

CHANGE: A TEACHER'S PERSPECTIVE

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CHAPTER 1

INTRODUCTION TO THE STUDY

Personal Interest in Topic

The sun streamed through the windows of my music classroom on a bright Wednesday afternoon as 25 students wiggled with the energy of third graders. One child, a beautiful girl with large brown eyes, stated without prompting, "I will not graduate from high school." "Oh yes," I answered quickly. "You are so bright! You will graduate from high school." "No I won't." she stated flatly. "No one in my family has ever graduated from high school and I won't either."

That was a transforming moment. Until that day I had not seen the bleak future some children accept early in their lives. I did not convince the student that she would succeed in achieving high school graduation, but she convinced me of the importance of helping every child believe he or she can succeed. The difficult challenge teacher's face in instilling the confidence to succeed in students was now my challenge. For the past 16 years I have been driven by the desire to find methods that translate to student success for each student.

As a music teacher, implementation of new change processes was generally individual in nature. Since the subject is not a core subject, few mandates have a direct impact on the delivery of curriculum or the expected outcomes. When I moved to administration a new view of the difficulty of implementing change emerged. As dean of instruction I was trained in five different change processes in one month with the charge to translate the training to over 60 teachers in one building. The time frame for accomplishing the training was short and the expectations were high. It seemed an

impossible task especially when coupled with major resistance from teachers who had experienced these types of mandates numerous times. This incident produced a desire for an immediate increase in the knowledge of educational change and the teacher's role in the process.

Education Need for Change

One challenge for education is instilling self-confidence and the ability to succeed in students who have tasted the sting of failure. Failure is re-emphasized many times in the student's educational career. Students enter school with varying abilities. Early in their academic career students know who the bluebirds and buzzards are in reading groups even if this grouping does not occur deliberately. Every day brings the possibility for further discouragement. It is important for each student, with his or her different ability levels, to believe they can succeed.

Education, as a whole, must make dramatic changes for this to occur. There are examples of student success in the most dismal of circumstances (Collins, 1992; Monroe, 1999), but students' success and failure can generally be predicted by the socio-economic conditions of the school population (English, 2000). This is not a new condition. In 1969, Glasser wrote:

Where education is a failure, as in the central city, little that is new is tried because the innovators don't work in these schools long enough to effect change and because the teachers resist innovation, which they fear will make their job harder. If education in suburbia were as dismal as it is in the central city, parents would be breaking down the walls with their complaints. (p. 113)

Students of poverty often receive a substandard education. Likewise, students

of middle and upper class background often receive a substandard education, but it is not as noticeable since the students come to school better equipped for the learning experience. Educational improvement will not occur until there are excellent learning opportunities for all students. This need for educational excellence is a central idea of the many current and past reform movements (Cuban, 1993; Tyack & Cuban, 1995).

Background of the Research Problem

Reform efforts, at their core, have intended to have an impact on student achievement and therefore lead to greater student success. Student success has been a stable ingredient in reform efforts; the purpose of the success has not. The quest for solutions is continual (Tyack & Cuban, 1995). Political winds shift the dynamics of success between two separate goals. The first is providing equity and access in educational offerings to for all students. The second is providing skilled workers for improved financial development and political superiority. This shift in reform focus often is cyclical in nature. Many major education reforms have been generated through legislative action (Tyack & Cuban, 1995). The current national education crisis is identified far from the classroom and a legislative action is determined as a solution. It becomes the law of the land and local educators are left with the task of turning the legislative mandate to action.

Due to the nature of the constitution, federal reforms do not provide the specifics concerning curriculum or the implementation of the reform (Ravitch, 1995a). State and district education leaders must interpret the mandate and determine the actions necessary to fulfill the legislative requirements. Reform legislation fuels continuous classroom change as local educators attempt to translate vague legislation into specific action

(Spring, 1993).

Educational improvement will not occur until it translates to the classroom. Teachers are the central enactor of all of the administrative directed answers to reform. Classrooms are the arena for education change (Bascia & Hargreaves, 2000; Katzenmeyer & Moller, 1996; Temes, 2002). Teachers must become students of change and the focal point of the change initiative. When this occurs it will translate to the student.

Introduction to Educational Change

In the past few decades, the pace of change has accelerated. Major changes are continuously occurring throughout the country. These include changes in political status, economics, diversity of population, number of single parent homes, and increased mobility of the nation's population. All of these factors call for significant changes in educational practices (Fullan, 2001; Pulliam & Patten, 1999). New and often conflicting approaches to education are being advocated and implemented throughout the country. These include, but are not limited to: whole language; interdisciplinary curriculum; heterogeneous grouping of students; cooperative learning teams; continuous improvement processes; and initiatives that alter the locus of control for improvement, such as site-based management, charter schools, shared decision making, and community governance systems. School improvement is increasingly the responsibility of local schools, and along with school-level decision making comes increased accountability for student learning outcomes (Ravitch, 1995a). At the same time, policy-making bodies such as local school boards are being reactivated and energized throughout the country. School leaders and policymakers will determine what changes occur and how they will

take place at the local level (Fullan, 2001).

Current Change Initiatives

Educational change is actively underway throughout the United States. A number of schools are altering relationships among teachers, parents, students, administrators, other school staff, local governing bodies, communities, and the central administration. States are linking school improvement, restructuring, and accountability systems in an effort to achieve continuous improvement (Schomaker, 1999; Ravitch, 1995b).

Too many innovations have been introduced in education to name them all. A few are included to provide an overview of the exploration of new initiatives. Demonstration schools are trying out instructional programs and innovations that, if successful, will be expanded around the nation (Guthrie & Guthrie, 2002). States are engaged in implementing multi-year plans and curriculum frameworks. Some districts have adopted a four-day school week and are moving substantial decision making and responsibility directly to schools (Chmelynski, 2003; Johnston, 2002; Dee, Henkin & Pell, 2002). Still other districts have moved to year round school (McGlynn, 2002). Most states are expanding leadership training as a key to student growth through school level improvement. The effective schools process is guided by principals and involves parents and community members in school change. Districts are installing an integrated curriculum and aligned assessment along with an effective schools project in hopes of gaining continuous improvement. All initiatives are couched in the dual reform of standards and accountability which has been the focus of the federal government for over a decade.

As educators initiate fundamental school and system-wide reforms, there is need

for: (1) information about the factors that inhibit or strengthen improvement efforts; (2) corroboration of research on educational change within different contexts and settings; (3) understanding about the characteristics of successful change efforts; (4) strategies for initiating, implementing, and sustaining changes in various educational settings; (5) strategies for continuous improvement; and (6) strategies and tools for evaluating the impact of continuous improvement efforts on student performance. This research makes contributions to several of these areas.

What Research Tells Us about Educational Change

Educational change processes borrowed from other systems have the potential to create chaos. In addition, some innovations carry with them costs that cannot be sustained over time. By contrast, educational innovations designed and implemented to improve schools and student learning can achieve their visions for the success. Research supporting the vital role of local decision making in educational change can be found in the Rand Change Agent Study (Berman & Pauly, 1975). One of the earliest systematic studies of educational change, the Rand Study looked at federally funded projects and described the role of federal policy and local responses as well as outputs and actual improvements in school practice. Before the Rand Study, the assumption underlying early federal projects was that policy set at the federal level would improve local school strategies and outputs (McLaughlin, 1990). The Rand Study identified the crucial role of the local context in achieving successful educational change. Projects that had the active commitment of district leadership and locally-selected implementation strategies surpassed the outcomes of interloper change agent projects.

When the Rand Study findings were revisited 15 years later, McLaughlin (1990)

noted that the following findings of the original study endure: (1) policy cannot mandate what matters; Local capacity and local will are what matter most for achieving educational outcomes; (2) local variability is the rule; uniformity is the exception.

Looking for the right way to change is as counterproductive as how to change because it will look different from place to place. Variations in approaches to change are healthy, not signs of problems.

Fullan (1985, 1987, 1990, 1991, 2001) has extensively documented the characteristics of successful change efforts in schools and school systems both large and small, resource rich and resource poor. He has also synthesized the research of many others to provide educators with information about characteristics or change factors found consistently in innovations that succeed (Fullan, 1989; Fullan & Miles, 1992; Fullan & Stiegelbauer, 1991). Fullan (2001) cautions that the research on change does not provide hard-and-fast rules about how to implement change, rather, the research provides broad guidelines with details that will vary for each local situation and context.

Questions That Have Guided the Educational Change Journey

Fullan's (1989) change factors have been reframed into questions to guide people involved in the process of change. Typical questions include: (1) Is the proposed educational change linked to high priority needs? (2) Are the changes we are considering built around a clear model? (3) Do we have a strong advocate who is committed to educational improvement and will provide leadership during initiation? (4) Have we identified a person or people who will be responsible for our change effort? (5) Are we providing both pressure and support? (6) Are we providing technical assistance? (7) Have we planned appropriate rewards for people in the process of change? (8) Is our innovation

embedded into the educational system? (9) Are our educational improvements linked to instruction? (10) Is there widespread use of improved practices? (10) Have we removed competing priorities so that people involved in the change are protected from additional duties or distractions? (11) Are people involved in change being given sufficient information, opportunities to practice and develop skills, and ongoing assistance to strengthen and expand their mastery and understanding? (12) Are new administrators and teachers given information and assistance to involve them in the change (Fullan, 1989)?

The obvious missing ingredient in Fullan's work and the work of others is the perception of teachers to the change process. Teachers are usually the implementers and sustainers of change yet they are noticeably overlooked and many times their opinions are not valued. This research addresses this deficiency in the knowledge base.

The Human Side of Change

The real meaning of change lies in its human, not its material, dimension. Huberman and Miles' (1984) research about people in the process of change suggests that a period of anxiety is part of the change process. People often change their practices before they change their beliefs and understanding. This research has been reinforced during the last two decades (Fullan, 2001; Guskey, 1995; Quinn, 1996). Change involves risk taking. It often appears messy in the early stages as teachers, principals, and others depart from what they know well to try new practices and strategies. Early innovators have no guarantees that the changes they are introducing will succeed. It is normal for people to feel overwhelmed and even threatened in the early stages of significant change.

The Change Process

In *The New Meaning of Educational Change* (2001), Fullan describes change as

multidimensional. He notes that change can occur at many levels, such as the classroom, school, district, or state. Implementing change can involve each of these levels. Within any level there can be changes that occur at the surface (e.g., new materials); changes that involve use of new practices and behaviors (e.g., new teaching approaches); and changes in the deep structures that affect the beliefs and understanding of individuals engaged in change. As Fullan points out, the phases of change are overlapping, not discrete.

In addition to the dimensions of change described by Fullan, another fundamental element is changing relationships among people engaged in educational innovation. Glickman documented change work among schools in the League of Professional Schools in Georgia (1991). He identified three ways people relate while engaged in educational change: (1) People work in isolation, with changes made in isolation (e.g., within individual classrooms or by school leaders operating alone); (2) people work in a congenial, friendly atmosphere, and may discuss their work, school events, and activities; (3) People work together collaboratively—discussing, arguing, planning, considering alternatives, and sharing successes and concerns. These people are fully engaged in shared decision making. Putting together Fullan’s work on dimensions of change and Blackman’s on people in the process of change, research can not provide a prescription for success. This research takes the next step by seeking to determine how teachers perceive the change process and what motivates them to be active participants in that process.

Problem Statement

The problem in educational change is that the major change enactor, the teacher, is often afforded little voice concerning the impending change. According to Ravitch

(1985), “educational reform movements have taken teachers for granted and treated them as classroom furniture rather than as thinking, disputatious human beings” (p. 19).

Change literature is also often written about teachers without adding the teacher’s collective voice to the discussion. Teachers bring an insight to the daily frustrations and needs of the classroom that can provide a firm underpinning for the discussion. Without the teachers’ collective voices change after change is implemented without reaching the desired outcome. Without understanding the teacher’s perception to change and the essential elements necessary to bring a teacher to the decision that change needs to be created, little effective or lasting change will be achieved. The findings of this research will contribute to the understanding of how teachers perceive change and are motivated to create improvement through the change process.

Purpose of the Research

The purpose of this study is to examine classroom change from the teacher's perspective. This research also seeks to establish what motivates teachers to change. The importance of administrators to individual change is also a focus of the study. Finally, the subject of the effectiveness of mandated change is a consideration of the research. This study poses four specific research questions in an attempt to address the research problem.

Research Questions

The research questions that guide this inquiry are:

1. What is it that makes a teacher want to change his or her traditional practices and replace them with different practices?
2. What are the steps that lead to the change?

3. Are teachers able to create a new classroom environment successfully without administrative support or is leadership key?
4. Is change more successful if the action is mandated or left to the teacher?

Structure of the Study

The research questions are addressed through the use of a qualitative research methodological framework. Qualitative research explores a social or human problem (Creswell, 1998). Change implementation in education is this type of problem. The research questions, which embrace the teacher's perception to change, seem to necessitate the use of the inquiry focus inherent in the qualitative research framework.

The interpretation of the data is from the constructivist perspective. This view determines that knowledge is not discovered but constructed (Crotty, 1998). In this research knowledge construction is between the researcher and the teachers.

This construction of knowledge was enlightened through several research methods. Two separate interviews, classroom observations and examination of classroom artifacts were employed to gather data. Each teacher was provided the opportunity to contribute to the research by producing a personal change journey depiction and a rubric for change determined by his or her personal change experiences.

Definition of Terms

In order to employ a common vocabulary the following operational and constitutive definitions are included.

1. Change is not just to make different, but also to continually improve. (Jenkins, 1997).
2. Data are operationally defined as factual information, especially information

organized for analysis or used to reason or make decisions.

3. A system is constitutively defined as a network of components within an organization that work together for the aim of the organization (Jenkins, 1997).
4. The operational definition of a change process rubric for this study is a step-by-step outline of the processes or procedures followed by the teachers interviewed to depict change.
5. The operational definition of quality tools for continuous improvement is any chart or graph used by a teacher or student to track student learning progress.
6. Professional development is training to prepare teachers to incorporate a new program, method or process in their classroom practice. The term staff development will be used interchangeably with professional development.
7. Reform is to change education with a goal for student improvement.
8. Langford training seminars incorporates brain research, current learning strategies, and quality tools for education. It is based on Deming's theory of profound knowledge.

Assumptions and Delimitations

This study is based on a few fundamental assumptions. First, the act of teaching is designed to cause students to learn, and the act of imparting knowledge and skill to students is the work of teachers. Next, it is assumed that the respondents to the interview questions provided complete and truthful information. Additionally, it is assumed that the shift from traditional teaching practices to the use of quality tools for continuous improvement in the classroom is a significant change in teacher behavior. This shift in

teacher paradigm involves a significant change in how the teacher uses data about critical learning elements to drive a continuous improvement process. This paradigm change also requires the teacher to have a clear view of the concepts and an organized plan for the total instruction that will be required to produce student success. This plan is flexible enough to change with student success or needs, yet stable enough to provide the students with a road map of the years study (Jenkins, 1997). It is further assumed that the teachers in this particular study are leaders in their profession and in this particular change as denoted by their selection by their administrators.

A delimitation of this study is that it is restricted to two independent public school districts 900 miles apart, one in the upper Midwest and one in the central Southwest. Another delimitation is that the study uses a purposeful sample of five teachers from one district and a convenience/purposeful sample from the other district. The final delimitation of the study is that one district was chosen for its convenience even though the implementation of the change process to continuous improvement was less than three years old. The other district was chosen because it has been implementing the change process district wide for several years.

The subjects were not randomly selected; therefore to generalize the findings to other teacher and school districts would be inappropriate. However, even though the findings of this study may not be widely generalizable they may be transferable to similar settings. The transferability of the findings is left to the reader's judgment of the applicability or the fit of the findings into his or her context (Erlander, Harris, Skipper & Allen, 1993).

Summary

While the change process in education has been well documented, little has been written to examine teachers' perception of change and the steps for personalizing the process for their own classrooms. This research seeks to determine teacher perceptions of a major classroom change by examining a change process initiated through staff development. The change process caused veteran teachers to shift from traditional classroom practices to the use of continuous improvement processes in the classroom. The key learning to be achieved is to understand what makes teachers want to change their traditional practices and replace them with a different practice. This qualitative study focuses on teacher attitudes and perceptions about change and establishes essential elements needed to facilitate change from the teacher's perspective.

Chapter 2 elaborates the basis of the study with a review of the relevant current and benchmark literature. This literature review includes an examination of the underlining drive for change in the United States. An overview of the change process is also discussed including the teacher's role in the process.

Chapter 3 elaborates the methodology utilized for this study. A brief description of Jenkins' work in the continuous improvement process is also provided to clarify the staff development activity common to the teachers being studied in this research. Chapter 4 explicates the results in individual narrative accounts of the teacher's classroom practices specifically addressing questions relative to this research. Chapter 5 provides an analysis of the data gathered. Chapter 6 offers findings, comments, conclusions, implications and suggestions for further research.

CHAPTER II

LITERATURE REVIEW

Introduction

This study explores teachers' perception of a change initiative. The literature review for this study is divided into two distinct sections. First, in order to better understand the challenge of change for educators, a review of the historical context of reform efforts is outlined. A further examination of a few of the pedagogical changes during this time will emphasize the numerous changes teachers have faced since the early 1950s. Change, as it affects teachers, is also a focus for this chapter.

The second focus of the literature review is to present a framework for examining change based on the work of Caine and Caine(1997b). as outlined in *Education on the Edge of Possibility* The work of Caine and Caine provides a means for examining the instructional and perceptual levels of each teacher. This work is coupled with the transformational cycle of change from the work of Quinn (1996) in his book *Deep Change*. Quinn outlines the cycles of transformational change into four phases coupled with four potential elements of failure for the progression of change. While Quinn's expertise lies in the area of organizational behavior and human resource management his change findings are relevant for education as well. Quinn's work provides a preliminary base for the essential elements outlined in Chapter V's.

Historical Context of Reform

Major Reform Efforts

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights that among

these are life, liberty and the pursuit of happiness. (Jefferson, 1776)

The issue of equality in public education has been a driving factor of school change (Glasser, 1969; English & Hill, 1994; Fullan, 2001; Hawley, 2002). All men or women are not created equally as stated in the Declaration of Independence nor are they provided equal opportunity. This fact is underlined in the reform movements of public education dating back to the early days of the nation. Early nineteenth century school reformers believed that education could reduce social class divisions and eliminate poverty (Spring, 1997). A key factor in an early nineteenth century reform, known as the Infant School movement, was a desire to help the poor and disadvantaged urban children and their parents (Vinovskis, 1999). Infant schools were begun as an attempt to reduce the expenses of welfare and crime. "For every dollar expended on Infant Schools, fifty will probably be saved to the community in the diminution of petty larcenies and the support of paupers and convicts" (Vinovskis, 1999, p. 70). While conflicting views caused the demise of these schools by the beginning of the Civil War, this belief has been restated in many reform initiatives since that time. The development of Head Start programs in 1965 and Even Start programs in 1988 is a reflection of this reform view and a continued indication that all children do not enter school with equal early childhood opportunities (Vinovskis, 1999). Despite the increase in federal funding for early education, children continue to begin school unequally prepared, as indicated by Goal 1 of Goals 2000: All children will start school ready to learn (Ravitch, 1995a).

Equity, or freedom from bias or favoritism, seems to be one call for educating the United States at the turn of the 21st century. According to Cuban (1993) "equity versus

excellence represents a continuous cycle in reform proxies for this culture's fundamental values of individual success and group interests have been dealt with separately, redefined and combined over the last century and a half to history" (p. 137).

The conflicting values of excellence and equity proxies for this culture's fundamental values of individual success and group interests, have been dealt with separately, redefined and combined over the last century and a half to cope with the highly charged emotions and national goals connected to these values. No consensus on which of these values is more or less important or how they can be incorporated easily into public policies involving schools has produced lasting compromises in curricular policymaking (Bacharach, 1990, p. 136).

This battle between excellence and equity is one of the problems facing reform in American schools. Although education reform is often examined with a starting date of the 1957 Sputnik science and math focus or the 1983 report of *A Nation At Risk*, the battle has been waged since the nation's infancy (Spring, 1997; Evers, 1998; Bacharach, 1999; Vinovskis, 1990; Ravitch, 1995a). The reform pendulum of excellence and equity will be examined from the Sputnik crisis for this review of literature.

Excellence Focus: 1957

The success of the Soviet Union's space program in 1957 provided the needed education crisis to reform curriculum (Tyack & Cuban, 1995; Bacharach, 1990). This reform focused the previously criticized high school curriculum into a curriculum designed to increase student performance. Advanced placement courses were introduced to provide increased opportunities for excellence for high performing students. Excellence was the focus of the day. The spirit of education during this time was

nationalistic. It was essential to educate citizens capable of competing with the Soviets on an international plane (Bacharach, 1990).

The solution was a stronger emphasis on science, mathematics and foreign language with a sub focus on the liberal arts. This was a time for high demands on student learning and higher demands on teacher preparation and teacher selection (Spring, 1997). The National Science Foundation (NSF) influence was increased dramatically during this time frame. Congress increased the funding for the foundation to \$134 million, nearly \$100 million more than the previous year. By 1990, NSF appropriations topped 2 billion (National Science Foundation, 1994).

America answered the Soviets with a space launch of its own in January of 1958 and the formation of NASA in October of 1958. Sputnik's success also contributed directly to passage of the National Defense Education Act of 1958, passed in September of 1958. This legislation provided expanded funding for both K-12 and college education (Government Documents Display Clearinghouse, 2001).

Johnson's War on Poverty

The excellence pendulum hit a wall in the early 1960's with Johnson's War on Poverty. An attack on the culture of poverty was begun during the fall of 1963 as a central initiative of the Kennedy administration. When Kennedy was assassinated in November of 1963, Johnson gave approval to continue this program. The report that spurred the War on Poverty was delivered in January of 1964 by Heller, one of the central engineers of the plan. Central to the report were the statements that focused on education and poverty (Tyack & Cuban, 1995; Spring, 1997; Spring, 1993). "The severely handicapping influence of lack of education is clear. The incidence of poverty

drops as educational attainments rise for nonwhites as well as white families at all ages” (Spring, 1997, p. 352).

The underlying desire of the Great Society programs was not an attempt to undermine excellence in education (Tyack & Cuban, 1995). It was a focus on equalizing the playing field. The goal was to redistribute funding more equitably so that proper schooling could eliminate poverty.

During the same time frame increased attention was afforded Civil Rights issues. While *Brown v. the Board of Education* occurred in 1954, the results of the decision were slow to occur (Guttek, 1991). This failure to act drove the movement to turn to the courts and federal government for an answer. The Civil Rights Act in 1964 gave financial power to previous decisions through a denying of federal funding to institutions that discriminated according to race, religion or ethnic origins. In 1965 the Elementary and Secondary Act was passed as a means of providing funding for underprivileged students. Title I, later called Chapter I and currently called Title I was formed in this Act (Spring, 1993).

The Coleman Report of 1966 further fueled the importance of Title I expenditures in schools. This report found that family background was the major determinant of public education (Spring, 1993; Lezotte, 1996). The report was a major influence in the development of compensatory education that dominated the 1960's and 1970's. These programs focused on changing the students' behavior with little effort to change schools (Lezotte).

During the 1960s the National Assessment of Educational Progress (NAEP) testing was authorized by congress. This test is supervised by the National Center for

Educational Statistics. Prior to NAEP the U. S. government had collected data on enrollment, facilities and spending, but not on student learning. Opponents of NAEP feared it would be a forerunner to nationalized curriculum, a national test, and federal control of local schools. During the 1980s the opposition decreased and NAEP was considered the nation's report card (Ravitch, 1995a).

By 1975 college entrance exam scores became a concern. SAT scores had fallen steadily since 1963 (Ravitch, 1995a; Pulliam & Patten, 1999). Verbal scores had dropped on an average of 50 points and mathematic scores had dropped by 40 points. The need for college remediation courses increased dramatically between 1975 and 1980 (Pulliam & Patten, 1999). The drop in SAT scores during this time frame has been attributed to many causes, both educational and non-educational in nature (Bacharach, 1990). However, the cause was not the concern of lawmakers: a change in the trend was necessary.

The United States Department of Education National Commission on Excellence publication of *A Nation at Risk* in 1983 fueled the current drive toward educational change (Temes, 2002). Tyack and Cuban in *Tinkering Toward Utopia* (1995) describe this report as "a fire and brimstone sermon about education" (p.1). It was stated that if change did not occur rapidly it would mean the economic decline of America.

The pendulum had successfully swung to the side of excellence. The new focus was on a back to basics, fundamental education philosophy. President Reagan even proposed a return to old-fashioned discipline in public schools, a far cry from the administrative views espoused in the 1960s and 1970s. The Reagan reforms emphasized a return to state leadership and excellence. Two negative focuses of the reform effort

were an excessive emphasis on top-down management and the neglect of the federal responsibility to provide leadership and funding to ease the serious education problems of the disadvantaged (Bacharach, 1990).

Bush Presidency (1989 -1993)

The Bush presidency infused a variety of reforms into the educational landscape. Bush and the nation's governors developed six national education goals during a summit in 1989. These goals were to be reached nationally by the year 2000 (Ravitch, 1995a). The goals included a push for standards. While the American people agreed that national standards and even a national test were acceptable, politicians did not feel it was the proper time to form a national curriculum (Ravitch, 1995b).

Another push of the Bush administration was the introduction of the New American Schools Development Corporation in July 1991. The goal was to open 535 model schools. The model school program was dominated by large corporations and a formal partnership between education and big business was established. The focus of this reform was to provide well trained workers for business (Spring, 1993; Spring, 1997; Ravitch, 1995a).

Deming, TQM, Baldrige and Education

While businesses had expressed interest in education in the past, the cooperation of business and government in the developing of new schools as demonstrated by the New American Schools Development Corporation takes this interest to a new level. This tie of business and education helped to accelerate the inclusion of the quality movement into the educational setting (Aquayo, 1990).

American business had recently become involved with the quality movement. Known by many different names including, Total Quality Management (TQM), Total

Quality Control (TQC), and Total Quality Leadership (TQL) a number of major corporations had accepted quality initiatives as a way to do business. These new approaches to management were not widely practiced in the United States until the late 1980's; yet they were not new, the roots extended back many decades and its principle profit was Deming (Bonstingl, 1996; Scholtes, 1988).

A statistician by profession, Deming formed many of his theories during World War II when he taught industries how to use statistical methods to improve the quality of military production. When the war ended, American industry turned its attention to meeting the demand for consumer goods. For almost 20 years, there was little significant foreign competition. Costly management practices were prevalent during this period of unparalleled prosperity. Across the Pacific, where 'made in Japan' meant junk, people turned to Deming for help. Deming simply told them to identify what their customers wanted, then study and improve their product design and production processes until the quality of the product was unsurpassed. Deming told the Japanese that they would have people demanding their products within five years. He was wrong; within four years the Japanese had already captured many markets. After leading 45 major industries to quality in Tokyo, Deming returned to the United States (Gabor, 1990; Scholtes, 1988). Deming was brought to the attention of America business when two television journalists went to Japan to determine why they were out producing the United States. They asked Japanese business leaders how they were accomplishing this and the leaders stated, "Dr. Deming taught us how to do it; he lives in Washington D. C., why don't you ask him." They did. The title of the documentary was "If Japan can why can't we." This documentary brought Deming to the attention of America business and he worked with

businesses from 1980 until his death in 1993.

The quality movement received substantial support from the government with the passage of Public Law 100-107 which established the Baldrige Award. The award was named for Malcolm Baldrige. Baldrige was the Secretary of Commerce from 1981 until his death in a rodeo accident in 1987. In 1998 the award was expanded to include education, and school districts that were already applying TQM principles or using the Baldrige Award Criterion began applying for this recognition (Baldrige National Quality Program, 2001).

Clinton and Goals 2000

President Bill Clinton had served on the summit that developed the education goals of 1989. During his bid for the presidency, he repeatedly stated that national standards and a national exam should be developed to measure student achievement. Clinton proposed a bill called Goals 2000 that would serve primarily to advance national standards and assessments. The legislation passed in 1994 and had eight main components. The eight goals focused on: School readiness; school completion; student achievement and citizenship; teacher education and professional development; mathematics and science; adult literacy and lifelong learning; safe, disciplined and alcohol and drug-free schools; and parental participation (Ravitch, 1995a). Simply stated students would be first by 2000 and schools would be performing in an unprecedented fashion. Goals 2000 included a local grant initiative to allow states and districts the opportunity to design their own reform plans (Ravitch 1995b). By the end of Clinton's two terms the goals had not successfully been met.

Bush and No Child Left Behind

Bush stated on his third day in office that education was a top priority of his administration and that his plan would have four priorities. The four priorities are stronger accountability for results, increased flexibility and local control, expanded options for parents, and a stronger emphasis on reading, especially for younger children (Sclafini, 2002). On January 8, 2002, Bush signed the legislation, which is based on previous initiatives into law (Donlevy, 2002). The legislation exceeds 1,100 pages. Only a brief outline of the basic goals is provided in this review.

Accountability is the first priority of the legislation. A statewide accountability system must be based on rigorous state standards in reading and mathematics, annual testing for all students in grades 3-8, and annual statewide progress objectives ensuring that all groups of students reach proficiency within 12 years. Not only are schools required to increase student performance, the requirement is to increase every student's performance. Special education and English Language Learners (ELL) students will be included in the yearly testing. Districts must disaggregate or separate student scores according to poverty, ethnicity, disability, and limited English proficiency. Testing must be provided for every grade level to insure longitudinal data analysis. Failure to meet the set performance guidelines will be met with penalties (No Child Left Behind, 2002).

An increase in state or local control is the second priority of the legislation. States are responsible for determining the yearly testing instrument. States also have a responsibility to ensure that the instrument is rigorous. Flexibility of funding use will be allowed by districts and states that are meeting their accountability goals. These funds may be used to provide after school programs, extra teachers or any other use determined effective for increasing student performance (No Child Left Behind, 2002).

Parents will have the right to move their child from an underachieving Title I school or receive the child's Title I funding to seek corrective measures. Up to 20% of the schools Title I monies are required to be spent to provide school choice or supplemental service to eligible students. Schools that fail to meet their Annual Yearly Progress (AYP) for five years will be considered for restructuring (No Child Left Behind, 2002).

Finally, the legislation proposes that all students will read on grade level by the third grade. Each state is required to submit Reading First State grants clearly outlining how they will meet this goal in order to receive extra federal funding. Districts will then compete for sub grants. One specific goal of this priority is a reduction in the number of students identified as special education students due to a lack of proper reading instruction during early education (No Child Left Behind, 2002).

New Programs and Pedagogical Conflict

While the past 50 years have presented a pendulum of change at the national level, classroom change has afforded even greater turbulence. The various programs presented to teachers for implementation are often based on theories that do not prove to be long lasting. An examination of a few of these programs and their downfall is necessary to understand the problem of change for the classroom teacher.

New Math

In the early 60's, supported by the federal government, a new math was designed. The goal was to better prepare college bound students and the belief was that the best way to teach the subject was to teach its structures and unifying ideas. The idea was at first enthusiastically greeted, but the enthusiasm quickly faded as the subject was introduced into elementary schools and non-college bound classes. Parents and teachers

alike complained that the new math was too formal, too abstract and too theoretical. By the mid 70's the new math was no longer taught and a back to basics math movement was in full swing (Ravitch, 1995a).

Open Classrooms

Spanning the late 1960's to early 1970's the open classroom movement was a return to the progressive theory of education. The concept was much like a one room school house. The movement was considered an interweaving of child liberation and a lever of radical social change. Schools were built without walls during this period with an aim to meet children's educational needs by allowing movement between centers. Centers and team teaching were both present in this form of education (Cuban, 1993). New teachers, who had not been prepared for the open structure, found it difficult to teach while their colleagues were teaching a few yards away. By the end of 1979 there was little formal interest in open classroom teaching. Many of the schools rebuilt walls and returned to the traditional approach of teaching. A few schools are still open in physical design, yet traditional in practice today.

Outcome Based Education (OBE)

Spady (1989) was the early implementer of outcome based education. He stated that "Mastery Learning, Effective Schools and OBE can deliberately intervene and transform the natural impact of family background and aptitude on achievement by restructuring the key conditions of success"(Spady, ,p. 17). Spady's definition of OBE is a focusing and organizing of all of the school's programs and instructional efforts around the clearly defined outcomes students should be able to demonstrate when they leave school. OBE is not considered a program, but a way of doing business that transforms

instruction (Spady). With roots on both the west and east coast, the process survived 15 to 20 years before real problems began.

The OBE pyramid structure presents one paradigm, two purposes, three premises, four principles and five practices. The paradigm was: Whether students learn something well is more important than when they learn it. The two purposes were to (1) to equip all students with the knowledge, competencies, and orientations needed for future success; and (2) implement programs and conditions that maximize learning success for all students. The three basic premises were (1) All students can learn and succeed, (2) schools can control the conditions of education to produce success, and (3) success breeds success. The four principles were; (1) clarity of focus on outcomes of significance; (2) expanded opportunity and support for learning success; (3) high expectations for all to succeed; and (4) design down from the exit outcomes. The five OBE practices were to (1) define outcomes (2) design curriculum (3) deliver instruction (4) document results (5) determine advancement (Spady, 1989).

Close to the end of the positive run of OBE, the original focus was lost to a new message called transformational OBE. This marriage of the affective and cognitive domains created problems for the conservative right wing and ultimately led to many states and districts withdrawing from the process. This problem was coupled with various criticisms concerning the potential lack of rigor in the process. By the mid 90's most districts had abandoned the use of OBE (Johnson, Dupuis, Musial, Hall, & Gollnick; 2002; Ornstein & Levine, 2003; Spring, 1993).

School-To-Work (STW)

During the Clinton presidency the School-to-Work act was passed into law. The

main purpose of school-to-work programs was to provide varied education for all high school students so they could compete in the business world after graduation. Four kinds of curriculum were offered for the secondary student involved in this program: honors college prep courses, non honors college prep courses, pre-baccalaureate/tech-prep to prepare students for two-year postsecondary school and a regular program that prepared students for work-based formal training. Many programs were funded through federal grants. Schools were academically restructured to meet the needs of the program. This bill was passed in 1994. Today the school-to-work federal website states it is no longer operational. Old initiatives do not fade away quietly in the electronic age (School to Work, 1994 ; STW website, 2002).

Whole Language Versus Phonics

A long running pedagogical debate has been waged concerning the best method to teach reading. The pendulum swing is mainly between whole language instruction and phonics instruction. Because reading is fundamental to the education process, educators have given a great deal of thought and debate to how they can best help children learn to read (Rayner, Foorman, Perfetti, Pesetsky & Seidenberg, 2002). Since various studies have placed the number of students failing to learn to read between 20 to 25 percent of the school population, it is easy to see why the debate is heated (Lieberman & Lieberman, 1990).

Whole language proponents, led by Kenneth Goodman, the modern father of Whole Language, believe they have found the way to teach reading that is more enjoyable for the child. A brief description of the method follows. The rules of phonics should not be directly taught. Reading and writing should be integrated so that children understand its

reciprocal relationship. Preschool children need many early literacy experiences in their homes. It is important to build on the language knowledge the child possesses when they enter school. Finally, the act of learning to read, like learning to speak, is a natural progress which children can teach themselves to do by using context clues and trial and error. The child is seeking meaning when reading, not sounds and words (Lieberman & Liberman, 1990; Rayner, Foorman, Perfetti, Pesetsky & Seidenberg, 2002).

Phonics instruction is based on the belief that readers process each letter in detail as they read. Therefore, the ability to sound out words is an essential prerequisite for rapid recognition of sight words. (Rayner, Foorman, Perfetti, Pesetsky & Seidenberg, 2002).

Phonics instruction is a systemic method of sound and letter recognition. The child must understand that each word is formed by the consonants and vowels the alphabet represents. These sounds, combined with specific usage rules, constitute reading instruction. Learning to read is not the natural occurrence of learning to speak. Most children need phonetic instruction to break the code and become fluent readers (Moats, 1999).

This debate is long standing. The two methods are on opposite ends of the continuum. A teacher who is taught one method during teacher preparation courses is often at a loss when they are hired by a district that requires the opposite method.

Conflicting Programs and Change

A definite problem concerning teachers and change is the fact that so many programs are started and then quickly end. After this has occurred several times, the teacher loses confidence in the new change. The wait and see attitude that is so frustrating to administrators and change agents has become prevalent in education because of rapid

program shifts or pedagogical debates.

Professional Development

When new programs or methods are introduced to teachers' training is generally part of the implementation process. Professional development is time consuming and expensive. Most teachers receive between 20 and 40 hours of professional development per year, yet the U. S. Department of Education reports that 85% of teachers receive less than 8 hours of training in one specific area (Temes, 2002). According to Sousa (2001) four conditions must be met to improve performance.

1. The learner must be sufficiently motivated to want to improve performance.
2. The learner must have all the knowledge necessary to understand the different ways that the new knowledge or skill can be applied.
3. The learner must understand how to apply the knowledge to deal with a particular situation.
4. The learner must be able to analyze the results of that application and know what needs to be changed to improve performance in the future. (p. 98)

It seems improbable that less than eight hours of training could lead to the fulfillment of these four steps.

Joyce and Showers (1988) state that without a grounding of theory in a new skill the teacher will not be able to apply the new skills or strategies beyond a superficial manner. The theoretical underpinning provides the deeper understanding necessary to transfer the behavior to multiple settings. When the majority of teachers are receiving less than eight hours of training in a specific area it seems unlikely that the training could lead to this deeper understanding, grounded in theory.

Finally, Fullan (2001) explains that teachers need a substantial amount of help and assistance to implement a new program or process, largely supported by staff development. However, the popular staff development belief is still often reflective of the ‘Three Step Fable’ of staff development. The three steps include:

1. give teachers a box of science equipment and materials
2. provide a half day orientation
3. bid them God speed and good luck (James, Hord & Pratt, 1988, p. 63).

Unfortunately, much staff development still reflects this three step process.

Another problem is that districts implement many different programs in a short period of time. Often multiple programs are introduced in one year, which means limited professional development time which provides sporadic and disconnected training and implementation. There are so many varied innovations and ideas from around the world. The objective is to comprehend the necessity and richness of external knowledge, without becoming victimized by it (Fullan, 2001). In order to best utilize limited amount of training time professional development must be focused toward the goals of the district or school, and teachers must understand those goals. Teachers and their role in change are a very important aspect of educational reform.

Teachers and Their Role in Change

A mission of public schools in America, as indicated by the drive toward high stakes testing and accountability, has been to level the playing field and eliminate the inequities. The expected outcome, as a nation, is to lead the world in the quality of students and workers educated in public schools. The economic future of the nation, it seems, hinges on the success of American schools (Frazier, 1997). It is this charge that

has been a driving force of educational change in the United States. Public schools have been slow to meet the needs of the disenfranchised child (Temes, 2002; English & Hill, 1994). Change is necessary for the improvement of education.

However change may not be the absolute answer to education's problems.

Education has undergone change after change accompanied by subsequent reversal to former practices. Continual changes must be replaced with improvement. Education can no longer afford expensive changes and the ensuing debates over the efficacy of each change (Jenkins, 1997, p. xxi).

By definition change is "to cause to be different or to exchange for or replace with another" (American Heritage, 2000, p. 163). Change does not imply things will be better, just different. The word improve, however, means "to raise to a more desirable or more excellent quality, to make better. Improvement is the act or process of improving" (American Heritage, p. 487).

According to Glasser (1990) in *The Quality School*, teaching may be the most difficult profession in society. One of the inherent problems is that teachers often teach the way they were taught. This return to educational roots makes it difficult for teachers to make dramatic changes or differences in the way they teach. "One of the paradoxes of educational systems is that they are often among the least likely organizations to provide for ongoing learning for their teachers" (Langford & Cleary, 1995, p. 114). This, coupled with resistance to change, can lead to stagnation of the teaching experience and delay the rapid changes that are the desire of the accelerated change movement.

Another difficulty inherent in the teaching profession is the public arena in which it rests. Teacher criticism flows from parents, students, administrators, the media,

community and peers. According to Palmer (1998), “teaching is always done at the dangerous intersection of personal and public life where weaving a web of connectedness feels more like crossing a freeway on foot” (p. 12). This public scrutiny can also lead to resistance to change in teachers.

If lasting change is to occur in education, it must stem from the classroom (Blasé, & Kiry, 1992; Glasser, 1969; Bascia, & Hargreaves, 2000; Katzenmeyer, & Moller, 1996; Hawley, 2002). Change discussion often is formalized through charges of leadership focusing on administration. However, teachers generally lead the largest numbers of people in the school through individual class or a series of class sessions. Classrooms are typically led by a single teacher. Combined the force of teacher influence is staggering and the potential possibility for change springs from that force (Vermont Restructuring Collaborative, 1994).

According to Fullan (2001) "Educational change depends on what teachers do and think, it's as simple and complex as that"(p.15). Fullan (1993) also states that teaching is a moral occupation and that most teachers enter this profession with a desire to make a difference for their students. For change to occur, teachers must connect with their moral purpose while using the skills of a change agent (Fullan, 1993).

Teachers are often left out of the key planning stages of education reform or change. The change is handed to the teacher to perform without any meaningful dialogue expressing why. “Teachers, as the rank and file implementers of change and bureaucrats, as the designers and advocates of change may have very different views on the exigencies of any particular reform” (Bascia & Hargreaves, 2000, p. 112). There should be a connection between the sergeants in the field doing the work of change and the generals

in the office planning the work; there should be some connective dialogue. The war is being fought in the classroom. If the bureaucratic general has not entered this arena in some time, the battlefield will have undergone tremendous transformation during the absence.

The reality, is unfortunately many of these bureaucratic generals have not entered a classroom since their own school days. Even in these situations the lack of opportunity for interaction continues to exist, which presents further problems for the teacher. The teacher does not have the opportunity to think about the change, discuss the change or make a personal commitment to the change before they are expected to produce the change. The teacher cannot think or do without understanding the change. The battle is lost before it is begun. Yet, despite this consistent disconnection, teachers do change practice in classrooms in the United States.

Goodlad and Klein (1970) state that "innovation is not enough, that behind the classroom door, even teachers who think they are implementing an innovation are often only twisting it right back into what they have always done" (p. 72). Again, teacher thought is central to this idea. If the teacher is to make true change, they must understand the innovation or change so deeply that they are cognizant of the pattern of the change itself. Just thought only, it seems is not sufficient. There must be a reflection upon action that leads to deeper contemplation and understanding. This reflection is the "capacity to distance oneself from the highly routinized, depleting, sometimes meaningless activities" which can make up the pattern of school (Barth, 2001, p. 17)

What is not clear is what the teacher perceives his or her role in the change process to be or how a teacher determines that a particular change is worth the external

effort and internal refocus necessary for achievement. Does real teacher change occur more readily if initiated by the teacher or through the direction of administrative mandates? While there is a school of thought that states teacher change must come from pressure and mandates, there is also a counter belief. In *The Constructivist Leader*, Lambert, et al. (2002) address the constructivist view of change: "Schools or organizations change as participants make sense of their work and find challenging possibilities together" (p.52). Teacher change or improvement must come from empowering the teacher.

Fullan and Classroom Change

Fullan (2001) states that there are no 'hard and fast rules, but a set of suggestions' when dealing with educational change. Teachers support is central to the change process and staff development is a necessary ingredient. Four characteristics of change identified by Fullan are need, clarity, complexity and quality or practicality.

Teachers must recognize the need for the proposed change. Fullan states that people often become clearer about their need during the implementation process. In other words, the teacher must begin the change process to recognize the need. Early rewards and concrete success are critical during the initial implementation stages of change.

Clarity of the goals and purpose is also necessary characteristic of change. Teachers should be able to identify the essential features of the change. Without clarity of goals teachers may engage in false clarity and be unable to perceive the actual purpose of the change. "Unclear and unspecified changes can cause great anxiety and frustration to those sincerely trying to implement them" (Fullan, 2001, p. 77).

Complexity of the change for the individuals involved can cause greater difficulty

in implementation of a change. However, complexity of tasks can also lead to greater change because more is attempted. Simple changes may be easier to implement, but they often have little impact, while complex changes promise greater results, but if they fail, also greater frustration.

Quality and practicality of the program is the last consideration of the four characteristics of change as outlined by Fullan. Initiatives that are politically generated often have a short time line between the initiation decision and startup which affect the quality of the change. Larger reform models require greater attention to quality according to Fullan. It is equally important to provide the needed resources to effect the change.

Fullan also discusses the importance of teacher collegiality for the change process. “Significant educational change consists of changes in beliefs, teaching style and materials, which can come about only through a process of personal development in a social context” (Fullan, 2001, p. 124). An overlapping of the assessment of learning, professional learning community and pedagogical practice is presented as an outline of the nature of professional learning communities and the desired environment for educational change.

A Framework for Examining Change

Two Lenses to Inform the Study

Caine and Caine

Two theoretical lenses are used to guide this research of a teacher’s perception of change. First, the work of Caine and Caine (1997a; 1997b) is used to determine the instructional and perceptual levels of each teacher. This is necessary to aid in the final

analysis of the data. Teacher differences in perceptions to change could be attributed to different instructional and perceptual levels of the teacher. An initial evaluation of the teachers using the information garnered from the Caines' research will aid in categorizing teachers according to their instructional levels and will help eliminate potential data bias.

In *Education on the Edge of Possibility* Caine and Caine (1997b) introduce a concept of instructional and perceptual levels to teaching as they related to the transformational change detailed in their study of the implementation of brain-based teaching strategies. This study spanned a four year period and was conducted directly at two sites and indirectly at multiple sites. During this study different levels of instruction and perceptual orientations were outlined. The instructional levels move from:

Level I, a highly organized, teacher driven by obtainment of knowledge

Level II, a mixture of teacher driven and student focused orientation, and finally to

Level III, highly student focused with genuine student interest at the core of the learning experience.

Teacher perception is tied to these three levels of instruction. The perceptual orientations are tied to the instructional approaches and move up the continuum from Level I to Level III. Four qualities or dimensions found in a teacher in Perceptual Level III are:

1. A sense of self-efficacy grounded in authenticity.
2. The ability to build relationships that facilitate self-organization.
3. The ability to see connections between subjects, discipline, and life.
4. The capacity to engage in self-reflection to grow and adapt (Caine & Caine, 1997b, p. 221).

The teacher working from Instructional Level III will have a world view that

encapsulates perceptual Level III but will also be able to work from all other instructional levels.

While these levels of instructional and perceptual change were designed to inform the Caines' research of the potential of brain based teaching, the levels identified through this study are helpful in the research of a teacher's perception of change. It has been assumed that the teachers in this particular study are leaders in their profession and in this particular change as denoted by their selection by their administrators. A framework is necessary to determine the level of instructional capacity the teachers' exhibit. The definitions and outlines presented by the Caines provide the lens for this determination.

Deep Change

A second lens is necessary as the elements of change are considered in this study. While many experts have proposed elements of change, the work of Quinn (1996) is useful for this study because it focuses both on "deep change" and personal change. Quinn's focus of study can be used in the macro view of the whole organization or the micro view of the individual. It is the micro view that is utilized for this study

Quinn (1996) discusses the possibility that one person can change an organization. He describes the transformation cycle of change, which is necessary for deep, lasting change to occur. This cycle is a continuous process of evolution moving through four distinct phases known as: initiation, uncertainty, transformation and routinization. According to Quinn, for an organization to remain healthy it must continually be moving through these four cycles (Quinn, 1996).

There is a corresponding danger prevalent in each of the cycles. These dangers are illusion, panic, exhaustion and stagnation. During the initiation phase of change the

group or individual develops a vision and begins to take the risks associated with change. During this phase the person does not know if the goal is solid or an illusion. If the goal is one that cannot be achieved the person may become trapped in the illusion of change (Quinn, 1996). The phase following illusion is uncertainty. When the person or group moves more solidly into the risks of change he or she will experience some failure and may panic and exit the cycle. The next phase is exhaustion. After working through the frustration phase of change the change can continue through further experimentation and growth. If the change continues the final trap is stagnation. According to Quinn, deep change produces the desire to continually assemble and reframe change theories. The cycle must be repeated.

Quinn's transformational cycle of change is a starting point for this research. The flow of transformation change described in Quinn's work outlines specific phases of the change cycle and potential obstacles and hazards to the journey to deep change. This cycle will be used to inform the study of a teacher's perception to the change process.

Quinn is not a public school educator although he does teach in the MBA and Executive Education Programs at the University of Michigan's School of Business (Quinn, 1996). He is an expert on organizations and management. Yet, his description of change presents possibility for public education systems or organizations as well as business. Quinn's phases of change are the framework used to examining the data collected from teacher interviews, observations and other collections of data in light of the change process. The data analysis is informed by his change model. Similarities and differences are analyzed as the formation of a new change model is determined through this study.

Another aspect of Quinn's work is the three barriers to initiative. These barriers are bureaucratic culture, embedded conflict and personal time constraints. Again these barriers introduce frustrations common to the education setting. The barrier description combined with the change cycle will be utilized throughout the theme development as a comparative lens for the struggles of human change.

The purpose of this research is to explore ten teachers' perception of change. All teachers have implemented the continuous improvement process. The elements of their particular change journey are compared as a means of determining change commonalities. While much has been written concerning change in schools, little has been written from the teacher's perspective. Using the models presented by Caine & Caine (1997b) and Quinn (1996) this research will explore how teachers come to a point of dramatic change and the elements they believe led to their change process.

Summary

Chapter II illustrates some of the major reform models that have continued to influence education the past 50 years. Change, and its effect, both on education and classroom teachers was also a central theme. Caine and Caine and Quinn's lenses were presented as guiding frameworks for the study. The next chapter is an overview of the methodology used to inform this study.

CHAPTER III

METHODOLOGY

The purpose of this study is to explore teachers' perception of educational change. All of the teachers involved in the research have experienced the same staff development training. The research is guided by four research questions: What is it that makes a teacher want to change their traditional practices and replace them with different practices? What are the steps that lead to the change? Are teachers able to create a new classroom environment successfully without administrative support or is leadership key? Is change more successful if the action is mandated or left to the teacher? These questions address teachers' perception of change and the support that encourages change initiatives to become practice.

The Common Staff Development for this Change Study

The focus of this study is a teachers' perspective of a change initiative. The change initiative is the process developed by Jenkins (1997). All of the teachers in this study have had the same basic two-day professional development training as a beginning point for their change. A brief description of the history, underpinning theory and the basic process will inform the reader of the particulars of this change initiative.

During the early nineties, Deming held his one workshop focused on education. Jenkins, a superintendent from California, was in the audience. He studied the principles presented during the four days and continued to seek more information concerning Deming and continuous improvement. He translated this study into a process to improve student learning. During a ten-year period Jenkins continued to serve as a superintendent in districts where the continuous improvement through data process was implemented and

refined by classroom teachers. Interest in this approach spread and Jenkins traveled on a limited schedule consulting while he maintained his position as superintendent. In 1997 his book, *Improving student learning: applying Deming's quality principles in classroom* was published by the American Society for Quality. It was well received and a second edition was published in February, 2003.

The process presented by Jenkins holds unique concepts for educators. The two-day seminar covers a variety of topics which provide the teacher with a theoretical overview and explanation of the process. During the training teachers are provided an opportunity to practice the process, teach the process to each other in small group settings and participate in hands-on experiences providing multiple methods of understanding for participants. An understanding of the staff development is required to inform the reader of the continuous improvement process.

Jenkins' seminar begins with the following overview of the root causes of educational frustration. According to Jenkins, these root causes have been part of the education system and were built into the system before current educators were born. The term root causes is not synonymous with the term causes. The following story is used to provide an explanation for seeking root causes of problems (Vision Production, 2002):

The granite on the Jefferson Memorial was crumbling and it was not crumbling on the other memorials in Washington D. C. A search was begun to determine why this was happening. Workers were asked and replied "We know why, it is because we wash it off more often." The next question was: "Why do you wash it off more." The answer: "It has more bird dung than any of the other memorials." The next question was: "Why does it have more bird dung." The

answer: “It has more birds.” The next question was: “Why does it have more birds?” The answer: “It has more spiders for birds to eat.” The next question was: “Why does it have more spiders?” The answer: “It has more flying insects for the spiders to eat?” The next question was: “Why does it have more flying insects.” The answer: “Because we turn the lights on earlier on the Jefferson Memorial.” So the workers turned the lights on later and the granite stopped crumbling. The logical answer to “why is the Jefferson Memorial crumbling” is not because the lights are turned on earlier. The answer must be founded by asking “why” until the cause is found. It is important to understand the root causes of frustration and develop solutions to these frustrations to bring about the needed changes.

The ten root causes of education and their basic meaning are provided to present an overview of the basic theory supporting Jenkins work.

1. Permission to forget is built into education. Students learn quickly that they have permission to forget. They learn this in first grade. Each week the students are given a new set of words on Monday; they take a test on Friday, and by Saturday have forgotten how to spell the words. One teacher gave her students a spelling test an hour and a half after the first test to disprove this theory. The students had already forgotten how to spell many of the words they had spelled correctly earlier that day. Cramming for the test is a common response to permission to forget.
2. Ranking is the worst decision making tool in education. When used for sports, it is acceptable, since the purpose of an athletic competition is to produce one

winner. Education's goal is to create as many winners as possible. Student ranking occurs daily in public schools through the use of stars on a chart for the most books read, student of the week, awards assemblies and countless other ways. The bell curve is another source of ranking students. When the educational aim is to have grades that resemble a bell curve, ranking is the outcome. The goal should be to have a 'J' curve where all or most of the students know all of the information necessary to succeed.

3. The pendulum is the continual change in the focus of educational instruction. One example is the conflict between teaching to learn basic information to teaching to develop deeper understanding. Trying to determine which of these approaches is best is a pendulum debate. Students need both the basic facts and deeper understanding. All of the available tools should be used to meet the student's needs. The pendulum is generally a quick reaction to a perceived educational failure without examining carefully the true needs. As long as these reactions occur we will not reach the level of instruction necessary to meet the needs of all students.
4. More pressure versus removing barriers is another educational problem according to Jenkins. Most people in positions of power tend to add pressure when there are problems. Most people, who are not in a power position, will add resistance when they are pressured. Status quo is maintained by having the pressure to change equalized by the resistance to change. The solution is for those in control to work to remove the barriers to success.
5. Change, but no improvement. Most often we experience change with out

knowing whether or not improvement has occurred. Sometimes change is like a rocking horse; movement occurs, but no change in results. It is important to know what we want to improve before we implement change. The research must be done to determine what the real education need is before the change occurs. There must be a way to analyze whether improvement has occurred or not. Data is essential for this determination.

6. Experience as the best teacher is what is believed. If experience were the best teacher we would have no more problems. Testing theory is the best teacher. If you have the same experiences every year with no improvement in performance it does not make you better. Example: An assistant principal who serves in this position for five years. During that time the number of student disciplinary referrals never decreases. This assistant principal has had the same experience every year. To improve there must be study to determine an area needing improvement, the generating of a hypothesis, trying the hypothesis and examining of data to determine if the proposed change brought improvement. If it did, it should be added to next years plan.
7. No clear aim. All must understand what the aim is in order to plan and implement successfully. One reason the proverbial 'report card committee' poses such difficulty is we have not agreed first upon the aim of the reporting system. Once the aim is agreed upon we can move ahead. No clear aim is a frequent problem in a district that implements numerous conflicting change strategies in one year.
8. Poor psychology. Educators have been told that it is our responsibility to

motivate the students. It is not our responsibility to motivate them, they were born motivated and enter kindergarten motivated to learn. It is our job to find out what is unmotivating them and stop doing it. We can ask the students and they will tell us which subjects they like and which subjects they don't like and why. Not only should we find out what is unmotivating students we should make the changes necessary to stop it.

9. Always the referee, rarely time to be the coach. Always evaluating and grading the students leaves little time to coach the students. Teaching is not like sports where one person can be the coach and another can be the referee. The ever-present responsibility to evaluate the students overwhelms the heart tug of the teachers to coach their students to higher levels of success. Building coaching time into the schedule paired with times to referee and assign grades addresses this problem.
10. Learning is not the constant, teaching is. It is said you can lead a horse to water, but cannot make him drink, which means I teach but have little impact upon the learning. Teaching is too often the constant in the classroom. Learning should be the constant; teaching should be the variable. There are infinite numbers of ways to learn things, not just one way (Vision Productions, 2002).

The continuous improvement process is intended to build a bridge between the educational design defects of the ten root causes and the solutions to these problems.

A shift in normal operating procedures is required in this process. First, teachers must determine essential facts for each subject taught. These facts have not been

predetermined by Jenkins. The facts that are important are the decision of the district, school or classroom teacher. It is encouraged that the starting point for the facts should be the state and district standards. Jenkins is presenting a process, not a method or pre-scripted approach to teaching.

According to Jenkins (1997):

The most important aspect of measuring information is clearly articulating to students and their parents the information to be learned by a designated time. For example, a second grade teacher can state to her students that they are expected to know how to spell the 1,000 most-often used English words by the end of eighth grade. In second grade they are expected to know how to spell the first 200 words. (p. 37)

Students are randomly tested over the square root of the number of the items listed. This randomized testing continues on a regular basis, usually weekly, throughout the school year. Randomized testing eliminates the opportunity to cram for the test which eliminates the permission to forget cycle. All of the information is important because it can be asked at anytime. As a result of the randomized testing, students review information each week they already know as they preview information that will be presented later during the school year. Through randomized testing students are questioned over materials they have not yet been taught. For this reason no grades are taken for these tests. If a teacher feels he or she must grade the process at the end of the first nine weeks the student should answer 25 percent of the questions correctly to receive a grade of A. At the end of the second nine weeks 50 percent of the questions should be answered correctly to receive an A. This continues with 75 percent for the third nine

weeks and 100 percent by the end of the year. Through preview and review the teacher can continuously determine the information students understand and their areas of weakness. This knowledge allows the teacher to adjust his or her teaching, as necessary to meet the needs of the students. The teacher and students produce charts to track the individual and class progress.

There are three basic charts used in the classroom process: the individual student run chart, the class run chart and the scatter diagram. (See Appendix) The students are responsible for tracking their learning on the student run chart. The class run chart may be maintained either by the teacher or the class. The teacher, to monitor the total class progress while displaying each student's progress in a single chart, uses the scatter diagram. (See Appendix) The teacher continues to teach information sequentially. The teacher also uses a histogram to monitor the class progress through the year. The histogram should be on the left of the chart in an L formation at the beginning of the year. During the middle of the year it should be in bell formation. At the end of the year the histogram should be at the right hand side of the chart in a J formation. This L, to bell, to J represents the regular learning curve of a class when the curriculum and teaching are meeting the expected outcomes.

The end desire of the attainment of essential facts is not a memorization of information, but the development of a common vocabulary that allows the students the opportunity to explore a subject with more depth. The practice of charting data allows the student to track his or her own knowledge growth. For some students charting the number of correct answers is the first time they have seen they are learning. Many teachers have already implemented this process with success in their classrooms (Ayres,

2000; Burgard, 2000; Carson, 2000; Fauss, 2000). This process has been used with students ranging from pre-school through graduate school.

Research Design

This study of a teacher's perspective to change is best suited to the qualitative approach to research. "Qualitative research properly seeks answers to questions by examining various social settings and the individuals who inhabit these settings (Berg, 1998, p. 7). The research questions framed for this study sought to elicit individual response to the larger context of educational change.

The interpretation of the data uses a constructivist epistemology. Lincoln and Guba (1985) equate this stance with the interpretive view. "There is no reality except that created by people as they attempt to make sense of their surroundings" (Guba & Lincoln, 1989, p. 12 -13). All participants of this study were provided multiple opportunities to make sense of the change that has occurred in their particular environment.

This construction of knowledge was enhanced through the theoretical perspective of phenomenology. According to Creswell (1998), "a phenomenological study describes the meaning of the lived experiences for several individuals about a concept or the phenomenon" (p. 51). In this research the phenomenon under study is change from the perspective of the teachers. The phenomenological approach relies on the subject's point of view. While knowledge is being constructed between the subject and the researcher, the constructed knowledge is that of the subject. The researcher acts as a conduit for the description of the experience (Anderson, 1998). The study is informed by both constructivist and phenomenological approaches.

The construction of knowledge was informed through several different research methods. Two separate interviews were conducted. Classroom observations provided an insight to the depth of the inclusion of the new change in the classroom environment. Examination of classroom artifacts also provided an opportunity to observe the depth of the change and the supportive materials provided by administration. The production of a personal change depiction allowed each teacher an opportunity to reflect and introduce a pictorial interpretation of his or her change journey. The formation of a rubric for change informed by their personal change experiences provided the teachers a possibility of determining how they would lead the change process.

All interviews were audio taped and transcribed. The tapes were transcribed as soon as possible with the majority transcribed the same day as the interview. This provided a second opportunity to listen to the interview and the rapidity of transcription presented a clearer memory of the subject's mannerisms and expressions during the interview.

The interviews were coded and analyzed using the protocol described in Miles and Huberman's (1994) *Qualitative Data Analysis*. While Miles and Huberman state that one method of coding is to establish a list of possible codes prior to the research, that method did not seem acceptable for this research. The teacher's perception to change was the desired outcome of the study. It seemed important to remain as free from bias of presupposed views of change as possible. Therefore, the coding process was begun after the first interview was completed. Each line of the interview was numbered and remarks were jotted in the margin of the transcript. These marginal codes were then summarized and themes were noted in each interview. The interview themes were then categorized

using an organizational table for comparison purposes. Each interview was then compared to the other interviews to determine consistent themes across the research. These themes informed the research conclusions. Both the pictorial interpretation of each teacher's change journey and the rubric for change were also coded and change themes were identified.

Site Selection

The two sites were selected for separate, yet equally important reasons. One site is a large urban district. This target population provides a convenience sample due to the proximity of the location. The name of the district was changed in this study to Metroville. The second purposive location is a smaller town in another state. This target population also provides a purposive sample. The name of this district was changed for this study to Townsend.

The choice of the locations for each sample of this study contributed to the development of an understanding that the participants in each site, even though having differing characteristics, have similar perceptions about the change process. The reasons for selecting Townsend was because the district has mandated the change to continuous improvement, has high levels of teacher involvement in the process, has rural demographics as opposed to Metroville's urban demographics and was a location of Jenkins' training for three consecutive years. Even though Metroville was a convenient location, , it was also purposeful for it provided different demographics, the continuous improvement process was not mandated, and the district was involved with Jenkins' staff development for two years. This allowed the researcher to support or refute the view that the teachers had similar perceptions about change. This provided easy identification of

common themes about the change process because the two samples were not homogenous. While the individual teacher was not the focus of the study, various educational settings with a diversity of cultural settings and climates provided a clearer delineation of the themes.

Sample

The principals of the sites helped determine the successful teachers engaged in the change process. The participants were from a group of teachers who had already received training and were fully implementing the procedures in their class setting. The proposed sample was composed of ten teachers. All of the teachers were using the Jenkins process except one. He dropped the process in the fall after the selection of sites and subjects had been determined. He was not dropped from the research because his views of the change experience are valid for this study. Anonymity was assured to all of the respondents of this study. Each participant was provided a letter of introduction explaining the research and an informed consent form (See Appendix). Each participant was informed that there would be no penalty for not participating and that they could drop out of the study at any time. They were assured the research would be conducted ethically. This form provided the participant with an explanation of how they were chosen for the research and the expectations of the research. All participants agreed to the research conditions and signed the consent form. Each teacher has a pseudonym to provide anonymity.

Two separate trips of three days each were necessary for the out of town site. The trips allowed an interview with each teacher during each trip and one classroom observation. The location required the same number of interviews and classroom

observations.

The first interviews in Townsend were conducted in the principal's office for the elementary teachers. The secondary interviews were conducted in the teacher workrooms at both the middle school and high school. These interviews were arranged by the curriculum coordinator for the district. The teachers were made as comfortable as possible. Each interview was audio taped. The same interview questions were used for all teachers (See Appendix C). The interview questions were asked in the same order for each participant. Some differences in the interview flow were expected due to the conversational nature of the interview process. The second Townsend interviews were conducted in the teacher's classroom or a staff lounge except for Marie's interview. A quiet restaurant provided a more casual conversation and a longer interview response than with any other participant. The second set of interviews was arranged through electronic mail correspondence.

All of the Metroville interviews were conducted in the teacher's classroom with the exception of Jean's interviews. Both interviews with Jean were held in a restaurant during lunch, the first on a Saturday, the second during her regular lunch hour. The informal nature of the meal provided ease in the interview process, but the noise level of the restaurant presented difficulty in the transcription of the interview.

During the first interview, a sub topic was consistently present which prompted the creation of two questions for a second interview. The two questions or statements are: (1) How many change initiatives have you experienced during your teaching? (2) If you have had a negative experience to a change discuss what prompted this experience and how you handled it. If you have never experienced a negative reaction to change,

discuss what you have observed from your peers. These questions provided an expansion of learning from the first interview.

Data Analysis

Multiple sources of data were collected through the use of interviews, observations, and the examination of artifacts. During the first interview each teacher developed a personal change journey depiction and described his or her journey with five key words. This depiction was drawn by the teacher in isolation to limit extraneous influence. The change journey depiction was studied and the five words were organized in a matrix to add to the coded phrases from the transcribed interviews. Classroom observations were used to examine the extent of the change process implementation and were a second step of the field protocol. A success indicator rubric was used to aid in this observation (See Appendix). The teachers also examined their own perceptions of the steps for change through the examination and description of a rubric for change designed by each teacher. Comparisons of each teacher's rubric provided one form of data to determine themes of teacher-enacted change. Artifacts were found in each class and were listed in a notebook during the visit. Artifacts that were found in the classrooms include copies of books guiding the implementation of the process, other books describing quality tools or processes, graphing software, teacher generated graphs, rubrics and flowcharts and student generated charts.

Caine and Caine

The lens of Caine and Caine (1997b) was used during the observation, interviews and initial analysis of the research findings as a tool to indicate the teacher's level of change involvement. This lens guided the study to the instructional approach and

perceptual orientation of each subject and provided a starting point for the analysis of data. This theoretical base is a starting point for the data analysis and a prerequisite to the study of the change as process as based on the work of Quinn.

Quinn

The work of Quinn in *Deep Change* (1996) provides a cycle of change. Quinn's work is based on the human aspects of deep change. Each element of change determined through the thematic development of the analysis is compared to the steps in this cycle as a comparison of similarities or differences. Quinn's work is specific to the business arena, not education. However, the personal focus of Quinn's work provides the best lens for research on teacher's perception of change. Another important aspect Quinn brings to the data analysis is the outline of three barriers to change also expressed in his work. These barriers added to the steps in the cycle of change were utilized as a lens for each segment of data analysis. A comparison of the steps Quinn found in his work in business and the cycle of change based on teacher change was a final step to the research.

Role of the Researcher

Denzin and Lincoln (1994) in their *Handbook of qualitative research* state that qualitative researchers stress the social construct of society and the personal connection between the researcher and what is studied. Twenty-four years of service as an educator and familiarity of the education setting informs this research, and also colors the perception of schools, teachers and change in this arena. The focus of the research is the teacher's perception of change. It was important to keep this focus clear during the research in order to offset any possible researcher bias.

Due to personal involvement with the Jenkins process a positive view of the

process is presented. This familiarity with the process provides a common vocabulary that provides an ease in the interview process. It is also possible that this familiarity brings a bias to the study.

Trustworthiness

The main question addressed by the concept of trustworthiness is straightforward, “How can an inquirer persuade his or her audiences that the research findings of an inquiry are worth paying attention to?” (Lincoln & Guba, 1985, p. 290.) Establishing trustworthiness does not ensure that the work is true but provides that the research findings were conducted with acceptable rigor. The set of four criteria established by Lincoln and Guba (1985) for judging trustworthiness in qualitative work that are used in this study are credibility, transferability, dependability and confirmability.

Credibility

Credibility involves establishing that the results of the research are believable from the perspective of the participants in the research (Lincoln & Guba, 1985). Several means of establishing credibility have been established by researchers. Multiple perspectives, data sources and data collection provide strong evidence of credibility. In this study, data was gathered through multiple sources including interviews, teacher designed depictions and observations. These multiple sources provide triangulation of data sources to support and verify the various interpretations (LeCompte, Millroy, & Preissle, 1992).

Lincoln and Guba also propose that it is important to provide a “rich, thick description” of the research so that the boundaries and parameters are well specified, and they advise that the key is a thorough description of the specific setting, circumstances,

subjects, and procedures. This is provided in Chapter IV as a description of each teacher and their personal change account is provided.

Member checking was a final process used in this research. Each teacher was provided a copy of the research with an opportunity to add or remove statements to provide more accuracy and to identify any missing details that were viewed as important by the participants. Each participant was also provided an opportunity to clarify comments from the first interview during the second interview process.

Transferability

Transferability, according to Lincoln and Guba (1985) is primarily the responsibility of the one doing the generalizing. It is the responsibility of the researcher to provide a thorough description of the research context and the assumptions that were essential to the research. Familiarity of the field of education and the Jenkins process allowed a thorough description of the educational setting, the process and the change setting. This knowledge provides information to be used by the reader to determine whether the findings are applicable to a new situation (Lincoln & Guba, 1985).

Dependability

For a study to be dependable both the process and the product of the work should be available for review of consistency (Lincoln & Guba, 1985). Dependability provides a roadmap for replication. For this study, all materials gathered, transcribed interviews, audio tapes and tools were organized for future use. A folder was prepared for each teacher in order to organize artifacts gathered during the field work. All coded materials were also stored in this research box.

Confirmability

A chain of evidence should be provided to indicate that the researcher's conclusions are supported by the data (Lincoln & Guba, 1985). Repeated use of quotes and teacher developed documents are presented contribute to confirmability. This use of data provides the reader a clear view of the data used to reach the conclusions of the study.

Summary

The purpose of this study is to examine a classroom change process initiated through staff development from the perspective of the teacher. The research question is: What is it that makes a teacher want to change their traditional practices and replace them with the Jenkins' continuous improvement process? The use of interviews allowed the teachers the opportunity to explore and express their personal change experience. This data informs the educational process and contribute to the knowledge base in education. Chapter IV presents a description of the individual teachers. Chapter V presents the analysis of data and the themes and new model of change that emerged through this research. Chapter VI focuses on both the summary and discussion of the research and provides recommendation for practice for both administrators and teachers.

CHAPTER IV

A RICH DESCRIPTION OF THE SAMPLE

The purpose of Chapter IV is to provide a description of the sample used in this qualitative research study. Since the individual teacher is the catalyst to the change process it is important to provide a brief background of each teacher to aid in the understanding of the composite data. This detailed description is an essential component of trustworthiness in this study.

Each teachers' change journey depiction is found in this chapter. The picture coupled with the teachers' explanation of their change provides a springboard for the data analysis found in Chapter V and the research conclusions found in Chapter VI.

District Profiles

This research was conducted in two separate districts located 900 miles and three states from each other. Even though this research is not a case study by research design, descriptions of each district are provided to inform the reader. There are only a few similarities found between the districts. Both districts are in the business of educating students. Both are run by an elected Board of Education. State and national mandates guide both districts in the criteria for educational programming. Each of the districts and all of the participants in the research were given pseudonyms in order to ensure individual and corporate privacy.

Townsend School District

Townsend is a community of 6,500 people. Main Street is lined with lovely turn of the 20th century homes. Smaller dwellings are found on multiple side-streets. Most of the homes are neatly appointed and pride of ownership is apparent. The Townsend

school mascot can be seen in the window dressings of some merchants' displays. The population is 96.9 percent Caucasian with the remaining 3.1 percent of the population distributed among five different ethnicities. Unemployment is low; the median income is \$38,280. This information was found on the Townsend website.

The current superintendent of Townsend has served in this post for 23 years. A strong figure in the community, an opinion of his job performance can be gained from the average citizen, and the opinion is 'He is doing a great job.' Aided by an assistant superintendent and curriculum coordinator, there is a strong bond felt between central office administration and schools as expressed by the teacher sample for this research. One teacher stated, "Administratively I have support, 100%, to try anything, from the superintendent to the board, to my principal; they are very, very supportive". Another teacher added, "Central office support has been 100% from the beginning. They came over and helped and there were supplies that I needed and I got them and I still do, anything that I need is fair game and I am not afraid to ask".

There are four schools in this district: a lower elementary, intermediate elementary, middle school, and high school. Each school is beautifully maintained and teacher resources seem to be equitably distributed. All teachers have a phone and computer in their room. Evidence of the continuous improvement process can be seen in the halls of the two elementary schools and the middle school. Graphs are located on the walls in the hall for each grade level. These graphs denote student progress during the year in all of the core subjects. The presence of the graphs in the hall is a reinforcement of site based administrative support for the change. There are no grade total charts located in the halls of the high school, but there are charts evident in some of the classes.

The intermediate school has a video monitor stationed at the entrance of the school that continually loops announcements and school performance results, via graphing.

While the student population is homogenous in ethnicity the student's learning needs are not homogenous. Teaching must be designed to meet a number of educational challenges. Special education students are mainstreamed for the majority of the day. All of the teachers in the sample have two or three special education students in their classes, some with severe disabilities.

The continuous improvement process was initiated three years ago. It is now required that every teacher record at least one subject in graph form. Training has been continuous. Each year Jenkins returns and works with the faculty in large group, small group and individual settings. Each teacher has received a copy of his book. A software program designed to aid graph production is loaded on every computer. The software provides ample opportunity to disaggregate data and has numerous chart choices.

Metroville School District

In sharp contrast, Metroville is a large, sprawling urban district with a population of over half a million. Schools are too numerous to connect by one mascot or theme. Each elementary school feeds into several middle schools, each middle school feeds into several high schools creating a challenge for smooth transition between the sites. School sites are basically older and in need of serious renovation. Schools are site based, but not autonomous in their decision making. The district influences many of the major decisions, while school administrators are allowed the opportunity to choose some professional development activities for their teachers and some budgetary decisions.

A maze of top administration oversees the district programs. Superintendents

have short tenure with the last four superintendents serving less than three years each. With every change in administration a shift in program focus occurs. Administrative leaders are continually changing programs and piloting new approaches in hope of reaching all of the students' various educational needs. None of the teachers in the study expressed central office administration as key to their change process.

Metroville educates a diverse population representing over 50 native languages. The population is 37.8% African American, 31.9% White, 22.0% Hispanic, 5.5% Native American and 2.8% Asian. The poverty rate is high. Over two-thirds of the schools have 70% free and reduced lunch. More than one out of six of the students in the district receive special education services. Special education student needs are met both through inclusion and with special classes designed for the student's specific needs. This data was collected from the district website.

Continuous improvement was introduced through a district grant in the 2000-2001 school year. All sixth grade teachers received training as well as an assistant principal for each of the middle school sites. Although the training was mandated for these educators, there was no mandate or district directive to implement the process. During the 2001-2002 school year the training was continued again through grant funding. All principals in the district were invited to participate in the two-day training that occurred one week per month. The training was open to all teachers whose principals chose to participate. Thirty-five sites took advantage of the training and 10 sites indicated they would train all of their teachers and implement the process building-wide. All sites received Jenkins book and supporting software during the training process. A pilot program was developed for the 2002-2003 school year that would provide school wide implementation

at seven sites. When the grant funding ended in the summer of 2002, support from central office also ended. A shift in administration focus resulted in the end of the planned pilot program and training opportunities.

Individual Teacher Profiles

It is safe to say that the teachers in this study are considered masters at their craft by their administrators. Over half of the teachers are contributors to their field in some manner, generally through writing or staff development presentations. Townsend participants were chosen after a brief conversation with the superintendent during a meeting at a conference. Aware that his district was using the continuous improvement process, the question of interviewing five teachers about their change perceptions was greeted with a positive response. A couple of electronic mails and one telephone call yielded five teachers, one from each site with two from the intermediate elementary. Site administrators chose the teachers and the first research visit was organized by the curriculum coordinator.

Metroville teachers had been recognized during the 2001-2002 school year as district leaders in the continuous improvement process. Principals aided the district grant office in denoting these leaders for a special project aimed to disseminate the process and highlight the improvements noted in the classrooms due to implementation. When identified, all of the teachers were actively embracing the process and were outspoken about their support. The five participants were all actively using the process in the fall of 2002. By the beginning of the teacher interviews one had dropped the Jenkins process. This participant was not dropped from the research group since he had been involved in the change and his views were still considered important to the research. Following is a

description of each teacher and their visual description of the change process.

Townsend Individual Teachers

Classroom Observations and Change Journey Depiction

Marie.

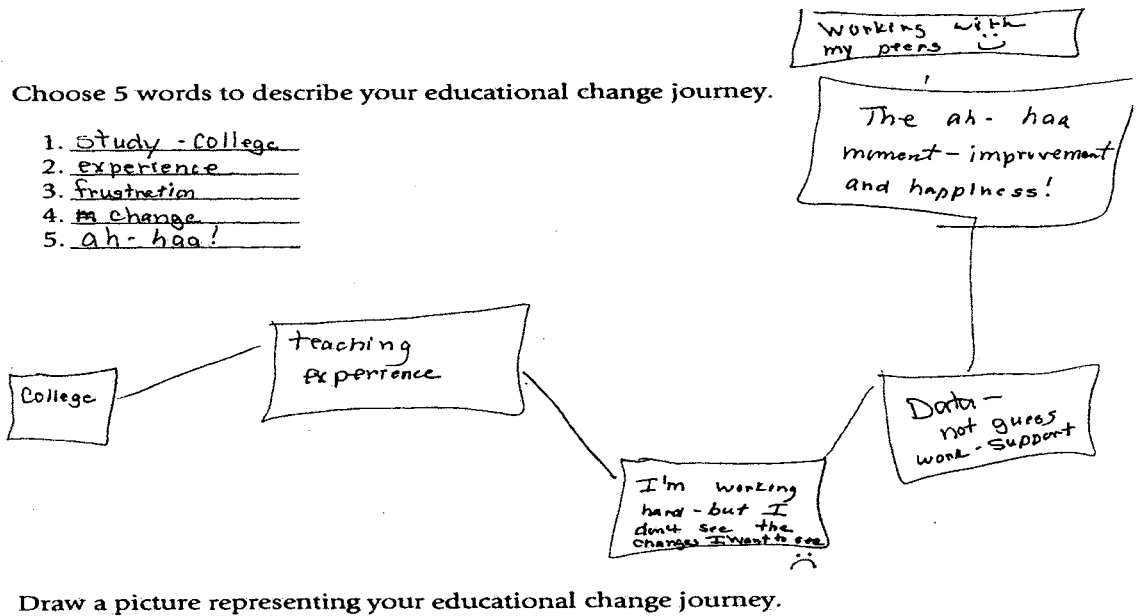
With 26 years of experience, Marie displays none of the clichés attributed to older teachers. Upon entering Marie's class she was found sitting on the floor surrounded by her students. As Marie taught her lesson it was pure art. Science, reading and language arts were flawlessly integrated in the observed lesson. Study skill development and test taking skills were also reinforced. Marie has worked in three districts in two different states. While she is a second grade teacher at this time, she has also taught first grade, kindergarten and a combination first and second grade class during her tenure as a teacher.

When Marie was asked to describe her educational change journey she shared the following points listed below. Marie described her change journey with five words: (a) study; (b) experience; (c) frustration; (d) change; (e) ah-haa! Marie shared the following comments about her change journey.

I guess the starting point would be when I was attending college to become a teacher. That was my study. Then, I went into my classroom for my teaching experience and I felt like maybe I was not really that together yet. I was feeling probably frustration because I was working very, very hard, but I was not seeing the change that I wanted to see. Then just very recently, using the 'datanotquesswork' and the support, I think those two things have to go together, support and the work. And we talked about the 'ah-haa' moments, and 'ah-haa'

this is starting to work and I was seeing lots of nice improvements and happiness on the part of myself and my students. I guess the key to all of it is that you have got to have a support group and I am finding that through the gals that I work with on a regular basis everyday as we are planning together and looking at our results and readjusting constantly. That is what is making it work. And then we have plans from last year and we keep those and we are planning for the next year. We are always making changes, trying to adapt to our students needs and make it better.

Figure 1 Change journey depiction for Marie



Diane.

Across town and five minutes away Diane teaches third grade. With 22 years of teaching experience she has taught remedial reading, remedial math, a readiness class, music, learning disabilities (LD), and third grade. Like Marie she is a master at her craft. About fifteen minutes after class begun the students were told to get into their discussion groups. They were to discuss a chapter of the book *Stone Fox*. One group began to

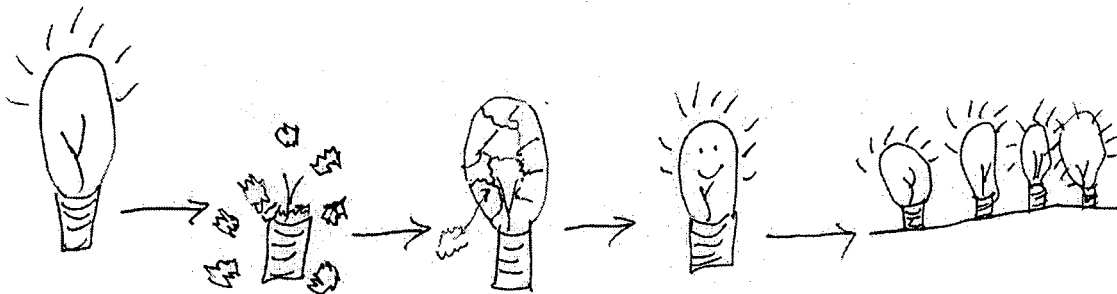
speak very loudly shortly after the beginning of the group work. Expecting to see a fight, a heated discussion about points of the book was seen instead. All of the students were discussing the book, with quotes, questions and page numbers to support their conclusions written on the previous night's assignment sheet. All of the students performed beautifully whether Diane was monitoring their group or not.

Diane's change journey was reflected with the words: (a) change information; (b) tried/failed; (c) trained; (d) success; and (e) looking for other ways to improve.

Figure 2 Change journey depiction for Diane

Choose 5 words to describe your educational change journey.

1. Change information
2. tried / failed
3. trained
4. success
5. looking for other ways to improve



Draw a picture representing your educational change journey.

Diane's description of her change journey follows.

I really feel like I was very content with what was going on and then as far as what I was doing educationally. I thought I was on the right track and things were going well. When I went to see the school and saw this (continuous improvement) being used by another school it was like a little light bulb came on.

So that is why I drew a picture of the light bulb. When I came back and tried it my light bulb burst, because I just really...., what I tried to do just really failed. It was very frustrating and it was because I didn't have the training. And then, I was fortunate enough that the training came and I was able to put the pieces of my light bulb together and then I did see success. So that is why I have the whole light bulb with the smiley face. And then I have my string of Christmas lights because looking at the future, one idea leads to another and another.

Sue.

Down the hall, Sue was conducting class with her 21 fourth graders. "This is the smallest class I have had and I really enjoy the opportunity to have more time for each individual student" she explained. A five year veteran, she was the library instructional assistant before she started teaching. All of her experience has been in the same building. She has taught first, third and fourth grade. Sue was the most uncomfortable of the teachers with the interview process of the research. None of that uncertainty was visible in the classroom. She was sure of her purpose. With a quiet patience she moved from group to group as they worked on their reading assignments.

Sue's change journey was reflected by the words: (a) starting; (b) thinking; (c) trying; (d) changing; and (e) learning. She discussed her change journey in the following manner.

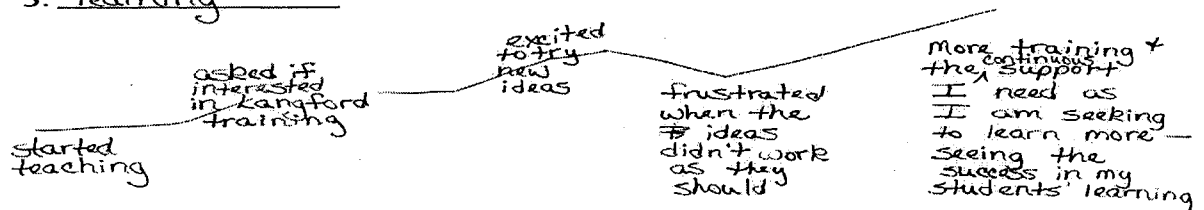
I started teaching and this opportunity was open to everybody and they just asked if I would be interested in having the training. Some administrators came back with some of the ideas that were presented there so I decided to go. I came back and was excited to try the ideas. There were a lot of different ideas and even

though I had only been teaching one year it was a change in my thinking, a lot of light bulbs clicked on when I went to the first training. Then, I became frustrated when I came back all excited and the ideas didn't work as they should and I didn't have the support to turn to and I went into the valley of despair and that was kind of a frustrating time. Then, more training was continuously offered and I had the support now that I needed and encouragement as I am trying to learn more and I am seeing the success of my students, which keeps me on a high too. I have had several opportunities to train with Dr. Jenkins and every time he comes he challenges my thinking some more, and every time he comes he charges me in a different way. I have the chance to ask him questions and he always makes me think about some things I have never thought of before and things that I am changing in the room. I think it is crucial that you have the continuous support because you can't just go to one training and then like the first one I went to I tried and then I got into the valley of despair and I didn't know anybody to help me out of it. But with him continually coming back it really, really helps.

Figure 3 Change journey depiction for Sue

Choose 5 words to describe your educational change journey.

1. starting
2. thinking
3. trying
4. changing
5. learning



Draw a picture representing your educational change journey.

Mike.

Mike has been a teacher for three years. He was a student of Townsend and many of the current Townsend teachers were once his teacher. After his first year of teaching in a neighboring district, Mike was pleased to return to Townsend. First year mentor advice from his previous school had been to ‘worksheet the students to death’. Mike knew that if he stayed in that environment he would become a ‘traditional’ teacher and that was the one thing he never wants to become. Since his move to Townsend he has been trained in the continuous improvement process. He stated it is the only way he knows how to teach.

Mike used the following five words to explain his change journey: (a) scared; (b) falling back; (c) curious; (d) decision time; and (e) moving forward.

Mike tells his story this way.

I started with scared because when I first started teaching my first year, it seemed like I was very scared and I didn’t know if I was doing well. There is no real way to know. And where I was you go home and that is it. So that is what the squiggly line means. [He was asked if he had a mentor.] Yeah, they have a mentoring program, but where I was the mentor actually told me to just worksheet them to death, so I didn’t want to listen to him too much, because I knew that wasn’t what I wanted to do. I definitely knew that, and so we never really talked that much. I mean we were cordial and we said ‘hi’ and ‘bye’ and that was it. He did what he had to do and I did what I had to do. So that is when I actually started talking with my principal here and we talked about education whenever we were with each other. I would get some feelings off of my chest and we would talk

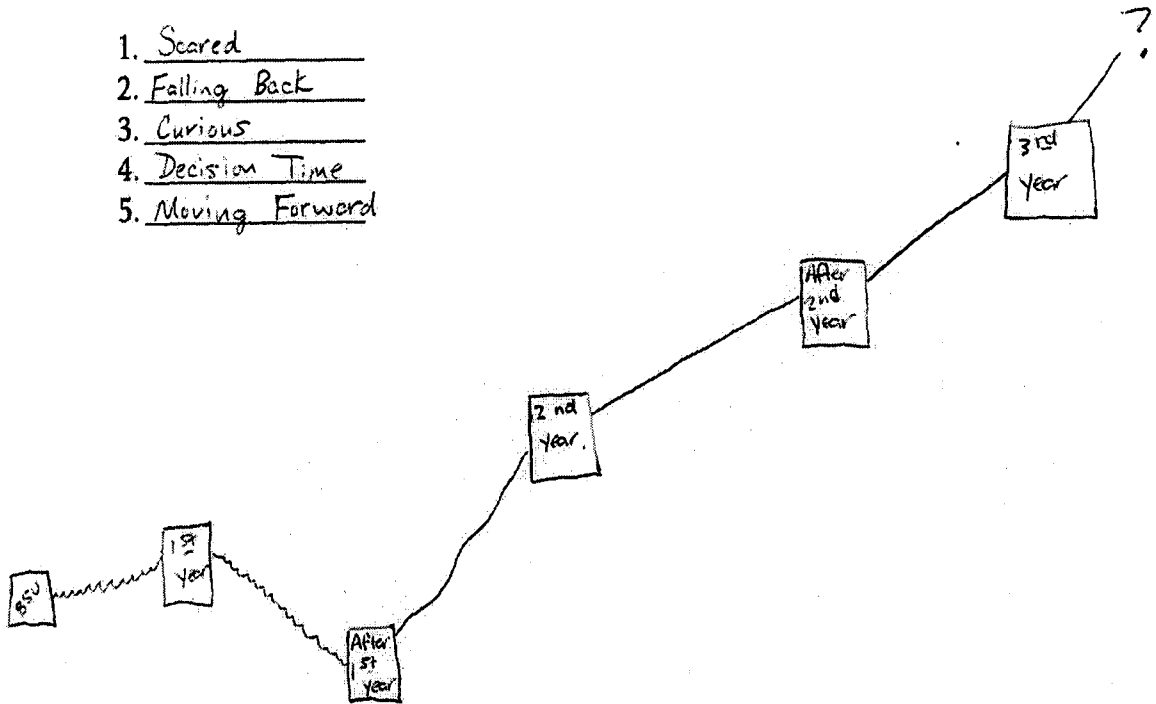
about some of the things they were going through and so that is what falling back is, because it was kind of scary you know as far as here at the beginning of my first year and then falling down after my first year. It just felt like OK now as far as my educational change, you know I could have been very comfortable there. You know as far as being very traditional, worksheet them to death, go home, and live my life you know and you know, not feel remorse about it. I could have been real comfortable, but I knew I didn't want to, not at such an early age. So that was falling back into my traditional ways. Curiosity was talking to my current principal about some things and him giving me a little hope that there is something out there that could help me, and so after my first year, I came here and I felt like there was a big change and I still wasn't very sure about it and that's why the line isn't so straight because I wasn't very sure. I knew this was right, but still I was just curious and didn't know too much. That was at the beginning of last year. Then I did some training, they had me do some training, which helped me mentally as far as knowing I could be a really good teacher. If they believed in me enough to have me do this training, somebody had to believe in me, so I started believing in myself, very, very much. So after my second year I am very high about that and my third year I just kept on going and that is why my lines are not so squiggly and I am in this process right here and I feel much better that I did after last year and where it goes nobody knows. Decision time was actually moving from the old school to here, because I could have lived there and by their standard, what I was doing was great for them, if I was doing it here it wouldn't be great. And I knew that was something I didn't want to do, because I

wasn't seeing any results. So that was a big decision. That was really stepping outside. And it wasn't a hard decision, but it was the biggest decision I have had so far in my short professional career. And when I came here, they started giving me training in continuous improvement in the first three months.

Figure 4 Change journey depiction for Mike

Choose 5 words to describe your educational change journey.

1. Scared
2. Falling Back
3. Curious
4. Decision Time
5. Moving Forward



Draw a picture representing your educational change journey.

Cindy.

Cindy is the veteran teacher of the district in the quality change initiative.

Midway in her second year of teaching, a group of administrators attended a David Langford conference. Only one teacher was invited to accompany the group. Cindy was the teacher. Immediately she saw the practical application of this procedure for her classroom. On the way back from the training she stated she remembered all of these

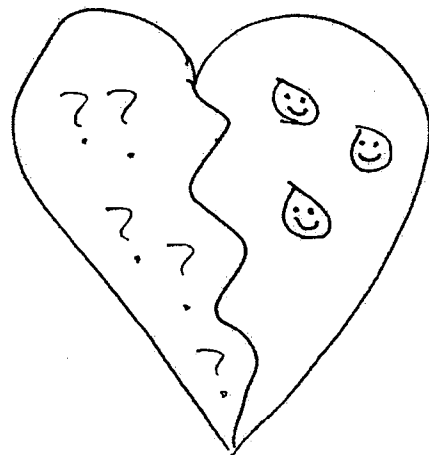
ideas racing through her head and she asked the superintendent how soon she could start implementing what she saw. He replied she could start tomorrow. She has been involved in the process for the past 6 ½ years. “Langford gave me the tools and I thought the tools were great, it gave me direction. Jenkins is the one who was able to put graphs and data into my hands and justify that what I was doing is OK.”

The five words Cindy used to describe her change journey were: (a) confusion; (b) introduction; (c) knowledge; (d) practice; and (e) continue to grow. Cindy drew this pictorial depiction of her change journey.

Figure 5 Change journey depiction for Cindy

Choose 5 words to describe your educational change journey.

1. Confusion
2. introduction
3. Knowledge
4. practice
5. Continue to grow



Draw a picture representing your educational change journey.

Cindy elaborated on the steps of her change journey in the following manner.

OK. I guess my first step in the change was confusion, because I felt as if in my heart, I knew what I wanted to do, and I knew what was right for kids and I knew that I had to involve all kids, but no matter how hard I tried to step out of my comfort zone, I didn't have all of the tools and information I needed. And then it wouldn't go successfully and then I would know, I would think I can't do this, this is why people teach the way they do because you can't step outside of this boundary and try these things. When I had an introduction to David Langford and some knowledge I could bring back, I was able to practice it in my classroom and have the support of the administrators and if I failed I could come and cry on their shoulders and they would offer help or if they didn't know the answers they got me in contact with people that did know the answers and could help and now I continue to grow, I think every day, I continue to grow and learn. And then this is my heart, and I started out with tons and tons of questions and now that I feel my students are happier in my classroom, they are learning more in my classroom. I don't think my students see me as a friend, I think that they just see me as somebody who can help them on their journey and they are not afraid to talk in class, they are not afraid to ask questions, and they are not afraid to come to me. [She was asked to explain the meaning of the line in the middle of the heart.] Because for a long time during my journey, I think my heart was broken between what was right and what was wrong. And knowing in my heart what was right and what was wrong and still to this day I go home and sometimes I think today was a success and other days I go home and I think, 'Oh my gosh, that really

flopped and the kids didn't get it and I let them down and I didn't listen to them.' A lot of times when that happens it is because I didn't listen to them, because they had this idea and I said. 'No, we are not going to do that,' and I don't know if they purposely don't get the concept because they didn't get to do it their way or if they really...but I go home and my husband is very supportive about it and he will say what went wrong and I tell him and he said did you ask the kids and he is always very good about asking me. When I want to throw in the towel he will ask, did you ask the kids or did you talk to the kids because he understands the foundation of it too.

Metroville Individual Teachers

Classroom Observations and Change Journey Depiction

Tom.

While all of the schools in Townsend were fairly similar in appearance, the schools in Metroville vary considerably. Tom teaches in a middle school that was built in 1930. Despite the age of the building, great care has been taken to improve the interior and exterior of the building. The plantings surrounding the building were part of a beautification grant from the city. Inside, student created murals, black painted lockers and silk plants give the building the appearance that the faculty and administration care about the students.

Tom's room is located on the second floor of the building. His subject area is math. He was the first teacher of this faculty to embrace the continuous improvement process. It was partially his students' enthusiasm that led other teachers to consider the process.

Determined to continue improving his classroom, Tom requested, and was allowed to add an Algebra class for all of the 8th grade students for the current school year. He found new algebra books at the district warehouse and worked during the summer to organize for this curricular change. The change was implemented the first day of classes during the 2002-2003 school year.

During the beginning of the year he taught Algebra and used the continuous improvement tools simultaneously. Toward the end of October he dropped the continuous improvement process. The reasons for discontinuing the process were time and a concern about the validity of the process for his subject. While he stated students enjoyed the process and he could see growth, he was not convinced that the growth was worth the time investment.

Tom's five words to describe his change included: (a) problem; (b) investigate; (c) plan; (d) try; and (e) evaluate.

Tom shared the following story about his change journey.

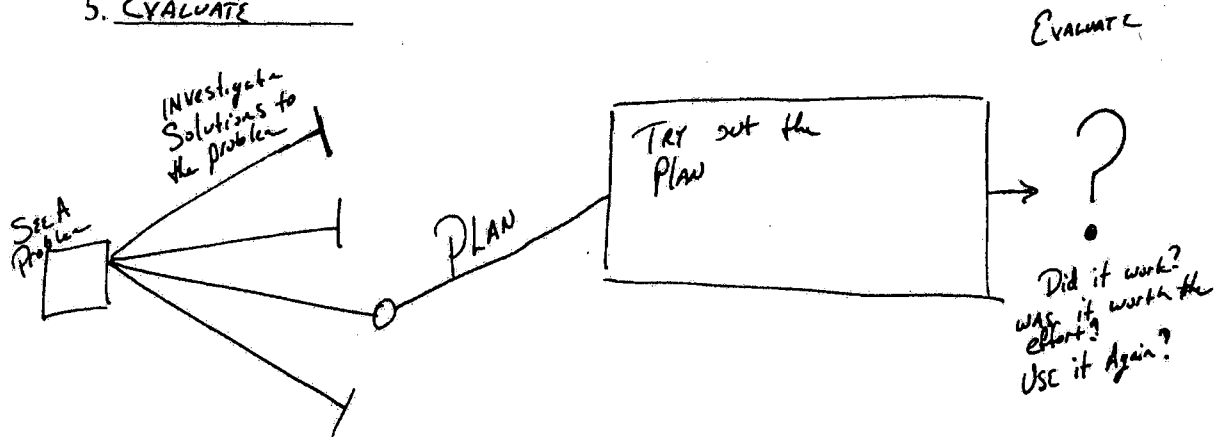
First of all you have a problem that you want to fix. You see a problem and you want to change it, that's where it starts out. Then, you investigate solutions to the problem, and I have a lot of different paths coming out because there are a lot of things that you could do and then you have to chose one and come up with a plan of how you are going to use that solution. Right here is a big box for trying out the plan; give it enough time for trying out because that is where, that is really where a lot of the work comes in and at the end a question mark and just evaluate. Did everything work like you want it to, was it worth the effort, would you use it again. That is my drawing.

Tom drew the following depiction of his change journey.

Figure 6 Change journey depiction for Tom

Choose 5 words to describe your educational change journey.

1. Problem
2. INVESTIGATE
3. PLAN
4. TRY
5. EVALUATE



Draw a picture representing your educational change journey.

Jim.

Jim's classroom is located next door to Tom's, yet the rooms are very different in appearance. While Tom's room was a standard classroom, Jim's room was previously a vocal music room. The 3 foot tiered risers are still present and take up over half of the room. Jim began his teaching career in the high school environment; however, he very quickly realized he was better suited to middle school teaching. He has taught math and social studies. Jim generously sprinkled humor throughout his teaching and his concern for his students was palpable.

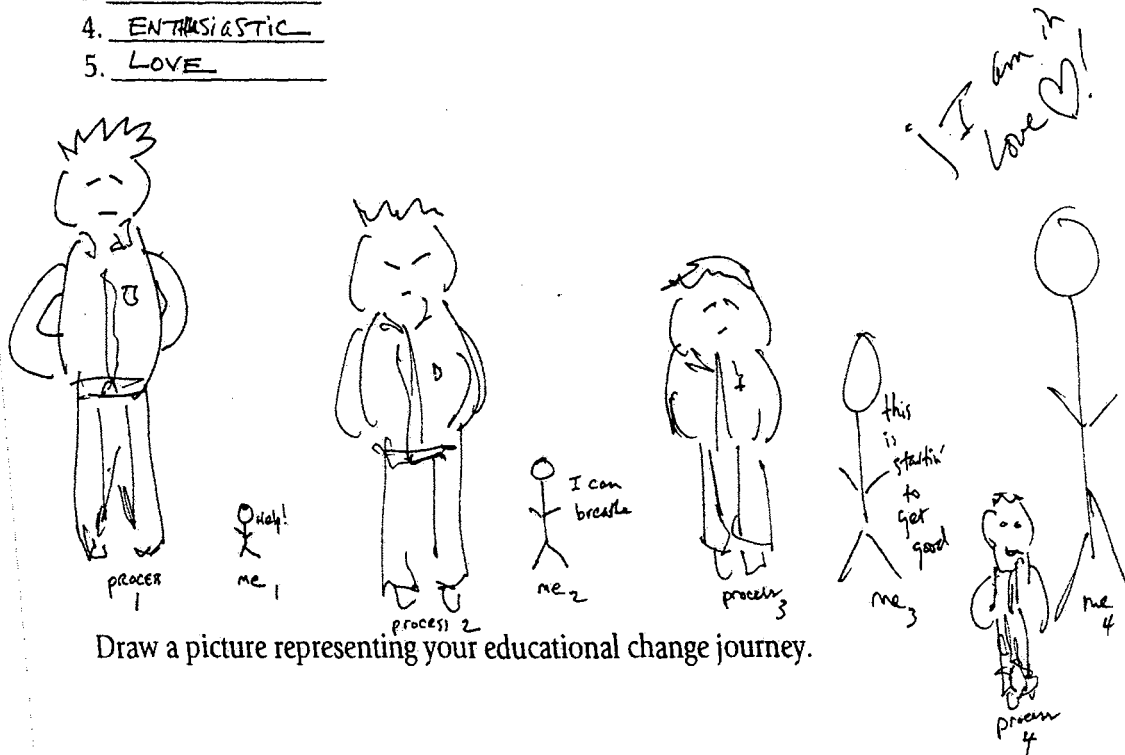
The five words Jim used to explain his change journey include: (a) stressful; (b)

lost; (c) encouraged; (d) enthusiastic; and (e) love. Jim drew this pictorial depiction of her change journey.

Figure 7 Change journey depiction for Jim

Choose 5 words to describe your educational change journey.

1. STRESSFUL
2. LOST
3. ENCOURAGED
4. ENTHUSIASTIC
5. LOVE



Draw a picture representing your educational change journey.

Jim shared his change journey with the following story.

Well, my change journey is that the process is a giant and I am a little, tiny, itty, bitty, tiny, itty, bitty, tiny, itty bitty. And then the process shrinks down and I feel a little bigger as it gets a little smaller and it seems a little bit less menacing. And I can finally breath a little bit and beyond the blades of grass there. And then, the process gets even smaller and doesn't seem to be quite as scary, even the look on the processes face is softening up a little bit. And I am getting a lot bigger and I

am starting to think that this is getting good and in the fourth the process just becomes, actually I should have made myself not quite so big, the process is about the size of myself and I love it. [He was asked to tell me a little more about the stressful] It is stressful because I like to be in control. And when I lose control I get scared and so I either make a decision not to do it or to do it. And if I start doing it I feel lost and it feels terrible and you just feel like you are lost. I don't like to feel that way. And then I have a kind of break through experience where I can see either that it is an ah- haa experience or I see some things improving or it might be a situation where things get easier because I am more practiced about it. And when that happens I get a little more enthusiasm inside of me and I keep doing it and it keeps getting better and I put more of myself into it because I am not quite as lost and I can incorporate myself better and then I am back in control.

Rachel and Tara.

It is impossible to discuss Rachel without mentioning Tara. The two teachers team teach 5th grade. Both have taught 10 years and they received their teacher education from the same university. Their classrooms have been very nontraditional since a fire the previous year caused a move to a neighborhood church. Their classes are held in Sunday School classrooms. The size of both of the teachers' rooms is about half the size of a normal classroom. It is estimated it will be another two years before they move back into a school building. Rachel teaches Science in three sections during the morning while Tara teaches Social Studies. A third teacher teaches Math. In the afternoon each teaches English, reading and writing to their homeroom class.

Rachel.

Rachel received her continuous improvement training when she was teaching sixth grade. All sixth grade teachers in the district were trained. Her sixth grade team worked independently and their implementation of the process was varied. Upon her return to fifth grade she was paired with Tara. Rachel shared the process with Tara and they implemented the process as a team. Rachel is a Nationally Board Certified Teacher. Over half of Rachel's class consists of Hispanic students, many struggling with language difficulties.

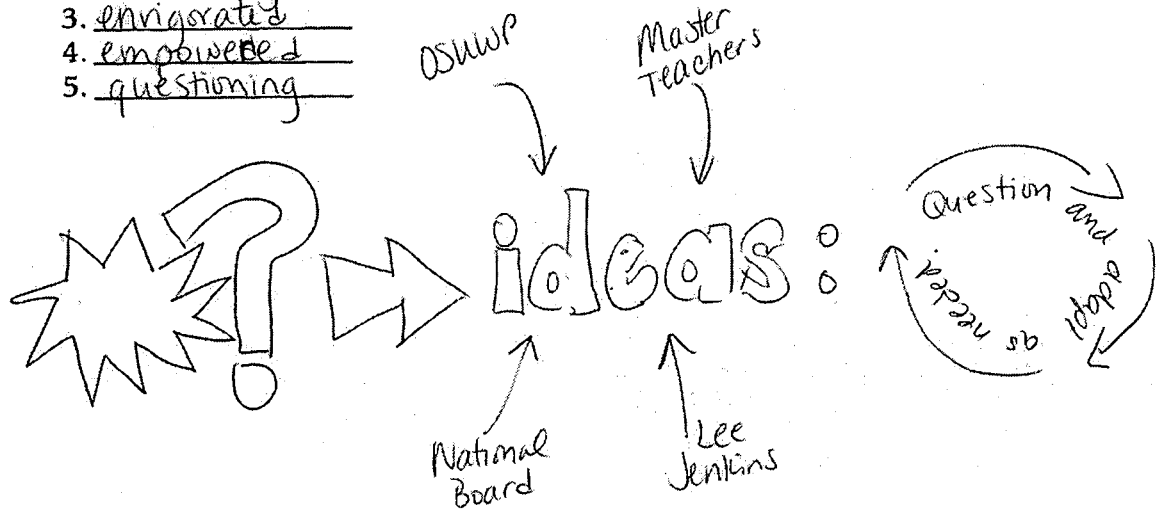
When using five words to describe her change journey Rachel listed: (a) frustration; (b) need to grow; (c) invigorated; (d) empowered; and (e) questioning. Rachel's account of her change journey follows.

The five words I picked were frustration; I think if anything can make me change it is frustration, or a need to grow. Sometimes I look back and I am pretty satisfied with everything except for this one thing, so I am going to go out and seek out something to make me better and so I will go there. So, one of those two things is going to force me to change. Once I find something that will help me get ideas, I generally get training. And I say I am ready, I am prepared, I have met enough people to network with that if I lose it I can always go and find them and get help, and I am feeling empowered. And then, again, once I get where I like it and I am really settled in then I am always asking myself, OK how can I make it better, how can I improve it and so that is what this represents, here is my frustration and my need to grow, followed by my ideas that I gather from other places and then once I have those ideas I question and adapt it, how can I use it to make it the best it can be.

Figure 8 Change journey depiction for Rachel

Choose 5 words to describe your educational change journey.

1. frustration
2. need to grow
3. energized
4. empowered
5. questioning



Draw a picture representing your educational change journey.

Tara.

Tara is also a Nationally Board Certified Teacher. She learned the continuous improvement process from Rachel.

I did it backwards. Rachel had gone to the training and used continuous improvement for a couple of years. Then she and I were teaching together and I just took off from where she was, but I hadn't been to the training. I was talked into doing the training, and it filled in some blanks. But I bought into the whole thing because it worked.

Despite the small, cramped quarters, Tara's class was remarkably organized. This is a second career for Tara; her first career was in the Air Force. Tara believes many of the skills necessary for her first career have translated well to education providing tools

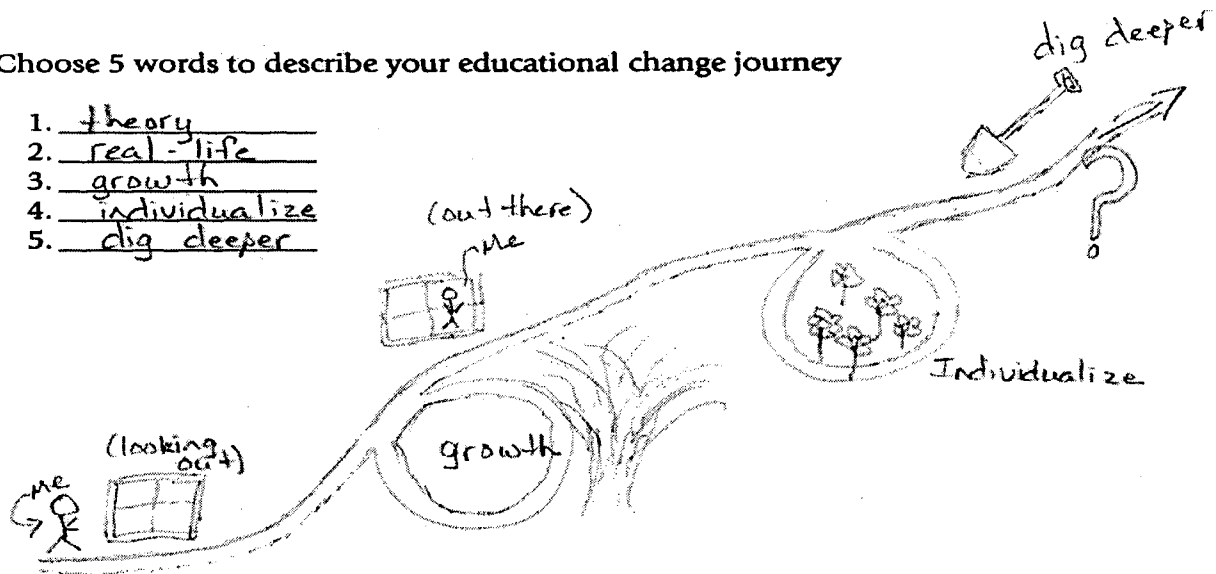
that make classroom management and organization easier.

Tara's change journey was described with the following words: (a) theory; (b) real-life; (c) growth; (d) individualize; (e) dig deeper. Tara drew this depiction of her change journey.

Figure 9 Change journey depiction for Tara

Choose 5 words to describe your educational change journey

1. theory
2. real-life
3. growth
4. individualize
5. dig deeper



Draw A Picture Representing Your Educational Change Journey

She shared her story in the following manner.

Well, first I wrote the words that just stood out as I was looking back. I remember thinking I had the theory down when I finished my degree and then I remember that first year, about two weeks in I realized I didn't know anything and this was real life and all of the theory didn't matter unless I got it together. So my teaching partner and I, at the time, we did our masters together and we ended up teaching in the same classroom, 46 kids in one classroom, chaos most of the time...no heat, no air; or heat when you needed air and air when you needed heat, and lights out all of the time...it was just unbelievable and mountains of mold on

the walls. So we just kept saying we know what theory is, but this is what is happening here so what do we do. So, we did some of our own research. We spent weeks and weeks really looking at what whole language was and what that really meant. Not what people were afraid of or thought it might be but what it might really mean. So we dug in and did some growth and so that is why this kind of goes in a circle. And that is why this kind of levels out. And then I realized the next step was each child, and I remember saying that when I got my first job, I really care about what each child needs, but I didn't really know what that meant. So I did that again here. I couldn't think of anything that represented more than one, so here I did the tree and me and then flowers for kids so that was the next group of research. How do I individualize and really do that and not just give one person one thing and one person another because that is not really individualizing. And now I am at the point where I am still doing this over and over again, but now I am looking at what is next, because there is something I am not getting and I know if I just get the next step it will help me get to the next point, does that makes sense. [You are digging deeper.] I am looking out at everybody else that knows how to teach and then OK, I think I have got it figured out after this growth. [So, now you are part of them?] Yes and I could use another window, but I just didn't know what to put in them. I guess a picture of me digging deeper.

Jean.

Jean teaches in a building that was built in 1923. Despite the age the building has the appearance of a school that is well maintained. A veteran of 21 years, Jean, like

Marie and Diane, also defies the stereotype of an older teacher. Jean's class was composed of students who have difficulty with reading. "If a third grader is reading below grade level, they are placed in my room." This is due to her training in many various reading formats. All of Jean's students were reading below first grade level in August, by January the students were reading at a 2.9 level.

Jean's class consisted of 15 students. Five of the students enrolled in January to replace five students who left for another site. One of the new students was from Ethiopia. A Spanish speaking aide was assigned to the student since the district does not have an aide that speaks the student's native language.

As with the majority of the teachers in the study, Jean does not have a desk. A teacher chair was located in the back of the room. Jean stood for the delivery of the lesson. Despite the age of the building her classroom was well decorated. Countless books line shelves around the room from her personal collection.

Jean used the following words to articulate her change journey: (1) need; (b) dissatisfied; (c) investigating; (d) research results; and (e) implementation.

Jean expressed her change journey in the following manner.

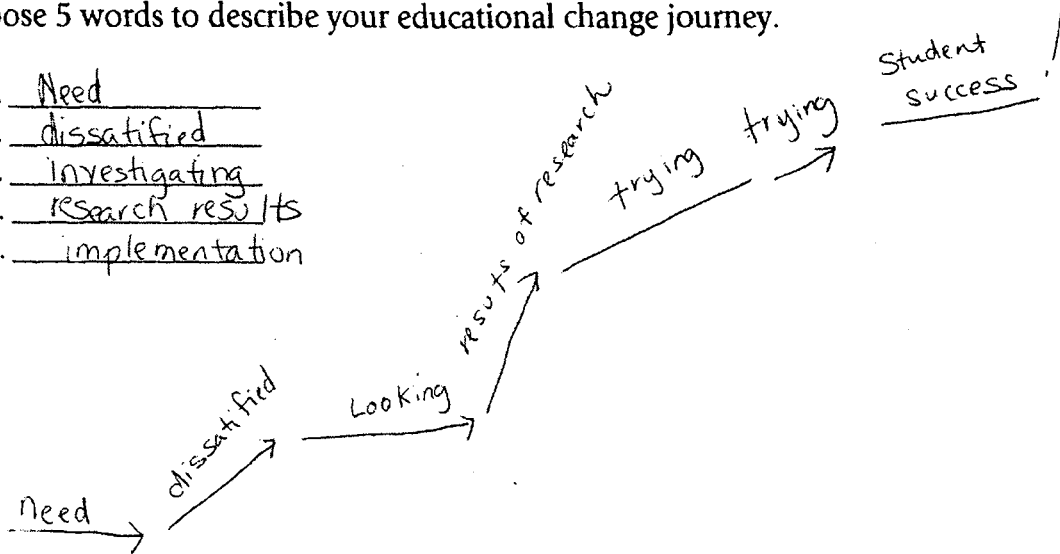
OK, I would see the needs of the students and what I had, the instrument I had and the materials I had were not meeting my needs and I was very dissatisfied with what I was doing. So I kept looking for something different. I would go to workshops; I would look and look and look. And as I got exposed to things that were the results of research like Accelerated Reader , or the Orton-Gillingham method and I started implementing that, I was trying it with the kids and as I saw student success, then I changed. And it took me a long time to change my

philosophy of how I did things, because I was never taught this in college. I had thought that this Lee Jenkins was the best thing next to Alphabetic Phonics that I had seen in years. I just don't know why you can't value them [children] for where they are instead of saying every child is going to fit into this mold because he is a third grader.

Figure 10 Change journey depiction for Jean

Choose 5 words to describe your educational change journey.

1. Need
2. dissatisfied
3. investigating
4. research results
5. implementation



Draw a picture representing your educational change journey.

Similarities and Differences

The following charts provide a visual of the similarities and differences of each teacher. The charts are separated by district due to space consideration. The range of experience spans from three years to 26 years, with the average time in the classroom 12.6 years. Three teachers have taught five different subjects. Only one of the

teachers has taught one single subject during their tenure as a teacher. Six of the teachers have taught in one district throughout their career.

Figure 11 Townsend teacher information

TEACHER	Marie	Diane	Sue	Mike	Cindy
YEARS EXPERIENCE	26	22	6	3	8
GRADES TAUGHT	K, 1 st , 2 nd , combo 1 st & 2 nd	LD, Remedial Reading, Remedial Math, Readiness, Music	1 st , 3 rd , Library Instructional Assistant	7 th , 8 th	9 th English
NUMBER OF DISTRICTS	3	2	1	2	1
GRADE TAUGHT NOW	2 nd	3 rd	4 th	7 th	9 th
NUMBER OF SUBJECTS GRAPHED	6	9	3	2	2
LANGFORD TRAINING	Yes, multiple training	Yes	Yes	Yes	Yes, multiple training
SUPPORT	Principal, Supt, Peers, Central Office	Principal,	Supt., Board, Principal	Principal, Supt., one peer, Central Office	Spouse, Principal, Supt.

Elementary, middle school and high school teachers are represented in the sample. There are seven female teachers and three male teachers. Subjects taught include math, social studies and language arts for the secondary schools. Two of the teachers are National Board Certified.

The sample was chosen from two different states. All of the teachers but one were educated in the state in which they are now teaching. These states have

Figure 12 Metroville teacher information

TEACHERS	Tom	Jim	Rachel	Tara	Jean
YEARS EXPERIENCE	12	5	10	10	24
GRADES TAUGHT	6 th , 7 th , 8 th	8 th , High School, Math, Social Studies	5 th , 6 th	2 nd , 3 rd , 4 th , 5 th , 3 rd & 4 th Split	
GRADE TAUGHT NOW	8 th	8 th	5 th	5 th	3 rd
NUMBER OF DISTRICTS	1	1	1	1	2
NUMBER OF SUBJECTS GRAPHED	1	2	6	6	4
SUPPORT	Principal	Principal Likes to work on his own when learning	Principal Team	Principal Team	Principal Friend

different requirements for receiving teacher licensure.

The two districts present a difference set of challenges for the teachers.

Metroville has a very diverse population and high poverty. All of the teachers had ESL (English Second Language) students in their classrooms. Townsend has a more homogenous student population, but inclusion of severely handicapped students in the regular classroom presents diversity. There are occasional ESL students found in the Townsend student population.

Despite these differences, the teachers share very similar pedagogical beliefs.

When asked about basic beliefs about student learning all of the teachers answered with some variation of 'all children can learn'. Quotes from each of the teachers have been

included due to the importance of this response to understanding the nature of the participants in the research sample. Each of the respondents with the exception of Tom placed the responsibility for this learning in some way on the teacher.

All children can learn. I think they like to learn. They like to be able to see their progress in ways that they can understand. My job to guide them through that.

(Marie)

High expectations for all children. If you expect more from a child you are going to get more. Lee Jenkins gives a better handle on where the children are very shortly after they come into my classroom, a true idea of what direction I need to take them. I know that all children learn; I feel my job is to motivate them, push them, and entice them to grow as much as they can. (Diane)

Students should be involved in their learning. They should have choices, opportunity to have a say in what they are learning and how they are learning.

Student choice and student interaction is important. (Sue)

I think all students have the ability to learn it just takes different ways for them to learn. You should never say a student can't learn because that is not true. One of the biggest challenges teachers have is trying to get different things into your classroom. I try to have three different items we do each day. (Mike)

My basic belief is that every student is capable of learning, not all at the same level, but every student is capable of coming into my classroom and leaving my classroom with more knowledge than what they entered with and that every student deserves that opportunity and a fair shot at that and it is my job to provide that opportunity to them. (Cindy)

Every child has the potential to learn it is just a matter of whether they have the desire to learn. I have a lot of kids that are very bright students, but are just lacking in drive. They don't even care about it. (Tom)

It has been proven to me. I didn't have complete faith in everything I was learning until I began to teach and one thing I didn't have complete faith in, and it really is true, is that every child can learn. And it works. Each student has the capacity to do well. (Jim)

My basic belief is that every child has a different way of learning and that is probably what I like best about teaching, because it is a challenge to figure out which way they learn and that is my job. When I watch teachers break out a text book I cringe, because I think about it and I think it is a one shot chance to reach the kids and that is not going to reach them. Especially our kids. And so that is my challenge each year. To figure out what is going to reach them and find it so that I can find the best way for them to learn and get the material in class to them or help them discover on their own. (Rachel)

There is always a way to get to them. If someone is not getting it for whatever the reason, academic or behaviorally, then I have to find a way to make that work, because everyday, every moment is looking at that. We just keep trying until we get it and sometimes it is big changes, sometimes it is little changes, sometimes it is individual, sometimes it is whole group. Always looking closely at the child, being child centered making sure they are getting what they need and what you like and what you want is not influencing what you are giving them. (Tara)

I really basically believe that learning, that every child can learn, but what

happens is we have to meet them where they are at and start where they are at and we have to have enough repetition and reinforcement to get mastery and that is a time factor and we don't have a lot of time for mastery and it is very frustrating if we do not have it. (Jean)

While the 10 teachers have different backgrounds and experiences there are many commonalities found within each change journey.

Summary

Chapter IV presented an introduction to the individual teachers who participated in this study. Similarities and differences between the sites and educators were also examined in Chapter IV. Each teacher's belief about student learning as presented during the first interview was also presented in this chapter.

Chapter V provides an analysis of the data gained from these teachers and an explanation of the essential elements of change developed from this research. The Perceptual Model of Teacher Change for education which is a result of the research is also shown in Chapter V.

CHAPTER V

FINDINGS, ANALYSIS AND THEMES

The purpose of this study is to examine classroom change through a teacher's perspective. Specifically this study explores a change known as the continuous improvement process, which has been introduced to all of the teachers in the study through staff development activities. All of the teachers have received at least two days of training. The teachers have also been recognized as leaders in their district in this process. This study is meant to explore the teacher's perception of the change process, not the specific process or the outcome of the process as represented by student success indicators.

Four research questions focus the study: (1) What is it that makes a teacher want to change their traditional practices and replace them with different practices? (2) What are the steps that lead to the change? (3) Are teachers able to create a new classroom environment successfully without administrative support or is leadership key? (4) Is change more successful if the action is mandated or left to the teacher? These four research questions spawned sixteen interview questions. During the first interview, a sub topic was consistently present which prompted two areas of discussion for a second interview. The second interview discussion topics were: Tell me how many changes you have been involved in during your career and discuss these changes briefly and discuss your thoughts about any negative changes experienced during your teaching career. If the teacher has never experienced a change they viewed in a negative light they could answer the question from the observations of peer's negative reactions to change.

Analysis of Teachers' Perception of Change

The four research questions are the focus of the study. The focus of the questions is the teacher's perception of change and the teacher's perception of the importance of administrative leadership to the individual teacher's change journey. For the purpose of reporting the prevailing themes of the research the four questions are divided into two sub-groupings. The first two questions: What is it that makes a teacher want to change his or her traditional practices and replace them with different practices and what are the steps that lead to the change are considered a pair. The second pairing is: Are teachers able to create a new classroom environment successfully without administrative support or is leadership key and is change more successful if the action is mandated or left to the teacher?

Teacher Instructional Level

Caine and Caine

After all of the research data were coded and organized the first step of analysis was the determination of the teachers' instructional and perceptual level. Using Caine and Caine's (1997b) model as a lens each teacher was considered separately before making a contextual determination. The purpose of the use of Caine and Caine is to clarify each teacher's educational stance.

When considering the research subjects' professionalism in the context of the work of the Instructional and Perceptual Levels to teaching expressed by Caine and Caine, it appears that nine of the ten teachers are functioning in Instructional Level III. The teachers demonstrate genuine student's interest as the core of the learning experience. The interview focus was primarily the student. Even when asked to express one example of excellence these teachers presented examples of student success. Tom is

a highly motivated and excellent teacher, but appears to be working at the Level II instructional level, which is a mixture of teacher driven and student focused orientation. Statements made by Tom were often focused on the teacher's responsibilities and the teacher's needs. He also found difficulty finding an example of excellence to share. Although Tom is no longer using the process, he was told he could consider any classroom moment when the question was asked he replied "Um...I don't really know...excellence? Oh, concerning the continuous improvement?" Tom was told that would be ideal, but he could discuss any examples of excellence in his classroom.

Ummm...Well you know you could see the kids improving and they would chart their improvement, and it was motivational to them, but on the other hand, like I say, a part of me just wondered if it wasn't memorization and...excellence, you always have kids that stand out you know as far as the kids... I am treading water.

There was also a balance of student focused statements in the interviews conducted with Tom. The following two statements support the contention that Tom is working from Instructional Level II. When asked about his basic beliefs about student learning Tom stated: "Every kid has the potential to learn, it is just a matter of whether they have the desire to learn." When he was asked to share his basic beliefs about teaching he replied.

Well, being a Math teacher, I have to teach the kid's math, that's number one.

But I am a role model for the kids, I have got to present myself in a way that the kids will have somebody to look up to, because they see me a lot of times as much as they see their parents, so I have got to do my best to present a good image to them and hopefully pass on some of my beliefs to them about what is right and what is wrong. Number one is math and what you are teaching and

other than that you have got to be there for them. Someone they can come to with their problems, somebody they can look up to.

While there are not right or wrong answers to the interview questions, this response is the only one that was this focused on the teacher. The other teachers discussed the need to listen to the students and the importance of working until they find a way to help every student learn. Tom is also the only teacher who did not mention special needs students during his interview and the importance of finding ways to meet their diverse needs. All of the other teachers mentioned specific ways to help their special needs students or specific examples of excellence tied to the special needs students. This focus is also indicative of a teacher working from Instructional Level III.

The Caines' research states that teachers working from Instructional Level III also demonstrate Perceptual Level III. The four qualities or dimensions found in a teacher in Perceptual Level III are: (1) A sense of self-efficacy grounded in authenticity; (2) The ability to build relationships that facilitate self-organization; (3) The ability to see connections between subjects, discipline, and life; (4) The capacity to engage in self-reflection to grow and adapt (Caine & Caine, 1997a). Teachers working from perceptual level III are able to move and work through all instructional and perceptual levels with ease, depending on the situation. Observation, interview exchanges, sharing of the teachers change depiction and change rubric substantiate that all nine of the teachers are working from perceptual level III.

After considering the instructional and perceptual focus of the teachers in the study the change themes could be more easily considered. Nine of the ten teachers were working from the same instructional and perceptual levels. After considering the

instructional and perceptual levels of the teacher, the lens provided by Caine and Caine was no longer necessary to the research.

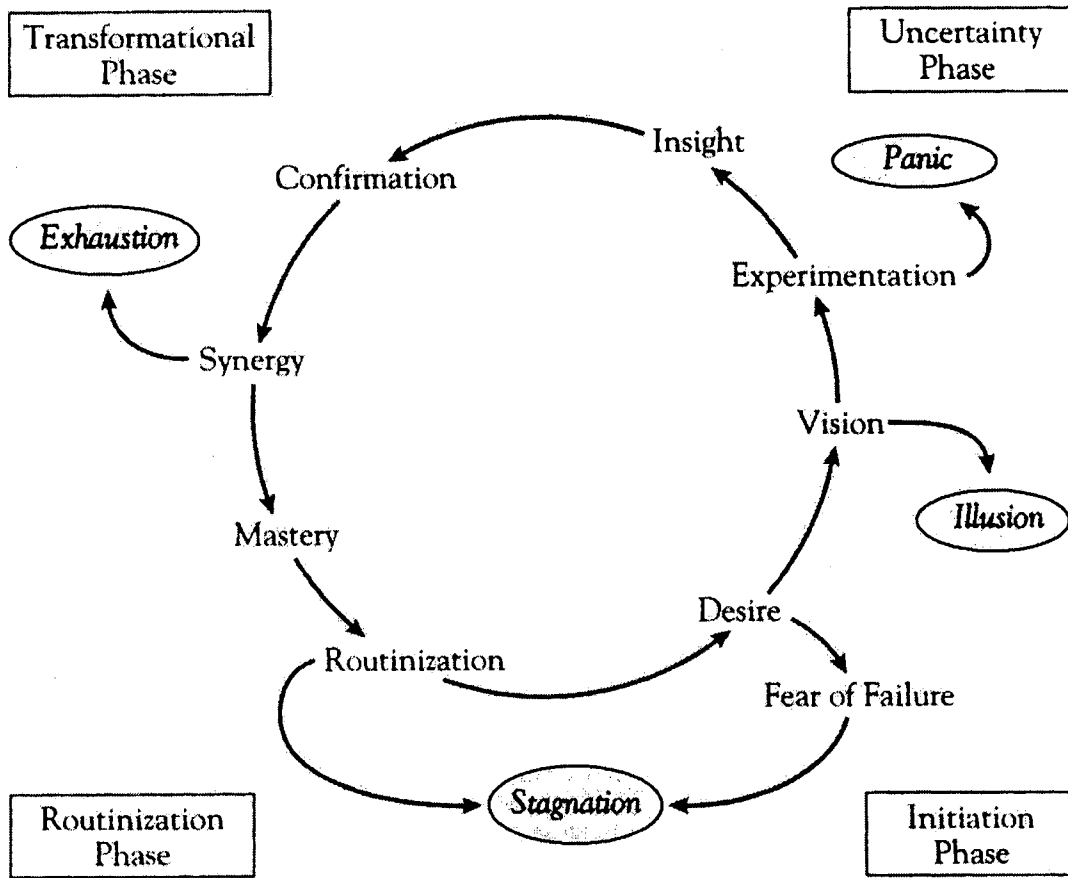
Change Cycle

Quinn

The themes derived from the data were then viewed through the lens of Quinn's transformational change process and the three barriers to transformation. According to Quinn there are four phases of change: Initiation, Uncertainty, Transformation and Routinization. Coupled with the phases are the stages of the change and the potential dangers of the change process. While desire for change is the starting point for the Quinn change process represented during the Initiation Phase, the fear of failure can derail the change before it really begins. If the fear of failure does not end the change process a developing a vision is the next step of the process. The vision can be translated into an illusion of change or can move the participant to the next change phase, which is experimentation. If the illusion of change occurs, the participant, teachers in this case, may believe they have changed, but no true change has actually occurred.

Experimentation is the phase of change where the new process becomes personalized by the person changing. Insight of the change is gained during this phase. However, panic can also ensue during this stage and again the change process can be derailed. At this point the participant can either become exhausted or enter a synergistic relationship with the process and those involved. If exhaustion is felt, the participant will often drop the new change. However, moving through synergy leads to mastery of the change and the routinization of the process for the participant. At this point it is time to enter a new change process to avoid organizational or personal stagnation.

Figure 13 The Transformational Cycle.



(Quinn, 1996, p. 168)

Quinn's model of change provided an example of a change process and an orienting framework for this research. Further analysis of the model reveals that Quinn's model is an incomplete example for change as viewed from the teacher's perspective. The themes that emerged from the data point to a new model of change.

While Quinn's model was a good starting point for this research, the findings pointed to a need for a new model that is more descriptive of a teachers change journey. This new model replaces Quinn's model. There are several commonalities between the two models that are noted in this research. Specifically, Quinn discusses the recognition

for the need to change, the failure aspect of change and the negative peer pressure associated with change. The new model and the themes that led to the development of the model are representative of the findings of this study. The remainder of the study is focused on the new model, the Perceptual Model of Teacher Change.

Teacher's Perception of Change

While the teachers involved in this study were distinct individuals with unique perceptions of their own change journey, undeniable interconnected themes of change surfaced during the research. Data was collected from interviews, classroom observations, the teacher's individual change journey depiction and the teacher developed rubric for change designed during the final interview. The data, when analyzed, revealed themes that recurred throughout the research. These themes are listed according to the prevalent views of the teacher as the elements necessary for change. Embedded within these elements are common themes which address why a teacher embarks on the change journey. These themes are recognition of a need to change, training, failure, support, time, peer teaming, stay the course and recycle. Following is a description of these themes.

Recognize Need to Change

A common starting point for change described by all of the teachers in the research was recognition of the desire to change. This corresponds with Quinn's initiation phase of change and the direct correlation of a desire to change that is necessary for change or improvement. While Quinn states that desire for change is the starting point for his change process, the desire for change is the central driver of the new model for change. This recognition emerges at different junctures for the teachers, but all stated

that recognition of the desire or need was key to pursuing the change initiative. Five of the teachers in the study identified a frustration in their current practices prior to their introduction to the new concept. They were seeking a change and when they were introduced to this process it was an *ah-haa* moment; light bulbs turned on and they believed this was the answer they had been seeking. Three of these teachers had the moments of realization in training provided by the district. Two identified their need for the change during a classroom observation of a teacher in another district who was using the process.

Three of the teachers were satisfied with their current practices when they attended the training. During the training experience they recognized that continuous improvement was something they believed could benefit their students. The other two participants described a continuous search for change. When they were introduced to the process they believed it held possibilities for their classrooms. Tom declared:

I was not very interested in the training at first, but I wanted to try something different and so the more that Dr. Jenkins was saying and showing this stuff, he kind of got me interested. I wanted to see if I could take the students beyond where I have taken them before. And so I thought maybe I should give this a try and see what happens.

Jim stated “when I first attended the training I was a little unclear about what we were trying to do until the second day and then I kind of clicked into what we were doing and I could see the potential. Rachel’s attendance was mandated and she was not seeking a change at the time of the training. She said:

I went to the training with my team, and all of us tried it and after six weeks I was

the one that said 'Wow, this is something I want to do next year' and I spent all summer getting ready to do it with my fifth graders next year.

The majority of the teachers had determined a need for this change before they began the implementation of the change.

Jean stated: It was just like an ah-haa moment when I went through the training. It was always what I felt, but I didn't know how to implement it. ...and when I took this training with Dr. Jenkins it was just like, this will be so easy to do. I knew it was something I should do.

According to Marie: I liked what I was hearing [during the workshop] and I just found the more that I try it the better it is working for the children and I am seeing so much growth.

Diane stated: I had some opportunities that maybe some other teachers didn't have in that I was able to go to a school that was doing some similar type of activities and I could see the success and I could see the value of it first hand before I was even training. So I was really gung ho and excited before we even started the process.

All of the teachers agreed that student need drove them to try the process and student success kept them involved in the process. Each teacher discussed student success as key to every thing they did in the classroom. Student's progress during any change is carefully monitored and if the students are benefiting from the change the improvement encourages the teacher to continue. The following statements are indicative of various statements made by the teachers.

In trying little steps along the way, I just found the more that I try, it is working

better for the children and I am seeing so much growth and that is why... (Marie, discussing why she continued the change)

What motivates me to make changes is probably more when there is a stumbling block or an obstacle that needs to be dealt with. (Diane, speaking of student learning)

I jotted down (during development of pictorial depiction) the desire to help students learn and be successful. Because if you don't start out with a goal or a dream or a desire for the students to be successful, then you might as well not start out with the change because you are just doing it to satisfy somebody.

(Mike)

Four of the five teachers in Metroville mentioned improved state test results during their interviews. Rachel, Tara and Jean are working in high risk schools. After a full year of implementation, Rachel and Tara's school was removed from the at risk list. While four of the Townsend teachers noted the importance of aligning curriculum to state standards, none discussed improved state test results as a desired outcome of the change. None of the four schools in Townsend are on the state at risk list.

The new model, The Perceptual Model of Teacher Change in Education, indicates the desire to change is driven by student need and student need drives the process throughout the change journey. For these teachers the desire to change, fueled by student need, is the central issue of change. Without this desire, change will be stopped no matter where the teacher is in the change process. Student need drives this desire to change.

Training, Training, Training

Another consistent theme that emerged from the data is the need for training to support any change procedure. The majority stated training should be consistent and ongoing. Training is a separate and necessary component of change according to all of the participants. Three of the teachers from Townsend mentioned Langford training as a help in understanding this new change. The teachers who had received both Langford and Jenkins training had been trained over 50 hours. It is added that the return of Langford and Jenkins to the district on a yearly basis helps expand the teacher's knowledge and improve their skills in using the processes in their classes. Several statements related to ongoing training are listed.

The brain must have a lot more time for training than just an hour and a half. A teacher cannot reach master in an hour and a half. (Jean)

Lee came and did several follow-ups that were very helpful. To kind of hold my hand and show me, and it really helped me a lot to have done it and ask him important questions that were coming up. (Rachel)

Fullan (2001) outlined the clarity of goals and purpose as one of his four characteristics of change. Training is one means of clarify the goals of the change. However, Fullan proposes that there must be organizational development as represented by professional learning communities. "Teachers need to participate in skill training workshops, but they also need to have one-to-one and group opportunities to receive and give help and more simply to converse about the meaning of the change" (Fullan, 2001, p. 124). Rachel discussed the building of a vision team in her second interview. "They are your vision team and if you do not have a team of people to support your view you will never get any change. It has to be grass roots." Teachers training teachers is another

aspect of the training component of change. Jim stated it was essential to share what you have learned with others as part of his change rubric. Marie determined her support group of team members helped her implement the change process and release potential frustrations through talking about the new process. “I think everybody should have a support system like that and bounce things off of each other, what is working, what is not working.” While not all of the teachers expressed the need for group processing of the training, the majority of the teachers did express a need for continued training. Most of the teachers are involved in a one-to-one or group opportunity to provide help for other teachers. The Townsend teachers have constant visitors to their classrooms which provide an opportunity to share the change process. Jim worked with teachers in his school to outline the essential facts for Social Studies. Rachel has directed staff development in the process and Rachel and Tara combined efforts in the writing of a book. Jean is leading her school, with the help of Sandy, in a school wide implementation of the process. While training was the focus of the teacher’s conversation, a professional community is part of the process, even when the teachers have to build that community themselves.

One teacher received her training after she had implemented the process for a year. Tara was taught the process by Rachel. When she received formalized training she stated it helped clarify the theory of the process and to return to the roots of the change by learning from Jenkins’ himself. This departure from the norm of training then change initiated a new view of the process as described by the teachers. Change, the findings of this study suggest, is not a linear process. A wheel of change was developed for this new model, with the desire to change and student need as the hub and the other elements of

change as the spokes. Each element is important to the process, but the order of the elements is not.

Failure/Frustration

Each teacher shared some account of failure in the change process. The general consensus suggests that one must experience some failure and frustration before one can make the process one's own. It is considered part of the change process. "Educators are very creative people, but I do see a lot of teachers that are being kind of control freaks and they want to be in control of what is happening.(Diane) "And when I lose control I get scared and so I either make a decision to not do it or do it. " (Jim) "I am no longer afraid to try something and have it fail when somebody is in the room, because I think that is all part of the process." (Cindy)

According to the teachers, failure is one step of the process. It does not necessarily mean the change will end. This failure or uncertainty phase corresponds with the disequilibrium described by Piaget as part of the learning phases (Leyden, 1991). There will be times of failure as one experiments with any new process. There is an uncertainty when entering into change. According to teachers this is where the change process most quickly ends. It is essential to have support to make it through this phase of change. Administrators and trainers should prepare teachers for the inevitability of failure during initial implementation to help alleviate some of the frustration in that essential phase in change.

Support

Support is an essential element of successfully combating the failure associated with change and was a theme found throughout the data analysis. Without support during

the initial stages of change teachers easily return to the comfort zone of traditional teaching. All of the teachers express that they receive substantial support from their principal. Townsend teachers appreciate the fact that their principals have been trained in the process and can model its use in some way. “When I try things and I fall on my face it’s OK because they [administration] support anything I decide to do, as long as I have good intentions.” (Sue)

I was able to practice it in my classroom and have the support of administrators and if I failed I could come and cry on their shoulder and they would offer help or if they didn’t know the answers they got me in contact with people that did know the answers. (Cindy)

The Townsend teachers also repeatedly stated that central office was very supportive. Three of the Metroville teachers stated that turn over in central office was one cause for feeling there is no strong support from that avenue. This interpreted lack of support is expressed in the following words.

We start something and then there is no support and so you feel like you are not being successful and so of course you are going to abandon it, because as a teacher you don’t want to waste your time and I think we see a lot of that going on. (Tara, addressing why some of her peers do not embrace change)

One area of support mentioned by over half of the respondents is support through resources. Tara stated “The question is not can it happen [student success], but do we have time to figure it out and do we have the resources to figure it out and I don’t mean money.” The resources mentioned are time, supplies, mentors, training opportunities, a note of encouragement in the teacher’s box, principal led celebrations with the teacher

and the students, practice and patience.

Peer support is also an important means of support. The teachers expressed a need for peer support and the belief it is best, but there is also the belief this support can grow during the implementation of the process.

I guess the key to all of it is that you have got to have a support group and I am finding that through the gals that I work with on a regular basis everyday, as we are planning together. (Marie)

Sue stated that the support group has grown during the implementation phase of the process. “You know we can talk about things now that a couple of years ago you wouldn’t have even dreamed of talking about as a staff.”

Time, Time, Time

It takes a major time commitment to achieve change. According to the participants the first year of a major change requires a great deal of extra time for the teacher. “It took a while for me to get this smoothed out...and by smoothed out I mean, I did it enough times so I could see where the pitfalls were and how I could avoid them.”

(Jim) Most of the subjects believe it takes at least three years to become comfortable with a major change initiative.

The first year is like treading water, you are never sure about the process. The second year you gain more confidence and can begin to make the change your own. The third year the teacher has the necessary freedom through repeated use to believe this is the way they teach. (Tara)

The general consensus of the group is if the district or site is willing to invest in a change financially, then they should be willing to invest in time also; enough time to allow the

change to occur. Fullan (2001) states that it takes a long time to achieve change. He proposes that it takes two or three years of use to put a reform into action and up to five years to reach institutionalization.

Peer Teaming

Working with peers can be one of the greatest support mechanisms for a teacher making change. Six of the teachers were involved in this type of peer relationship. Working with other teachers, they found many opportunities for growth. Of the four teachers involved in the study without peer support, one has a strong support mechanism in her spouse. He understands the process and she discusses the daily challenges with him on a regular basis. The teacher who is no longer involved in the continuous improvement process did not have a peer partner for support and idea exchange. The other two teachers were working to develop a support mechanism with peers who are becoming more positive about the change. One stated the conversations they can have about the process have grown dramatically in the past year. Time again is essential to the change process.

Negative peer reaction to the change process is a serious detriment to the process. Peer pressure is a recurring theme of the interviews. An explanation of this pressure is found in Quinn's barriers to initiatives. The first barrier according to Quinn is the bureaucratic culture. Since most changes are viewed as top-down initiatives by employees, there is an inherent danger if failure occurs. If you fail you may get punished. A contrasting view is if you succeed you may get punished. Quinn explains that one reward for success can be more work. According to the teachers it can be interpreted by non changing teachers as one teacher's success means more work for the

rest. Furthermore the change may succeed if a group of teachers successfully implement the change. For teachers resisting a change success is not the desired outcome. This dual change dilemma causes negative peer reaction in educational circles.

All of the teachers mentioned negative peer reaction as a challenge in some way. Four of the teachers are seriously affected by negative peer reaction. These teachers are in the district that mandates the change process and all teachers are required to collect data in at least one form at this time. Three of the teachers had tears in their eyes as they spoke of the cruel comments made by their peers. "I think the biggest challenge has been my peers. That has been really, really difficult for me." (Sue) "From my peers I have learned to shut my door." (Cindy)

Another negative connotation of peer pressure is the temptation to join the negative group and desert the positive change. Mike spoke of the ease of joining the choir of negativity. He stated:

It is so easy to get caught up in those kinds of feelings and conversations...of course sometimes when you hear it so often you are going to start believing it ...the biggest thing after I hear the choir singing you know I want to kind of sing along with them and that is a challenge. (Mike)

Several of the teachers discussed the negative atmosphere in the lounge. While each of the schools in this study maintains a teacher's lounge, for some of the teachers this lounge is none existent, especially during times of high negative peer interaction. Jim stated frankly that there is no lounge.

I don't go to the lounge. There is no lounge. In fact, there is a lounge here, but I have only been in it a couple of times just to get something. I have learned that

coffee rooms in business places and especially in schools, lounge areas, that is a place to go to gripe and a place to go to start rumors and a place to go, there is nothing positive there. (Jim)

Some days I don't go down to the lunch room. If the kids start talking about something that we've done in class that has gone well and the other teachers get wind of it, I often don't go to the lunch room. (Cindy)

Diane, who apparently experienced a difficult year, removed herself from all teacher contact including the lounge in an effort to avoid the negative comments of fellow teachers.

Last year was a horrible year for me, a horrible year and it didn't have anything to do with the kids. I probably had one of the best classes I had ever had. I was just getting so fed up with the undercurrent thing and I remember telling our principal at one point, I know how to handle it now, I just need to go in my room, close the door and tune everybody out and just do what I know to do. (Diane)

Three of the Metroville teachers are building leaders. While negative statements can be discouraging, two of the participants stated other teachers in their building would not make negative statements to them. After Rachel and Tara stated that there were negative teachers in their building, they were asked: Do they give you a hard time? "Oh gosh no, they know better." (Rachel) "I think they don't want us to come to them because they don't want to be hooked into anymore work. Because the things that have worked for us have been things that took quite a bit of work up front and those teachers shy away from it." (Tara)

Stay the Course

The absence of a vision is a barrier to initiatives according to Quinn. Lack of a vision is often viewed by workers as a problem of the bureaucratic culture. A lack of commitment to any set of values keep the worker guessing about the daily vision of the corporation. This switch of focus is as confusing for the teacher as it is for the corporate worker.

Teachers describe this final single component to successful change as staying the course. It is widely held by the subjects of this study that change upon change is counterproductive to increased student success. The consensus of opinion is it takes about three years for a teacher to become comfortable with a new major change. It is also believed that at least three years of student data is needed to determine if the change is increasing student success. Too many changes eliminate the ability to know the source of the success.

That is what bothers me about these changes where they keep changing things, even in the middle of the year, it is like did we really give that first one a chance to work and here we are changing it already. I know things I am going to do differently next year, but I didn't change things with the kids this year. I just know next year I am going to see if it works a little better with the new adjustments. (Diane)

I just think there is an attitude that something else will come up. Don't worry too much about this or don't put too much into this because next week it will be something else is prevalent.

Many of the teachers stated that continuous change is a cause of teacher burnout. Teachers no longer trust the change will endure the test of time. This lack of trust in the

change process is stated as a significant cause of the animosity many of the teachers felt from their peers. The change oriented teachers are seen as succeeding and the impression is if leadership sees their success they may require the resistant teachers to join the process. This change demand causes a lot of work for something the resistant teachers don't believe will be in place in two or three years. The resistance is a reaction to frequent, unconnected changes. Staying the course and completing the change would eliminate a lot of future resistance since teachers would begin to believe that the new change is going to become part of the organizational culture.

Because change is handed down annually and 99% of them, a year later, are gone.

When you have lived with that, I mean many of the teachers have been here so many times, why should I waste my time. I find myself getting into that sometimes. In fact, now we pretty much say, if it comes across our desk, if it is going to help our kids, OK. Otherwise, we just ignore it because we know what is going to work and we are not going to waste our time. (Tara)

I will get mad. I will get mad. I get scared. I'll get scared that I will not be able to do it right or that they are going to change it anyway. Or I will get scared that I am going to do all of this work and nothing is going to come of it. I am going to get scared that they are going to take away what I do and I think it works. (Jim)

We don't really get a chance to find out if the first thing works before we jump to something else."(Diane)

Recycle

After the stages of change are complete and the process is routinized it is essential to repeat the process or recycle. All of the teachers discussed continually evaluating their

teaching as they search for ways to improve the classroom for their students. Two brought a list of books that were currently influencing their teaching to the interview. Continuous growth and change is part of the mindset of these teachers.

Leadership provides an important role in maintaining this desire to continually improve. Recycling too rapidly is frustrating for teachers because they do not routinize the change before they begin the disequilibrium of the new change. Recycling too slowly is equally frustrating for the teacher. One of the teachers discussed this frustration by stating she is viewed by the district as a leader in this process. “They seem satisfied with what I am doing, so I have not had new opportunities for training in new processes. I am ready to learn more”. She wants the district to provide her the opportunity to take the lead in a new initiative. She is ready to recycle through the phases of change.

Elements of Change or Convergent Themes

The resultant themes of this research produced the elements of change as outlined by the teachers. The themes of this research are represented as the essential elements of change as represented by the following seven statements. (1) providing enough training that the teacher understands both the theoretical and operational components of the change (2) experimentation with the process which leads to failure and frustration (3) support from administration and peers to work through frustration and failure (4) time to learn about the change, practice the change, train, and implement the change (5) a formalized opportunity to work with peers through teaming or change focused discussion (6) staying with the change long enough to routinize or normalize the new process (7) recycling so that continuous improvement becomes the culture of the environment. These elements lead to continuous improvement and energize the educational

environment.

Perceptual Model of Teacher Change in Education

Even though Caine and Caine is used as a determinant of instructional perception and Fullan is used as a determinant of organizational change, this study uses only Quinn as a guiding framework for analysis of personal change. Quinn's model is a good model for deep and personal change and is a good starting point. Yet it is incomplete when dealing with teachers' perception of change. The essential elements of training, time, and peer support must be included in an educational perspective of change.

These essential elements of change can be graphically depicted as a Perceptual Model of Teacher Change in Education. This model is representative of the key themes identified by this study. The model depicts the process of change as perceived by teachers and serves as a guide for the implementation of change in public schools. My Perceptual Model of Teacher Change in Education resulted in specific essential elements of change. Though these elements are listed and numbered; they are equal in value and are present throughout the change process. The numbers convey the typical order in which they appeared during the interview process. However, each element of change can be operational during all of the change process. The numbers are a starting point, but should not be considered as a necessary order or a step-by-step, linear process. Training is not just an entry level activity, but is essential throughout the process in order to more fully understand the new change and provide the teacher the expertise to translate the change into his or her own process. The potential for failure in any endeavor is not just at the beginning of the process, although it is more prevalent at this time. It is possible to experience failure anytime during the introduction and practice of a new

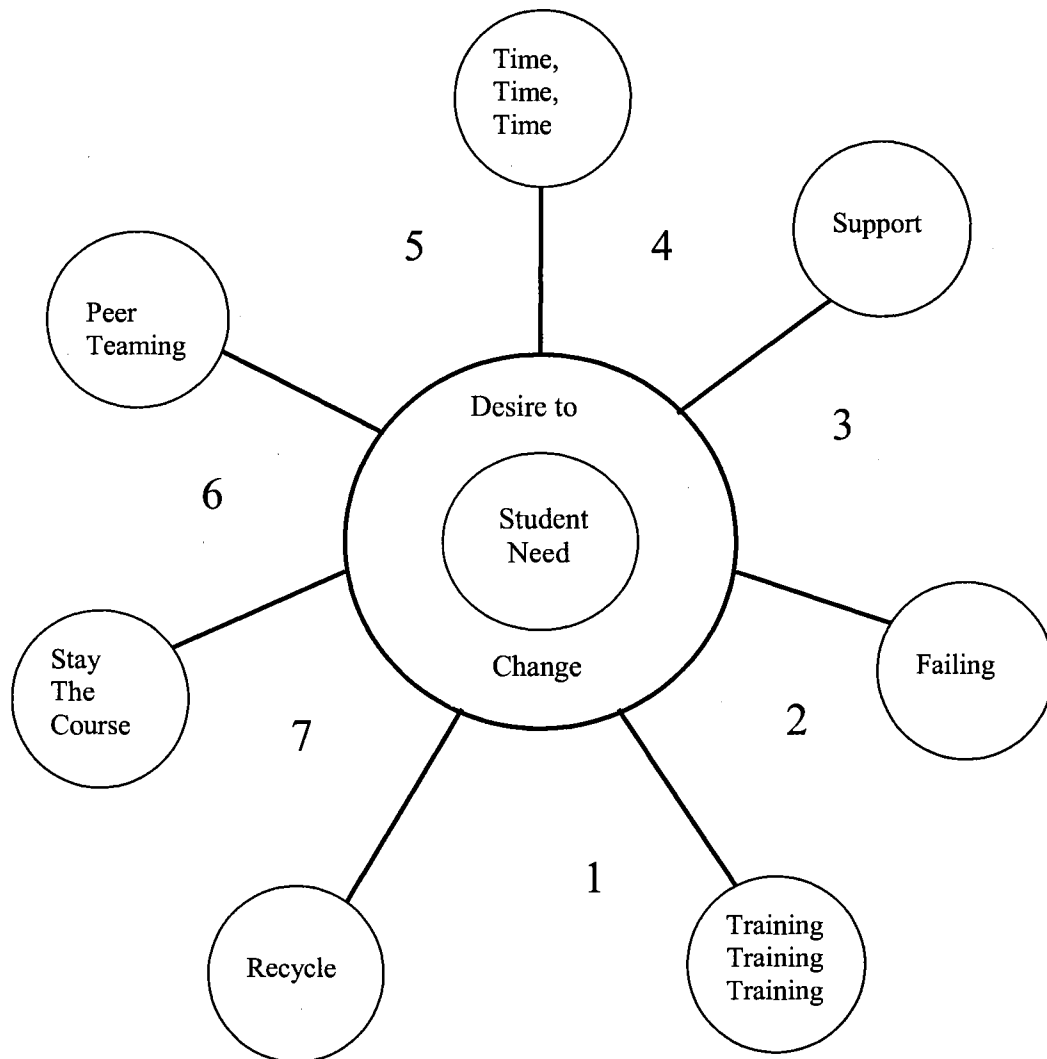
course of action. Support is not only needed when one is experiencing failure, but at every state of the change. Support, as viewed by the teachers in this study is a multifaceted issue including resources, time, and personal support. Time is an absolute necessity for any change. Again, time is needed throughout the process not as a step in the change. Peer interaction is part of the school workplace. During change, the positive or negative interactions of peers can have a dramatic effect on the potential success of change. Staying the course is an essential element at the beginning, middle and end of change. If a change has been institutionalized or routinized the training of new staff is part of staying the course. Finally, recycling is not just a terminal activity. Participants in change will reach the need for recycling at different times. While it seems recycling is a final step, in a vibrant organization it should be a continual part of the change process.

Pictorially, the elements of change in this model make a wheel. The hub of the wheel is student needs, surrounded closely by the teacher's desire to change. The teacher's desire is fueled by the student need. Student need informs the teachers search for change. From the hub of the wheel come the seven spokes of change or the essential elements of the change process. These elements are a representation of the convergent themes of this research. Each spoke is essential to the wheel. None of the spokes is more important than the other.

In contrast to Quinn's model for change, the Perceptual Model of Teacher Change in Education deals specifically with the process of improving or changing classroom instruction in education. On the other hand, Quinn's model deals with individual deep change as viewed through a business model. The Perceptual Model of Teacher Change in Education allows for individual differences of the teachers in the change process. This

allows each element to be independent of each other, yet connected through the central driving force of the desire to change supported by student need.

Figure 15 The Perceptual Model of Teacher Change for Education



Leadership and Change

Are teachers able to create a new classroom environment successfully without administrative support or is leadership key? The answer to this question is undeniable. All of the teachers discussed the importance of the principal to the change process. The teachers in Townsend praised the efforts of the superintendent and central office. The teachers in Metroville did not express the importance of central office to classroom

change and stated central office was often a barrier to change because of the frequent changes in leadership. Strong principal leadership is central to implementing change.

Fullan (2001) supports the need for a good principal in the implementation of change. "I know of no improving school that doesn't have a principal who is good at leading improvement. Almost every single study of school effectiveness has shown both primary and secondary leadership to be a key factor." (p.141)

A missing component in the majority of communities described by the teachers in this study is the pressure and support of leadership Fullan (2001) describes.

Successful change projects always include elements of both pressure and support. Pressure without support leads to resistance and alienation, support without pressure leads to drift or waste of resources. Professional learning communities or collaborative cultures incorporate both support and pressure through lateral accountability as teachers together monitor what they are doing (p. 91-92).

This pressure and support was expressed by the teachers in this study, although not in these words. When discussing whether change should be mandated, the teachers were hesitant to recommend the mandate, yet they desired the continuity of the change and knew it would not occur without the mandate. Fullan's pressure and support addresses this missing ingredient to school wide change viewed by the teachers in the study.

Mandated or Choice

Is change more successful if the action is mandated or left to the teacher? It was difficult for most of the teachers to determine the answer to this question. Over half of

the teachers, representing both districts, voiced frustration that the good work they were doing was hindered by others who refused to embrace a district directed change. Each year, as the teacher receives new students from teachers' classes, who have not followed the new process, the task for the teacher is harder than they feel it would be if all were involved. Two of the teachers have had great results because the feeder teachers in their building are using this process. Four of the teachers stated that there is a time when leadership must say change or leave. They all stated that time should be after the three year change time frame and that the teacher should be able to volunteer to be trained during the initial training. Two voiced frustration that their peers refused to chose not to participate in successful change initiatives. The below quotes reflect the mixed responses of the teachers.

I do feel like the training that took place in the district, as wonderful as it was, the teachers were kind of allowed to make the choice and I would want that choice, but I chose to do it. Some people chose not to do it, because initially it is a lot of work, and I think they are really cheating their kids and themselves because they don't know what it would do for them. But if somebody had said you will do this a lot of things would be different...or some people would be doing it wrong and it would be different in a negative way, maybe. (Tara)

Thinking back, it seems to me the change that has worked has been something we do in the classroom that directly impacts the kids. Although again, continuous improvement, that came from the district, we bought into it and it is working so we can't say that it is always that way, but no one said you have to go. (Rachel)

Townsend has required all of the teachers in the district to participate in the continuous

improvement change. At the present time all teachers are expected to graph at least one subject. The high school is the exception. High school teachers have been required to graph a subject one grade level at a time. Ninth grade was the first grade level to graph student results, followed sequentially a grade level at a time until they reach 100% participation. When asked what percentage was committed to the change in the building, four of the five Townsend teachers stated about 25%. Another approximately 50% were using the concept and would easily become committed to the process it was believed. The final 25% were resistant to the process. Cindy, the one high school teacher in the study stated only 4 or 5 teachers were really committed to the change in her building. But she believed approximately 40% to 50% were actually using the process. When asked if she believed all of the teachers would ever commit to the change Cindy replied:

I have prayed about it and I have been mad about it. Sometimes I feel I go in and I give and I give and give and give and then you see other people who hand the worksheet out you know. I take pride in what I do, but I don't know how you instill that in somebody, I don't think you can. You can't force anybody to do it and I think if people try to do that, they are doing more harm than good.

Final Word: I Didn't Learn That in College

Many of the teachers interviewed in the study stated that college had not prepared them for teaching. Mike, the youngest of the teachers' in the study made the following comment.

All of the courses I took did me no good, it was just a waste of time, but I didn't know that at the time, it was like they were stamping out the same thing. The biggest learning I had was my student teaching and my first year of teaching.

Something else is sometimes you are at that level you have no idea what it is going to be in the classroom and for an extended period of time, sure you go and visit a classroom for a week, but you do not know what it is like having a classroom of your own, to have students to work with everyday. One thing I have learned is you don't pick up on things until you are ready to pick up on them. If you could spend more time in a school maybe just observing good teachers or things that will help you instead of all of the methods courses, you know I don't even remember today.

Cindy stated "Langford was what I had tried to envision my classroom was going to be, but I couldn't because I didn't have the tools, nobody in college suggested it."

Tara remembered "That first year about two weeks in I realized I didn't know anything and this was real life and all of the theory didn't matter unless I got it together."

Jean also stated "It took me along time to change my philosophy of how I did things, because I was never taught this in college."

Summary

Chapter V presented an analysis of the data gathered for this study. The themes of change are: training, failure, support, time, peer support, staying the course and recycle. These major elements to change were developed from teacher perceptions of the change process. As a result, a new model was developed to identify the essential elements of teacher change and improvement in the classroom. This model, the Perceptual Model of Teacher Change in Education, was informed and evolved from Quinn's model of deep change.

CHAPTER VI

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

This study explores ten teachers' attitudes and perceptions of a major change initiative. The research questions provide an opportunity to examine both teacher perception of change and administrative leadership significance. In this study the interviews, classroom observations, change journey depiction and change rubric are a good fit for achieving the research goal of exploring the teachers' attitudes and perception of a major change initiative. The interviews provided an informal atmosphere of dialogue between two educators. An important part of the data collection was the teachers' visual depiction to change. This afforded the teachers a chance to organize their personal views concerning change and their personal journey. The five word descriptors provided a catalyst for the activity. The five words, organized in a spreadsheet format, when coupled with the data analysis of the two interviews was an aid in the construction of the elements of change model. While there is a definite pattern depicted by all of the teachers defining the needed components of change, the order for the elements varied. It is important to remember that change is a personal journey and each person will have a different story, even if there are similarities to the process. The change model and elements for change are not intended to provide a check list for change but an overview of the components that were found in this study.

In the interest of summary and conclusion, this chapter is organized as follows. First is a presentation of the research findings using the perspective of the research questions. Each question is presented, followed by statements of findings determined during the study. The second focus is the teacher's perception of what hinders a major

change initiative. These four hindrances to change are time, incorrect implementation, peer pressure and staying the course. Third is a parallel discussion between the best classroom practices and best administrative practices. Fourth is a presentation of how communication relates to the change process. Fifth is an examination of district differences and the implications for this study. Sixth is a list of recommendations for practice for teachers and administrators. Finally, suggestions for implications for future research are provided.

Findings

Within the limitations of the study, the following findings were established. The research questions provide a lens for the findings.

The Research Questions

Chapter V presented the research findings that emerged from the study and also that emerged from the analysis using the work of Quinn and the Caines. Following is a summary of these findings aided by the perspective of the research questions.

What is it that makes a teacher want to change their traditional practices and replace them with a different practice?

1. When a teacher observes serious student needs it is seen as a deficit in classroom instruction. This is the force that drives a teacher to voluntarily make major change.
2. This need can be identified through reflective actions pertaining to teaching and student performance, a new concept learned from staff development, teacher initiated research or inspiration from another teacher; either through observing their teaching or through dialogue.

3. Leadership alone cannot make the teacher decide to change their current practices.
4. If the teacher's perception of the change is that it will not improve the classroom, it is very difficult to achieve change.
5. Often teachers will demonstrate cursory change for administration benefit without actually making a deep rooted change if the change is not perceived as necessary.

What are the steps that lead to the change?

1. The teacher recognizes a need for change.
2. The teacher should receive the necessary training to address the need. This may require multiple training sessions and other forms of instruction including books, videos or planning sessions with other teachers involved in the change.
3. The attempt to implement the change always leads to some failure or frustration. It is best if the change can be initiated in small steps.
4. When the teacher experiences failure they generally need support. This support often is found through their principal or peers who are also involved in the change.
5. The teacher will need enough time to learn about the change and practice the new concepts learned during the training. Extra time is necessary to standardize classroom procedures, to write new lesson plans and for planning sessions. Time is one of the biggest hindrances to lasting change.
6. Normalization of the change, which means to use the change until it becomes the teacher's method of operation, is the next step in change. The teachers often

referred to this phase of the change process as staying the course.

7. Recycling the process. After normalization, the teachers are willing and desire to seek new ways to improve their classroom. Continuous training in the new process should be offered until the change is normalized.
8. The general time for implementing a new major change should be approximately three years.

Are teachers able to create a new classroom environment successfully without administrative support or is leadership key?

1. Administrative support is important to teachers as they undertake change.
2. Support includes training, encouragement, resources, time, patience, opportunities for discussion and direction to external support sources when necessary.
3. While teachers desire administrative support, they will make change without it if they feel the change is important for their students.

Is change more successful if the action is mandated or left to the teacher?

1. Teachers are capable of creating a new classroom environment on their own.
2. When the majority of the staff has accepted the change, the whole staff should be required to comply and correctly use the now district standard of operation.
3. Teachers desire to be an active part of the planning process for school improvement. They believe, if given the opportunity to participate equally with the administrator in the planning, the change process will be more successful because of greater teacher buy in.
4. When change is mandated it can result in negative peer pressure for the

teachers who are earlier innovators of the change.

Hindrance of Change

The following conclusions are drawn from the results of this study. Although the initial research question dealt with the teacher's perception of a major change initiative or what leads to change, it was impossible to hold a conversation with any of the teachers without discovering the opposite. The teacher's perception of what hinders a major change initiative is time, incorrect implementation, peer pressure and staying the course.

Time

A lack of time is the biggest deterrent to change, especially when multiple changes are initiated during the same time period. Time problems, in general, were mentioned in every dialogue between teacher and researcher. Teachers often drop the initiative quickly because they simply do not have the time to apply it effectively.

Incorrect Implementation

Many changes are perceived as ineffective due to incorrect implementation of the change. Training must be complete and teachers understanding of the change in some way evaluated. If the process is incorrectly implemented it will seem unsuccessful to the teacher and they will discontinue its practice.

Peer Pressure

The more successful a teacher is viewed by their peers in the process, as demonstrated by positive administration reaction, the more likely the negative peer pressure intensifies. It is safe to conclude that when the change is mandated, peer pressure as perceived by teachers involved in a change, could have a negative effect on the teacher implementing the change causing them to avoid their negative peers.

Additionally, negative peer pressure reduces the change implementer's willingness to share the process and recruit others.

All of the teachers in the study mentioned negative peer pressure in some way during the interview process. For half of the subjects this is a serious problem. While none of the subjects discontinued the use of the continuous improvement process because of peer pressure, there were numerous mentions of pressure from peers aimed to discourage the practice. Most felt this pressure was due to the peers concern that they would be required to implement the procedure if it was viewed as successful by administration. They felt the major cause was that the other teachers did not want the increased work load which translates into increased time commitment. Negative peer pressure is an undercurrent of school climate. One of the most experienced teachers in the study seriously considered leaving the teaching profession due to negative, repeated peer pressure and insults.

Staying the Course

A serious problem in change is the failure of leadership to stay with the change until it is successfully implemented. Change after change is the regular practice of education, as seen by all but one of the instructors. Teachers do not have the time to normalize the change before a new change is initiated. With multiple changes it is impossible to evaluate which change is causing the positive results. It takes at least three years of student data to confirm that there is an improvement trend. Three years is the minimum amount of time necessary for change to become normalized. This continuous change with no proven results is one of the main reasons given for teacher's resistance to change. Teachers who chose to wait and see if the change becomes internalized often do

not have to wait too long before the next change.

All of the hindrances to change are related to the essential elements of change in some manner. Time and staying the course are two of the elements of change according to the model developed through this research. Peer pressure and incorrect implementation are the opposite of peer support and training respectively.

Discussion

During the interviews the teacher's discussed their philosophy of best classroom practices and student learning. The examples provided by the teachers of best classroom practices are provided below as examples. As the teachers outlined their beliefs of leading change through staff development a clear parallel between best classroom practice and best administrative practices during a change initiative development began to emerge. The best administrative practices desired by the teachers are provided below as parallels. The major idea is that teachers would like to be treated with the same respect they are expected to give their students. A discussion of the examples and the parallels follow.

Examples/Parallels

Example 1: Students should be a part of the learning process. Teachers should listen to the students, give them choices and provide opportunities for an active voice in the classroom processes. Parallel 1: Teachers would like to be listened to, they would like to be provided opportunities to participate in the planning of a new initiative and they would like to have an active voice in the length and evaluation of the change.

Example 2: The learning should be made relevant to the student. There should be real life application for learning. It is important to communicate with students so they

understand why the new information is essential for them. Parallel 2: Teachers would like to understand how the change coordinates with current practices. They want to understand the real classroom application for the change. They want to believe the time necessary for the change will be worth the time commitment they will be required to make.

Example 3: Teachers should be positive and supportive of their students. All students can learn is the rule in the classroom and it is the teacher's responsibility to make sure the learning occurs, no matter what it takes. Students learn differently and it is the teacher's responsibility to develop methods to meet each child at their individual need. Every care should be used to insure the student is never embarrassed during the learning process. [Embarrassment can be either overly negative statements or overly positive statements.] Parallel 3: Administration should be positive and supportive of teachers. All teachers can learn the new change process, but they will not all learn in the same way on the same day. Different modes of training may be needed. Teachers should not be embarrassed publicly because they are not using the new process or are using it incorrectly; they also should not be overtly praised. A handwritten note in the teacher's box is as meaningful as a thousand words.

Example 4: Teacher's should check for understanding regularly. Formal evaluation is only one method of checking a students understanding of the curriculum. Students should be given a variety of formats to express their understanding of a concept. Teacher expectations should be clearly outlined for the student. Parallel 4: Formal teacher evaluation is only one way of assessing a teacher's performance. There should be a variety of opportunities to determine, with input from the teacher, the depth of

understanding of the current change process. A teacher's responsibility in the change process should be clearly outlined for the teacher.

Example 5: Great teachers know it is the teacher's responsibility to make sure the student understands concepts. Just because something has been taught, does not mean it has been learned. The phrase, I don't understand why he/she doesn't know this; I taught it to them is not in a great teacher's vocabulary. Parallel 5: A great administrator understands it is his/her responsibility to make sure every teacher in the building receives the training and support they need. The phrase, I gave them staff development on this and they just won't do it, is not in a great administrator's vocabulary.

Example 6: When a new student enters the classroom it is the teacher's responsibility to promptly instruct the student on class procedures and to determine the student's ability level so that they are able to perform at the highest level. If the student has knowledge deficits the teacher should develop a plan of action, with the student's input if possible, to address these needs. Parallel 6: When a new teacher joins the faculty it is the administrator's responsibility to promptly present school procedures and expectations to the teacher. Change that is now normalized for others teachers in the school may be new practice to the inductee. It is the principal's responsibility to develop, with the teachers help, a plan of action to address any training needs the new teacher may have.

Example 7: Students learn best by doing. There is little room for the sage on the stage. The guide on the side, knowledge facilitator is the necessary support for student growth. Parallel 7: Teacher's learn a new change process best by working through the change with support. There is little room for the change agent. The improvement

facilitator is the necessary support for teacher growth. By encouraging two-way dialogue and collaborative planning, providing learning opportunities and resources, listening when the teacher needs help, sharing ideas when needed and finding other help when they do not know the answers, the leaders can facilitate school improvement.

Example 8: A great teacher models his or her expectations for the student. This modeling includes academic as well as behavioral expectations. Parallel 8: A great administrator models his or her expectations for the teacher. This modeling includes change processes as well as professional expectations.

Further Discussion

Further discussion centered on communication as it effects change.

Communication was not included as an element of the change process model, because of its prevalence within each aspect of the model. Effective communication should be a central feature of leadership and thus merits further discussion.

Communication

Communication between administration and faculty was a major theme discussed by the subjects of this research. Statements included the necessity of ensuring both are on the same page throughout the change process. It is suggested that committees should be in place to increase both top-down and bottom-up communication. Teachers like to be part of the planning of the new change, not as figure heads but as real planning partners. Two of the teachers shared an example of working long hours on a curriculum plan requested from central office. Vague instructions were given concerning the district's expectation for this plan. After submitting the plan it was sent back with the message that the teachers' work was inaccurate. Both teachers felt they had wasted their time.

Shortly after this experience the district changed its curricular focus and the plan was no longer necessary. Better administrative communication and long term planning could have eliminated this cause of frustration.

District Differences

The presence of two distinct districts in the study warrants comment about their differences. While the focus of the study is the teacher's perception to change not the differences in the district, the district differences contributed a deep grounding for the similarities found in the study.

Townsend district is initiating the change district wide. It is obvious in every building with the exception of the high school. Approximately 75% of the district is actively involved in the process with an estimated 25% either normalized in their practices or close to reaching this stage of change. Peer pressure is a greater problem in Townsend than in Metroville. All of the Townsend teachers discussed peer pressure in some manner. Four of the Townsend teachers are experiencing peer pressure. It is probable that the mandated status of the change is responsible for this increase in negative peer pressure. However, when considering change, the mandate seems to be part of the pressure that balances support noted in Fullan (2001).

While three of the Metroville teachers were told to attend the training by administration, all felt they had made the choice to implement the process. While some discussion of negative peers is in all of the interviews, the Metroville teachers are able to avoid this problem. All of the teachers have, in some way, worked to increase the number of teachers implementing this process. While the principals at all of the Metroville sites were supportive, there was no indication of the change beyond the

classroom with the exception of Jean's school. She stated she anticipated that school wide participation would end at the completion of the quarter.

Three of the Townsend teachers expressed that the change should be required of all teachers at some point in time. Three of the Metroville teachers shared the same view, with the side bar that they would not have desired a mandate to change. These teachers all stated that the process is so important to increasing student success, that those not using the process are robbing the children and themselves of an invaluable opportunity.

Recommendations for Administrators and Teachers

Administration

The major recommendations for administration from this study is communicate with the faculty. Teachers want to understand why the change is important and why they should be involved. In other words teachers want to know if the change will benefit their classroom and their students.

Administrators should support the essential elements of change. This support should be shown in the following ways.

1. Provide adequate training.
2. Expect teachers to face times of failure during the change process.
3. Provide positive support especially during times of failure.
4. Provide adequate time to train, implement and design the change process.
5. Develop support groups and provide time for teachers to share current practice.
6. Make a long-term commitment to the change.

7. Continuously assess the progress of change and make necessary adjustments to continue improvement.

Teachers

If a teacher is interested in fully implementing a change the following suggestions are culminations of this research.

1. Attend multiple trainings on the same process to ensure deep understanding of the process both theory and practice.
2. Begin the process with small steps.
3. Expect some failure during the learning of a new process.
4. Build a peer support group of others who are involved in the change process.
5. Monitor student success or needs,

Future Research Recommendations

Examining a major change initiative from a teacher's perception is an area that should be researched further. Follow up research could add to the depth of this study. Nine of the teachers stated they believe their teaching paradigm has been permanently shifted through this change. Will the change still be visibly noticeable in the teacher's classes next year, in two years, in five years? These questions lend themselves to a longitudinal research approach.

Most of the teachers in this study are teachers who have made many changes in their careers. They are perceived by their administrators as leaders in their district. Based on Caine and Caine's research, all but one teacher would be viewed as Level III teachers. A future research possibility could be to interview a group of teachers who are

perceived by administration to be Level I teachers or change resisters. Would there be decidedly different responses from these teachers or would their view of the problems with change in education remain consistent with their counterparts from this study?

Another avenue for future research could be to interview both administrators and teachers from the same district. Would these two groups have a similar perception of a change initiative in the district or would they view the process from two, distinct, different vantage points?

Finally, administrators could be the focus of a study similar to the one presented here. The same questions asked of the teachers could be asked of building administrators in several districts that are involved in major change initiatives. Administrators could be asked to remember changes that occurred during their teaching careers and how they responded to change. Would the majority of the administrators consider themselves as early innovators or would they voice the same frustrations of change voiced by the teachers in this study?

Conclusion

Society is rapidly changing as technology advancements modify how life is lived. As society changes and the needs of the individual change, it is important for education to keep pace with the needs of the students. However, constant educational change seems to produce more frustration than improvement. The time has come for education to replace the atmosphere of change to one of continuous improvement. The expense of change after change is a burden to education. This expense is not just manifested through tremendous financial waste, but a ravage of human resources as well. It is time to replace continuous, rapid, costly changes, with collaboratively planned and well implemented

continuous improvement.

We can, whenever and wherever we choose successfully teach all children whose schooling is of interest to us. We already know more than we need to do that.

Whether or not we do it must finally depend on how we feel about the fact that we haven't so far (Edmunds, 1962, p. 7).

It is time that we meet this call to action. The objective of twenty-first century education should be to transfer that knowledge into action as we continually improve our schools until the promise of equality is a reality for all students.

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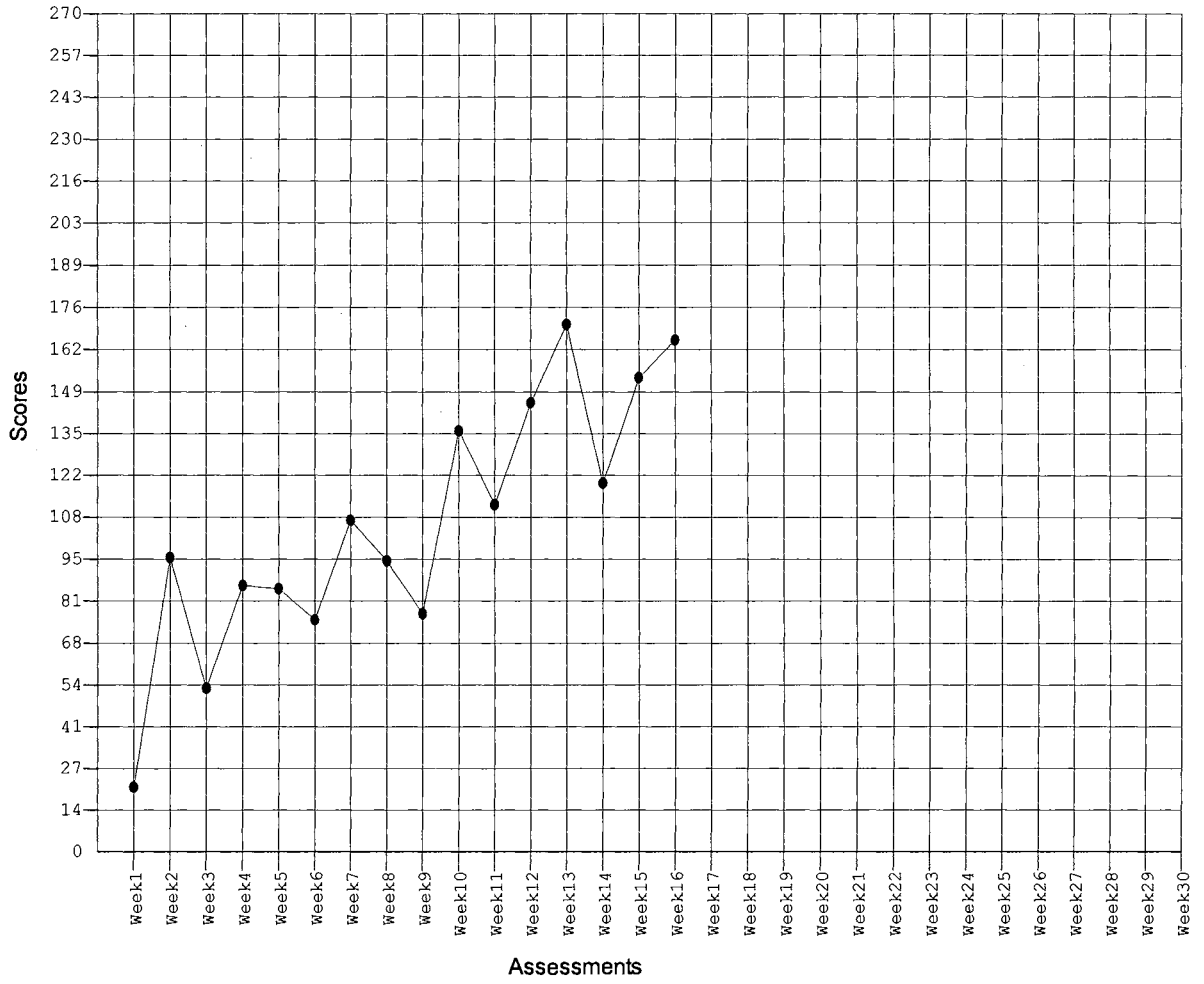
APPENDICES

Appendix A

Examples of Class Charts

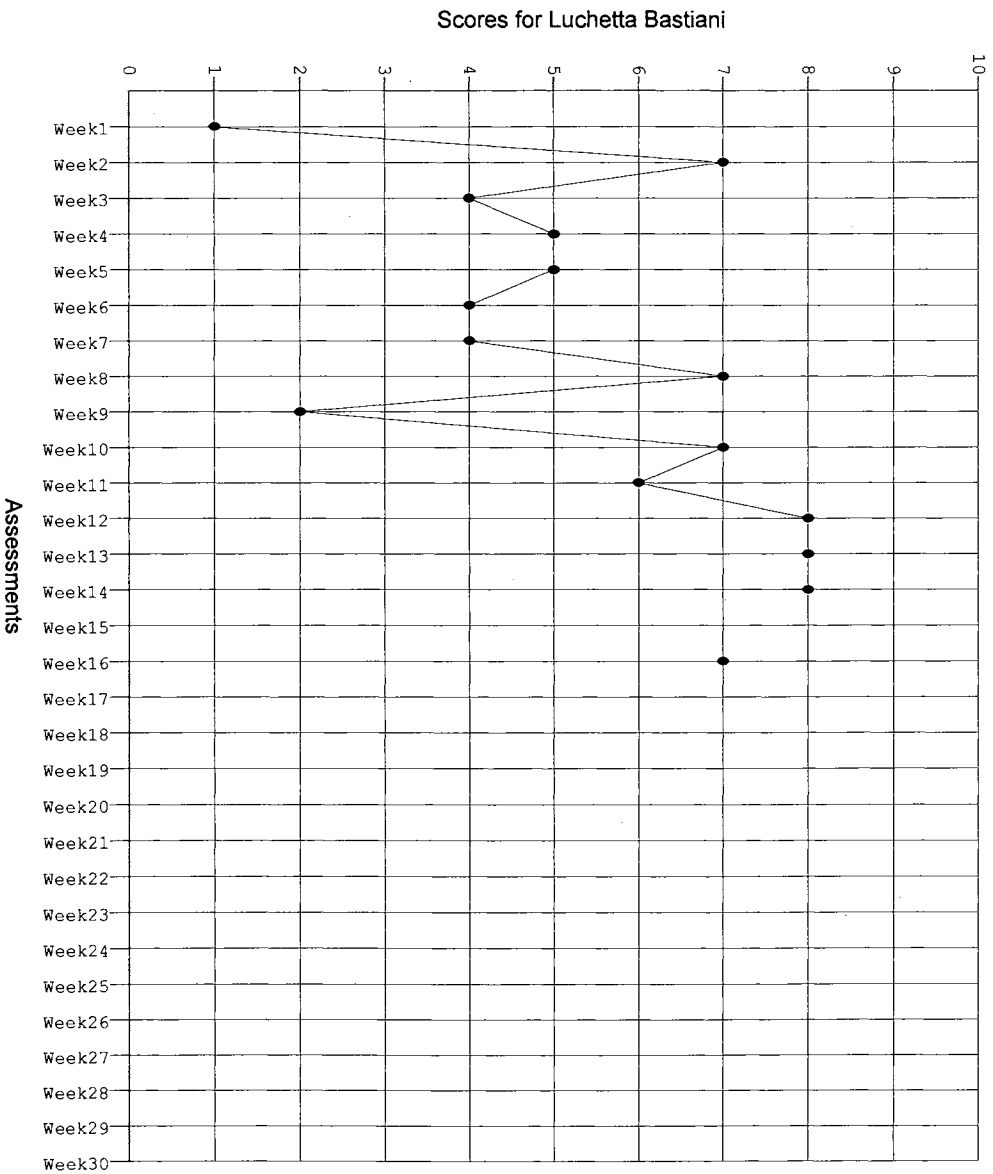
Class Run Chart

rb-Second Period 100 Math Facts
Class Run Chart



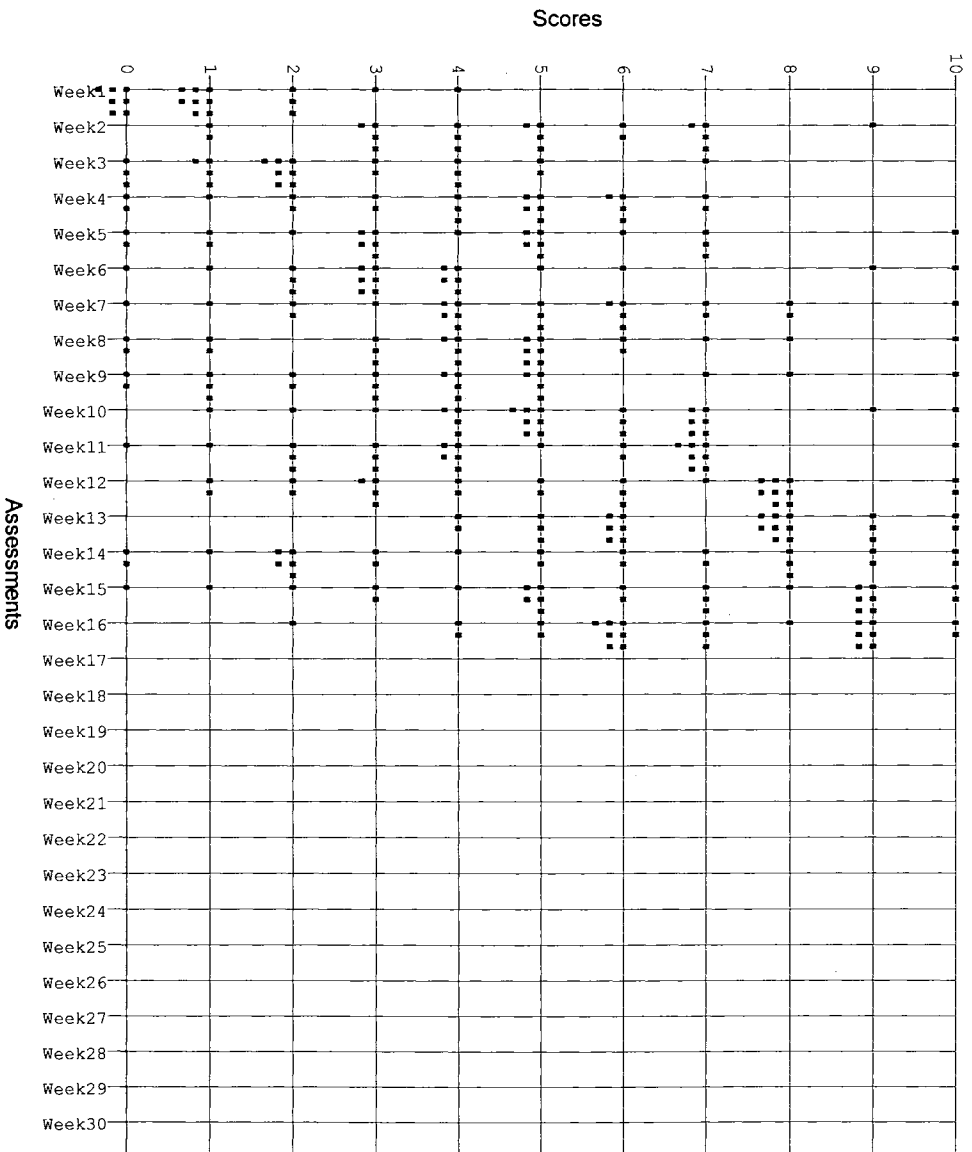
Student Run Chart

rb-Second Period 100 Math Facts
Student Run Chart for Luchetta Bastiani



Scatter Diagram

rb-Second Period 100 Math Facts
Class Scatter Matrix



Appendix B

Interview Questions

Interview Questions

1. What grade do you teach?
2. How long have you been teaching?
3. Tell me about a typical day in your classroom.

Let's discuss your basic beliefs about student learning and potential

4. Tell me your basic beliefs about student learning.
5. When I say "All students can learn" what does this mean to you.
6. Do student abilities change with instruction or is ability fixed?
7. Tell me your basic beliefs about teaching.

What thoughts do you have about the Continuous Improvement Process?

8. Why did you attend the training?
9. What did you think about the training?
10. How many hours of training have you received in the Continuous Improvement Process?
11. In what ways has it changed your teaching?
12. What support have you received during the implementation of the process?
 - a. From central office;
 - b. From your principal;
 - c. From your peers
13. Can you give me specifics of how your classroom has changed?
14. Share one example of excellence that has occurred in your classroom since you have implemented this process.
15. What has been the most difficult challenge you encountered during implementation of the process?
16. Have you made important modifications that makes the process uniquely your own?

Appendix C

Informed Consent

CJR

Caroline Jean Roettger
Oklahoma State University
Doctorate Candidate
2600 N. W. 28
Oklahoma City, OK 73107
405-917-1991

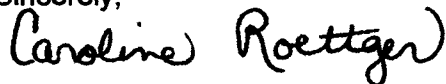
Dear Participant,

I am completing my doctorate at Oklahoma State University in Educational Administration. My area of research concerns teacher perception of a major change initiative. You are being asked to participate in this research because of your recent involvement in Continuous Improvement training with Dr. Lee Jenkins.

Your participation in this research will require a few days of classroom observation, two, one-hour interviews and a personal reflection of your perception of this change process. All information will remain anonymous. I believe teachers are the major key to true education reform, yet teachers are not given enough consideration in the research process. Your help in this research can contribute to the knowledge base that supports the need to involve teachers. You will be asked to read and sign an informed consent instrument form that will further explain my research.

Thank you for your willingness to help in this matter.

Sincerely,



Caroline Roettger

IRB
Office of Research Compliance
Division of the Vice President of Research
Oklahoma State University
415 Whitehurst
Stillwater, OK 74078
405-744-5700

CJR

Caroline Jean Roettger
Oklahoma State University
Doctorate Candidate
405-917-1991

INFORMED CONSENT

Caroline J. Roettger is conducting this research under the auspices of Oklahoma State University. She will be supervised by Dr. Kelly Ward of the College of Education.

1. What is the purpose of the study? The purpose of this study is to examine a classroom change process initiated through staff development from the perspective of the teacher. The major research question is: "What is it that makes a teacher want to change their traditional practices and replace them with a different practice?" If change is going to occur in the classroom it will need to be led by teachers. Understanding teacher perception to change through staff development can help further the knowledge base of the change process and the methods necessary for providing focus that can lead to teacher paradigm shifts.

2. How was I chosen? You were chosen because you have participated in Continuous Improvement training led by Dr. Lee Jenkins and experienced a change in your teaching due to this professional experience.

3. What will be involved in participating? You will be interviewed on two separate occasions. There will also be several classroom observations. A reflective activity will include development of a matrix that delineates your change perception of your change experience.

4. Who will know results of the research and who will know exactly what I say in the interview? All laws, rules, and regulations regarding privacy will be followed. In other words only you, the researcher, and your building administration will know you are even a participant. The interview responses will be totally anonymous and completely confidential with no individual responses identified in the report.

5. What risks and benefits are associated with participation? There is no foreseeable risk

6. What are my rights as a participant? You may ask any questions regarding the research at any time. You may withdraw from the study at any time. You may choose to not participate in this study. Your participation is completely voluntary and no repercussions will result from your non-participation or withdrawal.

7. What will be published? Only the collective results of the interview will be published. These responses will have no personal identification information, and no individual response will be reported by itself. All responses will be grouped together into a narrative case study.

8. If I want more information, whom can I contact about the study? You may contact the researcher Caroline J. Roettger at (405) 917-1991 or the researcher's supervisor Dr. Kelly Ward at Oklahoma State University.

Participation options:

_____By checking here, I hereby consent to participate in the study described above.

_____By checking here, I hereby decline to participate in the study described above.

No penalty or repercussion will occur with your declining to participate.

Participant's Name: Printed _____

Signed _____

Appendix D

Artifacts

Table 1

Success Indicator Rubric

Indicator	High Quality	Competent	Inadequate
Class Run Chart	Visible	Developed but not displayed	No class run chart
Student Run chart	For every student - up to date	For every student missing weeks of information	No student run charts
Scatter diagram	For teacher only		No scatter diagram
Disaggregation of Data	Disaggregates data to check for gaps in gender, ethnicity, or other factors		No disaggregation of data
Essential Facts	Are established for more than one grade level - school wide alignment	Are established for the current grade	No essential facts
Life Journal	Established for all subjects complete with all essential information copy for student and parent	Established for a few subjects, copy for student	No life journal

Appendix E

IRB

**Oklahoma State University
Institutional Review Board**

Protocol Expires: 11/13/2003

Date: Thursday, November 14, 2002

IRB Application No ED0343

Proposal Title: TRANSITION TO EDUCATIONAL QUALITY: A STUDY OF CHANGE THROUGH A
TEACHER'S PERSPECTIVE

Principal
Investigator(s):

Caroline Roettger

Kelly Ward

110 Colvin

2600 NW 28, OK 74078

Stillwater, OK 74078

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI :

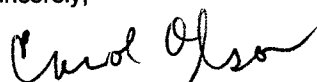
Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research 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 415 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,



Carol Olson, Chair
Institutional Review Board



VITA

Caroline J. Roettger

Candidate for the Degree of
Doctor of Education

Thesis: CHANGE: A TEACHER'S PERSPECTIVE

Major Field: Higher Education Administration

Biographical:

Education: Graduated from Northwest Classen High School, Oklahoma City, Oklahoma, May 1969; Bachelor of Music Education, Oklahoma City University, May 1973; Master's Degree of Music Education, University of Central Oklahoma, Edmond, OK May 1985; Master's Degree of Educational Administration, University of Central Oklahoma, Edmond, OK May 1999; Doctor of Education (Ed.D.) Oklahoma State University, Stillwater, OK
Major Field: Higher Education with an emphasis in Educational Leadership, Dissertation: CHANGE THROUGH A TEACHER'S PERSPECTIVE, August 2003

Experience: K - 3 teacher, Mid-Del Schools, 1976; Instructor, Southern Nazarene University, 1980 - 1986; Teacher, Private K - 12, Nashville, Tennessee, 1986 - 1987; Teacher, Middle School, Mustang, Oklahoma, 1987 - 1990; Teacher, K - 6; Yukon Public Schools, 1990 - 1996; Principal, K - 8, Paden, Oklahoma; 1996 - 1997; Teacher, K - 5, Yukon, Public Schools, 1997 - 1999; Assistant Principal, Oklahoma City Public Schools, 1999 - 2000; Dean of Instruction, Oklahoma City Public Schools 2001; Coordinator of Reform Models, Evaluation, Assessment and Technical Assistance, Oklahoma City Public Schools, 2001- 2003.

Professional Memberships: Phi Delta Kappa; National Association of Elementary School Principals, Association of the Society of Quality; Association of Supervision and Curriculum Development; Oklahoma Association of Elementary School Principals; Cooperating Council of Oklahoma School Administrators