of all who engage in research to produce findings that are meaningful. It is my hope this study will meaningfully inform theory, research and practice in the area of educational change.

Theory

This study examined the usefulness of Granovetter's $(1973 ; 1983)$ network analysis as a framework. This framework should explain the impact of weak tie formation as a means of creating acceptance of change implementation. Together with Braddock's Perpetuation Theory, network analysis should explain change as a result of learning in both groups in the study, those dominant and those new to the site.

This study explored the usefulness of Perpetuation Theory (Braddock, 1980; McPartland \& Braddock, 1981; Wells \& Crain, 1994) as a tool for increasing teacher effectiveness. Their research advises isolation from innovation perpetuates the status quo. Therefore, a collaborative culture will end teacher isolation and promote new learning in two groups of teachers, those dominant, and those new to the site. This theory in conjunction with Granovetter's (1986) theory of strong and weak ties was used to
examine the context of change in teachers' beliefs, approaches, and materials (Fullan, 1991) used in their practice as evidenced in their answers to interview questions.

Fullan's (1991) is a useful framework for use when administrators view the need for change in their schools. The data from this study confirms the use of weak ties (Granovetter, 1973) across an existing faculty can create needed change.

## Research

This study will add information to the knowledge base on educational change. This study should explain how the use of weak ties across a faculty could provide a vehicle for needed change in educational setting. This study should explain how learning takes place between two groups in a setting. Learning should be noted in both groups, the dominant and the new. Answers to interview questions provided evidence of this learning.

## Practice

By identifying the formation of weak ties across a faculty, administrators can use Granovetter's (1973) weak and strong ties, in conjunction with McPartland and Braddock's (1981) Perpetuation Theory, to create needed change. Linking faculty by providing the context for formation of weak ties can be the catalyst for the change.

## Summary

The purpose of this study was to document the sources of professional practice as evidenced by instructional materials used, approaches engaged in, and the beliefs held by
teachers in one school context (Fullan, 1991, 1997). I observed and recorded the beliefs, approaches, and materials used by teachers in two groups at the site of the study prior to the study. Further, observations of interaction were observed to note patterns of collaboration. Opportunities to form weak ties (Granovetter, 1973) with many subjects at the site were offered to all teachers at the site. Presentation of new beliefs, approaches, and materials used in practice were revealed in answers to interview questions.

## Reporting

Chapter II presents a literature review on Perpetuation Theory (McPartland \& Braddock, 1981) and Granovetter's network analysis (Granovetter, 1973, 1983). Also included in the literature review is teacher isolation/collaboration, and Michael Fullan's (Fullan, 1991, 1997) work on educational change. Chapter III presents the data gained from interviews of 20 teachers at the site of the study. Chapter IV presents analysis of the data from the interviews. Chapter V contains a summary, conclusions, recommendations, implications and a commentary.

## CHAPTER II

## REVIEW OF THE LITERATURE

School administrators are being held accountable and charged with the responsibility to improve student achievement in at-risk schools. In order to improve an at-risk school's performance, the school administrator must adopt a policy to change beliefs, approaches, and materials in place (Fullan, 1991). Improvement through change can be viewed through the lenses of change theory, teacher isolation/teacher collaboration, Perpetuation Theory, and network analysis.

## Change Theory

Adoption, implementation, and continuation are the three phases of voluntary change (Fullan, 1991). Phase I, adoption, is the process leading to and including the decision to create change. Phase II, implementation, is the initial experience(s) putting change into practice. Phase II usually takes two to three years to put into practice. Phase III, continuation, is the stage change becomes institutionalized, or the change is consciously discarded (Fullan, 1991).

Diverse factors can affect the decision to initiate change. Problem-solving and bureaucratic orientations; external change agents; federal, state, and local policy mandates; administrative and constituent advocacy; and the existence, quality, and access to innovations can be factors (Fullan, 1991). Key players also affect the decision to
create change. Sarason (1996, p. 293) states, "...the high frequency of failure in efforts at change can in part be attributed to the failure to see teachers as a constituency that, therefore, needed to be informed and involved at all stages of the change process." Teachers are key players in this study.

Sarason states, "...to introduce a change into the school setting makes at least two assumptions: the change is desirable according to some set of values, and the intended outcomes are clear" (Sarason, S., 1996, p. 95). In at-risk schools change is desirable according to local and state standards of achievement. And, the outcomes are clear; the achievement scores of students must rise.

Once a decision has been made to create change, the process itself has three stages; initiation, implementation, and continuation (Fullan, 1991). The decision to create change and the process leading to this decision is the initiation stage, or Phase I. Implementation, or Phase II, is the initial use and first attempts to put a reform in place. Fullan says this phase takes two or three years (1991). Phase III, or continuation refers to the stage where a change or reform becomes a part of the ongoing institution. It can also be the phase where a decision is made to discard the change. The concept of outcome can be added in order to give a complete picture of the process of change (Fullan, 1991).

Fullan poses this process is a fluid one. Each phase can flow backwards or forward into the next phase. A decision can be made at the implementation phase to alter a decision of the initiation stage. Fullan warns change is a process, not an event (1991). He warns further that evaluation of outcomes only can be misleading. Evidence of change involves looking at three components.

Michael Fullan (1991) states true change occurs when one can see and document changes in materials, approaches, and beliefs of faculty in the existing environment. First, administrators must facilitate a change in faculty beliefs. In order to do so, administrators need to learn what teachers believe about their roles. Teachers have biases and preconceptions about what teaching involves (Lortie, 1975; Shapiro \& Kilbey, 1990). Administrators need to understand the reasons for existing beliefs teachers bring to their roles (Blumberg, 1989).

Teachers arrive with years of experience in schools as students establishing their beliefs long before they arrive in the classroom as educators (Buchmann, 1987; FlorioRuane \& Lensmire, 1990; Wilson, 1990). Kagan (1992, p. 65) defines teacher beliefs as "tacit, often unconsciously held assumptions about students, classrooms, and the academic material to be taught." Teachers tend to become comfortable with their beliefs and they tend to become resistant to change (Pajares, 1992). Additionally, these beliefs are reflected in the education teachers provide in their classrooms (Kagan, 1992, p. 73).

Schools in need of change have faculty members believing their students cannot learn as well as those in other circumstances. They do not expect their students to excel; therefore, they do not. We must change this belief. It should be considered malpractice not to do so.

Schools at risk need to change their approaches to teaching. Keeping students quiet and busy no longer is a measure of good teaching. Research has proven learning takes place when students are engaged in their own learning. Simms (1978, p. 96) says, "Recommended teaching methodologies include providing opportunities for active involvement of the child, using a variety of resources and techniques (viewing, reading,
speaking, informal drama, mime, photography, etc.)..." Changes in practice are accomplished when beliefs and approaches (methodologies) are closely intertwined (Fullan, 1991). We must believe students can learn, and we must find the best possible approaches to use.

The third tenet of change is change in materials. Using new materials is a natural flow from the intertwining of changes in beliefs and approaches (Fullan, 1991). If one is using an active approach involving student engagement with groups, then a basal reader is not a good tool.

Fullan sums it up best. "Beliefs guide and are informed by the teaching strategies and activities; the effective use of materials depends on their articulation with beliefs and teaching approaches and so on. Many innovations entail changes in some aspects of educational beliefs and teaching behavior, use of materials, and more. Whether or not people develop meaning in relation to all three aspects is fundamentally the problem" (1991, p. 41).

Rogers (1971, p. 317) offers factors to make change successful. He claims the more contacts a change agent has with others, the more successful the change will become.

## Summary

The tenets of change are beliefs, approaches and materials. These need to be different from current practices to establish change. Teachers need to believe they can be effective and they need to believe students can learn. Once teachers believe in themselves and believe in their students, they need to use approaches that are effective
for students to be successful. More effective approaches require the use of different materials other than worksheets completed in isolated silence.

## Teacher Isolation

Teacher isolation goes back to the days of the one-room schoolhouse (Glickman, 1990). Teachers were the only adult entities in the building (Lortie, 1975). This isolation continues in the way of school organization today. Teachers have few opportunities to interact with colleagues (Fullan, 1991). Fullan (1991) claims this isolation prevents collaboration of teachers, which is the power behind change in schools. Fullan (1991) claims the degree of successful change is directly related to the extent teachers interact with each other. Hargreaves (1992) claims teachers learn the most from other teachers, particularly those in their buildings.

Bakkenes, Brabander, and Imants (1999) claim teacher isolation operates on two levels. One is the way a school is organized, and the other is the behavior of the individual teacher. "...we define teacher isolation as the extent to which teachers are restricted from or restrict themselves from interactions with other individuals or groups in the school. Isolation is a situation in which a teacher is minimally influenced by and exerts minimal influence on other staff members" (p.67).

Bakkenes, Brabander, and Imants claim teacher isolation on the individual level is a defensive behavior. It is the "avoidance of work-related communication with collegues"(p. 69). Avoiding work-related discussion promotes this individual's isolation. The more a teacher engages in work-related conversation, the more links that teacher has
to other teachers, and the more work-related conversation a teacher has the more central the teacher is in the organization, and the less isolated.

The authors found teachers made a choice to avoid professional conversation in order to spend more time with students. The isolated teacher is protecting the limited time available (1999).

The same authors also define other isolates. The teacher with only one other teacher connection is defined as an isolate. Groups of teachers who communicate with each other often, but avoid the central network of the school, form isolated groups with the potential to become dysfunctional (1999).

## Summary

There are three different types of isolation discussed in the literature. The first is the isolate. This is a person working in isolation. This isolate does not interact with others in the workplace.

The structure of the organization can cause isolation. Teaching a certain grade level in schools can cause a teacher to be isolated from teachers working at different grade levels. Schools are often organized in such a way that a teacher in one grade level may never interact with other grade level teachers.

The physical makeup of a school can cause isolation of groups. The site in this study was constructed of three separate and distinct pods. Each pod operated as an individual entity. Efforts had to be made to provide opportunities for the three pods to interact with each other.

## Teacher Collaboration

Teacher professional collaboration is the vehicle for change (Fullan, 1991). The more teachers interact the more successful change. Student learning is directly correlated to this professional collaboration (Freiberg \& Knight, 1987). The greatest challenge to this collaboration is scheduling. Too often the only available time is during a short recess period, a hurried lunch time, or after school when teachers are too exhausted to share their best thinking (Hargreaves, 1992).

Teachers learn best from each other, particularly from those in the same building. Teachers encounter many problems their colleagues have faced previously. Collaboration is a way to share experiences and prevent each and every teacher from "reinventing the wheel" (Hargeaves, 1992).

One vehicle for collaboration is team teaching. Team teaching is a way of organizing instruction for a particular group of students with two or more teachers sharing the responsibility for the instruction (Rosenholtz, 1989). In a school where teachers share common goals, and where teachers are congenial, team teaching is a valuable tool. (Rosenholtz, 1989).

Fullan (1991) states developing collaboration in a school breaks down the barrier of teacher isolation and provides support needed by teachers for each other. He adds it also helps raise morale, promotes experimenting, and increases teacher efficacy. Such collaboration should promote the chances for professional dialogue, as compared to the lack of such chances when teachers are isolated as much as they were in the days of the one-room schoolhouse (Glickman, 1990).

Teacher collaboration was found important as a factor to implement change through teachers' inservice (Kealey, Peterson, Gaul, \& Dinh, 2000). They say, "Developing personal rapport with teachers and promotiong team formation are beneficial because teachers who feel connected to the research project staff and to each other are more receptive to the trainer's message, more comforatable with their new work demands, and more able to view the implementation effort as worthwhile" (p. 67).

Linda Darling-Hammond (1998) says teachers need to know their subject matter, but they also need to know how to collaborate. To acquire this knowledge teachers need to be able to gain this knowledge outside of the college classroom. Teachers learn best from each other. Shared knowledge and shared standards of practice promote strategies that are successful in improving teaching practices.
"These approaches shift from old models of "teacher training" or "inservicing" to a model in which teachers confront research and theory directly, are regularly engaged in evaluating their practice, and use their colleagues for mutual assistance" (p. 6).

Petruska Clarkson, in her book Change in organizations (1995), speaks of the relationships between workers. She claims the quality of those relationships determine the quality of the work in the organization. She describes five types of relationships, one of which is the "working alliance."

This type is the most desired as it involves loving the work one is doing, and the satisfaction of doing this work with others. The working alliance she describes allows the workers to gain personal satisfaction from their work, and to thrive doing it.

Michael Marlow and Jennifer Nass-Fukai (2000) use Hord's definition of collaboration. Collaboration is "development of a model of joint planning, joint
implementation, and joint evaluation between individuals organizations"(Hord, 1986). Marlow and Nass-Fukai say collaboration can be difficult when people of varying perspectives and experience come together to reach agreement on goals and objectives. However, once agreement has been reached, positive actions and products are the result. These have the potential to influence educational practices in a positive way (2000).

Tom Sharpe and Tom Templin (1997) define teamwork as "teachers, administrators, and teacher educators (1) sharing leadership roles, (2) being held mutually accountable for their work efforts, (3) providing collective work products, and (4) collaboratively problem solving to meet the ongoing objectives of the educational setting in which each works"(p. 68).

Sharpe and Templin claim the team approach allows the individual, or group to voice challenges they face professionally. The benefit of the team approach is that collaboration is a way to meet these challenges using skills and perspectives of a diverse pool of members working together. They illustrate the benefit in their study of two separate physical education teachers, one working alone, the other working as a member of a team (1997).

They found the teacher in the school who was a member of a team felt less isolated and less marginalized than the physical education teacher who taught and worked alone. This teacher worked in a school where all faculty members were part of a team. They shared goals for the entire school, not just their particular subject or grade level. The team approach was credited with greater teacher job satisfaction and with the major reductions in teacher absenteeism and teacher turnover (1997).

## Summary

Teacher collaboration is the vehicle to increase this professional learning. It is also an important vehicle for change in a school. Breaking teacher isolation with teacher collaboration can expose more teachers to more dynamic practices.

Teachers' training and teachers' in-service training are only effective when teachers share their knowledge with each other. They also need to be able to use their peers as sources of in-service, as teachers claim they learn the most from each other. To do this teachers need to be able to work together.

Isolated teachers often feel marginalized. Working in a collaborative environment prevents this marginalization and provides opportunities to share professional goals and objectives. Teacher collaboration is also a great tool to use for problem solving in the educational setting.

## Perpetuation Theory

In 1980 Braddock presented his finding on desegregation of blacks in America. He found if blacks were not exposed to sustained experiences in desegregated settings at an early age, they tended to return to segregated settings, and they continued their racial beliefs.

Braddock (1980) also found blacks who had sustained experiences in desegrated setting tended to attend predominately white colleges. Braddock contends this was true due to the early exposure to desegregation. These blacks were familiar with and comfortable with desegregated settings. Both scenarios could be explained through Granovetter's stong and weak ties (1973, 1976, 1995).

Granovetter's strong ties could explain why blacks not exposed to sustained early desegregated settings tended to return to racially segregated settings. Desegregated experiences could be characterized as weak ties, formed during early desegregated settings, were formed with whites. These blacks crossed cultural boundaries of segregation.

Wells and Crain (1994) expanded this research. They found minority students participating in desegregated settings tended to have higher occupational and educational goals than those who remained in segregated settings. This was the result of exposure to different cultural expectations in the desegregated setting.

## Summary

Perpetuation Theory is a lens to explain how important it is exposure is provided. Exposure to innovations and ideas is the only vehicle for implementation of them. Sustained exposure at the early portion of experience leads to more acceptance of the innovations and ideas. Absence of this exposure tends to maintain the status quo. In other words, if you aren't exposed to the germ, you cannot catch the disease.

## Network Analysis

Network analysis was first used to examine the social structure of groups in classrooms (Gronlund, 1959). Later, other disciplines began using network analysis. The form of the instrument varied, but purpose was to measure the feelings of individuals toward other members of a group (Lindzey \& Byrne, 1968). These feelings should be
based on real situations where individuals have real opportunities to participate in a given situation, and not based on simulated situations (Gronlund, 1959).

In a sociogram people are denoted by points, or dots, and interaction between these people denoted by lines linking the points. Interaction is defined as networking. This is the "active process of building and managing productive relationships..." (Baker, 1994).

The lines depicting these relationships can be called "ties" (Coombs, 1973). Granovetter further postulates these "ties" are measurable (1973). He characterizes these measurements as strong and weak ties. The strength of the ties can be measured by time, intensity, intimacy, and reciprocity (Granovetter, 1973).

Strong ties are characterized as having high emotional interaction, or intensity, and mutual commitment to continue the relationship, or the commitment to spend time together. Strong ties also have intimacy. This is the amount of shared knowledge shared by the individuals. Reciprocity is the expectation of individuals that the relationship is and will continue to be rewarding. Weak ties have smaller measurements of these characteristics (Granovetter, 1973).

Weak ties can be characterized as acquaintances, and strong ties as good friends. Granovetter postulates weak ties are the avenues for diffusion of innovation. The more acquaintances one has, the more information one gains and/or shares (Granovetter, 1973). Weak ties are also the "bridges" for strong ties.

If two people have a strong tie, and one of them has a weak tie with someone else, the other person will be exposed to the information of the third party. In Granovetter's words,
"Since, in general, each person has a great many contacts, a bridge between $A$ and B provides the only route along which information or influence can flow from any contact of $A$ to any contact of $B$, and consequently, from anyone connected indirectly to B. Thus, in the study of diffusion, we can expect bridges to assume an important role" (1973).

Baker (1994) concurs strong ties are between people who know similar things. Weak ties occur between people who are different from each other, promoting diverse knowledge. Therefore, the more weak ties one has, the more knowledge it is possible to share and gain. Weak tie formation should abate teacher isolation and promote teacher collaboration.

## Summary

Teachers hold certain beliefs, use certain approaches, and use certain materials in their practice. When these are not effective for student achievement change is indicated. In order to effect change, beliefs, approaches, and materials need to change (Fullan, 1991).

Fullan claims the most effective way to create change is to have teachers break the mold of isolation and start collaborating with each other. Collaboration is a most effective method of creating positive change. It can be the greatest source of professional development valued by teachers. Teachers tend to trust the judgment of peers more than other professional activities (Scribner, 1999).

In order to create a congenial collaborative culture in a site, development of weak ties is necessary. The use of weak ties is an effective way to diffuse innovation, thus creating change (Granovetter, 1973).

## CHAPTER III

## PRESENTATION OF THE DATA

This chapter presents the background of the study, describes the respondents in the study, presents study procedures, and reveals themes from 20 faculty interviews. The data are presented to reveal the realities of the lived world of the subjects involved and documents sources of changes in materials used, approaches engaged, and beliefs held by both groups in the study (Grant \& Fine, 1992). Data are presented from the ethnographic stance of one trying to convey the world lived at the site to the reader (Emerson, Fretz, \& Shaw, 1995).

## Background of Study

For several years before I arrived at Columbus Elementary as the principal, it and two other schools in the district had received low scores on the state mandated achievement tests. This led to the identification of these sites as at-risk schools, in danger of being taken over by the state.

The school board decided to take the other two schools and turn them into magnet schools, one for science and math and one for the performing arts. The site of this study was not considered for such a move, and was given no extra help.

Low teacher morale was the result. The magnet schools were constantly being praised for their accomplishments by the district and local newspaper. The magnet
schools were able to pick and choose their teachers and their students. Many best students and teachers from Columbus Elementary were drawn to the two new magnets. Other teachers were reassigned to Columbus Elementary. Many of the tenured teachers no longer wanted in the new magnet schools were assigned to Columbus. This caused even lower morale for the hard-working teachers already at Columbus. They felt they had been robbed of their brightest students, and given the district's worst teachers. All this was happening without any extra money, while the magnet schools were receiving large amounts of money to implement their new programs.

Columbus Elementary is located in a community 50 miles from a midwestern state's second largest city. The community's population is approximately 40,000 . Columbus is one of ten elementary schools in the district. The district also has two middle schools and one high school. The school district in the community served 6,463 students in the year 2000. Five ethnic groups are represented; $41 \%$ of the population is Caucasian, $28 \%$ is Black, $1 \%$ is Asian, $3 \%$ is Hispanic, and $27 \%$ is Native American. Fifteen percent of the adults in the community held college diplomas in 1990. Thirty one percent in the same year had not completed $12^{\text {th }}$ grade. The average 1990 household income was $\$ 19,590$.

Despite all the above, the principal previous to me was able to get the school removed from the at-risk list. However, the low morale of the faculty continued. The teachers feel they are being asked to do the most work with the least amount of help.

Columbus Elementary is located in the poorest socioeconomic area of a midwestern town. It is located on the side of town populated mostly by minorities. All the students receive free breakfast and lunch. Many students are from families with
many social and economic problems. Columbus Elementary is considered the toughest place to work in the district.

In July of 2000 I wrote the following memo on the politics of the midwestern town where Columbus Elementary is located. It highlights my impressions of the situation when I arrived at the site.

A coalition has been formed to address the fact O'Keeffe, (the location of the study) is a shrinking community. The local homebuilders started it. The coalition is composed of people at the head of the large businesses, school system top administrators, and community leaders. Twenty thousand dollars was raised to hire a consulting firm to find the reasons for O'Keeffe's lack of growth. This firm found the following perceptions as reasons for O'Keeffe's problems.

First, the perception exists that O'Keeffe is a racially divided town. Secondly, the town is ugly in appearance. Finally, the perception is that O'Keeffe Public Schools are bad.

Meetings have been held to address all issues mentioned. The school system requested all administrators attend three of these meetings addressing the school system perception. I attended two of these meetings. I missed one because I had class, which I think created another problem I will address later.

The first was held right after I was hired in November of 1999 at St. Bartholomew's College building, which is located directly behind the school system's administration building. Naturally, all of the administrators were there. Discussion seemed to center on the local newspaper's reports about the schools. School people were quick to point out the constant negative reports regarding the school system.

The gist of the problem seems to be O'Keeffe Public Schools has a huge public relations problem with the community. They have some wonderful schools, but I had never heard about them until I was hired. One grade school teaches all subjects through the arts. They are housed in an old high school and have a wonderful auditorium and a dance studio. The principal handpicked the teachers, and they love teaching there. Another grade school teaches all subjects through the lens of science. In fact, it is called Linda Dennis Science Academy. There are ten elementary schools. Each has a special focus. The school I head is supposed to focus on global studies. My most effective teachers do.

The second meeting I attended was held at the Civic Center. The public was invited to come address any concerns they had about the school district. A lady named Pamela Smith chaired the meeting. The cues I got from other administrators around me was she is to be feared, or hated, or both! I remembered her name because one of my professors had told me she would be a good person to contact regarding my school. I did introduce myself and used his name. She seemed very pleased to hear about him. Maybe he is my protective armor!

She started the meeting by declaring this committee was in the business of making the community better. All of us were charged with reflecting on what we could do for that purpose. Then the microphones were opened to the public. The first lady to the microphone was a mother with an axe to grind. Her son had graduated last year from O'Keeffe High School with honors. However, he was not able to earn acceptable test scores for entrance to college. He was required to take remedial math and English classes this year in college.

One of our elementary principals got up and spoke. He was a native of O'Keeffe. His speech was in defense of the schools. He had chosen to live in the community and raise his family. The schools are great. The problem with the community in his view was lack of jobs for people his age. All of his high school classmates had gone to college and then found jobs outside of O'Keeffe.

It seemed to me that everyone left in O'Keeffe was unhappy about their situation. This same feeling carried down to the school level. Columbus Elementary was filled with people unhappy about being there. The teachers are particularly bitter about their situations. They feel unappreciated and oppressed. The background of Columbus Elementary explains their feelings.

Columbus school is considered the toughest elementary. It has 397 students, and is located on the west side of $\mathrm{O}^{\prime}$ Keeffe in a poor neighborhood. Most of the students are African Americans. Many are of American Indian descent. The site will have $100 \%$ free lunch and breakfast.

Many of the teachers have been at Columbus for several years. The district will not honor their requests for transfers. They are good teachers and Columbus needs them. Three of the teachers are African Americans. All but the gym teacher are female.

I became principal November 22, 1999. It was the anniversary of the Kennedy assassination. That should have been my first clue of things to come! I was one of 29 applicants, so I was flattered to get the job. Mary

Wolf had been doing her new job as director of special programs and the job of Columbus's principal. She agreed to be my mentor. (This proved disastrous for me. It took me several months to realize she was withholding information I needed, and she was criticizing me every time I asked a question.)

The school finance secretary went with Mary to her new position. I inherited a new finance secretary and an attendance secretary who had been moved to every school in the district. Efforts were made to have her fired, but Dr. M. Whitehorn, president of the school board, boarded his horses on her property. Enough said! However, in February of 2000 he abstained from a vote recommending she be terminated. She resigned before it became official. So, I had no attendance secretary and a new finance secretary.

This meant someone from the administration building came out every day for a several weeks. They stayed long enough to do the attendance. I now know they stayed long enough to find things to criticize. Other problems were as follows: incompetent Severely Emotionally Disturbed teacher, one horrible kindergarten teacher hired in October, one militant black teacher hired in November, one militant black parent liaison (also a school employee) in cahoots with the militant teacher, beloved custodian dies suddenly, fourth grade teacher dies, two new first year first grade teachers (one good, one bad), SED kids eat up $90 \%$ of my time, I am new to district and new to principalship.

Now, to the politics of the place. Basically, there was a problem all year with the militant black teacher and the militant black parent liaison. They were hired in October, so they had not yet established base operations when I arrived. They started during January, Martin Luther King's birthday month. They decided on their own to put on a separate program. By the time I learned about it the fourth and fifth grade teachers were having students pulled out of class to practice. The music teacher was irate because they wanted to use her equipment, but not her help. Black kids began to make racially inappropriate remarks to teachers and other students.

The horrible teachers and the black militants were all temporary since they were hired after the start of the year. Needless to say, I did not pull their applications out of the files when it came time to interview. The district did not honor any of the 17 requests for teacher transfers. I had a chance to build a community of trust. The teachers I received from the closing of the middle school seemed to be great. Their reputations were such. The one new teacher I inherited is the daughter of a dynamic principal. The principal where she student taught said she was the best he had ever seen. Hope springs eternal!

## Summary of Memo

Pamela Smith was correct. The community needed to question what could be done by each entity to make O'Keeffe a growing community. The school system needed to ask for Pamela Smith's help instead of fearing and hating her.

The memo provides a background of the situation I faced. I was challenged to increase teacher morale and increase student achievement. The students needed to do better and the teachers needed to change their beliefs, approaches and materials regarding their professional practice and the teachers needed to work collaboratively. I needed to meet the challenges by creating a more congenial atmosphere. The following year the number of teachers asking for transfers dropped from 17 to two.

## Respondents

The teachers at Columbus Elementary taught kindergarten through $6^{\text {th }}$ grade. They were housed in all three pods. Due to the physical layout of the building, each pod provided more opportunities for interaction of teachers in that particular pod. Each pod has its own lunch and recess schedules. Teachers in each pod share duties during these times. Figure 1 presents a map of the school and its pods.


Figure 1. Columbus Elementary School Map and It's Pods

In this study most teachers were assigned a number. Teachers with positive and effective beliefs, approaches, and materials employed in their practice were assigned a color. These dynamic teachers have students engaged in active learning in their classrooms. The test scores of their students are high, regardless of grade level. The dynamic teachers have very few discipline referrals, and an atmosphere of mutual respect is present in their classrooms. Members of the dominant group in the study are denoted by all capital letters in their names, such as PURPLE and TEACHER 1. Members of the group new to the study site are denoted by initial capital letter followed by lower case letters, such as Green and Teacher 12.

## Pod "P"

TEACHER 1 has a bachelor's degree and all 22 years of her career are in this school district. Her teaching assignment during this study was self-contained intermediate grade. She also served as the mentor teacher for the teacher in Pod "T" identified as "Fushcia." TEACHER 1 is not happy with her grade placement and has asked to teach a primary grade next school year. Last year she asked to be moved from one intermediate grade to another. She did not want to teach a "testing grade." In this district and state, grades 3 and 5 are the grades that testing scores determine whether or not a school is "at-risk." TEACHER 1 is pleasant and calm. She handles difficult students well, and she has a good rapport with the parents of her students.

TEACHER 2 has 22 years of experience. She teaches a primary grade this year. She has a bachelor's degree in early childhood. She wanted to stay in the building this year instead of transferring to a new four-year old center. This teacher spends most of
her day seated at her desk. She disciplines by yelling, and she uses many worksheets done in isolation.

The next teacher in Pod "P" I call "PURPLE." She has 13 years experience in the district. She has a master's degree in speech pathology. She teaches a primary grade. She is the district's teacher of the year. She is also the state winner for teacher of the year from a service organization. Her honors are well deserved. She maintains a positive approach to her practice. Her materials are hands-on, and she believes all children can learn. Her class this year was particularly difficult. Several of the students are emotionally disturbed, several are mentally retarded, and two are "crack babies." Since the district does not test or diagnose special education students until they are eight years of age, these children remain in the regular education classes without special education services, usually until third grade. PURPLE's sense of humor sustained her this year. She claimed we must laugh with her about her class or we would do nothing but cry.

Across the hall from PURPLE, is teacher number 3. She is a second year teacher, and is teaching a primary grade. Last year she taught a different grade in this same Pod. Once she saw test results from the Iowa Test of Basic Skills for her students she asked me to put her in a different grade level. The students' scores were in the 20's. This year she seems willing to let PURPLE lead and direct her.

Adjacent to Teacher 3 is Teacher 4. She came to Columbus Elementary in October. She replaced Teacher 0 who was suspended with pay and eventually fired. Her teaching assignment is a primary grade. This class was out of control and not used to working. Teacher 4 is in her first year, but she had served a long-term substitute's
position the previous semester. The first several weeks she relied on me for most of her guidance.

Teacher number 5 teaches a primary grade. She has a master's degree and 11 years of experience. She maintains order by yelling. Worksheets done in silence are her main material. Basically, she would rather be out in the hall talking to adults than in her classroom. She is very honest about this. She has a pleasant demeanor with adults, and maintains good relationships with the parents of her students. She is friendly and willing to help anyone do anything, except teach.

TEACHER 6 has a bachelor's degree and 11 years experience. She asked to move out of a testing grade. She requested an early childhood grade. She had done some intern teaching in a primary grade and wanted to try it. She found the discipline too difficult for her at the upper grade levels. TEACHER 6 admitted she did not like the pressure of teaching a testing grade. She has found new enthusiasm for teaching this year. She requested permission to attend workshops on her own time. This was not her attitude last year. While teaching the previous year she maintained the minimum amount of hours in the building. She was also frequently absent. This year she comes early and stays late. She has even volunteered for extra duty.

Next to TEACHER 6 is a teacher I call "Green." She is a first year teacher, but is not the traditional new teacher. She is older than a traditional new teacher. She has a bachelor's degree and is teaching $2^{\text {nd }}$ grade. She taught summer school in this building last summer, and developed a professional relationship with the teacher next to her. I call this teacher "RED." Fortunately, RED has rubbed off on Green.

Teacher 0 was one of teachers who had to be removed from the site during the school year. I include her only because of her influence on the interaction of the faculty members. The faculty members in Pod P united in their distrust of Teacher 0.

RED is the most dynamic teacher in the building. She believes her students can learn. She has a master's degree and is also a reading specialist with 22 years experience. Her teaching assignment is a multi-aged class of primary students. At the first of the school year she was looping with her class from last year. This means she teaches the same children as last year. But, with the population changes in the student body, this multi-aged class was developed. As usual, RED wanted the challenge. Her materials are all "hands-on." For social studies and science she uses only the textbooks written by her and the children. In reading she uses a combination of whole language and phonics. She individualizes all materials for her students. The other teachers in the building respect her professionally.

This pod has members from both groups, the dominant and the new. All but TEACHER 1 teach an early childhood grade, or second grade. TEACHER 1 had moved to that pod before she was assigned an intermediate grade.

## Pod "O"

TEACHER 7 is the building librarian. She has a bachelor's degree and 18 years experience in the district. Her strength is her belief that students at Columbus Elementary can learn to love reading. She does not spend much time integrating the other teachers' curriculum into her classes, but she is willing to help in other ways. Since she can handle tough classes, she is very good with extra duty in open times and areas,
such as breakfast and hallways. She is also a master at planning schedules and ordering appropriate materials for all classes. She knows the correct materials.

ORANGE holds a master's degree, is a reading specialist, and has 22 years experience in the district. She is living in Columbus's school neighborhood. She believes her students can learn. She expects them to do so, and they do. She also expects her students to behave properly, and they do. She teaches with a variety of approaches, and uses every possible material.

Unfortunately, during the middle of this study, ORANGE had to leave school due to illness. She had to leave school for the remainder of the year. She still graded papers for the long-term substitute teaching her class. She also called parents to keep them informed about grades and behaviors. She offered to help with end of the year reports I develop for my superiors.

TEACHER 13 is a primary level teacher. She has a master's degree and 18 years experience. She is a strong teacher but keeps very much to herself. She has learned to share her expertise with Teacher 12. She would like to teach in another building in the district. She works very hard to achieve high test scores from her students. She claims this would be easier in another socioeconomic level.

TEACHER 12 came to Columbus Elementary last school year as a long-term substitute in a different primary grade. She has a master's degree and several years experience over the last ten years. Last year was her first time to return to teaching after working in other fields for several years. TEACHER 12 readily admits to following the lead of the other teachers at her grade level. She has had a difficult time adjusting to the population here at Columbus, but she has made great strides. She started to enjoy
experiencing her own teaching style, and experiencing her own success. She was very instrumental in establishing our partners in education in the community's business sector.

TEACHER 13 is a primary level teacher. She has a master's degree and 18 years experience. She is a strong teacher but keeps very much to herself. She has learned to share her expertise with TEACHER 12. She would like to teach in another building in the district. She works very hard to achieve high test scores from her students. She claims this would be easier in another socioeconomic level.

TEACHER 14 requested a transfer last year and received one. However, the school she was assigned is the magnet school for the arts. She spent most of the summer urging the superintendent to move her back to Columbus Elementary. She disliked the requirement of using approaches different from her usual practice. All curricula in this magnet school must be taught through art, music, or dance and drama. She admits she prefers worksheets and basal textbooks. She returned to Columbus Elementary.

TEACHER 15 used to teach primary grades. She has a bachelor's degree and 24 years of experience. She was considered an outstanding educator. Last year she became the computer technology expert for the school. Her job is to integrate technology into the teachers' curriculum. She spends much of her time troubleshooting computer problems for the teachers. She says she does not want to return to the classroom.

Pod O housed only one very dynamic teacher, Orange. It was unfortunate she had to leave during the time discussed in interviews. She did maintain contact with Teacher 12 and TEACHER 13 while she was on medical leave. Her interaction with those two teachers provided positive support for them.

## Pod "T"

PINK is the music teacher, and she could be the professional background for the entire school. She is willing to integrate all curricula with her music classes. She uses materials appropriate for each level. When students leave the third grade after four years under her influence, they can read music. She drives an hour and a half each way each way to work. Teaching jobs in her community must be "inherited." She has been offered several positions in that community, but she knew she did not care for the grade levels offered. Teachers using her expertise find their students learn more about the subject at hand. She was a professional musician many years before joining the teaching profession. She also had a business career. She has a master's degree and three years teaching experience.

TEACHER 16 teaches a multi-age Emotionally Disturbed class. She has a bachelor's degree and has taught for seven years. Her contacts with other teachers are not on a regular schedule due to the nature of her class. She takes her planning period at various times during the day, depending on the mood of her students. She has a great deal of contact with a half-time Learning Disabled teacher, and she seeks out a few others during free time.

The teacher I call Fuchsia has a bachelor's degree and this is her first year of teaching. Teacher number 1 is her mentor. Fuchsia's teaching assignment is a multi-age intermediate grade class. She loves having a class of multi-aged students from grades 5 and 6 , and she works very hard to meet all their needs. She has started working on her master's degree, and she is enamored with the study of different learning styles.

Across the hall from Fuchsia is the teacher I call "Turquoise." She has a bachelor's degree and this is her second year to teach. Her teaching assignment this year is self-contained intermediate level. She also taught in a middle school the previous year. She said she did not mind the change in teaching assignment to grade school. She was only apprehensive due to the low socioeconomic level of the students at Columbus. She has done very well. She had the advantage of knowing and working with the teacher in the adjacent classroom. This is the teacher I call "Blue."

Blue is also a second year teacher with a bachelor's degree. As mentioned she had been teaching in a middle school with "Turquoise." She and Turquoise have teamed with curriculum. One is strong in science and math. The other is strong in reading and grammar. They teach their preferences to both classes. They trade classes at lunchtime, and they have equal time with both classes.

TEACHER 18 was a former middle school teacher. She was afraid the transition to grade school would be tough. She found the location and appearance of Columbus Elementary very depressing. However, she found she enjoyed working with two classes of $6^{\text {th }}$ graders, specializing in English and Reading. (Another teacher, not included in the study, taught the same two classes math and science. She was not available to be interviewed.)

Teachers in this pod were all new to the site with the exception of PINK. PINK taught music to all the students in the school. The other teachers taught grades five and six.

Interviews were conducted after I had resigned from the study site and taken a job in another district. The following section introduces the circumstances of the interviews,
and it offers summaries of all interviews conducted. Chapter IV analyzes the data from these interviews.

## Procedures

I called the current principal of the study site stating my wish to interview the teachers who had been under my supervision the previous year. I explained I had a few questions regarding my efforts to create change during the previous year. I requested that I be able to interview individual teachers during their planning periods in an out-of -theway classroom. This particular room is seldom used as it is next to the kitchen. It is not wired for the site's intercom system or computer system. It is clean and quiet and equipped with students' desks and a teacher's desk, as well as several chairs and a table. I would also be out of view of the students, so that my presence would not distract the students when they were changing classes. The principal said it would be fine and to email him the request for interviews and he would forward it to all the teachers. We agreed on a day, time, and the particular room at the site.

The following day I received several e-mails from teachers stating their pleasure to be able to help me. I responded that I appreciated their willingness to give up a few minutes of their planning periods to help me. I also asked my employer for a day away from my job for personal business. It was granted.

On the day specified I drove to the community where the site is located. I also stopped at the local grocery store and purchased chocolate candy. The teachers at the site were accustomed to my having it on my desk at all times. Whenever they visited my
office they knew they were free to enjoy the chocolate I kept in a basket on my desk. I knew they would expect me to bring my "trademark."

I arrived at the site armed with my protocol and consent forms. I proceeded to the office where I encountered the principal speaking to the secretary who was new to me. He informed me I was not going to be allowed to conduct my interviews on school property. My former boss, the elementary director who had been the high school principal for years, had said he did not like the idea of my interviews. I would have to conduct them somewhere else and at another time. His tone was not polite. He did say he was sorry for not calling me the day before. He looked at several teachers, the parent liaison, and a parent, all in the office as he said this. In my opinion, the people mentioned all had astonished looks on their faces. I responded that I did not understand, but would conduct the interviews at another time and location. I smiled and said I knew he was following orders. I wanted him to feel comfortable with my response. His daughter is a student in the school where I am currently the Junior High Principal. I would not want her to feel embarrassed if she became aware of the scenario. The kids are always the bottom line with me. I thanked him and said I knew he would have a good year. I left the office with the teachers who had been present. As I walked to the exit I encountered many students and most of the teachers. Many students hugged me, as did the teachers. I explained I needed to conduct the interviews at another time and location and would communicate with them soon.

As I left the site, I remembered that the teacher I called "RED" had been transferred to another elementary school. The enrollment of the site had dropped and one teacher had to be cut. "RED" had the most seniority in the building and chose to take the
chance to try another socioeconomic level of students in another site in the district. The principal of that particular school at a conference had greeted me two days previously. I had told him I wished to interview "RED" during her planning time sometime soon. He said to come by at my convenience. I was welcome to interview her anytime. He would have someone else cover her class if I arrived at a time other than her planning period.

I drove to "RED's" school before leaving town. I visited the office of her school where I found the principal. He told me to go ahead to her classroom. I related my experience earlier at the site of the study. He said not to worry about that. He would be pleased to help me with my research, and to please proceed. I went to the designated classroom and found the teacher in question with her students. I told her I planned to have interviews with the teachers in the study sometime soon at a convenient location.

Next door to "RED" I found the teacher I called "4." She had been a long-term substitute teacher replacing the teacher who had been terminated at the site of the study the previous year. She had been hired at the new site as a probationary teacher, which entitled her to the possibility of gaining tenure in the district in three years. She agreed to let me interview her at a time in the near future. I decided not to interview "RED" or teacher " 4 " until I interviewed all the other teachers. I had arrived at their school when neither one had a planning period. I was afraid that having someone else cover their classes might affect the ease they felt about spending time with me. Both are very professional about their practice, and both would possibly worry about time being spent away from their students.

As I left the community where the study site is located I remembered teacher " 12 " in the study was no longer teaching. She and her husband owned a popular restaurant
near the site of the study. I called the restaurant on my cell phone and " 12 " answered. I told her I would like to conduct interviews of her and as many other teachers as possible within the next few days. Would her restaurant be available? She replied it would. We discussed the particulars and set a time five days later.

When I arrived at the site of my present employment, I e-mailed several teachers with the arrangements. I asked them to please forward the arrangements to all the teachers at the site. I also asked them to reply to my e-mail to let me know they had done so. I received several e-mails confirming their acceptance of my invitation.

Twenty-three teachers from the site were asked to respond. Twenty teachers were eventually interviewed. I interviewed 12 of these teachers in a large room with several long tables at the local restaurant. It was possible to conduct an interview in privacy, away from the group. The remaining teachers came to the room at their appointed time, took some food I offered, and sat with other co-teachers who were waiting until I requested their presence in the interview area. After each interview the teacher being interviewed left the premises. Three teachers had to be interviewed by telephone due to unforeseen circumstances preventing their participation at the time. Four other interviews were conducted in teachers' homes. A final interview was conducted in a different restaurant.

## Protocol

The protocol was designed to reveal evidence of differences in materials, approaches and beliefs in the two groups of teachers in the study, the dominant, and the group new to the site.

I expected the dominant group to say they could not change the way the students at Columbus Elementary learn. I also expected them to say it is necessary to maintain the status quo. However, I also expected them to mention the difference in the amount of interaction with peers from previous years. The group new to the site was expected to be more hopeful. Many of them were younger teachers with new and innovative training.

1. After my first year as principal at Columbus Elementary, I decided the school was in need of a more collaborative culture. Did you feel you had more opportunities to interact with other teachers than you did the previous years?
2. Did you see what I did to provide interaction opportunities?
3. What kind of a job do you feel I did?
4. What else happened last year?
5. Who else would be willing to answer these questions?

## Themes Revealed

After transcribing the interviews, I coded them by reading them closely. Key words led to a cluster of words regarding three separate themes. The first theme was interaction. As I reread the transcripts I kept finding words such as "share" and "with." I clipped these out and placed them together until I felt I had an overall theme. The first became interaction. Fullan (1991) claims teacher collaboration is directly proportional to student achievement. Since increased student achievement was my goal, I chose to provide conditions where teachers had more opportunities to interact. As mentioned in the interviews, the planning meetings led to greater teacher collaboration and less teacher
isolation. "It was so nice working with people instead of suffering alone all the time" (TEACHER 5, 10-29-01).

Following interaction was the theme of change, including changes in materials, approaches and beliefs. Inattention from higher administration proved to be the third theme. Teachers in both groups provided evidence regarding these themes.

## Interaction

Interviews revealed the common theme of interaction. It was my intention to provide many opportunities for teachers to do so. Every teacher responded more opportunities were available to interact than previously. Planning meetings with me were the most commonly mentioned opportunities. Other opportunities included committee work and playground/lunchroom duty.

Pod "P". TEACHER 1 started by saying, "I used to just sit and get something down in case a sub was needed for me, but when we started meeting every week, we all decided to do our plans together" (10-29-01). TEACHER 2 commented in a similar vein. "You don't have to be so lonesome and miserable by yourself. You can share the work and this place isn't so bad" (10-29-01). She also commented later about being in the same building with some of the teachers for a couple of years without opportunities to get to know them until this year.

TEACHER 5 noticed assignment of teachers to committees. She also talked of the planning meetings. "We became able to share lesson plans, and we split-up running off papers" (10-29-01). TEACHER 6 followed the same pattern. "Your planning meetings helped me a lot. That started all of us working together" (10-29-01). Green
mentioned planning also. "After our meetings on Mondays we would sit and plan some more. I finally saw I had to plan every minute, not just for the days."

RED noticed my efforts at collaboration. "You did everything you could to throw us together professionally. Your committees and meetings were obvious. I also noticed so many new teachers in the building always had questions for me. They would always say you sent them to ask this or that." Later in the conversation she said, "...we did interact a lot more" (10-29-01).

Pod "O". TEACHER 7 spoke mostly of committee work. "You put us together more often. You truly lived the site-based philosophy. All the teachers planned everything. I don't mean that in a bad way. We had choices of committees. Before you came we were always stuck with doing some chore on our own. I always got stuck with the plan schedule. Then, I got blamed by someone every year for their planning time they didn't like. At least your way, they blamed the entire committee" (10-29-01).

ORANGE mentioned the grade level meetings. "We had those grade level meetings with you. Then TEACHER 12 came next door. She wanted help with discipline and curriculum. She had not taught this grade before. Then, when I had to leave I worked with the substitute on the same two things" (10-30-01).

TEACHER 12 said she had opportunities to interact with the other faculty members. "You had us meet together. That was a great help to me. I got to know ORANGE. She helped me a lot. She made great suggestions. So did TEACHER 13. They are really good. TEACHER 13 and I started sharing taking care of kids who had not completed their work. This way we didn't give up every planning period" (10-30-01).

TEACHER 13 said she had more opportunities to interact with other teachers but preferred just to interact with the teachers at her grade level. She did like the grade level meetings though. Grade level meetings had her interacting with ORANGE and TEACHER 12 (10-30-01).

TEACHER 14 spoke of interacting. "You put us together at grade levels with the same planning time, then had us meet once a week with you. That was good" (10-30-01). She also spoke of her friendship with ORANGE. ORANGE was ill and had to leave before the first semester was over. "It was scary. I was lost. I was used to spending my planning period in her room. We did everything together. Now we can again" (10-30-01).

TEACHER 15 said the nature of her new job as the technology integrationist gave her more opportunities to interact with the other teachers. "I was all over the building during all the planning periods. I always had someone wanting help with their computer. I'd see teachers together talking about kids and plans. Before, most teachers just stayed to themselves" (10-29-01).

Pod "T". TEACHER 18 talked about the planning meetings. "The grade level planning meetings kind of set the tone for us to work together. It just served as a springboard for interaction" (10-30-01). She talked further about working together. She claimed the school population was tough, but by working together they all got through it.

Fuchsia was a brand new teacher. She said she had nothing to compare with my efforts. However, her mom was a principal in the district and her mom told her it was obvious I was trying to get teachers to work together. Fuchsia said, "I started noticing how you had a mixture of us on different committees" (10-30-01).

Turquoise spoke of interaction with other teachers, but mostly with Blue. "Of course we had planning meetings, but they were just the two of us most of the time. We did spend time with other teachers on duty and on committees. It was good we were spread out. Blue and I get along so well, probably because we didn't have to spend every minute with each other" (10-29-01).

Blue spoke in a similar vein. "We had those planning meetings with you, then we had committees to work on with other teachers. Site Plan committee has introduced me to a lot of teachers in the other pods. Otherwise, I would never see them except at faculty meetings. I think you planned the rotation of who brings food to our meetings, too. That forces us to talk to other teachers we might miss out on" (10-29-01).

PINK mentioned a variety of times together. "Yes, we were given the opportunity to meet together, and you encouraged the teachers to coordinate their curriculum with mine. With several I was able to integrate" (10-29-01). She went on to talk about committees of teachers that had never worked together before. "We actually talked to each other" (10-29-01). She spoke of sharing when she said, "You were right when you said at least we have each other. If we hadn't learned to share our misery last year, I would have gone crazy" (10-29-01).

## Materials, Approaches, Beliefs

Michael Fullan (1991) says real change occurs when three components have altered. The three components are materials used, approaches engaged, and beliefs held. The teachers in this study provided data regarding all three. The purpose of this study is to note changes in professional practice given ties formed between teachers in the two
groups in the study, the dominant group and the group new to the study. This section provides evidence of such change.

Pod "P". Pod P provided evidence of changes in materials and approaches. These two were linked together. Changes in beliefs were also evident in Pod P. TEACHER 1 gave evidence of changing approaches and materials. When speaking of approaches she mentioned she learned new tricks for classroom management and about students' learning styles. Her evidence regarding materials referred to her interaction with TEACHER 14. She said they traded lesson plans and teaching materials. They did this because one teacher was better at reading, and the other better at math. (TEACHER 1, 10-29-01)

Teacher 3 changed her approaches and materials. She thought PURPLE was such an awesome teacher. Eventually, she and the other teachers on her team borrowed PURPLE's lesson plan form, and PURPLE's stuff. This form spoke of methods, or approaches. When I asked about her meaning of stuff she replied that she borrowed math manipulatives. She said TEACHER 2 did the same. They requested I ask the business partners to purchase manipulatives for their classrooms, so that they would have them available without having to borrow from PURPLE.

TEACHER 6 said the planning meetings changed her approaches and materials. She said, "Your planning meetings help me a lot. That started all of us working together. That's how I found out what all I need to do. They had all the "stuff." These teachers were willing to let me watch how they arranged everything when they used everything" (10-29-01). She spoke of the students making their own books and writing their own stories. "It is awesome" (10-29-01).

Green spoke of changing her approaches by using PURPLE's lesson plan form.
Once she learned this difference she changed her approaches. "I finally saw I had to plan every minute, not just for the days. We ended up using the form PURPLE had invented for planning" (10-29-01).

In addition to materials, many teachers voiced changes in beliefs. TEACHER 2 gave evidence of a change in her beliefs. She said, "Well, I learned you can work in this God-awful school and have a good time. You don't have to be so lonesome and miserable by yourself. You can share the work and this place isn't so bad" (10-29-01).

TEACHER 3 changed her beliefs regarding problems teachers faced at other grade levels. She learned other grade levels had many of the same problems she faced at her present level. She had thought problems would be different due to the differences in the students' ages (10-29-01).

TEACHER 4 was a first year teacher. She took over Teacher 0's class in October. The students had not made any progress before Teacher 4 arrived. Teacher 4's belief regarding her ability changed over the course of the year. She was proud of the job she had done. She claimed she would have quit her job by Thanksgiving if the other teachers had not been willing to help her.

TEACHER 6 also showed signs of changing her beliefs. The previous year she had taught an upper grade. The year of the study I moved her to $1^{\text {st }}$ grade at her request. This move proved to be a positive one for her. She said, "I can't thank you enough for letting me teach $1^{\text {st }}$ grade. It has made all the difference in my life. I go home talking about my kids and how wonderful they are. Last year I drug myself home everyday and talked about how awful the big kids were" (10-29-01).

Green spoke of her admiration for RED. RED's influence helped her change her belief about a quiet classroom. She said, "I was under the impression that noise in the classroom was bad. RED showed me the difference between good noise and bad noise" (10-29-01).

RED was a teacher using dynamic approaches and inventive materials. As previously noted she seldom asked for a textbook. She and her students wrote and assembled the books they used. RED's students were always actively engaged in their learning. The students worked collaboratively with RED and with each other. I did not want her to change her materials, approaches or beliefs.

Pod "O". Pod O indicated changes in materials and approaches. TEACHER 12 provided this evidence. ORANGE provided help to TEACHER 12 and TEACHER 13. ORANGE believed her students could learn, and she helped the other teachers with approaches and materials.

TEACHER 12 knew she needed help. She talked about getting to know ORANGE. "I got to know ORANGE. She helped me a lot. She made great suggestions. So did TEACHER 13. They are really good. TEACHER 13 and I started sharing taking care of kids who had not completed their work. This way we didn't give up every planning period. The kids finally got the idea if they didn't do their work they were going to miss PE and recess. That got their attentions real quick" (10-30-01). This is evidence of change in approaches.

ORANGE was an outstanding teacher. Her methods and materials engaged students in their learning. She believed her students could learn. They did. She believed they could behave. They did. When she became ill, it was a blow to my efforts. I had
planned to have her create more weak ties with other teachers to increase the possibilities of change. However, even when she was out of the building, she maintained a weak tie with the substitute in her classroom, and with TEACHER 12. "We had those grade level meetings with you. Then TEACHER 12 came next door. She wanted help with discipline and curriculum. She had not taught this grade before. Then, when I had to leave I worked with the substitute on the same two things. These kids are really tough. That sub came a long way. So did TEACHER 12" (10-30-01).

Pod "T". Pod T provided some evidence of changes in approaches and beliefs. In the interviews teachers in this pod did not mention change in use of materials. This pod houses upper grades, 5 and 6. The music teacher and the teacher of Severely Emotionally Disturbed (SED) students are also in this pod.

TEACHER 16 referred to plans to take her students on field trips. She had not done so previously to the one she mentioned in the interview. She vowed to take them on a field trip every month during the new school year. TEACHER 18 offered evidence of a change in approaches as a result of interaction with Fuchsia. "She is so enthusiastic. It is catching. She does know a lot about learning styles. I altered some of my stuff after talking to her" (10-30-01).

Fuchsia was a first year teacher. She was still forming her approaches, preparing her materials, and forming her beliefs. Her relationship with her mentor, TEACHER 1 , helped her with her professional approaches. Fuchsia said, "Of course I had a great mentor in TEACHER 1. She told me I should do this or that, and I learned what teaching manners were. She kept me from making big faux pas" (10-30-01).

Turquoise spoke of the difference in approaches at Columbus Elementary. She was comparing them to her previous experiences teaching in a middle school with Blue. "We taught at the middle school together, but not like we are doing here. We really teach together here. We have the same kids. I do the history and reading; she does the math and science. We love that. It gives us less prep, but more kids. We probably don't talk much to the other teachers because we are so busy with these kids. We have so many that are so low. We are always racking our brains to find some way to help them" (10-29-01).

PINK made one reference to changing beliefs. This was a remark regarding her opinion of a difference she felt I had made. "It was amazing that people could enjoy working in such a horrible place. You did that!" (10-29-01).

TEACHER 16 taught a self-contained class. She offered evidence of a change in approaches in the future. She also changed her belief in her students' ability to behave.

She spoke of taking her students on a field trip the end of the year. She was so surprised at how awe-stricken they were. It was then she realized her students had never been far out of the neighborhood, let alone out of town. Their good behavior surprised her.

Blue spoke of a new belief in herself as a teacher. She spoke of a decision that I feel affected her approaches and beliefs. "I grew as teacher. I had to or lose my mind. Turquoise and I just decided we were going to have a good year, and we did. ..... As a teacher I gained confidence. If I can handle Columbus, I can handle anything. You can't buy that feeling, you have to earn it" (10-29-01).

## Unattended

The third theme identified in the data is the feeling of being unattended or neglected by people in higher administration. Many teachers felt the school was the toughest one in the district, yet they received the least amount of attention, and the least amount of help.

Pod "P". TEACHER 1 made reference to this theme. She was complimenting me for my support of teachers. She claimed this was important because so often the parents and higher administration wanted things done that were impossible at the site, or "just plain crazy" (10-29-01).

TEACHER 5 made a similar comment regarding the lack of concern by the former administrator of the study site. "It was so nice working with people instead of suffering alone all the time. No one used to care what we did, good or bad. And, no one cared what we did as long as we kept the kids out of the office" (1-29-01).

TEACHER 6 referred to my problems with Teacher 0 while referring to inattention from higher administration. "We had to look out for each other. What a loony she was. Her husband was dangerous though. I knew that when I heard him threaten you. I can't believe what you had to go through to get the district to fix the doors so they would lock" (10-29-01).

RED voiced her concern for the students and teachers. "If the district cared anything at all about kids, and supported their principals, you could've performed miracles. We trusted you, because you were just out of the classroom. You knew what
we were up against. You didn't tell us just to handle it the way Mary Wolf did. When they hired the second crazy one (teacher), I knew you wouldn't stay" (10-29-01).

TEACHER 7 referred to TEACHER 0 while expressing her feelings regarding the higher administration. "I could not believe how long it took the district to listen to you. If you had not sent her home the first time, we would probably still be putting up with her. We had to work together to get rid of her. We tried helping her. Her family should've gotten help for her, but then someone might find out how crazy they all are. Can't believe those two are principals. Shows you how smart the higher-ups are" (10-29-01).

TEACHER 7 referred to the lack of attention at another point in the interview. "The year was so different, but also the same. You were different, but the higher-ups were the same. They just don't know what it's like in a school like this. Thank God you were always available when we needed it. Wolf wouldn't come out of her office, and she wouldn't let us come in! They give us the toughest kids, and the least help. It's amazing people can be so stupid" (10-29-01).

Pod "O". TEACHER 13 had been in the district many years. She voiced her opinion regarding the elementary director at the district board office. He had been the high school principal for many years preceding the year of the study. "No wonder he doesn't understand us. He hasn't got a clue about elementary, let alone this population. I don't think this school system will ever get over worrying about test scores instead of kids" (10-30-01).

At the time of the interview, TEACHER 13 had recently been transferred to a different school. The new position was located in a school serving an upper middle
socioeconomic neighborhood. She commented on the difference between the two sites. "The teachers have no idea what we put up with over here. You did as much as you could, but without help from the top this place will always be a mess" (10-30-01).

TEACHER 14 commented about the inattention from the higher administration. She went beyond saying Columbus was ignored. She felt Columbus Elementary was actually being purposely victimized. She and TEACHER 1 taught the same grade level, and both teachers had particularly difficult classes. "Some years you just get the right mix to be a nightmare. Then, the superintendent sent every horrible kid from other schools to us on district transfers. They always seemed to be fourth graders. He went out of his way to dump on Columbus. What a jerk" (10-30-01).

Pod "T". PLNK just made one comment during the interview voicing her feeling about inattention. She was discussing the need for in-house suspension and difficulties with student discipline. PINK and TEACHER 7 started a reward system for good behavior. "I started the reward system with them. They like it as much as the little kids. TEACHER 7 and I both use one. You have to. You shouldn't have to. Kids should just behave because they are supposed to, but they don't here. We need in-house suspension so much. We have no clout" (10-29-01).

Table I illustrates the themes revealed by each teacher in each pod.

TABLE I

## THEMES REVEALED

| POD P |  |  |  |
| :---: | :---: | :---: | :---: |
| Respondents | Interaction | Materials Approaches Beliefs | Unattended |
| Teacher 1 | X |  | X |
| Teacher 2 |  | X |  |
| Teacher 3 |  | X |  |
| Teacher 4 |  | X |  |
| Teacher 5 | X |  | X |
| Green |  | X |  |
| PURPLE |  |  |  |
| Teacher 6 |  |  | X |
| REE | X |  | K |
| POD O |  |  |  |
| Teacher 7 | X |  | X |
| ORANGE | X |  |  |
| Teacher 12 | X | X |  |
| Teacher 13 | X | X |  |
| Teacher 14 | X |  | X |
| Teacher 15 | X |  |  |
| POD T |  |  |  |
|  |  |  |  |
| PINK | X | X | X |
| Teacher 16 |  | X |  |
| Teacher 18 | X | X |  |
| Fuchsia | X | X |  |
| Blue | x | X |  |
| Turquoise | X | X |  |

## Student Achievement

The state decides the status of an elementary school by the test scores achieved by $5^{\text {th }}$ and $3^{\text {rd }}$ graders on achievement tests given every year. Columbus Elementary

School's scores for the year of the study did increase. The $5^{\text {th }}$ grade is given a Criterion Referenced Test in the subjects of math, writing, U. S. History/Constitution/Government, Geography, and the Arts. The crucial score for a school is the percentage of students scoring as unsatisfactory.

All other grades take the Iowa Test of Basic Skills. Tables II and III below illustrates the scores from Columbus Elementary School for the year of the study. Since fifth graders do not take the same test they did as fourth graders, it is not possible to compare the progress fifth graders have gained during a school year. It is possible to compare the scores of third graders with their scores from second grade. Notable progress was made by these students. Table II below illustrates fifth grade scores. Table III illustrates $3^{\text {rd }}$ grade scores.

TABLE II
CRT PERCENT OF UNSATISFACTORY FIFTH GRADE STUDENTS

|  | Math | Reading | Science | Social <br> Studies | Geography | Writing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | $20 \%$ | $37 \%$ | $45 \%$ | $57 \%$ | $63 \%$ | $2 \%$ |
| 2001 | $5 \%$ | $15 \%$ | $27 \%$ | $41 \%$ | $41 \%$ | $2 \%$ |

## TABLE III

THIRD GRADE NATIONAL PERCENTILE RANKING

|  | Language | Math | Reading | Total Score |
| :--- | :---: | :---: | :---: | :---: |
| $3^{\text {rd }}$ Grade 2001 | 52 | 58 | 33 | 45 |
| $2^{\text {nd }}$ Grade 2000 | 43 | 41 | 34 | 38 |

Summary

The chapter contained the background of the study and presented data from teachers' interviews. These interviews revealed three distinctive themes. These themes were interaction, sources of change, and inattention from district higher administration. Table 1 summarizes frequency with which these themes were revealed. Student achievement scores for third and fifth grades were also presented. These were displayed in Table II.

Chapter IV will present analysis of the data through the lenses of Granovetter's strength of ties $(1972,1983)$ and Braddock and McPartland's network analysis (1981).

## CHAPTER IV

## ANALYSIS OF THE DATA

Analysis focused on reviewing the impact of ties upon a more collaborative environment in which changes in instructional materials, approaches engaged and beliefs held led to increased student achievement. These ties were analyzed through the lenses of Granovetter's $(1973,1983,1986)$ theory of strong and weak ties and McPartland and Braddock's (1981) Perpetuation Theory.

## Description of Ties

Granovetter's (1973) network analysis assumes that ties have four characteristics: (1) amount of time, (2) emotional intensity, (3) intimacy, and (4) reciprocity. As the data emerged revealing these ties, I drew a network map illustrating the ties (Figure 2).

## Time

Many respondents mentioned continuing working together at times other than planning meetings with me. One teacher mentioned after the weekly planning meetings her team would go back and plan more together. TEACHER 7 spoke of committee work. Granovetter's component of time started as minimal, once a week during their plan. Faculty meetings, planning meetings and committee meetings led to the creation of weak ties. As revealed in many of the interviews, teachers often spoke of planning meetings


Figure 2. Network Map with Ties
with other teachers teaching the same grade level and with me. TEACHER 1 said, "We had never had weekly grade level meetings before. It was nice just to realize we all had the same problems. I used to just sit and get something down in case a sub was needed for me, but when we started meeting every week, we all decided to do our plans together. It made it so much easier" (10-29-01). TEACHER 15 provided evidence of a change in the amount of time teachers spent together. "I was all over the building during all the planning periods. I always had someone wanting help with their computer. I'd see teachers together talking about kids and plans. Before, most teacher just stayed to themselves" (10-29-01). Green verified TEACHER 15's statement. She said, "After our meetings with you on Mondays we would sit and plan some more" (10-29-01).

## Reciprocity

Data revealed time gradually increased, leading to reciprocity. Teachers found they had various skills they could share. Some teachers were better at math and science while their team member was better at reading and social studies. They shared planning. They shared preparation of materials. They found the ties beneficial. TEACHER 1 spoke of sharing planning with TEACHER 14. She commented that TEACHER 14 was much better at math that she was, and she was better at reading. They traded plans and materials for those two subjects. TEACHER 5 spoke in the same vein. "We became able to share lesson plans, and we split up running off papers" (10-29-01). Later she spoke of reciprocal conditions concerning student discipline. "‘"We needed in-house so badly. Send a kid home and those parents just let the kid watch TV all day. Kids loved going
home. But, if a teacher sent a kid to me for time-out, that kid did not want to come back. I made sure of it. The others did the same for me and my little felons" (10-29-01).

## Intensity

Baker (1994) describes intensity as the amount of emotional interaction and the amount of commitment needed to maintain the relationship over time. Data revealed intensity started at a low level in the beginning of the school year in question. However, the teachers maintained their relationships during the entire year, which is evidence of growing intensity. Only one teacher spoke of socializing with other teachers, so the intensity was not at the strongest level. For the purposes of this study, a moderate amount of intensity was enough to maintain a professional weak tie.

When Green spoke of her admiration for RED's teaching practices, she gave evidence that the intensity of the relationship was strong enough to last during the entire school year. "I was brand new, and that was hard, but I got to know RED. She's awesome" (10-29-01). Later she described the intensity of the relationship. "It helped me a lot that RED never missed a day. I could really count on her. Everybody could" (10-29-01).

## Intimacy

Baker (1994) describes intimacy as the amount of common knowledge two individuals share. In this study all the teachers held elementary teaching certificates, which means they shared the same knowledge on a professional level. They were exposed to the same higher education curriculum in order to gain their certificates. The
differences they had were in years of experience and locations of teaching experience. It is assumed they maintained a high level of intimacy due to their training and their experience at the site of the study. The teachers found the lack of support from higher administration in the district led to dependence on each other and me for help with students.

This was evidenced by many when they stated how tough the students were to handle at the site. TEACHER 7 spoke of the ignorance of the higher administration regarding the at-risk population of Columbus Elementary. "They just do not know what it's like in a school like this. Thank God you were always available when we needed it. Wolf wouldn't come out of her office, and she wouldn't let us come in! They give us the toughest kids, and the least help" (10-29-01).

## Demographic and Contextual Ties

Fischer, Jackson, Stueve, Gerson, and Jones (1977) as well as Lindzey and Byrne (1968) added demographic factors and contextual factors for evaluating ties. These components were added to this study as factors describing the environment of the network. The more demographic factors shared by two subjects, the stronger the tie between them. Conversely, the fewer demographic factors shared by subject, the weaker the tie between them (Lindzey \& Byrne, 1968). How is intensity different from demographic factors?

Blue and Turquoise formed a strong tie since they shared so many demographic factors. Both were second year teachers. At the site of the study they shared the same students. Turquoise provided the evidence of this strong tie. "We moved from the middle
school. We were both glad. We had wanted to teach grade school anyway. But, when we heard it was going to be this place we freaked. It turned out to be fine. We were so happy to get to teach together, and we were grateful you let us trade classes at noon each day. It was kind of a happy medium between middle school and grade school" (10-29-01). Blue added to the evidence when she said, "Turquoise and I just decided we were going to have a good year, and we did" (10-29-01).

Teacher 4 alluded to this. She was very glad her first year was over. She was grateful to all the teachers for their help during the year. "Our school is a tough place, and we couldn't take it without leaning on each other. If the other teachers hadn't been willing to help, I would have quit by Thanksgiving" (10-29-01).

Perpetuation Theory (Braddock, 1980; McPartland \& Braddock, 1981; Wells \& Crain, 1994; Granovetter, 1973, 1983, 1986) explains how early exposure to desegregation tended to provide minorities with more opportunities to form weak ties, leading to higher educational and occupational levels. Likewise, teachers exposed to more innovative practices on a regular basis were more likely to adopt some of these practices. Due to proximity, teachers in the same Pod tended to do this. Green spoke of using PURPLE's lesson plan format, and learning from RED that a noisy classroom is not necessarily bad.

## Individual Networks

Individual networks were also revealed during the study. Interview data provided evidence of ties formed in all three pods of the site.

## Pod P

Pod $P$ contained teachers assigned to early childhood grades, kindergarten and grade one. Grade two was also in this pod. TEACHER 1 was the only one teaching an intermediate grade in this pod.

TEACHER 1 was a member of the dominant group of teachers. Fuchsia was a member of those new to the site. TEACHER 1 and Fuchsia provided evidence that learning did occur between members of both groups through formation of their weak ties.

TEACHER 1 said, "I taught Fuchsia about professional courtesy and about paying her dues as a new teacher. At the same time I learned some new tricks to use for classroom management and about teaching and learning styles. Young teachers know so much more about teaching and learning than we did when we started. They have so many more opportunities to see how the real teaching world is before they finish their degrees" (10-29-01).

Fuchsia provided similar evidence. "Of course I had a great mentor in TEACHER 1. She told me I could do this or that, and I learned what teaching manners were. She kept me from making big faux pas. I know I talk too much. I just can't help it. You know my mom. We aren't known for being quiet" (10-30-01).

This is also evidence of reciprocity, one element of a weak tie. Fuchsia and TEACHER 1 may have formed a stronger tie if their teaching assignments had been at the same grade level, and in the same pod.

TEACHER 2 said she enjoyed the planning meetings because she could learn what the other two teachers were doing. She said she had taught for a long time with PURPLE but they had never shared teaching ideas before. By using the word "sharing"
she alludes to reciprocity. Other than her presence at planning meetings and this interview, I have no other evidence of tie components. In the absence of evidence of time and intimacy, I would categorize her ties with her team members as weak.

Teacher 3 describes her relationship with other team members. "It is nice to have the same plan time as PURPLE, because she is an awesome teacher. The three of us $(2,3$ and PURPLE) finally just used PURPLE's lesson plan form, and borrowed her "stuff" (10-29-01). I asked what she meant by "stuff." She replied she borrowed math manipulatives, and TEACHER 2 did the same. She and TEACHER 2 then had me ask our business partners to purchase manipulatives for them. I did, and they gladly made the purchase.

I found no evidence of reciprocity with PURPLE. PURPLE was an effective dynamic teacher. It could be said she had nothing to learn from TEACHER 2 and Teacher 3. Therefore, there could not be a tie between Teachers 1 and 2 and PURPLE due to lack of reciprocity (Granovetter, 1973, 1983, 1986). Since all three teachers taught the same grade level, and all three attended weekly planning meetings together, their tie could be considered the result of contextual factors. Fischer (1977) found time might not be an indicator of the strength of some ties. Contextual factors such as the place of work could lead to a professional tie, not a personal one. The fact that team members came together at least once a week for planning meetings created a tie among them.

The interview did not offer any more evidence regarding the strength of Teacher 3's ties with other members of the faculty, or with her team members. She spoke of loaning some materials to teachers in the other pods, and she mentioned borrowing some
of theirs. This is evidence of reciprocity with other pod members, which differs from her relationship with PURPLE.

Teacher 3 was considered new to the site. TEACHER 2 and PURPLE were both members of the dominant group. By stating she was using PURPLE's lesson plan form, and borrowing the same teacher's manipultives, she provided evidence of learning from a member of the dominant group. No other faculty member mentioned borrowing "stuff" from Teacher 3. This does not mean it did not happen. It was just not mentioned in these interviews. Therefore, we do not know if other teachers learned from Teacher 3.

Teacher 4 spoke of how the other teachers helped her get her class on target. Teacher 4 replaced Teacher 0 after Teacher 0 was terminated. She said, "You hooked me up with other teachers. They were so nice and shared everything with me. They were all so willing to share everything with me. With their help I was able to get things going" (10-29-01).

She made one reference to reciprocity. "Our school is a tough place, and we couldn't take it without leaning on each other" (10-29-01). This statement, in combination with her references to the other teachers' help, let me assume the teachers shared time, intensity, intimacy, and reciprocity with Teacher 4. These factors gave her a weak tie with the other teachers I "hooked her up with."

TEACHER 5 spoke of her weak ties with other members of her team (RED and Green). She said, "We became able to share lesson plans, and we split-up running off papers" (10-29-01). She gave further evidence of a weak tie when she said, "It was so nice working with people instead of suffering alone all the time" (10-29-01).

TEACHER 6 said all the planning meetings started her team members "working together" (10-29-01). This indicates time and reciprocity. Since she only mentions her grade level and PURPLE, I cannot assume she had ties with other faculty members. PURPLE did not teach her grade level, but she was an inspiration to all the faculty members. Again, she did not need reciprocity from other faculty members. Therefore, TEACHER 6 did not have a weak tie with PURPLE, just help from PURPLE. TEACHER 6 spent time with RED, Green and TEACHER 5. Her weak ties were with those teachers as indicated in the data.

RED had many weak ties formed with her. She speaks of the new teachers being sent to her. Other teachers mention her influence. She was also the teachers' union representative for the building. The union responsibility was the reciprocal factor on her part of the ties. This fact gave her contact with all the teachers in the building, as all were members, as was I. However, the teachers forming weak ties with her were the ones who sought her out for her professional advice.

The ties revealed in this pod are illustrated in the network map below.


Figure 3. Network Map Pod P

Pod O

Pod O housed only one dynamic teacher, ORANGE. It was fortunate she was able to maintain interaction with Teacher 12 and TEACHER 13 after she had to leave the site due to illness. This pod also housed members of both groups, the dominant and the new.

TEACHER 7 talked about working with other teachers, but she was not specific. She teaches one subject all day, and classes rotate through her room. She is the only person teaching her subject. She is considered a resource for other teachers. However, the data did not indicate any weak or strong ties with other faculty members. This was true of her interview as well as all the other data from the rest of the interviews.

Pod O was weakened when ORANGE had to leave the site of the study. It was fortunate she was able to continue to interact with Teacher 12 and TEACHER 13. ORANGE' $S$ efforts helped the other two teachers improve their practice.

ORANGE said, "Then Teacher 12 came next door. She wanted help with discipline and curriculum. She hadn't taught this level before. Then, when I had to leave, I worked with the substitute on the same two things. These kids are really tough. That sub came a long way. So did Teacher 12 " (10-30-01). ORANGE indicates weak ties with these two teachers when she uses the word "with" when referring to working on discipline and curriculum. She indicates time by indicating being able to say both teachers "came a long way" (10-30-01). This would also indicate being intimate, in that she would have had to share knowledge of the students often with the other teachers to know how far they had come on discipline and curriculum. As far as reciprocal services go, she did not indicate any tangible reward. However, I know how she hated to leave her class during the year. I am sure she received some peace of mind from knowing she was
helping the substitute with her former students. Her professionalism was of the highest caliber. She would have been worried about her students if she had not been able to keep up with their discipline and curriculum.

Teacher 12 revealed a strong tie with TEACHER 13. She said, "TEACHER 13 and I started sharing taking care of kids who had not completed their work. This way we didn't give up every planning period. The kids finally got the idea if they didn't do their work they were going to miss PE and recess. That got their attention real quick" (10-30$01)$. This is evidence of reciprocity and time. The two teacher had a vested interest in continuing the relationship (Baker, 1994). This is characteristic of a strong tie.

ORANGE had revealed a relationship with TEACHER 12 that had the characteristics of a weak tie, as stated previously.

TEACHER 13 formed a strong tie with Teacher 12. This was revealed by
Teacher 12. TEACHER 13 also had a weak tie with ORANGE, as revealed previously. ORANGE revealed the fact they were teaching together at the time of the interviews. They had taught together at another site previously, and TEACHER 14 stated the fact she and ORANGE are best friends.

TEACHER 14 revealed a strong tie with ORANGE. She mentioned the fact she was lost because she was used to spending every planning period in ORANGE's classroom. She did mention the fact that during the time of the study, she and the other members of her planning team (12 and 13) learned to share responsibility for each other's classes when the need arose to call a parent. She said, "At least we helped each other with the discipline because of those meetings. If I needed to call a parent, someone was willing to watch my class so I could do it immediately. It makes all the difference when
you can act right away. If your plan time was over, you'd probably be too tired at the end of the day to handle it, even if you remembered it. Nobody knows how tough these kids are until they get here" (10-30-01). This statement reveals the characteristics of a weak tie. The members of her team shared responsibility for watching each other's classes. TEACHER 14 needed these teachers as a result of losing the benefits of her strong tie with ORANGE.

TEACHER 15's interview did not reveal any weak or strong ties. Her job was such that she interacted with all the teachers in regard to their technology needs. However, she did not mention any evidence at the time of the study regarding her relationship with other teachers.

The network map included as Figure 4 illustrates ties revealed in the above data.

Pod T

Pod T had only one teacher who was a member of the dominant group, PINK. The other teachers were new to the site. Both strong and weak ties were revealed in the data from this pod.

PINK teaches a single subject. Classes rotate through her classroom throughout the day. There is a possibility of weak ties with the sixth grade teachers. She mentions starting a reward system with them for disciplinary reasons, but she was not specific regarding the factors of intimacy and intensity. She spoke of other teachers, but she did not reveal specifically who they were, or what her professional relationship was with the them.


Figure 4. Network Map Pod O

Teacher 16 taught a self-contained class for emotionally disturbed children. She provided evidence of increased interaction with other teachers, but there was no evidence with all the elements of strong or weak ties.

Teacher 18 spoke of getting acquainted with Fuchsia. She also spoke of learning from her, but she did not mention any reciprocity. She also did not give any conclusive evidence of strong or weak ties with other teachers at the site.

Fuchsia provided evidence of two ties. The first was with her mentor, TEACHER 1. "Of course I had a great mentor in TEACHER 1. She told me I should do this or that, and I learned what teaching manners were. She kept me from making big faux pas" (10-30-01).

Teacher 17 was not part of the study, as she could not participate in the interviews. Fuchsia revealed that she and Teacher 17 were best friends. Fuchsia knew about the poor professional habits of Teacher 17. She could only know these as a result of intimacy with Teacher 17. "I know I am new at this, but she is really a lousy teacher. She comes in late, leaves early, and lets Teacher 18 do all the work" (10-29-01). Fuchsia also knew of Teacher 18's habits at her previous assignment. "She talks about leaving school and shopping while other teachers watched her class. Then she would return the favor" (10-29-01).

The ties revealed in Pod T are illustrated in the network map below (Figure 5).


Strong tie
Weak tie
*Possible multiple ties, but data did not reveal such.

Figure 5. Network Map Pod T

Many of the teachers spoke of meetings with me, which put them together in contextual situations. The contextual factors are ones existing due to regularly scheduled meetings and/or social situations requiring teachers' attendance (Fischer et al., 1977). The regularly scheduled planning meetings led to the formation of ties between members of the same grade levels, some from the dominant group as well as those new to the site.

This interaction led to collaboration. Almost every teacher spoke of working "with" others. They spoke of working with members of their grade level on planning. They also spoke of this being a new situation for them. The notion of ties became evident as they spoke of getting "hooked up" (Teacher 4, 10-29-01) with others in the building. Many mentioned working together on committees. These contextual settings brought about "contrived collegiality" (Fullan, 1991), since I initially formed these committees.

## Change

Much of the data revealed the theme of change. As I coded the data I found a cluster of words revealing changes in approaches, materials and beliefs as used in professional practice. Change in the data was characterized as day- to- day functions being different from previous years at the site of the study (Fullan, 1983, 1991). This was especially true of the teachers in the dominant group. They had a frame of reference to compare their experiences. The teachers spoke of committees and meetings being different experiences. Collaboration was a change from the past. TEACHER 2 was a member of the dominant group. She said, "I learned you can work in this God-awful school and have a good time. You don't have to be so lonesome and miserable by
yourself. You can share the work this place isn't so bad" (10-29-01). This is evidence of TEACHER 2's change in belief.

Learning took place in both directions between the two groups of teachers, those dominant and those new to the site. TEACHER 1 and Fuchsia were a prime example. TEACHER 1 said, "I learned new tricks for classroom management from her, and about students' learning styles" (10-29-01). Fuchsia, who was new to the site said, when referring to TEACHER 1, "She told me I should do this or that, and I learned what teaching manners were. She kept me from making big faux pas" (10-29-01). These are representatives of a change in approaches (classroom management) on the part of TEACHER 1 who was a member of the dominant group. Fuchsia learned about professional approaches (teaching manners) from TEACHER 1.

Teacher 3, a member of the group new to the site, spoke of using different teaching materials. "The three of us eventually copied PURPLE's (a member of the dominant group) lesson plan, and borrowed her stuff (10-29-01). When I asked what "stuff" was she replied, "math manipulatives." This is evidence of a change in teaching materials.

Fullan (1991) states true change occurs when there is evidence of change in materials, approaches, and beliefs in an existing environment. Several teachers talked of change in materials. TEACHER 6 spoke of using manipulatives with her students. She had not done this previously. The other teachers showed her how to arrange everything (TEACHER 6, 10-29-01). I personally observed a teacher from the dominant group walk across the hall to a teacher from the new group and borrow her math manipulatives. I considered this evidence of a change in materials, approaches, and beliefs. She would not
have borrowed the materials to use in a new approach to math if she did not believe this usage would help her students learn.

Change in approaches refers to change in teaching methods. So often the dominant group had used the method of worksheets done in isolation. Simms (1978) states that teaching methods should include methods that involve the students actively. Students should be allowed to view, read, speak, perform, etc. Beliefs and approaches are closely intertwined. If you believe all students can learn, you are willing to change your approaches, (methods) to ensure they do. Fullan (1991) claims the solution to change is getting teachers to believe there is meaning to be developed in relation to their materials, approaches, and beliefs in their professional practice.

## Inattention

The third theme revealed in the data was inattention from higher administration. Interviews revealed many teachers felt Columbus Elementary was the toughest school in the district, and it was the most difficult place for teachers to work. On top of this, the higher administration provided the perception of not caring about Columbus and its students. TEACHER 1 started by saying, "higher administration wanted us to do things that were either impossible at our site, or just plain crazy" (10-29-01). Other teachers spoke in the same vein. Many mentioned the need for in-house suspension at Columbus Elementary. "Things were so awful with the families we had, and we had no help at all besides each other. The kids were from hell. If you hadn't let us help each other with discipline we would've all been nuts. You were right. We needed in-house so badly"
(TEACHER 5, 10-29-01). TEACHER 7 followed by saying, "You were different but the higher ups were the same. They give us the toughest kids, and the least help"(10-29-01).

PINK also spoke of the need for in-house suspension, and lack of support for it from higher administration. "Kids should just behave because they are supposed to, but they don't here. We need in-house suspension so much. We have no clout" (10-29-01).

TEACHER 13 spoke of being transferred after the year of the study. She was comparing her experiences at Columbus Elementary with the experiences of the teachers at her new assignment. "The teachers have no idea what we put up with over here. You did as much as you could, but without help from the top that place will always be a mess"(10-30-01).

RED mentioned problems from the higher administration regarding two teachers who had to be terminated during the year, Teacher 0 and Teacher 11. "When they hired the second crazy one, I knew you wouldn't stay. I wouldn't have either" (10-29-01).

Each of the three themes was revealed in each pod. Both the dominant group and those new to the site contributed evidence. Networks revealed changed practices as a result of ties described. However, some teachers maintained their isolated practices. They chose to interact as little as possible with other teachers, and those chose to teach using isolated tasks done in silence as their method. Perpetuation Theory (Braddock, 1980; McPartland and Braddock, 1981; Well \& Crain, 1994) maintains to change status of practice early and sustained exposure to innovation is necessary. TEACHER 2 chose to interact very little with other teachers. She also did not change her teaching style. No evidence of a change in her materials, approaches or beliefs was presented. The same was true of TEACHER 5. If she interacted with other teachers it was not about professional
practice. She liked to socialize, not talk about pedagogy. TEACHER 14 provided evidence of unwillingness to change even with her friendship with ORANGE. The tie between ORANGE and TEACHER 14 was a strong tie, and it was social. They were best friends. TEACHER 14 did not change her fondness for the isolated, silently produced worksheet.

Green provided evidence of exposure to innovation on a sustained basis can lead to more innovative practice. She spoke of RED's materials and practices, and she spoke of the fact she could always count on RED to be there. RED never missed a day of school and Green's room was adjacent to RED's. The proximity provided opportunity for sustained exposure to the innovative practices. This was also true of PURPLE's proximity to Teacher 3 and Teacher 4. They spoke of using PURPLE's lesson plan form. TEACHER 6 spoke of borrowing PURPLE's math manipulatives. This exposure through the formation of weak ties provided opportunities for Teacher 3, Teacher 4 and TEACHER 6 to be exposed to PURPLE's materials, approaches and beliefs on a sustained basis.

Network Analysis and Perpetuation Theory Evaluation

Granovetter's (1973) network analysis was a useful lens to use to describe the ties found in the data. The amount of time, intimacy, intensity, and reciprocity mentioned in interviews guided the development of the network map (Table 2). As teachers revealed changes in materials used, approaches engaged, and beliefs held, I could measure the sources of their change. Measuring was done by listening for the amounts of time,
intimacy, intensity, and reciprocity between the interviewee and other members of the faculty.

Perpetuation Theory (Braddock \& McPartland, 1981; Wells \& Crain, 1994) was a useful tool to promote changes in materials used, approaches engaged, and beliefs held. By identifying faculty members using dynamic effective practices, I used Perpetuation Theory to guide my diffusion of these effective practices. Perpetuation Theory posits that to diffuse effective practices, early and sustained exposure to these practices is necessary.

In this study I started early in the school year to expose as many teachers as possible to the effective dynamic teachers. I created committees made up of teachers from both groups at the site, the dominant, and those new to the site. Both of these groups had outstanding teachers among them. Both groups also had members in need of changing their materials used, approaches engaged, and beliefs held.

Proximity proved to be a factor for diffusion of innovative practices. Due to the factors of scheduling and building size and shape, teachers in the same pods had more chances to interact. A prime example was Green. She eventually used PURPLE's lesson plan form, and she learned from RED that a noisy classroom is not necessarily bad. Simms (1978, p. 96) says, "recommended teaching methodologies include providing opportunities for active involvement of the child, using a variety of resources and techniques (viewing, reading, speaking, informal drama, mime, photography, etc.)." RED was using these techniques. These techniques can cause what I call good noise. I needed to get other teachers to use them. Previously, the predominate method used at Columbus Elementary was single worksheets done in silent isolation.

## Teacher Isolation/Collaboration

The data reveals teachers in this study had moved from isolation to collaboration. Michael Fullan (1991) claims the power to create change in a school comes from teacher collaboration. He states further that the amount of change is directly related to extent teacher collaboration exists in a school. Following Fullan, Hargreaves (1992) states teachers learn best from each other, particularly those at their site.

Every interview revealed collaboration. Most revealed the establishment of weak ties with their team members, teaching the same grade level. Others mentioned collaboration with teachers other than team members, such as Fuchsia's relationship with TEACHER 1. Even TEACHER 14, who has a strong tie with ORANGE, mentioned contact with other teachers.

Data revealed most of the dynamic teachers had several weak ties with other faculty members. However, it is noteworthy that these ties seemed to be the result of other teachers coming to them, rather than the result of the dynamic teachers reaching out to others. My observations indicated dynamic teachers had little time to seek out others. They were often too busy with preparation to reach out. I also noticed these teachers did not mind other teachers visiting their rooms to collaborate. Dynamic teachers tended to continue to work while other teachers visited their rooms. They did not waste time, and it takes time to be a dynamic teacher.

## Student Achievement

The test scores of third graders and fifth graders determine whether or not a school is in danger of being taken over by the state. Therefore, the scores of those two particular grades are critical to any elementary administrator. The scores of third and fifth grades increased significantly the year of the study. I attribute this rise to a weak tie combination in grade three, and both a weak and strong tie in grade five.

As explained, ORANGE was a dynamic teacher who became ill before the end of the study. She had to leave the site; however, she created weak ties with both TEACHER 12 and TEACHER 13. They wanted help with curriculum and discipline. She led both teachers to use her materials and approaches. One can only guess that her beliefs became the beliefs of TEACHER 12 and TEACHER 13. Once those two teachers changed their materials and approaches, they saw their students could behave, and they could learn.

In grade 5 Turquoise and Blue had a strong tie. It was fortunate they were both dynamic effective teachers. They used effective materials and approaches. They also believed their students could learn. As Blue said, "Turquoise and I decided we were going to have a good year, and we did" (10-29-01). Their weak tie was with me.

These two teachers had not had elementary experience. They also were new to the at-risk population. They came together to me during planning meetings, and other times to ask for help. Due to my experience I was able to help them, or guide them to people who could. The reciprocal part of the tie for me was the fact these two teachers did an outstanding job. Knowing they were doing all they could to be effective teachers was a great relief to me.

## Summary

Interview data revealed many weak ties were formed among members of the faculty at Columbus Elementary. These ties helped diffusion of innovative practices of dynamic teachers. These ties were described by the time invested, reciprocal services of teachers in each tie formed, along with intensity and intimacy. Most of the ties formed in this study had a small amount of emotional intensity, as is characteristic of weak ties. Intimacy refers to the amount of common knowledge shared by two individuals. In this study most individual ties formed were with teachers of the same grade level, or with teachers working in the same pod. These teachers did not share living in the same neighborhoods, or share moving in the same social circles. Most tie pairs were of different age groups. These characteristics are consistent with weak ties.

The formation of weak ties provided teachers with sustained exposure to innovative practices. Perpetuation Theory (Braddock, 1980; McPartland \& Braddock, 1981; Wells \& Crain, 1994) states sustained exposure to innovation is necessary for adoption of the change. Teachers who remained isolated do not have the opportunity to gain this exposure. Teachers exposed on a regular basis did change materials used, approaches engaged, and/or beliefs held about their professional practice.

Individual networks were described as revealed by each teacher's interview. Each teacher revealed ties she had formed with other members of their team, as well as ties formed with other members of the faculty. A visual map of these ties was formed from data revealed in interviews.

## CHAPTER V

## SUMMARY, CONCLUSIONS, RECOMMENDATIONS, IMPLICATIONS, AND COMMENTARY

This chapter concludes this study. A summary of the study, conclusions reached, recommendations for future study, implications gained, and a commentary on the processes of the study are included.

Summary

The purpose of this study was to examine the sources of professional practices of two groups of teachers at a site, those dominant and those new to the site. The sources of practice were evidenced by the beliefs held, approaches used, and materials used by each group, as revealed in qualitative interviews (Fullan, 1991, 1997). The data from these interviews were examined by clusters which included three themes. These themes were interaction, change in materials, approaches and beliefs, and feeling unattended. Granovetter's network analysis $(1973,1983)$ and Braddock and McPartland's network analysis (1981) were used as lenses to analyze the data revealed in these interviews. Through these lenses strong and weak ties were revealed as the sources of learning in the two groups of teachers.

## Data Needs and Sources

The primary focus of the study was the interaction of these teachers as it related to their professional practices. Interviews were the source of the data for the study. The interviews conducted revealed learning occurred in the two groups of teachers at the site, the dominant group and those new to the site.

## Data Collection

The data were collected through twenty interviews of teachers at the site of the study. All twenty teachers were interviewed using the protocol in chapter III. These interviews were conducted after I was no longer the principal of the study site.

## Data Presentation

Teachers were identified by color or number. Teachers given a color I considered dynamic and effective. Identification of membership of teachers to the two groups, the dominant and those new to the site, was presented by use of capital and lower case letters. The dominant group was identified by use of all capital letters, such as ORANGE or TEACHER 1. Members of the group new to the site was presented by use of initial capital letters followed by lower case letters, such as Green or Teacher 18. I based my opinion of these teachers on my 28 years experience in the field of $\mathrm{K}-12$ public education.

Interviews of all twenty teachers were conducted, recorded, and transcribed by me. The data collected from the interviews were examined inductively. This examination revealed common themes. These themes were interaction, change in
materials, approaches, and beliefs in professional practice, and inattention from higher administration.

## Data Analysis

The data were analyzed against two theoretical lenses, Perpetuation Theory (Granovetter, 1973) and Braddock and McPartland's network analysis (1981). These lenses were used to reveal evidence of change. This evidence was revealed in interviews indicated by a change in beliefs, approaches, and material used in professional practice (Fullan, 1991, 1997). I especially looked for change in the teachers identified by a number; teachers identified by a color were using beliefs, approaches, and materials to promote dynamic and effective professional practice. Evidence was found depicting changes in materials used, approaches engaged, and beliefs held regarding professional practice. Evidence also revealed that learning took place between the two groups of teachers at the site, the dominant group and the group new to the site.

## Findings

Data from the interviews revealed the following:

- The teachers in the study developed weak ties and strong ties.
- The ties developed resulted in learning between both groups of teachers at the site, the dominant, and those new to the site.
- The ties developed resulted in more dynamic teaching practices used in more classrooms than previously.
- Granovetter's network analysis $(1973,1976,1983,1986)$ and Braddock and McPartland and Wells \& Crain's Perpetuation Theory were useful lenses for describing these ties. Granovetter's $(1973,1983)$ strength of ties was useful in that it provides components of weak and strong ties. Braddock and McPartland (1981) and Wells and Crain's (1994) Perpetuation Theory were useful lenses to examine usefulness of teacher collaboration.


## Description of Ties

According to Granovetter (1973) there are four elements in a tie, time, reciprocity, intensity, and intimacy. This definition was a very useful tool for describing the ties developed at the site. After the data were obtained the ties were analyzed using this lens. This lens proved to be the most helpful because it was "user friendly." As I looked at relationships between teachers, I had the four elements to use as measuring devices. I looked for them in those relationships. This gave me a guide to use to see if a tie existed, and if so, was it a weak tie or strong tie.

It was assumed that all the teachers at the site had some tie with all teachers due to the limitation of the size of the faculty, 23 teachers. The limitation of size confined the subjects to a single parking lot, a single central office, and a single teachers' lounge/workroom. This fact alone resulted in some interaction, albeit it be slight. Regular faculty meetings also provided an occasion for some interaction.

The purpose of this study was to document the sources of practice as evidenced by instructional materials used, approaches engaged in, and beliefs held by teachers in
this site's context. Granovetter's $(1973,1983,1986)$ definition of ties was chosen as a framework to examine the sources of practices used by two groups of teachers at the site, the dominant group and the group new to the site. Granovetter (1973) describes the strength of a tie as strong or weak. Strong ties are those characterized by close relationships between individuals such as those with family members or close friends. Frequent interaction and mutual sentiments further characterize strong ties. Weak ties are those with acquaintances, or friends of friends. Weak ties are more likely to link individuals with other groups of individuals. Both strong and weak ties have the components of time, intensity, intimacy and reciprocal services (Granovetter, 1973). These two frameworks guided the study.

The data revealed the development of weak ties and strong ties. Weak ties developed as a result of efforts made to create a more collaborative culture in the faculty at the site, and they developed at most grade levels as a result of weekly planning meetings. Teachers shared materials and chores on a regular basis. This sharing led to more dynamic practices used by some members of the dominant group.

Strong ties continued between two sets of teachers. Data revealed one set of teachers consisted of best friends. This set of teachers had a strong tie due to time. They had taught in the same building at the same grade level for many years previous to this study. Another set had taught together at another site previous to this study. They also shared a preference for elementary teaching. This added to the intimacy of that particular tie. The contextual element added to the strength of the latter tie. These two teachers were the only members of that grade level team. Other teams contained three members.

Perpetuation Theory (Braddock, 1980; McPartland \& Braddock, 1981; and Well \& Crain, 1994) proved to be the least helpful. It was difficult to know if the faculty of Columbus Elementary had been exposed to dynamic and innovative practices. If teachers claimed to know about innovative practices, I had no way of judging if their exposure to such practices had been thorough enough for them to be able to use them in their practice. If they had been thoroughly exposed, what prevented them from using them? I had no way to gauge the past professional experiences of the faculty. I could only deal with the "here and now." I had to create the exposure to dynamic and innovative practices for the teachers at the study site. Then, following Perpetuation Theory's (Braddock, 1980; Wells \& Crain, 1994) tenet of sustained exposure through development of weak ties (Granovetter, 1973, 1983) the possibility existed to have less effective teachers form weak ties with dynamic teachers. Through formation of these ties less effective teachers were exposed to more dynamic practices. With sustained exposure through weak ties, less effective teachers did change materials, approaches, and beliefs (Fullan, 1991) in their professional practice.

## Conclusions

It can be concluded from this study network analysis (Granovetter, 1973) and Perpetuation Theory (Braddock \& McPartland, 1981; Wells \& Crain, 1994) are useful frameworks to use to describe ties developed among members of a faculty. These lenses are useful for explaining the development of the ties, and for explaining the changes evidenced in beliefs held, approaches engaged, and materials used in professional practice ( Fullan, 1991).

It can also be concluded teachers prefer working with others as data from the interviews revealed teachers preferred working together rather than in isolation. It can be further concluded teachers formed ties which led to changes in materials used, approaches engaged and beliefs held in professional practice (Fullan, 1981). And, the conclusion made as a result of these ties is learning took place in both groups in the study, those dominant and those new to the site.

Fullan (1991) says teacher collaboration is directly tied to student achievement. He further states the more teachers collaborate, the more student achievement increases. The test scores for the third and fifth grades showed significant increases in most areas. The third grade scores were higher than the scores for the same students the previous year. When the scores were compared to the scores the same students had received as second graders, significant increases could be noted.

Fifth grade scores showed significant gains in math, reading, science, history, and geography. These gains were indicated on the fifth grade core curriculum test. Third grade scores on the Iowa Test of Basic skills were compared to scores on the same test when these third graders were in second grade. These comparisons showed gains in language and math. Reading did show a drop, but that was only one point on the national percentile ranking. The core total score's national percentile ranking increased by seven points over their second grade scores.

It is important to note a fifth grade comparison to their scores as fourth graders is not possible. When students are fourth graders they are given the Iowa Test of Basic Skills. When they are fifth graders they are given a different test, the core curriculum test. The two do not lend themselves to accurate comparison.

## Recommendations

I would recommend any administrator faced with the challenge to implement change in professional practice of teachers take several steps. The first would be to document the sources of innovative and dynamic professional practice already in use at the site. Parallel to these dynamic sources I would urge an administrator to document the areas of concern. Concern would include teachers not using dynamic and effective materials, approaches or beliefs in their practice (Fullan, 1981). Following the documentation I would recommend opportunities be implemented to engage members of the two groups in interaction, professionally.

Exposure to innovative and effective practices can lead to changes in professional practice. This exposure must be sustained for change to occur among those in need of changing (McPartland \& Braddock, 1981). Creating sustained exposure can lead to weak tie formation. Opportunities must be created for teachers to interact in order for the weak ties to be formed. Using Granovetter's definition of weak ties (1973), I would create opportunities for teachers from the dynamic group to form ties with the less effective group. They must have time together as well as the opportunities necessary for intimacy and intensity to increase in the relationship. Finally, the element of reciprocity must be instilled. Members of the tie formed must feel the relationship is beneficial .

To document the success of the of the formation of weak ties, administrators must be diligent about reviewing the professional practices used by both groups, the dynamic and the less effective. Check often to document what changes in materials, approaches engaged, and beliefs held are new and effective. Provide new opportunities for exposure to effective practices as they become available. Create interaction venues in
as many ways as possible. Above all, check on students' reactions to practices engaged. Are the students actively learning? Do they feel ownership of their learning? Are they allowed to learn using their preferred mode of learning. Students are the bottom line.

## Implications

The data revealed in this study should impact the field of educational research as it relates to existing theory, practice, and knowledge base (Hoy \& Miskel, 1991). The following section examines the contributions of this study to all three areas.

## Theory

The two lenses chosen to examine the data revealed in this study proved very useful. Network analysis (Granovetter, 1973, 1976, 1983, 1995) and Perpetuation Theory (Braddock, 1980; McPartland \& Braddock, 1981; Wells \& Crain, 1994) were useful in identification and description of "ties" formed between individuals in the study. The elements of a tie are amounts of reciprocity, intensity, intimacy, and time. The greater amount of these elements shared between individuals, the stronger the tie they share. These lenses proved useful for this identification and description.

## Research

Guiding this study were the lenses of Perpetuation Theory and Network Analysis along with Michael Fullan's $(1981,1991)$ framework for evidence of change. Evidence of changes in beliefs, approaches, and materials constitute real change. In this study there were data revealing such changes as a result of the formation of ties among faculty
members. Evidence was offered to document the increase in number of teachers using more effective professional practices. This use was the result of formation of ties. It is noteworthy that dynamic teachers do not seem to initiate the formation of these ties. Further study might reveal if dynamic teachers have effective practice due to formation of ties with professionals outside the faculty with whom they share membership. Are dynamic teachers effective due to the efforts they produce on their own? Are they more effective with ties as well as without ties?

Practice

This study revealed teacher collaboration as a result of weak tie formations leads to diffusion of innovative practices. Interaction in a collaborative environment is necessary for formation of ties. Regular team meetings and committee assignments were effective as initiators of this interaction. Increasing interaction among faculty members can lead to formation of weak ties between effective and less effective practitioners. Such tie formation leads to learning between the two groups, the dominant and the new. Learning can also occur between the dynamic and those less effective. Such learning could take place in organizations other than public schools.

## Commentary

While I was assigned the principal of Columbus Elementary School I had a 37 mile drive to work each morning, and home again each night. To make the drive more enjoyable and productive, I often dictated notes into a tape recorder and listened to music
on the CD player in my car. At the end of my assignment as the principal of Columbus Elementary I cleaned out my car, and I noticed a certain pattern to my taste in music.

The CD's in my car were stacked in the order of their usage. At the bottom of the stack were several Broadway sound tracks I had listened to while in the early months of my assignment. These were CD's with light-hearted messages full of love and hope for the future. They were a reflection of my resolve to make Columbus Elementary School the most wonderful and effective school in the state. My efforts at creating a collaborative culture in the school were working, and teachers were expressing their hopes for having a more pleasant working environment where teachers worked together to solve problems.

The next group of CD's consisted of ones written by Billy Joel or Elton John. I was definitely singing the "Sad Songs" when dealing with Brown and her family. The entire situation was very negative and took a great deal of energy to cope with. I was feeling like the "Innocent Man" who was the victim of "Careless Talk." The teachers in Pod "P" felt the same way. But, I was determined to mind Elton's words, "Don't let the sun go down on me." It didn't, and I won a unanimous decision by the school board to fire Brown. I also won when I insisted the board look into Teacher 11's lack of credentials and past criminal record. She was also fired. The strain on my nerves was worth it to spare children exposure to these two individuals. Once in a while "The Yellow Brick Road" leads to "Keeping the Faith."

When I ended my assignment at Columbus Elementary School I felt a sadness that reminded me of postpartum depression. When you create an entity it is very difficult to separate from it. My husband was the first to notice my feelings. I was excited about
my new assignment in another town as the Junior High principal. I am very experienced at the junior high level, and the community where it is located is very supportive of its principals. However, I had to spend some grieving about my separation from "my baby," Columbus Elementary School.

While writing this study I had to relive and reexperience my life at Columbus Elementary School. All the emotions and events came back to me. I think it is fitting to end this effort with the following anecdote.

The last day of school for the children at Columbus Elementary was a beautiful sunny day. The last 40 minutes of the school day I gave the primary teachers permission to take the students out to the playground. This meant approximately 200 children were playing. Two grades decided to play kickball. When one second grader kicked off, the ball went flying out into the street. It bounced in front of a luxury car coming down the street. The driver of the car stopped. He exited his car, walked to the errant ball, picked it up, opened his car door, threw the ball into his car, and got into his car and sped away! The students stared at me and the teachers in disbelief! As I left school that day, there was no hesitation in my choice of music. It had to be Aerosmith's "A Little South of Sanity!"

## REFERENCES

Bakkenes, I., Brabander, C., \& Imants, J. (1999). Teacher isolation and communication in primary schools. Educational Administration Quarterly(35), 166-202.

Bauch, P.A. (1982, March). Predicting elementary classroom teaching practices from teachers' educational beliefs. Paper presented at the annual meeting of the American Educational Research Association, New York.

Becerra-Fernandez, I., Stevenson, J.M. (2001). Knowledge management systems \& solutions for the school principal as chief learning officer. Education (121), 508-518.

Braddock, J.H. (1980). The perpetuation of segregation across levels of education: A behavioral assessment of the contact-hypothesis. Sociology of Education, 53, 178-186.

Brody, H.S., Smith, B.O., \& Burnett, J. (1964). Democracy and excellence in American secondary education. Chicago: Rand McNally.

Clarkson, P. (1995). Change in Organisations. London \& SanDiego: Whurr Publishers.

Darling-Hammond, L. (1998). Teacher learning that supports student learning. Educational Leadership, (55), 6-10.

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

Emerson, R.M. (1983). Contemporary field research: A collection of readings. Boston: Little, Brown and Company.

Emerson, R.M., Fretz, R.I., Shaw, L.L. (1995). Writing Ethnographic Fieldnotes. Chicago \& London: The University of Chicago Press.

Eraut, M. (1994). Developing professional knowledge and competence. London: Falmer.

Erlanson, D.A., Harris, E.L., Skipper, B.L., \& Allen, S.D. (1983). Doing naturalistic inquiry: A guide to methods. Newbury Park, CA: Sage.

Evans, R. (1995, April). Getting real about leadership. Education Week, 14, 36.

Fullan, M. G. (1991). The new meaning of educational change. ( ${ }^{\text {nd }}$ ed.). Boston: Allyn and Bacon.

Fullan, M.G. \& Hargreaves, A. (1991). What's worth fighting for in your school? New York: Teachers College Press.

Fullan, M.G. (1997). What's worth fighting for in the principalship? New York: Teachers College Press.

Fullan, M. G. (1998). Breaking the bonds of dependency. Educational Leadership, (55), 6-10.

Glickman, C. D. (1990). Supervision of instruction: A development approach (2 $2^{\text {nd }}$ ed.). Boston: Allyn and Bacon.kh

Granovetter, M. (1973) The strength of weak ties. American Journal of Sociology, 78, 1360-1380.

Granovetter, M. (1983). The strength of weak ties: A network theory revisited. In r. Collins (Ed.), Sociology Theory (Vol. 1) (pp. 201-233). San Francisco: JosseyBass.

Granovetter, M. ((1986). The micro-structure of school desegregation. In J. Prager, D. Longshore, \& M. Seeman (Eds.), School desegregation research: New directions in situational analysis (pp. 81-110). New York: Plenum Press.

Grant, L., \& Fine, G.A. (1992). Sociology unleashed: Creative directions in classical ethnography. In M. D. LeCompte, W.L. Millroay, \& J. Preissle (Eds), The Handbook of Qualitative Research in Education. (pp. 405-446). San Diego, CA: Academic Press.

Hargreaves, A. (1982). The challenge for the comprehensive school. London: Routledge and Kagan Paul.

Hargreaves, A. (1992). Cultures of teaching: A focus for change. In A. Hargreaves \& M. G. Fullan (Eds.), Understanding teacher development (pp. 216-240). New York: Teachers College Press.

Hord, S.M., Rutherford, W.L., Huling-Austin, L. \& Hall, G.E. (1987). Taking charge of change. Alexandria, VA: Association for Supervision and Curriculum Development.

Hoy, W.K. \& Miskel, C. (1991). Educational administration: Theory-researchpractice. New York: McGraw Hill.

Kagan, D.M., (1992). Implication of research on teacher belief. Educational Psychologist. 27. (1), 65-90.

Kealey, K.A., Dinh, K.T., Gaul, M. A., \& Peterson, A.V. (2000). Teacher training as a behavior change process: Principles and results from a longitudinal study. Health Education and Behavior, 27. 64-81.

Larsson, P. , Lowstedt, J. (2001). IT and the learning organization: Exploring myths of change. Organization Development Journal. (19). 73-91.

Lortie,D.C. (1975). Schoolteacher: A sociology study. Chicago: University of Chicago Press.

McPartland, J.M. \& Braddock, J.H. (1981). Going to college and getting a good job: The impact of desegregation. In W.D. Hawley (Ed.). Effective school desegregation: Equality, quality, and feasibility. (pp. 141-154). London: Sage.

Marlow, M., Nass-Fukai, J. (2000). Collegiality, collaboration, and kuleana: Three crucial components for sustaining effective school-university partnerships. Education. 121. 188-197.

Rosenholtz, S.J. (1989). Teachers' workplace: The social organization of schools New York: Longman.

Sarason, S.B. (1996). Revisiting "The Culture of the school and the Problem of Change." New York: Teachers College Press.

Schubert, W.H. \& Ayers, W.A. (Eds.). (1992). Teacher lore: Learning from our own experience. New York: Longman.

Scribner, J.P. (1999). Professional development: Untangling the influence of work context on teacher learning. Educational Administration Quarterly, 35, 238-266.

Sharpe, T., \& Templin, T. (1997). Implementing collaborative teams: A strategy for school-based professionals. Journal of Physical Education. Recreation. \& Dance. (68). (6) 50--55.

Wells, A.S., \& Crain, R.L. (1994). Perpetuation theory and the long-term effects of school desegregation. Review of Educational Research, 64 (4), 531-555.

APPENDIXES

## APPENDIX A

INFORMED CONSENT OF

HUMAN SUBJECTS

I, $\qquad$ , authorize Susan Ferry Phillips to interview me as part of her research into the impact of weak ties on change in an at risk elementary school. This is done as part of an investigation entitled "The strength of weak ties and change: Views from an at risk elementary school."

I understand that:

- My participation is voluntary;
- There is no penalty for refusal to participate;
- I am free to withdraw my consent and participation in the project at any time without penalty;
- My participation in this study will consist of granting an individual interview to Susan D. Phillips. Typically, these interviews last $\mathbf{4 5}$ minutes to one hour.
- If I permit it, the interview will be tape-recorded.
- My name will not appear on the tape or transcript of the interview.
- I will not be identified by name as an interviewee in any description or report of this research. However, portions of my interview may be presented as quotations;
- If I have a unique perspective or unique access to information, people at my school familiar with that unique perspective and/or familiar with that unique access may be able to connect me with my words. I recognize the need to protect myself from this possibility if I consider it necessary.

I may contact Susan D. Phillips at (918) 455-1531, or 12713 E. $136^{\text {th }}$ Street, Broken Arrow, Oklahoma 74011. I may also contact Sharon Bacher at the Oklahoma State Institutional Review Board (405) 744-5700.

I have read and fully understand the consent from. I sign it freely and voluntarily. A copy has been given to me.

Signed: $\qquad$

## APPENDIX B

## INTERVIEW SUMMARIES

Teacher I taught an intermediate grade during 2000-2001 school year. I asked her the questions in the order they appear on the protocol, but we had a conversation regarding her experience as a mentor teacher for "Fuchsia." She claimed she taught Fuchsia about professional courtesy and about paying her dues as a new teacher. At the same time Teacher 1 learned new tricks to use for classroom management and about students' learning styles. She told me the young teachers know so much more about teaching and learning than we did when we started. They have more opportunities to see how the real teaching world is before they finish their degrees. She said that was really a good thing.

When I asked her opinion regarding whether or not she saw what I did to provide interaction opportunities, she said she did. "We had never had weekly grade level meetings before. It was nice just to realize each week we all had the same problems." She went on to comment about making lesson plans. "I used to just sit and get something down in case a sub was needed for me, but when we started meeting every week, we all decided to do our plans together. It made it so much easier (Teacher 1 , 10-29-01). She commented that teacher 14 was much better at ideas for math than she was. She felt she helped out in the reading area. They traded plans and materials she said. She did the reading, and 14 did the math (Teacher 1, 10-29-01).

The next question asked her opinion on what kind of a job did she feel I had done. She said the fact that we worked so much more together made her feel I was doing a good job. It was important to her that I supported the teachers when parents and higher administration wanted us to do things that were either impossible at our sight, or "just plain crazy" (Teacher 1, 10-29-01).

When I asked the question about what else happened last year, she talked about Teacher "O." "We all had to watch out for her. She and her husband are both nuts. When one of us saw her coming towards us, we would warn the other teachers" (10-29-01). I asked her if there was anything else she wanted to say about last year. Her only comment was a compliment to me about what a good job I had done, and she wished I had not left. She commented further that things were so much better last year than the year before. I followed up by asking if she knew anyone else who felt differently about last year. She said that none of the teachers she worked with felt any differently.

Teacher 2 felt she had more opportunities to communicate with others during the year. She commented about feeling dread when she learned I was requiring teachers to meet with me once a week with their plans. But she found she enjoyed these meetings because she could learn what the other two teachers were doing. She said she had taught for a long time with "Purple," but they had never shared teaching ideas before.

I asked if she noticed what I had done to provide interaction opportunities. She said she never thought about it until I asked, but she did see some things now. She
said I had started those meetings once a week, and I had assigned them to work in committees on various problems. I even had them work together to bring food for our meetings.

When I asked how she thought I had done, she commented jokingly, "You done good, girl" (Teacher 2, 10-29-01). I thanked her and asked if she wanted to add more to that. She declined. I then asked about what else happened last year.

She commented how Teacher "O" brought everyone on her hall closer, quickly. "We all had to watch out for her and her crazy husband (Teacher 2, 10-29-01). She talked about how they all felt sorry for me because " O " and her husband had given me such a hard time. She talked about the teachers in her hall watching out for each other because they were literally afraid of the two of them.

I asked who else would be willing to answer my questions, and who could I talk to that feels differently about last year. She said she felt all the teachers would be happy to answer my questions, except a couple of teachers. She said the ones who did not want to answer the questions were the teachers who did the bare minimum every day. "They were too lazy to come over here today" (Teacher 2, 10-29-01).

I asked her finally what else she wanted to say about last year. She said, "Well, I learned you can work in this God-awful school and have a good time. You don't have to be so lonesome and miserable by yourself. You can share the work and this place isn't so bad" (Teacher 2, 10-29-01). She said she admired me and my efforts, and she wished I had stayed and kept up the improvements.

Teacher 3 is known among the faculty as the young teacher who speaks her mind, even if she shouldn't. I asked her if she noticed the things I had done to try and create a more collaborative culture in the building. She said she really hadn't thought about it, but she didn't remember having planning meetings before I came. She went on to say it was nice to have the same plan time as Purple, because she is such an awesome teacher. She said the three of them at her grade level eventually copied Purple's lesson plan, and borrowed her "stuff." I asked what she meant about "stuff." She explained she borrowed math manipulatives, and Teacher 2 did the same. They eventually got me to have the business partners buy some for her and Teacher 2.

I asked her opinion about how I did providing opportunities for teachers to interact with each other. Her reply was that I had done very well. She even got to know people in the building in the other Pods. They had taught in the same building for a couple of years, but until last year had never had an occasion to talk to each other. She learned the other grade levels had the same problems in the classroom as she did. She said that surprised her. She thought the problems would somehow be different because of the age differences in the kids. She borrowed some of their "stuff" for her more advanced students, and she loaned "stuff" to the upper grades teachers to use with their lowest students.

She did not know of anyone who would not be willing to answer my questions, and she did not know of anyone who felt differently about last year. I then asked her what else happened last year?

She talked at length about "O." Teacher $O$ had been in the room adjacent to hers. Teacher O had accused her of stealing Teacher O's "stuff." She was very afraid of the woman and her husband. They lived near the school, and were seen spying on her as well as the rest of us in the building. She also encountered Teacher $O$ out in the community several times, and those experiences were very upsetting. She was very glad I had stood my ground and had her dismissed. She added that since Teacher O "went crazy in August," everyone on her hall became friends quickly (Teacher 3, 10-29-01).

Teacher 4 said she did not have any other experience with which to compare my efforts to build a collaborative culture in the building. She did like the way I "hooked her up" with other teachers (Teacher 4, 10-29-01). Those other teachers were so nice and shared everything with her. It made being a new teacher so much easier for her, because, "they are all so willing to help me with anything" (Teacher 4, 10-29-01).

When I asked her about what other things happened at school last year, she said she went from being absolutely overwhelmed by an awful class, to feeling very good about all the progress they made. She said I had warned her when she started the class given her had been out of control. Teacher $O$ had been their teacher. None of the students had even started to read. "With the help of the other teachers, I was able to get things going" (Teacher 4, 10-29-01).

She claimed all the teachers would be willing to answer my questions. She also said she did not know anyone who felt differently about last year. She added, "Well, maybe the lazy teachers would" (Teacher 4, 10-29-01). I then asked her what else she would like to say about last year.

Teacher 4 said last year was hard because she started in October, and it was her first year. She was very glad it was over, but she was very proud of herself. "Our school is a tough place, and we couldn't take it without leaning on each other. If the other teachers had not been willing to help, I would have quit by Thanksgiving" (Teacher 4, 10-29-01).

Teacher 5 noticed what I had tried to do to build a more collaborative culture in the building. She said she noticed right away that teachers were always on committees with each other. She claimed she liked doing committee work, and she liked our weekly planning meetings. "We became able to share lesson plans, and we split-up running off papers" (Teacher 5, 10-29-01).

When I asked her opinion regarding the quality of my efforts to build a more collaborative culture, she claimed she "loved" what I had done. "It was so nice working with people instead of suffering alone all the time." No one used to care what we did, good or bad. And, no one cared what we did as long as we kept the kids out of the office" (Teacher 5, 10-29-01).

When I asked what else happened last year she talked extensively about Teacher O. Teacher O's classroom was on the same hall with Teacher 5. She talked about how "crazy" Teacher O and her husband were, and how dangerous she felt they were. She thought Teacher $O$ her husband were the kind of people who would get on a rampage and come up to the school with guns. Teacher 5 went on to talk about the hearing where the school board voted to dismiss Teacher O. "You testified wonderfully. We were all there because of you. I never do school stuff at night, but we all stayed until after midnight that night when the vote finally came down. We wanted to make sure she didn't pull out a gun and shoot you. She is still fixated on you, you know. Watch your back if you come to O'Keeffe for anything. She has all those crazy relatives too. Too bad they are district administrators" (Teacher 5, 10-29-01).

I asked her who else would be willing to answer these questions, and who might feel differently about last year than she does. She said she thought all the teachers would be willing to answer my questions, and she thought the only person who felt differently about last year was Teacher O.

When I asked what else could she say about last year she talked about how much we laughed. "We all laughed a lot. If we hadn't we would've been crying all the time. Things were so awful with the families we had, and we had no help at all besides each other. The kids were from hell. If you hadn't let us help each other with discipline we would've all been nuts. You were right. We needed in-house so badly. Send a kid home and those parents just let the kids watch TV all day. Kids loved going home. But, if a teacher sent a kid to me for time-out, that kid did not want to come back. I made sure of it. The others did the same for me and my little felons" (Teacher 5, 10-29-01).

Teacher 6 said she saw what I did to try and get teachers to work together. She noticed at the first faculty meeting how I "arranged teachers' committees, and how we had food and music as a backdrop for a professional experience" (Teacher 6, 10-2901). She claimed just those things made life seem better.

Teacher 6 said she had many more opportunities to interact with her peers this year. She changed from an intermediate grade to a primary one. "It was nice that the teachers were willing to help me at this grade level. Your planning meetings helped me a lot. That started all of us working together. That's how I found out what all I need to do. They had all the "stuff" (Teacher 6, 10-29-01). I asked her what she meant by "stuff." She explained she had not used manipulatives with her upper
grade. "These teachers were willing to let me watch how they arranged everything when they used everything" (Teacher 6, 10-29-01). She expanded to talk about the students making their own books and writing their own stories. "It is awesome" (Teacher 6, 10-29-01).

When I asked her opinion on the quality of my efforts she said, "Well, you can see how much better I was last year, so I know you know I think you did great" (Teacher 6, 10-29-01). I then asked about other things that happened last year.

She said, " Teacher O" (Teacher 6, 10-29-01). She explained Teacher O was an awful thing to happen to any school, but Teacher $O$ did bring us all closer together, quickly. "We got to know each other real well, real quick. We had to look out for each other. What a looney she was. Her husband was dangerous though. I knew that when I heard him threaten you. I couldn't believe what you had to through to get the district to fix the doors so they would lock" (Teacher 6, 10-29-01).

When I asked who might feel differently about last year, she said she really did not know. "The people on our hall are so much happier. I just don't know all the new people in the back hall. They seemed happy though" (Teacher 6, 10-29-01). I also asked who else would be willing to answer my questions. She told me her impression was any teacher in the building would probably do so.

I asked if there was anything else she wanted to say about last year. "I can't thank you enough for letting me teach first grade. It has made all the difference in my life. I go home talking about my kids and how wonderful they are. Last year I drug myself home everyday and talked about how awful the big kids were" (Teacher 6, 10-29-01).

Green is the next teacher interviewed. I asked about her feelings about having more chances to interact with other teachers, and opportunities to do so. She responded since it was her first real year to teach she did not have anything to compare it to. She did not know what principals did other than me. She really had not thought about it.

When I asked her opinion about what kind of job I had done, she responded in a similar vein. She thought I was a good principal because I had always responded to her concerns. However, she did not know how a "bad" principal worked (Green, 10-29-01). I proceeded to ask about what else happened last year.

She said, "It was so good and so bad. I was brand new, and that was hard, but I got to know Red. She's awesome. She sure helped me. I was under the impression that noise in the classroom was bad. Red showed me the difference between good noise and bad noise. The kids are really tough, but she helped me control them. After our meetings with you on Mondays we would sit and plan some more. I finally saw I had to plan every minute, not just for the days. We ended up using the form Purple had
invented for planning. It helped me a lot too that Red never missed a day. I could really count on her. Everybody could. I really miss her"(Green, 10-29-01).

When I asked about others answering my question she said she supposed everyone at the site probably would. She said she really thought most of the teachers thought I had done a good job and they would do anything they could to help me. I asked her if she knew anyone who felt differently. She responded, "If there is someone it must be the lazy teachers, because they're too lazy to stay around and talk to anybody, so they're probably too lazy to share their negative feelings" (Green, 10-29-01).

When I asked what else she would like to say about last year she said, "I am so glad it's over. I mean it was my first year, and that was hard. Then we had crazy Teacher O. She didn't mess with me much though. I guess I should count my blessings" (Green, 10-29-01).

Red was glad to see everyone at the restaurant, and they were glad to see her. I asked her my first question regarding whether she saw what I had done. She said, "definitely" (Red, 10-29-01). I asked her to expand that answer. She said, "You did everything you could to throw us together professionally. Your committees, meetings, were obvious. I also noticed so many new teachers to the building always had questions for me. They would always say you sent them to ask about this or that. I was flattered, I think. Maybe I should've felt used, but I didn't" (Red, 10-29-01). She laughed as she said the last sentence.

When I asked about more chances to interact, she said she thought she had just answered that. "But, yes, we did interact a lot more. It's funny now that I think about it. We interacted, and at the same time we had fun. Of course, we all had Brown to worry about most of the year. I hear they are still after you. Did you know that" (Red, 10-29-01)? I responded that I was not worried about it. They have no more legal maneuvers left. She said, "They are still crazy" (Red, 10-29-01).

I asked her opinion on the quality of my work. She said I had done a great job with the limitations I had been dealt. With a weak superintendent, and no administrative help, or in-house suspension, I had done very well. "If the district cared anything at all about kids, and supported their principals, you could've performed miracles. We trusted you, because you were just out of the classroom. You knew what we were up against. You didn't tell us just to handle it the way Mary Wolf did. When they hired the second crazy one, I knew you wouldn't stay. I wouldn't have either. It made me sick" (Red, 10-29-01). She was referring to Teacher 11.

When I asked who else would be willing to answer these questions, she said, "Teacher O," and then laughed (Red, 10-29-01). She said further the ones that were present were probably it. The rest were the ones who did not want to teach, or were burned out. That is why they were not present. I then asked who felt differently about last year. She laughed and said again, "Teacher O" (Red, 10-29-01). She added the
people who were not present might feel differently, but she would not give them credibility. "They have had the same lesson plan for the last 25 years. They also keep to themselves, because they're afraid someone will ask them to do some work" (Red, 10-29-01).

Teacher 7 teaches one subject all day. The grade level classes rotate through her classroom two or three times per week. I asked her if she had more opportunities to interact with other teachers during 2000-2001 school year than previous years. She said she did. When I asked what I did to provide interaction opportunities, she said, "You put us together more often. You truly lived the site-based philosophy. All the teachers planned everything. I don't mean that in a bad way. We had choices of committees. Before you came we were always stuck with doing some chore on our own. I always got stuck with the plan schedule. Then, I got blamed by someone every year for their planning time they didn't like. At least your way, they blamed the entire committee" (Teacher 7, 10-29-01).

When I asked what kind of job she felt I did, she told me I had done well. "It was amazing that people could enjoy working in such a horrible place. You did that! You got us together and got rid of several slugs. I was so glad you did not rehire Miller. She was so divisive. Always stirring up trouble" (Teacher 7, 10-29-01).

When I asked her to talk about what else happened last year, she discussed Teacher O. "I could not believe how long it took the district to listen to you. If you had not sent her home the first time, we would probably still be putting up with her. We had to work together to get rid of her. We tried helping her. Her family should have gotten help for her, but then someone might find out how crazy they all are. Can't believe two of them are principals. Shows you how smart the higher-ups are" (Teacher 7, 10-29-01). I then asked about other people willing to answer my questions.
"I'd guess any one of us would answer these. But, you know, we would all answer the same ways. Maybe our brand new teachers wouldn't, but they don't have the experience to know the difference. Well, Fuchsia might, since her mom is a principal. She would probably know just from being around it. There are a couple of teachers who spend so little time on school, they probably don't know you're gone! They'd resent having to spend the time answering. We're lucky. We don't have but a couple of those" (Teacher 7, 10-29-01).

I asked who feels differently about last year. She said she did not know of anyone. I then asked about what else she would like to say about last year. She replied, "The year was so different, but also the same. You were different, but the higher-ups were the same. They just do not know what it's like in a school like this. Thank God you were always available when we needed it. Wolf wouldn't come out of her office, and she wouldn't let us come in! They give us the toughest kids, and the least help. It's amazing people can be so stupid" (Teacher 7, 10-29-01).

Pink also teaches a discipline which enables her to see all the classes two or three times a week. I asked her if she noticed if she had more opportunities to interact with other teachers during 2000-2001. She said, "Yes, we were given the opportunity to meet together, and you encouraged the teachers to coordinate their curriculum with mine. With several I was able to integrate. The ones who need me of course, didn't want any suggestions. Our new teachers were really the best. They are teaching curriculum integration in colleges these days. They expect it (Pink, 10-29-01).

I asked if she saw what I did to provide interaction. She talked about the grade level meetings and committees. She said even the meeting food was brought by committees of teachers who had never worked together on anything previously. "We didn't go into our rooms and stay there until time to go home. We actually talked to each other when we had the chance. We even had the teachers volunteering to do extra teaching in the mornings because we don't have a gym where the kids can wait without getting into trouble. When we did have duty, we did talk to each other if possible. We even talked school! But, the best thing was you were wherever we were. No wonder you wear tennis shoes all day! Your classroom experience showed. You knew what our problems were before we told you. And, you didn't tell us to handle it on our own the way Wolf did. At least we could handle things with each other, especially the discipline problems. I am really mad at you for leaving, but I don't blame you (Pink, 10-29-01).

I said that I assumed she thought I had done a good job. She said it was obvious from her previous answer. I asked her what else happened last year. "We got the sixth graders back. I have trouble with those older ones. So many of them are from awful family situations that make them miserable by this age. It is really hard to deal with them even though I really feel for them. I did learn to work with the sixth grade teachers on discipline. They really helped me out. I started the reward system with them. The liked it as much as the little kids. Teacher 7 and I both use one. You have to. You shouldn't have to. Kids should just behave because they are supposed to, but they don't here. We need in-house suspension so much. We have no clout (Pink, 10-29-01).

I asked about others willing to answer my questions. She said everyone would except a couple of people who never do anything extra. I added the question of who feels differently about last year. She responded that she really didn't know, but probably someone who would not come today. Then I asked what else she would like to say about last year.
"I enjoyed getting to teach in the primary classroom when Teacher O left. I am really good at that level. There are good teachers in that hall, too. I want out of this subject. There just aren't any new ones out there, though. Colleges just don't have any music graduates. You know, you tried to find one for me. Even if they did, no new graduate would want to come into this place. Not when they have a choice. Man, if you just could come back things would be better. At least you know what we are up against. You were right when you said teachers at least have each other. If we
hadn't learned to share our misery last year, I would have gone crazy" (Pink, 10-29$01)$.

Orange said she had more opportunities to interact with other teachers during the 2000-2001 school year. "We had those grade level meetings with you. Then Teacher 12 came next door. She wanted help with discipline and curriculum. She had not taught this grade before. Then, when I had to leave I worked with the substitute on the same two things. These kids are really tough. That sub came a long way, so did Teacher 12. Teacher 11 was hopeless. She had no control at all" (Orange, 10-30-01).

When I asked her opinion about what kind of job I had done, she said I had done as well as anyone could possibly do in that school. When I asked her what else happened last year, she said she was so consumed with her health problem she really did not know. I got the same response when I asked who else might answer these questions.

When I asked who feels differently about last year, she said some of the crazy parents. "You are white and they don't like anyone like you. Mary Wolf was black, so they trusted her just because of that. They shouldn't have. The good ones already trust you. They like the way you will always see them and talk to them.

I asked her if she had anything else to say about the 2000-2001 school year. She was just glad it was over due to her health problems. She is glad to be back at work, and she feels fine now. She also enjoys working with Teacher 14 . Teacher 14 moved to her grade level. They had worked together at another site previously, she said.

Teacher 12 said she had many more opportunities to interact with other teachers than she had in previous teaching years. She said she saw what I did. "You had us meet together. That was a great help to me. I got to know Orange. She helped me a lot. She made great suggestions. So did Teacher 13. They are really good. Teacher 13 and I started sharing taking care of kids who had not completed their work. This way we didn't give up every planning period. The kids finally got the idea if they didn't do their work they were going to miss PE and recess. That got their attention real quick" (Teacher 12, 10-30-01).

When I asked about what else happened last year she talked about Orange. She felt badly Orange could not complete the school year. She also talked about my helping her. It meant a great deal to her that I would come to classroom regularly and help with discipline. She felt the kids saw I was backing her, so they should behave and do their work.

Teacher 13 said she had more opportunities to interact with other teachers this year, but she preferred just to interact with the other teachers at her grade level. She liked the grade level meetings with me though. That was new to her. She thought it was a good idea so that I could know what they are doing and what they need.

She felt I had done a good job at providing teachers opportunities to work together. "But the ones who need others help, don't want it. They never want to do their share anyway, so you were wasting your breath. Maybe you helped some teachers, don't get me wrong" (Teacher 13, 10-30-01).

I asked her what else happened during 2000-2001 school year. She talked about the high school principal becoming the elementary director. She said, "No wonder he doesn't understand us. He hasn't got a clue about elementary, let alone this population. I don't think this school system will ever get over worrying about test scores instead of kids" (10-30-01).

She talked about the difference in student populations. She has been transferred to a school in an upper middle socioeconomic neighborhood. "The teachers have no idea what we put up with over here. You did as much as you could, but without help from the top that place will always be a mess" (10-30-01).

I asked who else would be willing to answer these questions. She said she knew the other teachers at her grade level would be more than willing. She did not know if anyone felt differently, but she claimed there is always one willing to be negative. I ventured on to ask what else she would like to say about last year. She talked about enjoying working for me, and hoped I liked my new assignment.

Teacher 14 said she had more opportunities to interact with other teachers during the 2000-2001 school year. I asked her if she saw what I did to provide this interaction. "You put us together at grade levels with the same planning time, then had us meet once a week with you. That was good. We felt like you knew what was going on and what we had to put up with. At least we helped each other with the discipline because of those meetings. If I needed to call a parent, someone was willing to watch my class to I could do it immediately. It makes all the difference when you can act right away. If your plan time was over, you'd probably be too tired at the end of the day to handle it, even if you remembered it. Nobody knows how tough these kids are until they get here" (Teacher 14, 10-30-01).

When I asked what kind of job she felt I did she claimed I had done wonderfully for someone with no help with forces working against me in higher administration. "We understand why you left, but we sure hate it. You respected us. So many principals don't" (10-30-01). I asked about what else happened last year.

Her response had to do with Orange. They are best friends. She had her mind on her all year worrying about her. "It was so scary. I was lost. I was used to spending my planning period in her room. We did everything together. Now we can again, especially since we are teaching the same grade again. It is wonderful to have her back" ( 10-30-01). She also said all the teachers in her Pod would be willing to answer my questions. She did not know of anyone who felt differently about last year. But, she admitted she did not know the teachers on the back pod very well.

When I asked what else she wanted to say about last year, she talked about being glad it was over. "Orange was sick, and I had the class from hell. Teacher 1 agreed. (They taught the same grade level.) If we had to be gone it was difficult to find a sub. You remember? We both had subs walk out. Some years you just get the right mix to be a nightmare. Then, the superintendent sent every horrible kid from other schools to us on district transfers. They always seemed to be fourth graders. He went out of his way to dump on Columbus. What a jerk" (10-30-01).

Teacher 15 said she could interact more with other teachers. However, she thought it was the nature of her new job as the technology integrationist for the building. She saw almost every teacher every day as they rotated through her computer lab. She noticed I had provided opportunities for other teachers to interact more. She talked about our grade level meetings. She was glad I had included her in these meetings. She came during her plan time with the second grade teachers.

Teacher 15 thought I had done a good job of getting teachers to talk to each other. "I was all over the building during all the planning periods. I always had someone wanting help with their computer. I'd see teachers together talking about kids and plans. Before, most teachers just stayed to themselves" (Teacher 15, 10-29-01).

When I asked who else might answer my questions, she said she could not think of anyone who wouldn't. She did not know who felt differently than she did. I then asked what else happened last year. She talked about Teacher O and Teacher 11. She thought it astounding two "crazy teachers could be foisted off on you by other administrators. I didn't know about Teacher $O$ until it was in the paper. But, Teacher 11 was close to my lab. She let those kids mess up the computers in her room everyday. I have a feeling they were on sites they shouldn't have been" (10-29-01).

I asked if she had anything else she wanted to say about last year. Her response had to do with teachers worked together more, and everyone seemed so much happier. The students were still tough but she thought we handled them better than before. She was glad I had told teachers not to put up with chaos in the classrooms. She felt as though I had backed the teachers when it came to "discipline problems and crazy parents" (10-29-01).

Teacher 16 said it was difficult for her notice the interaction opportunities due to the nature of her class. "I never know when I am going to get to take a plan or lunch time. If my aide isn't there, I have to just stay with the kids all day. They go bonkers with any kind of change. I did interact with Marci a lot. Her classes are somewhat like mine. At least we weren't hanging out alone all the time. I have become friends with the other teachers in this pod too. We don't teach anything alike, but it's nice to have friends at work (Teacher 16, 10-27-01).

I asked her opinion on the quality of my work. She said it meant a lot to her that I would help her with her students. "Not many principals are willing to keep a kid in a therapeutic hold until the police come, especially when she outweighs you by 100 pounds! The other teachers saw that and now they want to learn how to help when I need it. It's hard to keep those kids from hurting themselves or another kid. We didn't have anyone go to the hospital this year because of my class. I just realized that. The other teachers helped me out on the playground. They've learned the signs when one of my kids is about to go off. That helps. Used to be, they would meet these kids head on, then the explosions began! Can't do that with SED kids" (10-2701). I then asked about what else happened during the 2000-2001 school year.
"You took me to the doctor after a kid scratched me. Remember? His parents had both died of Aids, and you didn't trust me not to just go to Sonic instead of going to the doctor. You know, I probably would've. It was just dumb luck I learned about his parents. You're around a kid for two years, they'll tell you anything" (10-27-01).

I followed by asking who else would be willing to answer my questions, and who feels differently about last year. Her response to both was she did not know. She thought the people in her pod had already talked to me. She said she was more isolated than most of the teachers, so she did not know how other people felt. I asked if she had anything else to say about last year.

She asked if I remembered the sixth grade field trip at the end of the year. I did. She said she has resolved to take her kids on a field trip every month. She realized on that field trip those students had never been far out the neighborhood, let alone out of town. They need experiences and real life ones she claimed. She was so surprised at how awe-stricken the kids were on that trip. Their good behavior really surprised her, when she had been dreading the trip.

Teacher 18 is a former middle school teacher. She said she was surprised how easy the transition was to elementary. I asked her if she had more opportunities to interact with other teacher than she did before. She responded that she had more opportunities to interact at the middle school level, but not on a professional basis. I followed with my question regarding her vision of my efforts to provide interaction opportunities. She said she did. "The grade level planning meetings kind of set the tone for us to work together. It just served as a springboard for interaction. You would tell us about some teacher at another level using something all of us could use, so we would seek out that teacher, especially Fuchsia and I" (Teacher 18, 10-30-01).

When I asked her opinion of my efforts, she said she thought I done well to wring every ounce of professionalism out of the teachers in my building. She thought our population was really tough, but by working together we managed to get through it with a laugh. She said she really appreciated my backing when dealing with a certain family that had given her a very unfair tough time. I followed by asking what else had happened last year.

Her response talked about the move from middle school to elementary. She found it was easier than she thought. When she first drove over to look at the neighborhood and the school, she said she was appalled. It was such a tough looking place, and so dismal looking. She was surprised at how cheerful the inside appearance of the building was. I asked who else would be willing to answer these questions, and who felt differently about last year.

She thought everyone she dealt with would be willing to answer my questions. She said she knew someone probably felt differently about last year. Probably Teacher 17 did. She was so unhappy with the move from middle school, she would not have been happy anywhere else. I ended by asking if she would like to say anything else about last year.
"It was a tough but good year. We managed with your help to depend on each other. It was obvious downtown thought we were just a dumping ground, and they kept on dumping. I liked getting to work with Fuchsia. She is awesome for a first year teacher. You can tell she was born to be a teacher. She is so enthusiastic. It's catching. She does know a lot about learning styles. I altered some of my stuff after talking to her. I should say after listening to her. It is hard to get a word in with her, but that's alright. I also have to say you were awesome. You took risks in every way. Some of us who have taught awhile know what you did. We really admire you. I'd work for you anytime, any place" (Teacher 18, 10-30-01).

Fuchsia said she was so glad to see me again. Since it was her first year to teach, I altered my questions to fit that situation. I asked her if she felt she had plenty of opportunities to interact with other teachers during the 2000-2001 school year. She said she thought she really did. I asked if she could tell what I had done to encourage this interaction. She said, "Not at first. I talked to my mom about what were doing. She said she could see I was trying to get teachers to work together. After she said that, I started noticing how you had a mixture of us on different committees. Mom told me our planning meetings were really a good idea, and she was going to start doing that at her school. She told me teachers were often so isolated from each other they became miserable. I never felt that way. Of course I had a great mentor in Teacher 1. She told me I should do this or that, and I learned what teaching manners were. She kept me from making big faux pas. I know I talk too much. I just can't help it. You know my mom. We aren't known for being quiet"(Fuchsia, 10-30-01).

I asked what kind of job do you feel I had done. She said she knew she was brand new, so she would always think I was awesome. She was so happy to get my print of "Starry Nights" by Van Gogh that I had given her when she completed her requirements for her residency year and became a full-fledged teacher. I followed with the question regarding what else happened last year.

She talked about going from a sixth grade classroom in August to a multi-aged class in October. "It was tough, but I can handle anything now. Those kids are really
special to me and you are too. You never forget your first principal or your first class" (Fuchsia, 10-29-01). I then asked what else happened last year.

She talked about the fact she had been stood up at the altar, but the guy had repented and is now vigorously pursuing her. She also met another guy she thought was her true love, just to become disappointed in his real personality. All this happened while she was trying to become a new teacher. She also decided to start pursuing her administrative certificate. She appreciated my help with class assignments. I then asked who else would be willing to answer my questions and who would feel differently about last year than she does.

She seemed surprised that anyone would feel differently. She really did not know of anyone who would not answer my questions. She knew Teacher 1 would, and felt as though I had done a great job. I then asked if she had anything else to say about last year.

She talked about teacher 17 becoming her best friend. But, she said, "I know I am new at this, but she is really a lousy teacher. She comes in late, leaves early, and lets Teacher 18 do all the work. Maybe I can get her turned around. I will make it my professional project. I know you know what I am saying. You wouldn't have given her a letter of concern earlier if you didn't. The other teachers know it too. Of course, sixth graders love her because she doesn't make them do anything, and they eat candy and drink pop all day. I don't think she is used to a real principal. Look at Mr. Boone. He's in the classroom again, and they closed his school. Teacher 17 loved him. She talks about leaving school and shopping while other teachers watched her class. Then she would return the favor. I'll work on her. Is this bad for me to say? Tell me if it is" (10-30-01).

Turquoise said she is glad she had the experience at middle school before coming to Columbus. She felt as though the teachers at Columbus worked together more than the middle school level. I asked her if she had more opportunities to interact with other teachers than before. She said she did, but it was mostly with Blue. "We taught at the middle school together, but not like we are doing here. We really teach together here. We have the same kids. I do the history and reading, she does the math and science. We love that. It gives us less prep, but more kids. We probably don't talk to other teachers much, because we are so busy with these kids. We have so many that are so low. We are always racking our brains to find some way to help them. We have spent some time talking to Teacher 1 and Teacher 5. They had them last year in fourth grade. We have so many new ones though they can't help us with" (Turquoise, 10-29-01). I asked if she saw what I did to provide opportunities to interact with other teachers.
"Of course, we had planning meetings, but they were just the two of us most of the time. We did spend time with other teachers on duty and on committees. It was good we were spread out. Blue and I get along so well, probably because we didn't have to spend every minute with each other" (10-29-01). I asked her opinion of my efforts.
"We both thought you were awesome. This place could be a nightmare. It may be for you. If we needed help you knew who to send us to. The music teacher and the librarian were good sources for us. You were too because you had taught this level. It was tough having a testing grade. I know you told us to teach "kids" not the test, but you can't help but worry about it" (Turquoise, 10-29-01). I asked her what else happened last year.
"We moved from the middle school. We were both glad. We had wanted to teach grade school, anyway. But, when we heard it was going to be this place we freaked. It turned out to be fine. We were so happy to get to teach together, and we were grateful you let us trade classes at noon each day. It was kind of a happy medium between middle school and grade school. Oh, yeah, I became a very young grandmother" (10-29-01).

When I asked who else would answer my questions, she replied she thought all the teachers would. I then asked if she knew anyone that felt differently and would answer my questions. She said she felt sure there was bound to be someone, but she did not personally know of anyone. I asked if she had anything else she would like to add about last year.
"It was very tough, but we felt we were a family going through this together. It is amazing what you can endure when you don't feel alone. You were with us, and at teachers' meetings it was obvious others were in the same boat. I miss Blue, but teaching with Fuchsia is almost as good. She is so enthusiastic" (10-29-01).

Blue said it was easier to interact with teachers at the middle school, because they were out in the hall at the end of every class period. "But, we did not have curriculum discussions like we do with you here. We might have talked about kids, but usually the teacher next to you did not teach the same subject or level you did, so you just did small talk. Here we actually get together and plan, with you and others. I'm mostly with Turquoise since we basically team teach" (Blue, 10-29-01). I asked if she saw what I had done to encourage teachers to interact.
"We have those planning meetings with you, then we have committees to work on with other teachers. Site Plan committee has introduced me to a lot of teachers in the other pods. Otherwise, I would never see them except at faculty meetings. I think you planned the rotation of who brings food to our meetings too. That forces us to talk to other teachers we might miss out on. Since I have older kids, most of the other teachers have had them, and they always have some sort of advice or info about at least one of them. All this helps, especially in a place like this"(10-29-01). I asked her opinion of my efforts last year. She said it was "awesome" (10-29-01). She said she depended on Turquoise and me for help, and we were always willing. "If we had some help from downtown, we could have blown the top off this place. They just dump on us, then try to push us out of view. I would have stayed if you had, even getting this other job where my husband teaches. But, I just had to take the
opportunity once you said you were leaving" (10-29-01). I asked what else happened last year.
"I grew as a teacher. I had to or lose my mind. Turquoise and I just decided we were going to have a good year, and we did. Personally, my little girl was so sick so much that I was scared for a long time. She's fine now, thank God. I'll never forget the year because of that if nothing else. As a teacher I gained confidence. If I can handle Columbus, I can handle anything. You can't buy that feeling, you have to earn it" (10-29-01). I followed by asking who else would answer my questions, and did anyone feel differently than she does.

Blue said she knew human nature well enough to know there had to be someone who grumbled, but she did not personally know anyone. She felt all the teachers would answer my questions. I finally asked if she had anything else to say about last year. She said she just had a question for me. "Did I feel like a person who had been through a war?" I responded by asking if she felt that way. She said she did.

## APPENDIX C

INSTITUTIONAL REVIEW BOARD APPROVAL FORM

# Oklahoma State University <br> Institutional Review Board 

Protocol Expires: 9/26/02

Date: Tuesday, October 23, 2001 IRB Application No ED0224
Proposal Title: THE STRENGTH OF WEAK TIES AND CHANGE: VIEWS FROM AN AT RISK
Proposal Title: THE STRENGTH OF WEAK TIES AND CHANGE: VIEWS FROM AN AT RISK
ELEMENTARY SCHOOL

Principal
Investigator(s):

| Adrienne Hyle | Susan D. Phillips |
| :--- | :--- |
| 314 Willard Hall | 12713 E. 136th |
| Stilwwater, OK 74078 | Broken Arrow, OK 74011 |

Reviewed and
Processed as: Exempt
Approval Status Recommended by Reviewer(s): Approved j

Dear PI:
Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 203 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).


Carol Olson, Chair
Institutional Review Board

# VITA 

Susan Ferry Phillips
Candidate for the Degree of
Doctor of Education

## Thesis: ADMINISTRATIVE STRATEGIES IN AN AT-RISK ELEMENTARY SCHOOOL: THE STRENGTH OF WEAK TIES AND CHANGE (YOU CANNOT CATCH THE DISEASE IF YOU ARE NOT EXPOSED TO THE GERM!)

Major Field: Educational Administration
Biographical:
Personal Data: Born in Columbus Indiana, the daughter of John and Vivian Ferry, married to George P. Phillips, mother of two adult children.

Education: Received Bachelor of Science degree in Education from Indiana University, Bloomington, Indiana, June, 1968; received Master of Science degree in Curriculum and Instruction from Oklahoma State University, Stillwater, Oklahoma, July, 1998. Completed requirements for the Doctor of Education degree in Educational Administration at Oklahoma State University, Stillwater, Oklahoma in May, 2002.

Experience: Elementary classroom teacher in Indiana, January, 1968 - August, 1970; elementary teacher, Tulsa Public Schools, 1970-1975; elementary and middle school teacher, Monte Cassino Public Schools, Tulsa, Oklahoma, 1983-1993; middle school teacher, Broken Arrow Public Schools, Broken Arrow, Oklahoma, 1993-1999; elementary principal, Muskogee Public Schools, Muskogee, Oklahoma, 1999-2001; junior high principal, Tahlequah Public Schools, Tahlequah, Oklahoma, 2001 - present.

Professional Memberships: Cooperative Council of Oklahoma School Administration, Delta Kappa Gamma.

