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Understanding change for effective school improvement initiatives: critical elements of school reform.

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UNDERSTANDING CHANGE FOR EFFECTIVE SCHOOL IMPROVEMENT INITIATIVES:
CRITICAL ELEMENTS OF SCHOOL REFORM

A Dissertation

Presented to

The College of Graduate and Professional Studies

Department of Educational Leadership

Indiana State University

Terre Haute, Indiana

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

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Keywords: Change, school improvement, education reform, initiatives

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ABSTRACT

With the historical political and social changes, which ultimately affect education, it is easy to see why teachers sometimes balk at new initiatives and perceived new *best practices*. For change to occur it is important to understand how perception of critical elements of change impact student academic growth. It is also important to have a clearer picture of the level of implementation of critical elements of change.

It is evident there are statistically significant relationships between successful school change predictors and the criterion variables, belief that the rationale of the change initiative is important, continued support of the change initiative, success of professional development embedded in the change process, and strong lines of communication at all levels. The strongest relationships exist between consistent planning for a district-wide change initiative and the predictor variables: resources are based on the instructional priorities of the initiative, staff strengths are matched with staff responsibilities, resources are used to determine annual priorities for staff learning, teachers work together, sharing what they learn to help others learn more, and free flow of information to staff is evident.

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CHAPTER 1

INTRODUCTION

Historical Context

Goethe once said, “The dear people do not know how long it takes to learn to read. I have been at it all my life and I cannot say I have reached the goal” (as cited in Bert, Austin, Spoeche, Bailey, & Wheeler, 1960, p. 90).

Throughout the history of American education, educators and researchers have continued to change ideas regarding best practices, programs, and professional development in instruction. With the recent development in brain research and the ability to perform MRIs on students during instruction, another shift in thinking is being discussed on what comprises best instruction. Those instructional approaches considered to be effective have once again taken a directional change. With state, local, and federal governments so invested in education, the challenge continues to examine the *next best thing* in education to address existing problems. Many changes in education are authored by those riding waves of political goals, resulting in programs such as Reading First Initiatives and Quality Review, as well as changes in the Individuals with Disabilities in Education Act (IDEA), Title I, Gifted and Talented, and No Child Left Behind (NCLB; U.S. Department of Education, 2002).

The challenge to improve methods and develop current best practices is not new and neither is the challenge of change as teachers accept and incorporate new practices or revitalize

what continues to work well. Historical research by Mary C. Austin, a lecturer in reading education at Harvard University in the 1960s, revealed that during the 1800s teachers focused primarily on word recognition and pronunciation (Bert et al., 1960) when teaching reading. For example, one young female teacher in a one-room school during the early 1920s reflected on her experience with the time-honored practice of oral recitation with phonics blends. She recalled the *monotonous chant* as students repeated the reading tables in the spelling text, which included instructions for teaching that she followed rigidly. She humorously observed that somehow her students “hypnotize[d] themselves into learning to read and spell” (Clegg, 1993, p. 2).

Interestingly, television and film of the 20th century tend to portray and popularize a romantic notion of American education during the period from the late 1800s through the early 1900s. Anyone watching *Little House on the Prairie* (Landon, n.d.), *Anne of Green Gables* (Sullivan, 2011), or *Christy* (Green, n.d.) might easily assume that there was no such thing as a learning disability and that everyone learned to read easily in the one-room school.

Mary K. Austin noted throughout the early 1900s some teachers had begun to focus more on reading comprehension and interpretation (Bert et al., 1960). As teaching continued to develop as more of a professional and research-based field, the concept of critical thinking became more of a focus in reading. The research-based work of William Gray influenced millions of emerging readers, with his use of both grapheme and phoneme cues. Gray co-authored the series that introduced Americans to Dick, Jane, and Sally, and of course, Spot and Puff (Jorgenson, 2009). He also assisted in the development of the first readability formulas (Gray & Leary, 1935). By the 1960s, essential reading skills had expanded to incorporate the reader’s ability for application in problem solving—whether personal, social, or professional (Bert et al., 1960).

The changing needs of society and emerging readers brought continued need for reassessment in best practices. By 1955, Rudolph Flesch published what many considered to be a shocking indictment of the education system “Why Johnny Can’t Read” and advocated less of a reliance on the word-method approach and a return to repetition, drill, and phonics (as cited in “Education: Why Johnny Can’t Read,” 1955). In 1957, the Soviet Union successfully launched the first earth-orbiting satellite, ushering in the space age. In a competitive effort, the U.S. education system also launched its own back-to-basics movement, primarily in the areas of science and math; however, reading initiatives and trends swept along in the back-to-basics movement. The 1980s brought the report *A Nation at Risk* (National Commission on Excellence in Education, 1983). The 1990s continued with *Quality Review* (U.S. Department of Education [USDOE], 1996), and *Goals 2000* (USDOE, 1994), and the turn of the century brought the nation’s latest initiative, No Child Left Behind.

Through every change, numerous stakeholders are affected: parents, communities, teachers, principals, superintendents, school boards, curriculum developers and directors, government agencies, taxpayers, institutions of higher education, and most emphatically, students. The annual Gallop Poll found, “Americans believe the most important national education program should be improving the quality of teaching” (Bushaw & Lopez, 2010, p. 10). The extent to which change happens appropriately and effectively depends on the wisdom of several decision makers throughout the process. Although Bower’s (2005) thoughts are in regard to science teachers, his statement can also be correlated with teachers of all subject areas:

The involvement of working scientists can have a profound effect on teacher optimism.

Changing teaching style and/or adopting new curriculum requires tremendous energy and commitment on the part of the teachers involved. Through supportive participation in the

process, scientists can provide crucial emotional support for teachers and also advocate for teachers within a program, school district, and/or community. (p. 7)

Purpose of the Study

The purpose of this study was to discover what school leaders can do to implement successful practices and initiatives in the districts they lead. A survey developed for this research assisted in determining what districts can do to implement successful education initiatives as well as what districts should avoid to prevent unsuccessful initiatives, as perceived among multiple educational stakeholders.

Statement of the Problem

In a monograph prepared for Hawaii's School Leadership Academy, Heim (1996) denoted, "One needs only listen to snippets of the current educational reform dialogue to realize that 'accountability' has many meanings for political leaders, education officials, teachers, parents, community and business leaders, and the general public" (p. 2).

Marzano, Zaffron, Zarik, Robins, and Yoon (1995) may have said it best:

One of the constants within education is that someone is always trying to change it. That is, it seems that someone is always proposing a new practice, program, and new techniques to change education for the better. Yet many seemingly powerful change-oriented innovations are short-lived. (p. 162)

With the historical political and social changes, which ultimately affect education, it is easy to see why teachers sometimes balk at new initiatives and perceived new *best practices*. Educators and policymakers rarely agree on the definition of academic achievement.

NCLB sets testing benchmarks in reading and math to try and capture academic progress.

The law mandates that all schools meet proficiency standards, established by the

individual states, in reading and math by the year 2014 - or lose federal funding. (School Counselor.org, 2011, para. 3)

As educational research continues to improve in quality and quantity, learning leaders understand more about effective teaching practices and professional development efforts (Au, 2010). In past years, professional development often took the form of a few required, in-service hours after school. Teachers were expected to implement best practices with little or no follow-up support. More recent research shows what many educators instinctively know, that *drive-by* professional development is not effective (Sparks, 1999). Rather, systemic professional development on best practices literacy—delivered consistently and over a period of time with fidelity and additional support—proves to be the most effective form of professional development (Au, 2010).

With federal grant monies, the state of Illinois is now making dramatic changes in its lowest performing schools through school turnaround initiatives. Turnaround schools have four improvement models from which to choose: (a) school closure, (b2) restart as a charter school, (c) turnaround through replacement of the principal and at least half of the teaching staff, or (d) transformation through various reforms (Manwaring, 2011). As the state continues to offer more grant dollars to low performing schools it becomes increasingly important to understand what must take place for change to occur. For change to occur it is important to understand how perception of critical elements of change impact student academic growth. It is also important to have a clearer picture of the level of implementation of critical elements of change and its impact on student academic achievement growth.

Andrew Carnegie (n.d.) once said, “You cannot push anyone up a ladder unless he is willing to climb it himself.” Thomas Jefferson (n.d.) observed, “Nothing can stop the man with

the right mental attitude. . . Nothing on earth can help the man with the wrong mental attitude.”

Resistance to change seems nearly instinctive for many teachers. Some educators appear to have moved into a survival mode of self-protection, but others simply want to fly *below the radar* until the next trend runs its course. So, how can a district implement a successful initiative, design and implement professional development and establish *buy-in* if a teacher is unwilling to accept the change and implement new initiatives or practices with fidelity (Au, 2010)?

Research Questions

1. To what extent do the variables predict if initiatives are reinforced through individual work with staff members, stipends are not a motivator, and professional development is embedded in the change process?
2. To what extent do the variables predict if resources are allocated based on instructional priorities of an initiative, resources are used to determine annual priorities for faculty learning, staff strengths are focused on and matched with current responsibilities, consistent planning for the change initiative, and supports are in place for the initiative to continue when people leave the district?
3. To what extent do the variables predict if a district’s resources are based on instructional priorities, consistent planning for a change initiative, staff strengths are matched with responsibilities, resources are used to determine annual priorities for faculty learning, and supports are in place for the initiative to continue when staff members leave the district?
4. To what extent do the variables predict if there is effective district-wide communication, resources are allocated based on instructional priorities of the

- initiative, staff strengths are matched with current responsibilities, and consistent planning for a change initiative?
5. To what extent do the variables predict if resources are based on the instructional priorities of the initiative, staff strengths are matched with staff responsibilities, resources are used to determine annual priorities for staff learning, teachers work together, sharing what they learn to help others learn more, and free flow of information to staff?
 6. To what extent do the variables predict if the belief the rational for the change initiative is important, staff strengths are matched with current responsibilities, resources are used to determine annual priorities for staff learning, teacher involvement in professional development to enhance teaching, and well-protected instructional time?

Null Hypotheses

H₀1. The variables do not predict if initiatives are reinforced through individual work with staff members, stipends are not a motivator, and professional development is embedded in the change process.

H₀2. The variables do not predict if resources are allocated based on instructional priorities of an initiative, resources are used to determine annual priorities for faculty learning, staff strengths are focused on and matched with current responsibilities, consistent planning for the change initiative, and supports are in place for the initiative to continue when people leave the district.

H₀3. The variables do not predict if a district's resources are based on instructional priorities, consistent planning for a change initiative, staff strengths are matched with

responsibilities, resources are used to determine annual priorities for faculty learning, and supports are in place for the initiative to continue when staff members leave the district.

H₀4. The variables do not predict effective district-wide communication, if resources are allocated based on instructional priorities of the initiative, if staff strengths are matched with current responsibilities, and if consistent planning for a change initiative is ongoing.

H₀5. The variables do not predict if resources are based on the instructional priorities of the initiative, if staff strengths are matched with staff responsibilities, if resources are used to determine annual priorities for staff learning, if teachers work together sharing what they learn to help others learn more, and if free flow of information to staff is evident.

H₀6. The variables do not predict if belief the rational for the change initiative is important, if staff strengths are matched with current responsibilities, if resources are used to determine annual priorities for staff learning, if teacher involvement in professional development to enhance teaching, and if instructional time is well-protected.

Definitions

The following terminology was defined for clarification to enable the reader to better understand this study:

Curriculum is “the planned interaction of pupils with instructional content, materials, resources, and processes for evaluating the attainment of educational objectives” (Indiana Department of Education [IDOE], 2011, para. 10).

Implementation “is a variable, and if the change is a potentially good one, success (such as improved student learning or increased skills on the part of teachers) will depend on the degree and quality of change in actual practice” (Fullan, 2001, p. 70).

Perception is “an attitude or understanding based on what is observed or thought”

(Encarta World English Dictionary, 2009, para. 3).

Systemic change is change that occurs in all aspects and levels of the educational process and that affects all of the people included in this process—students, teachers, parents, administrators, and community members. It is a dynamic process that requires constant communication and evaluation and has implications for the curriculum, instruction, assessment, and professional development. (Mosely, 2009, p. 12)

Limitations

This study may have been influenced by the following limitations:

1. There may possibly have been a biased response from participants who are reluctant to change.
2. There may possibly have been a biased response from participants who favor change.
3. Findings were limited by the number of completed surveys represented in the study.

Delimitations

This study had the following delimitations:

1. The study was conducted from mid-January to mid-February 2012.
2. This study was delimited to Illinois public school teachers, principals, directors of curriculum and instruction, assistant superintendents, and superintendents whose districts have received Illinois School Improvement Grant funding.
3. The sample size was small due to the low number of schools who have received Illinois School Improvement funding.

Summary

This particular study is divided into five chapters. Chapter 1 addresses the statement of the problem, the purpose of the study, research questions, hypothesis, definitions, limitations, and delimitations. Chapter 2 contains a review of current literature on best practices in reading, change research, and professional development. Chapter 3 explains the methodology used to complete this study. Chapter 4 includes the presentation of results and the analysis of data. Chapter 5 shares the study's conclusions, implications, recommendations, and summary of the study.

CHAPTER 2

LITERATURE REVIEW

Overview

The topic of change is underpinned by an enormous body of research. The Education Resources Information Center (ERIC) database attests to this fact with 149,928 articles on change, 25,868 articles on education reform, 40,941 articles on the history of change research, and 6,874 articles on change theory research. The purpose of this chapter is to investigate the topic of change as it relates to education. This chapter focuses on a review of research relative to the concept of change and educational reform, specifically as it relates to stakeholder understanding and acceptance of change in order to implement successful school initiatives.

The word *change* seems simple enough to define until one actually looks up the word and examines the various meanings and innuendos related to the word. Webster defined the transitive verb, change, as 1.a) “to make different in some particular: ALTER <never bothered to change the will> 1.b) make radically different: TRANSFORM <can’t change human nature>, and 1.c) to give a different position, course, or direction to” (Merriam-Webster, 2011, para. 1).

Subsequently, the literature review focuses on three fundamental areas: (a) an overview of educational reform, (b) an overview on layers of change research, and (c) current change research and theory.

The literature review graphic in Figure 1 is a visual representation used to outline the study for this research.

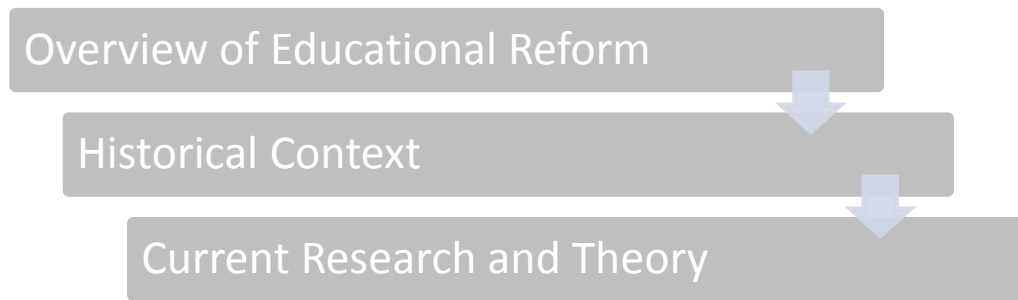


Figure 1. Literature review outline graphic

Overview of Educational Reform

The year 1893 brought about recommendations from the Committee of Ten to standardize curriculum in nine different areas in order for high schools and post-secondary schools to better articulate what was being taught in American schools (College Board, 2011). Likewise in 1893 the Committee of Fifteen, formed by the National Education Association, concentrated on elementary education reform. The traditional eight-grade system was supported by the committee and recommendations for grammar, literature, arithmetic, geography and history to be taught as core subjects instead of a correlated broad subject were reported to the nation in 1895 (American-Education.org, 2011).

Educational practices and the impact on student achievement continued to be examined in the 1900s. As the needs in the workforce changed and America's place in a changing global society was challenged by the Soviet's launch of Sputnik in 1957 (Garber, 2007), the face of American education began to change as well. The Back to Basics movement, *A Nation at Risk* (National Commission on Excellence in Education, 1983), *Quality Review*, *Goals 2000*

(USDOE, 1994), and No Child Left Behind (NCLB, USDOE, 2002) were all attempts to change the face of American education.

During the 1960s and 1970s, Madeline Hunter's recommended instructional lessons should include "an anticipatory set" (as cited in Schmoker, 2011, p. 57), as well as direct teaching and modeling, guided practice, and checking for understanding. Douglas Fisher and Nancy Fry's work in 2007 built their "gradual release of responsibility" from Hunter's model (as cited in Schmoker, 2011, p. 58). Marilyn Burns work also reflects that of Hunter, Fisher and Fry. Burns believed students should practice "think-pair-share" (as cited in Schmoker, 2011, p. 59). Also in 2007, Marzano's research also backed the importance of utilizing Hunter's elements of a good lesson plan (as cited in Schmoker, 2011). Although decades of research demonstrate how lessons should be designed and taught,

the payoff isn't in knowing these components; the payoff comes from *actually doing them*. What would happen if we did design *and implement* this simple, universally affirmed structure into our lessons? I'll say it again: We would make educational history. (Marzano as cited in Schmoker, 2011, p. 60)

President George W. Bush was quoted in a January 2002 memorandum regarding NCLB: "These reforms express my deep belief in our public schools and their mission to build the mind and character of every child, from every background, in every part of America" (U.S. Department of Education, 2002, para. 1).

A study on the 2010 *Race to the Top* initiative, a competitive federal initiative, was another attempt by the federal government to improve education (Keller, 2010). Illinois placed fifth in the competition and failed to receive Race to the Top funds, which could have netted Illinois with between \$200 million to \$400 million in competitive education dollars (Malone,

2010). Since then, Illinois is one of several states to adopt Common Core Standards. The initial hope was Illinois would have a better chance of receiving “Race to the Top” funds because of the Common Core Standards adoption. As of October 2010, Common Core State Standards (CCSS) have been adopted by 37 states (Tienken, 2011). However it was Tienken’s belief after much research that the Common Core is hardly a 21st century innovation but rather a revitalization of the recommendations from the 1893 Committee of Ten and the 1895 report from Committee of Fifteen (Tienken, 2011).

There is an interesting comparison between the annual Gallop Poll of 2010 and 2011. The 42nd Annual Gallop Poll found “Americans believe the most important national education program should be improving the quality of teaching” (Bushaw & Lopez, 2010, p. 10). Almost contradictory in nature, the 43rd Annual Phi Delta Kappan Gallup Poll reported the following,

Approximately three of four Americans have trust and confidence in public school teachers, and this level of trust is even higher for Americans under age 40, the college educated, and parents of children in public schools. As an indicator of this trust, three of four Americans believe teachers should have flexibility to teach in the ways they think best rather than being required to follow a prescribed curriculum. (Phi Delta Kappa, 2011, p. 10)

In September of 2011, the U.S. House of Representatives began consideration of the Empowering Parents through Quality Charter Schools Act (H.R. 2218). This act would “facilitate the establishment and replication of high-performing charter schools, as well as encourage choice, innovation, and excellence in education” (Kline, 2011, p. 1).

More sweeping changes were coming in education. In late September 2011, the Obama administration announced a competition for 185 million federal dollars to colleges who can

produce teachers whose students perform well on standardized tests (Banchero & Helliker, 2011).

Historical Context of Change Research

Change has so many invisible layers. The peeled-back layers sometimes yield surprising results. Psychologist William James investigated sequences of change events to determine “emotion is feedback from the bodily changes that occur in response to a particular situation” (as cited in Guskey, 2002, p. 386).

Whitaker (2010) discussed how each situational change scenario is unique. Whitaker (2010) compared change in a school setting to a game of chess:

It’s much more like playing chess than like playing checkers. If you play checkers often enough, you begin to recognize certain patterns. Furthermore, until a piece advances to the king row, all of your pieces have to march across the board in the same direction.

Well, chess players also start each game with a specific set of pieces in specific positions, but each piece moved differently, and the number of possible combinations is so vast that every game can turn into a contest much different from the one before. (p. 2)

Perception on affecting change developed largely from the early influence of psychotherapeutic models developed by scholars like Kurt Lewin (Guskey, 2002). He first presented a simple change model in 1947, “a three stage theory of change commonly referred to as Unfreeze, Change, Freeze (or Refreeze)” (Lewin as cited in Change-Management-Coach.com, 2011, para. 1). Motivation was a key aspect—weighing the positives and negatives during what Lewin called *Force Field Analysis*, a time to examine all the factors (Change-Management-Coach.com, 2011). Without enough reasons to change, motivation for change would be low. Lewin’s model recognized change as a process and has provided foundational principles for

other models over the last 60 years. Lewin recognized that the Change Stage (stage 2) was a transition period of problem solving, training, and internalizing the vision with a focus on benefits of the change (Change-Management-Coach.com, 2011). Stage 3, known both as Freezing and Refreezing, involved acceptance and stability, usually with time to settle in to a new working pattern (Change-Management-Coach.com, 2011).

Whitaker (2010) suggested, “Our task is to steer that change *in the direction we choose* by applying intentional strategies to maximize the chance of success as the game unfolds” (pp. 2-3). Whitaker (2010) also suggested nine strategies to lead change: “identify the change” (p. 5), “make sure the first exposure is great” (p. 17), “determine who matters most” (p. 27), “find the entry points” (p.41), “reduce the resistance” (p. 55), “harness the power of emotion” (p. 71), “look past buy-in to action” (p.83), “reinforce changed behaviors” (p. 99), and “fit it all together” (p. 113).

Research on motivation was a large part of change theory investigation during the mid-1900s. Famed Gestalt psychologist, Karl Duncker, studied motivation theory in the 1930s (Zangwill, 1987). One of the experiments Duncker used was the candle problem. He asked participants to attach the candle to the wall so the wax would not drip on the table. The key for those in the experiment was to overcome functional fixedness (Pink, 2009a).

Harry Harlow, who is most widely known for his research in attachment and bonding, also used rhesus monkeys for experiments in learning. Pink (2009b) has recently brought Harlow’s work in motivation to the forefront. Harlow’s lesser-known experiments revealed that the rhesus monkeys demonstrated strong intrinsic motivation to complete tasks, a surprising result that ran counter to the prevailing behavioristic science of the time that assumed reward and punishment as essential to motivation for behavioral change. Harlow’s work provided a

springboard for follow-up studies by Deci in 1969 (Pink, 2009b). Deci examined the effects of intrinsic versus extrinsic motivation and observed that external reward, such as money, would often result in a lessened motivation in human subjects (as cited in Pink, 2009b).

Research conducted in 1974 indicated innovations by themselves were not necessarily a failure, but basic nature of the change process (Watzlawick, Weakland, & Fisch, 1974).

Although Chapter 2 focuses a large section on first-order and second-order change, Watzlawick et al. (1974) found that first-order change was largely psychological while second-order change is predominantly ontological.

During the mid-20th century, another change factor, beyond motivation, focused on the change agent, often a person outside of an institution whose specific role was to be the catalyst for systems change. The phrase was first used by the National Training Laboratory staff in 1947 to facilitate discussion among professional outside helpers (Ottaway & Cooper, 1976).

Before a leader can initiate change, the leader first needs to identify the change he/she wishes to make. Additionally, it is critical to identify the problem, identify the goal, recognize who will be affected by your decisions, and consider the source for the change you seek. Whitaker (2010) discussed three levels of change: “procedural change, structural change, and cultural change” (pp. 9-10).

Concerns-Based Adoption Model (CBAM)

The year 1978 brought about one of the most popular education models used to describe the psychological stages in relationship to implementation of new innovations or changes (Marzano et al., 1995). The Concern Based Adoption Model or CBAM (Hall & Loucks, 1978) examined seven stages individuals move through as they become aware of new innovation or

change, as they understand and hopefully accept and apply the change or innovation (Marzano et al., 1995).

The CBAM by Hord, Rutherford, Huling-Austin, and Hall (as cited in Hall & Loucks, 1978) was used as a model for a survey which was distributed to teachers across the United States. This survey examined typical expressions of concern about innovation as well as levels of use of the innovation to better understand the impact on professional development. This was one of the first studies to delve into the effects of change on teachers (Hord et al., 1987). This was also the first study of its kind to examine teacher response to change initiatives.

Through Hord's research, the need for a change facilitator is great. The change facilitator is the person who can, "deliver actions based on the needs of the individuals or groups of individuals involved in change and improvement" (Hall, 1986, p. 9). This person actually works with teachers to determine "the stages of concern, levels of use, and innovation configurations" (Hall, 1986, p. 10).

The levels of concern examined in Hord et al.'s (1987) research include: "awareness, information, personal, management, consequence, collaboration, and refocusing" (p. 36). The levels of use examine "eight areas where a teacher might be in their level of use of a certain program" (Hall, 1986, p. 55). Levels of use include: "level 0 = non-use, level 1 = orientation, level 2 = preparation, level 3 = mechanical use, level 4a = routine, level 4b = refinement, level 5 = integration, and level 6 = renewal" (Hord, 1986, p. 55).

The innovation configuration is a set of questions used to understand, "How are teachers using X program?" (Hord et al., 1987, p. 12). Not only does this information help one "understand the simplicity or complexity of use of a program, information is used to help teachers more effectively "use" the program" (Hord et al.'s, 1987, p. 13). Hord et al.'s (1987)

SoCQ Quick Scoring Device is a questionnaire teachers complete in order for the change facilitator to more accurately gauge “what people who are using or thinking about using various programs are concerned about at various times during the innovation adoption process” (p. 48).

Another important layer in the change process is training and learning. Organizations hope to train employees on best practices while covering large quantities of material in the shortest amount of time in order to save both time and money. However, Robbins and Finley (1996) cautioned, “As your organization grapples with its change initiatives, you will want to run reality checks to make sure you are learning, and not just training” (p. 125).

The Minnesota and Toronto researchers for the Wallace Foundation found, “Building principals’ confidence in their ability to lead change by providing them the necessary training and support is one of the most important things a district can do to improve school performance” (Vitcoy & Bloom, 2010, p. 18). Prior to the beginning of the implementation of a new initiative, many school districts send teams of teachers and administrators to schools where successful implementation of an initiative has been carried out. Whitaker (2010) recommended site visits with parameters. Administrators should know what teachers are going to see at the visit. Whitaker (2010) also cautioned to not choose critics to attend on-site visits as a way to win them over, but “to remember the people who attend the on-site visits will become the resident experts in the building” (p. 24). Whitaker (2010) also stated, “You might hold a series of small-group sessions for the crucial first exposure, starting with the more positive potential supports and gradually bringing in the fence-sitters. Again, be intentional about the makeup of these groups” (p. 24)

Katzenback (1995) conducted a study on Real Change Leaders (RCLs) and looked at RCLs in the business community. The insight gleaned from this study identified and examined

three areas RCLs need from management. All RCLs should have *Performance Discipline* with goals and measures that make sense to customers and employees. Leaders should be demanding and walk the talk. RCLs should reward those who earn it, and punish those who deserve it. RCLs raise the standard in low performing areas. Katzenback (1995) also suggested rewarding the areas being promoted by the organization.

A second area RCLs exhibit success is the arena of *unflagging support*. RCLs encourage customers and employees to tell it like it is and listen when they do (Katzenback, 1995). RCLs also take personal risks, allow employees to make mistakes, and are consistent with word and deed (Katzenback, 1995).

The third area RCLs show success according to Katzenback is *Staying the Course*. Katzenback (1995) stated, “Real Change Leaders accelerate efforts to create change leadership opportunities. RCLs get involved down the line and stay involved over time. RCLs help us build an increasingly diverse tool kit for change. RCLs expand and diversify the skill mix” (pp. 336-337).

One level of change is global change (Robbins & Finley, 1996). Global change is the change which happens around and to people. Such things as politics, economy, technology, global competition, and gas prices around the world are a part of global change (Robbins & Finley, 1996). Globalization and technology are also two forces for change (Kanter, 1999).

Another area of change as defined by Robbins and Finley is the layer of organizational change. Organizational change incorporates all of the change initiatives an organization takes to meet the needs of global change (Robbins & Finley, 1996).

Robbins and Finley (1996) pointed out a third layer of change which is personal change. Personal change describes the positive and negative effects which occur in individuals and affect

how flexible a person is throughout the change process (Robbins & Finley, 1996). Chaos theory sees systems as not only complex but also spontaneous and idiosyncratic and, most importantly, identified as unpredictable (Evans, 1996).

Kotter's (1996) research discussed the value of lifelong learning and leadership skills with the capability to succeed in the future. Kotter (1996) described the following characteristics evidenced by lifelong learners:

1. Risk taking: Willingness to push oneself out of comfort zones,
2. Humble self-reflection: Honest assessment of successes and failures, especially the latter,
3. Solicitation of opinions: Aggressive collection of information and ideas from others,
4. Careful listening: Propensity to listen to others, and
5. Openness to new ideas: Willingness to view life with an open mind. (p. 183)

Kanter's 1999 research found, "Years of study and experience show that the things that sustain change are not bold strokes but long marches—the independent, discretionary, and ongoing efforts of people throughout the organization" (p. 1). The article also outlined 10 reasons for change resistance to educational initiatives:

1. Decisions or requests that are sprung on administrators and teachers without notice.
2. Not knowing enough about the change will result in the "Walking off a Cliff Blindfolded" syndrome.
3. Feeling a loss of control that changes are done to, rather than done by, those affected.
4. Concerns that change will require administrators and teachers to question familiar (and comfortable) routines and habits.

5. Expectation that the initiative is temporary and it will stay incomplete, meaning the best strategy is to lay low and not contribute to success.
6. Change implies that the former way of doing things was wrong. Some administrators and teachers may feel embarrassed in front of their peers or staff.
7. Educators can question their ability to be effective after a change: Can I do it? How will I do it? Will I make it in the new situation?
8. Change in one area can disrupt other projects or activities, even ones outside of work.
9. Organizational change often increases workloads.
10. Change often creates real winners and losers, and people worry about where they will end up when the project is complete. (Kanter as cited in McLeod, 2007, para. 2)

Kotter (1999) suggested there are three keys to mastering change: “the imagination to innovate, the professionalism to perform, and the openness to collaborate” (as cited in Kanter, 1999, para. 10). Kanter (1999) also outlined seven classic skills leaders should develop for successful change: “tuning in to the environment, challenging the prevailing organizational wisdom, communicating a compelling aspiration, building coalitions, transferring ownership to a working team, learning to persevere, and making everyone a hero” (para. 14).

According to Kotter (1996), management versus leadership makes a significant difference in the transformational change process. “While management accounts for only 10 to 30% of successful transformational change process, leadership accounts for 70 to 90% of successful transformational change process” (Kotter, 1996, p. 26).

In 2009, Daniel Pink published a book regarding the surprising science of motivation. Do problems have a clear set of rules and a single solution? Usually not, rules are sometimes surprising and not obvious. He stated we are still dealing with the candle problem which Karl

Duncker made famous earlier in the century. Pink's premise was that *if then* rewards do not work (Pink, 2009a). However, when mechanical skill was involved, bonuses worked well. When tasks were asked for other skills, a larger reward led to poorer performance. Pink decided to go to India to test again. Again, those being evaluated were given three levels of rewards. They found larger rewards gained no better results than small rewards. Those individuals in the study who were looking for the highest rewards did worst of all thus demonstrating that higher incentives led to worst performance. This confirms Pinks's (2009a) research that *if then* rewards are not effective.

Parents in Compton, California, a South Central Los Angeles town, are the first to employ the *Trigger Law* to sanction change in their school district. If 51% of parents sign a petition for change, the parents can then release teachers, principals, administration and change their public school to a charter school. This is just what parents in Compton, California are doing (Education World, 2011).

Educational Change

Michael Fullan, an expert on educational change and collaborator with Microsoft's Partner in Learning (PiL), answered the question regarding the difficulty of bringing about change initiatives in education. Fullan responded, "How hard is bringing about positive change on a large scale? Damn so judging from the history of failed attempts over the past half century" (Fullan, 2011, p. 3).

Change often brings reluctance from members of the staff. It is important to recognize the hesitancy in the beginning of an initiative and deal with it up front. Whitaker (2010) also stated, "Again, you teach the entire group, follow up with individuals, and then reteach or reinforce the lesson with the entire group" (p. 62).

Many of the change initiative models available for reflection focus on the business model where companies can choose the types of customers and geographical regions they wish to court for customers. Education does not easily fit into this complex model. Educators are expected to educate the children who are residents of the district, not children the districts seek out.

In Robbins and Finley's (1996) book, the authors boldly proclaim The Seven Unchangeable Rules of Change have not changed for the past 40,000 years. The Seven Unchangeable Rules of Change are

1. People do what they perceive is in their best interest, thinking as rationally as circumstances allow them to think. We call this the law of Push.
2. People are not inherently anti-change. Most will, in fact, embrace initiatives provided the change has positive meaning for them. This is the law of Pull.
3. People thrive under creative challenge, but wilt under negative stress.
4. People believe what they see. Actions do speak louder than words, and a history of previous deception octuples present suspicion.
5. The way to make effective long-term change is to first visualize what you want to accomplish, and then inhabit this vision until it comes true.
6. Change is an act of the imagination. Until the imagination is engaged, no important change can occur. (Robbins & Findley, 1996, p. 11)

McManus (2009) suggested not using the term *resistance to change* and instead focus on the concerns of people and why they are unconvinced the initiative will not work and how to address what the changes will mean for them. McManus (2009) said, "People resist change, and what does it teach us when they do? Their hesitancy, and sometimes-outright objections, can

yield important insights for leaders who remain open minded enough to tap them to help their change initiatives succeed” (para. 4).

“Change is a highly personal experience” (Hord, 1987, p. 6). Individual educator’s response to change is frequently different from each other. Some educators are excited about change and new initiatives while others are not. “It is vital to pay close attention to individual’s responses to change in order to improve the success of a change initiative in a school district” (Hord, 1987, p. 6).

“Because teaching is very personal, it is important to take away the element of fear from new change initiatives” (Whitaker, 2010, p. 73). Whitaker (2010) also recommended, “Make it seem as if everyone is doing it, make the new seem normal, make everyone want it, and give everyone two incentives for change” (p. 79).

According to City, Elmore, Fiarman, and Teitel (2009), professionals are described as people who share a common practice, not people whose practices are determined by taste and style. Furthermore, the only way to *improve* your practice is to allow yourself to think that your practice is *not* who you are. It is, instead, a way of expressing your current understanding of your work, your knowledge about the work, and your beliefs about what is important about the work. (p. 160)

Professional educators should grow in knowledge, skill, expertise, and understanding of work (City et al., 2009). Interestingly, educators who believe what defines who they are as a person, show minimal growth. Conversely, educators who maintain the values and commitments that make that person unique yet are willing to change their practices, show growth. “Your practice is an instrument for expressing who you are as a professional; it is not who you are.” (City et al., 2009, p. 161).

Whitaker (2010) also indicated the importance of a positive initial response. “One way to ensure a positive initial response is to focus on the positive outcomes that will result from the change. The second is to focus on the negatives that the change will diminish or forestall” (p. 81). Whitaker (2010) reflected that “some people need to experience a situation before they think it is a good idea” (p. 87). To this end, Whitaker (2010) suggested “creating a visual where the leader maps out where each teacher appears to be on the spectrum. After that the best time to issue a mandate for change is after the balance has shifted in favor of the initiative” (p. 97).

Current Research and Theory of Educational Change

In his work, Fullan (2011) focused on a framework of change which consisted of five components: moral purpose, “understanding change, relationship building, knowledge creation and sharing, and coherence making” (p. xi). Research by Guskey (2002) gave the following three implications for professional development which in turn should lead to successful change. First “recognize change is a gradual and difficult process for teachers” (Guskey, 2002, p. 386). Secondly, “ensure that teachers receive regular feedback on student learning progress” (Guskey, 2002, p. 387). Third, provide continued follow-up, support, and pressure” (Guskey, 2002, p. 388).

The extent to which change happens appropriately and effectively depends on the wisdom of several decision makers throughout the process. Although Bower’s thoughts are in regard to science teachers, his statement can also be related to other curricular-areas:

The involvement of working scientists can have a profound effect on teacher optimism.

Changing teaching style and/or adopting new curriculum requires tremendous energy and commitment on the part of the teachers involved. Through supportive participation in the process, scientists can provide crucial emotional support for teachers and also advocate

for teachers within a program, school district, and/or community. (as cited in Bushaw & Lopez, 2010, p. 7)

Research released in 2005 by Marzano, Waters, and McNulty reviewed results of a meta-analysis conducted on over 35 years of research on the relationship between leadership and student achievement. This study concluded there were 21 responsibilities of the school leader in order to bring about student achievement. All 21 responsibilities were mentioned in prior research. Marzano et al. (2005) speculated that due to the enormous number of leadership skills set needed for a school leader, it is no wonder so few are successful. The 21 responsibilities of school leaders are

affirmation, change agent, contingent rewards, communication, culture, discipline, flexibility, focus, ideals/beliefs, input, intellectual stimulation, involvement in curriculum, instruction, and assessment, knowledge of curriculum, instruction, and assessment, monitoring/evaluating, optimizer, order, outreach, relationships, resources, situational awareness, and visibility” (Marzano et al., 2005, pp. 41-61).

Marzano’s research also indicated “it is important to ensure the instructional time of teachers is well protected” (Marzano et al., 2005, p. 162).

Dorsey’s (2005) focused primarily on one of Marzano’s 21 responsibilities of leaders, the importance of school culture. Dorsey (2005) described high performing schools as schools with positive energy, fun places to be, and full of both students and teachers who wanted to be at school, doing his/her best. Positive school culture can be built one person, one positive relationship at a time. Dorsey (2010) believed that “all long-term school improvement hinges on developing the people within the school” (p. iii).

Wagner et al. (2006) introduced the interrelated 4Cs of change: “competencies, conditions, culture, and context” (p. 98). Competencies are defined as “the repertoire of skills and knowledge that influences student learning” (Wagner et al., 2006, p. 99). Conditions are noted as “the external architecture surrounding student learning, the tangible arrangements of time, space, and resources” (Wagner et al., 2006, p. 101). Culture is characterized by “the shared values, beliefs, assumptions, expectations, and behaviors related to students and learning, teachers and teaching, instructional leadership and the quality of relationships within and beyond the school” (Wagner et al., 2006, p. 102).

Context refers “to ‘*skill demands*’ all students must meet to succeed as providers, learners, and citizens and the particular aspirations, needs, and concerns of the families and community that the school or district serves” (Wagner et al., 2006, p. 104). The authors suggest the 4Cs are interconnected and should all be considered in “a global, state, and community context before making changes in an educational institution” (Wagner et al., 2006, p. 105).

Hall and Hord (2011) discussed change: “We need to emphasize that at all levels—individual, organizational, and system—change is highly complex, multivariate, and dynamic. If it weren’t so complicated, it would not be nearly as much fun to study, facilitate, and experience” (pp. 5-6).

A key finding in the Educational Research Service (2009) study indicated principals credit districts with providing resources to support improvement, however, principals perception is that districts do not provide the quantity of resources needed. Principals also perceived a need for greater support when implementing programs which have been adopted. Principals did not perceive a need for more district-mandated reform models and/or intervention programs other than programs already implemented (Educational Research Service, 2009).

First-Order Change

The premise of first-order change is to make improvements to what we are *already* doing in schools (Evans, 1996). Marzano et al. (2005) examined the differences of first order and second order change. There are six areas that indicate first order change:

1. The change is perceived as an extension of the past,
2. Fits within existing paradigms,
3. Is consistent with prevailing values and norms,
4. Can be implemented with existing knowledge and skills, and
5. Requires resources currently available to those responsible for implementing the innovations, and may be accepted because of common agreement that the innovation is necessary. (Marzano et al., 2005, p. 105)

Whitaker (2010) stated, “There is no question that the new will never become the normal without an ongoing effort to integrate change into the everyday routine of a school” (p. 103). He also suggested, “Spaced reinforcement (early and often) can go a lot farther than massed reinforcement in supporting a regular effort to improve habits in the classroom” (Whitaker, 2010, p. 104).

It is important for school leaders to pay attention and understand the importance of all 21 responsibilities of leaders (Marzano et al., 2005). Nevertheless, for the success of first-order change, the school principal must have a purposeful community and have the ability to support first-order change. In order to have a purposeful community the school principal should pay careful attention to the following nine responsibilities: “optimizer, affirmation, ideals/beliefs, situational awareness, visibility, relationships, communication, culture, and input” (Marzano et al., 2005, p. 115).

Procedural change involves, very simply, process and procedures in areas such as taking attendance, sending out truancy letters, and substitute procedures. Although this appears to be a very low level change where teachers could be notified through an e-mail, it is still a little more sophisticated. According to Whitaker (2010), “I have described these procedural changes as *simple*, but that is not to say they are *easy*. Keep in mind that even minimal changes can become big deals if they are not handled with care” (p. 10).

Structural change is more complicated than a procedural change but is still a matter of management and organization. While it may change structure, it does not change people. Structural change could involve changing from a traditional school day to a balanced calendar or moving from a junior high concept to a middle school concept. It could also include adoption of new textbooks or increasing class size.

While the building principal needs to use the nine responsibilities in order to support first-order change, building principals must also have a strong leadership team. During first-order change initiatives, leadership teams must also focus specifically on the following 11 responsibilities: “monitoring/evaluating, knowledge of curriculum, instruction, and assessment, focus, intellectual stimulation, flexibility, resources, contingent rewards, outreach, discipline, change agent, and order” (Marzano et al., 2005, pp. 108-109). Table 1 contains the characteristics of first-order and second-order change.

Table 1

Characteristics of First-Order and Second-Order Comparison

First Order Change	Second Order Change
Is perceived as an extension of the past	Is perceived as a break with the past
Fits within existing paradigms	Lies outside existing paradigms
Is consistent with prevailing values and norms	Conflicts with prevailing values and norms
Can be implemented with existing knowledge and skills	Requires the acquisition of new knowledge and skills
Requires resources currently available to those responsible for implementing the innovations	Requires resources currently not available to those responsible for implementing the innovations
May be accepted because of common agreement that the innovation is necessary	May be resisted because only those who have a broad perspective of the school see the innovation as necessary

Source: Marzano et al., 2005, p. 113.

Second-Order Change

Second order changes are “systemic in nature and aim to modify the very way an organization is put together, altering its assumptions, goals, structures, roles, and norms” (Watzlawick et al., 1974, pp. 10-11). In contrast to first-order change, second-order change causes people to not simply do things the way they have always done things, but in fact, to change the way they have previously thought about the way they did things and change their mind-set and actions.

A cultural change builds on procedural and structural change and tackles how we do things. Cultural change often brings resistance, is difficult, and has the power to change the very heart of the group. Whitaker (2010) emphasized a couple of assumptions:

The first is that the most challenging kind of change to make is cultural change. If your school culture declares that you make decisions based on what is best for students, it should be relatively easy to implement structural or procedural changes...But few organizations have such a strongly established positive culture, and so in most cases the outcomes you seek require cultural change. Secondly, if you take the right approach from the start, the effects begin to take hold rather quickly. (p. 14)

The following six areas represent Marzano and Waters' (2009) research on second-order change. This type of change

1. Is perceived as a break with the past,
2. Lies outside existing paradigms,
3. Conflicts with prevailing values and norms,
4. Requires the acquisition of new knowledge and skills,
5. Requires resources currently not available to those responsible for implementing the innovations, and
6. May be resisted because only those who have a broad perspective of the school see the innovation as necessary. (Marzano & Waters, 2009, p. 105)

The first dimension of second-order change focuses on a perceived break with the past. If a school district's nonnegotiable goal has been to pursue academic performance and has always been academic performance, it may not seem this is a second-order change. However, tie standards-based reports cards to the mix and you may have second order change because it would be a break from past practice for a large number of school districts (Marzano & Waters, 2009).

The next dimension of second-order change occurs when the change lies outside existing paradigms. Marzano and Waters's (2009) research suggested current educational institutions are not highly consistent with student achievement and instructional practices. Changes to the structure of the institution may also result in second-order change (Marzano & Waters, 2009).

The third dimension of second-order change involves conflicts with prevailing values and norms. Marzano and Waters (2009) believed this area is the most malleable because it involves influence. Leaders have a unique opportunity to influence values and norms.

The fourth dimension of second-order change requires the acquisition of new knowledge and skills. For years research has been available which outlines the indicators for successful district initiatives, school reform, and classroom instruction for student achievement. Frequently, the information has been slow getting to the classroom level. Classroom-level teachers must be given time to receive training and support in order to create change at the classroom level (Marzano & Waters, 2009).

With the need for new knowledge and skills to be taught consistently, some districts are moving to embedded, differentiated professional development in order to coach teachers based on his or her own learning needs and learning styles. Research by Stover, Kissel, Haag, and Shoniker (2011) found, "Experienced coaches describe strategies they use to meet the professional development needs of individual teachers and encourage professional growth" (p. 498). Stover et al (2011) also found,

The core of professional development is the trusting relationship between teacher and coach. When this relationship is fostered, literacy coaches come to know, understand, and appreciate the teachers' level of experience, expertise, and interests. Because of this

knowledge, the coach can more effectively support them in their professional growth. (p. 499)

The fifth dimension of second-order change requires resources currently not available to those responsible for implementing the innovations. It is imperative teachers are given time for training and implementation of new strategies in order for an initiative to become effective (Marzano & Waters, 2009).

In the 2007 work, *Blind Spots*, Van Hecke's (2007) research echoed Marzano and Walter's findings on second order change in terms of having the ability to develop a broad perspective of the big picture. Being able to see a map or a model that captures the complexity of the system would be helpful. According to Van Hecke (2007), in reality, "it is more like an ecological system that is in constance flux and that involves processes, such as changes in the air or soil, that aren't easy to detect" (p. 227). Van Hecke believed the big picture is difficult to understand because of the inability to think abstractly. Van Hecke (2007) stated, "If we fail to think in these more abstract terms, we'll be blind to the deeper and broader connections that would give us insights into a more meaningful big picture" (p. 228).

According to Marzano and Waters (2009), the final dimension of second-order change may be resisted because only those who have a broad perspective of the school see the innovation as necessary. Rarely are teachers given the opportunity to see the holistic view of a district in relationship to the change initiative. Therefore, frequently teachers view a change that would impact the flow of an established routine, even for a brief moment of time, as a negative. Conversely, teachers view changes that appear useful and helpful to his/her daily routine as positive (Marzano & Waters, 2009).

Whitaker (2010) advised leaders to locate the entry points in order to lead successful school change. He suggested starting changes “somewhere, not everywhere” (Whitaker, 2010, p. 43). He also suggested starting with staff who offered the least resistance to enhance the probability for success of the initiative. Whitaker (2010) summed it up by stating,

Like the graduate student who reduced the daunting task of writing a dissertation to manageable proportions by always working on the section he is most eager to complete, we can build the critical mass by working on one person at a time, always taking the path of least resistance. Once we reach the critical mass, the momentum for change is in our favor. (p. 52)

Second-order change requires school leaders to work from a different skill set in order to successfully manage second-order change (Marzano et al., 2005). The seven critical responsibilities of school leaders needed for second-order change initiatives are “knowledge of curriculum, instruction, and assessment, optimizer, intellectual stimulation, change agent, monitoring/evaluating, flexibility, and ideals/beliefs” (Marzano et al., 2005, p. 116).

The first introduction to a new initiative should also include only the positives. Whitaker (2010) related first exposures to initiatives to movie trailers at the theaters. “Our first exposure to new movies shows the highlights to get us hooked” (Whitaker, 2010, p. 26).

When starting new initiatives it is important to understand the dynamics and make-up of the people. In a very broad sense there are three types of employees: “irreplaceables make up 2-10% of the staff; the solids; make up 80-90% of the staff; and the replacement level make up approximately 5-10% of the staff” (Whitaker, 2010, pp. 31-32).

One critical finding in Marzano and Water’s (2009) research on first-order and second-order change is for leaders to expect some individuals within the organization to complain that

“things” have gotten worse as a result of the new innovation (p. 107). Another finding leaders must face is the perception by some faculty members that “life is more chaotic in the schools and less ordered” (Marzano & Waters, 2009, p. 108). When non-negotiable goals for achievement and instruction are implemented principals may also feel that “schools are more chaotic and run less smoothly than before” (Marzano & Waters, 2009, p. 108). District leaders may also be faced with the perception that “communication has broken down and a preexisting culture of cooperation has been disrupted” (Marzano & Waters, 2009, p. 108). In addition, leaders may also be faced with another perception that “teachers have lost their voice regarding their decisions on school policy” (Marzano & Waters, 2009, p. 108).

Even when districts have systematically worked with staff and principals listening, working together, and communicating, “principals may also view the changes as top down at the district level” (Marzano & Waters, 2009, p. 108). District leaders may also be faced with the perception that “things” have gotten worse (Marzano & Waters, 2009, p. 108). This is not the time for an administrator to run away from the perceptions or change the district’s goals for achievement and instruction. Instead, “leaders must be willing to face the perceptions so that when success comes, they can stand with their staff with a sense of pride” (Marzano & Waters, 2009, p. 109).

Whitaker (2010) articulated, “Effective leaders continually watch for the development of negative clusters” (p. 65). Whitaker (2010) also suggested leaders cannot overlook the importance of the male cohort where sports and coaching are the mutual focus. “It is extremely important to have a male teacher, whom others respect, committed to the initiative” (Whitaker, 2010, p. 69).

In 2008, Fullan addressed six secrets of change. Fullan (2011) described the six interconnected secrets as “love your employees, connect peers with purpose, capacity building trumps judgementalism, learning is the work, transparency rules, and systems learn” (p. xi). One 2008-2009 Canadian case study on educational reform revealed six specific structures used by principals which were evident in successful school reform. The six structures noted in this study are the “ready-fire-aim change savvy, participate as a learner, instructional focus, develop others, and network and system engaged” (Fullan, 2010, p. 301). Fullan (2010) also suggested, “The key to the speed of quality change is embedded in the power of the principal helping to lead organization and system transformation” (p. 10).

“The research is clear and overwhelming: If school districts want high-achieving high schools, they must empower principals to be leaders of change” (Educational Research Service, 2009). The 2009 study from the Educational Research Service noted seven district support strategies that must be in place before change can occur.

1. Strategy 1 centers on establishing a clear focus and a strategic plan for improving student achievement.
2. Strategy 2 suggests organizing and engaging the district office in support of each school.
3. Strategy 3 charges the district office to provide instructional coherence and support.
4. Strategy 4 implores the district office administration to invest heavily in instruction-related professional learning for principals, and school leaders.
5. Strategy 5 encourages the district office to provide high-quality data that link student achievement to school and classroom practices and assist schools to use data effectively.

6. Strategy 6 encourages the district office to optimize the use of resources to support learning improvement.
7. Strategy 7 asks the district office to use open, credible processes to involve progressive school and community leaders in school improvement. (Educational Research Service, 2009, pp. 1-8)

In Christensen's (2008) work, motivation is described as "the catalyzing ingredient for every successful innovation." (p. 7). Christensen (2008) described extrinsic motivation as something someone learns, not because they found the task interesting, but because learning this task can take the person to something else the person desires. Intrinsic motivation is characterized as, when the work itself stimulates and compels an individual to stay with the task because the task by itself is inherently fun and enjoyable. In this situation, were there no outside pressures, an intrinsically motivated person might still very well decide to tackle this work. (Christensen, 2008, p. 107)

Christensen (2008) went on to say, "When there is high extrinsic motivation for someone to learn something, schools' jobs are easier. When there is no extrinsic motivation, however, things become trickier. Schools need to create intrinsically engaging methods for learning" (p. 107).

Pink (2009a) argued there is a mismatch between what scientists know and what businesses do. Pink (2009a) suggested if we really want high performance, the solution is not to do more of the wrong things such as giving rewards for performance. Instead, Pink (2009a) suggested there is a tremendous intrinsic motivation around things we like, the things that matter and the things that are important to us. Pink (2009a) advocated motivation is caused by autonomy, mastery, and purpose. Pink (2009a) described autonomy as the urge to direct our own

lives. Mastery is the desire to get better at things that matter. Pink (2009a) defined purpose as yearning to do what we do in the service of something larger than ourselves.

In a video presentation, Pink (2009a) explained that just because someone invented management does not mean it will always work because management is only acceptable if a company desires compliance. However, self-direction works more effectively. Pink (2009a) also found paying people adequately and fairly and giving them lots of autonomy is effective.

Atlasian, an Australian software company, directs engineers to work for 24 hours on anything they wanted as long as it was not part of what they regularly did. Individuals then presented what they had developed to teammates at end of the day. These days are called “FedEx Days” because individuals have to deliver something overnight. Pink (2009a) said, “One day of intense autonomy worked so well they have increased “FedEx” time to 20% of the regular work day.” Google has birthed one-half of their new products through a similar “FedEx” time (Pink, 2009a).

Another company experimented with a Results Only Work Environment (ROWE). In a ROWE environment, employees do not have schedules. Employees arrive to work when they want and leave work when they wish. Even meetings are optional. There is only one caveat, the employee must complete the projects. Surprisingly, productivity, worker engagement, and work satisfaction increased while turnover and mobility went down (Pink, 2009a).

In the mid-1990s encyclopedia giant, Encarta, hired well-compensated managers who stayed on budget, on time. Another relatively unknown encyclopedia company, Wikipedia, did not pay for people to write informative text. Instead individuals wrote informational text because they enjoyed writing informational text on topics on which they were experts. Ten years

ago Pink (2009a) suggested economists would have said the Wikipedia model would never work. However, Wikipedia is one of the most successful encyclopedias of today (Pink, 2009a).

Prior to Daniel Pink's research on rewards and punishment, Alfie Kohn was an ambassador to the educational community on the counter-productiveness of rewards and punishments in regard to teacher and student behaviors. In an interview, Kohn made the following comments on rewards and punishment:

There are at least 70 studies showing that extrinsic motivators—including A's, sometimes praise, and other rewards—are not merely ineffective over the long haul but counterproductive with respect to the things that concern us most: desire to learn, commitment to good values, and so on. Another group of studies shows that when people are offered a reward for doing a task that involves some degree of problem solving or creativity—or for doing it well—they will tend to do lower quality work than those offered no reward. (Brandt, 1995, para. 8)

Pink (2009a) also found 20th century motivators work in a narrow way. He suggested rewards and punishment are not effective. Pink's (2009a) research showed individuals with a drive to do things that matter are more effective than if-then rewards. Pink (2009a) suggested if we repair the mismatch into the 20th century we can strengthen business, solve candle problems, and maybe change the world.

"It is important to teach the desired behavior" (Whitaker, 2010, p. 61). This philosophy also follows that of Positive Behavior Intervention and Support System (PBIS) in which teachers follow the principles outlined for use with students.

1. Identify what behaviors you want to see in your classroom.
2. Teach students your expectations.

3. Reinforce students when they demonstrate the expectations.
4. Design the classroom and lessons to meet the needs of all students.
5. Assess challenging behavior by looking for reasons behind the behavior (functions of behavior) and make changes to address the underlying cause of the behavior. (Peters, 2010, para. 2)

According to Hall and Hord (2011), the first change principle educators should consider is as follows:

Professional learning is a critical component embedded in the change process. Research focused on change process and on professional development reveals parallel finds, both of which identify the imperative of learning in order to use improved programs, processes, and practices. (p. 7)

Reeves's (2010) research pointed out the first distinguishing factor of professional learning is directly related to student learning. In other words, "the documentation of the link to student learning occurs at the classroom level, linking specific gains in student learning to specific teaching strategies" (Reeves, 2010, p. 22). The second distinguishing factor of "high-impact" professional learning balances "student results with "rigorous" observation of adult practices, to merely a measurement of student results" (Reeves, 2010, p. 22).

Whitaker (2010) challenged administrators to be sure that the first exposure staff have to a new initiative be dynamic. Mediocre introductions to new ideas, concepts, and change initiatives tend to fail with poor exposure. Whitaker (2010) stated, "In my experience, one consistent obstacle to effective change is the failure to ensure a strong start" (p. 19). Whitaker (2010) also suggested one way to do this is to have an outside speaker or consultant provide the first exposure.

Hall and Hord (2011) identified a second change principle, that change is a process, not an event. They stated,

The strategic plan for change will look very different, depending on whether it is assumed that change is a process or an event. If the assumption is that change is a process, then the plan for change will be strategic in nature. It will allow at least three to five years for implementation and will budget the resources needed to support formal learning and on-site coaching for the duration of this phase. There will be policies that address the need for multiyear implementation support, and each year data will be collected about the change process to inform the leaders in supporting planning for and facilitating implementation in subsequent years. (Hall & Hord, 2011, p. 8)

For the third change principle, Hall and Hord (2011) indicated that the school is the primary unit for change. They observed,

The school's staff and its leaders will make or break any change effort, regardless of whether the change is initiated from the inside or outside. However, the school is not an island; rather, it is part of district, state, and/or federal systems of education. The school can and must do a lot for itself, but it also must move in concert with and be supported by the other components of the system. (Hall & Hord, 2011, p. 9)

The fourth change principle according to Hall and Hord (2011) was that organizations adopt change while individuals implement change. "Successful change initiatives ultimately start and end at the individual level" (Hall & Hord, 2011, p. 9).

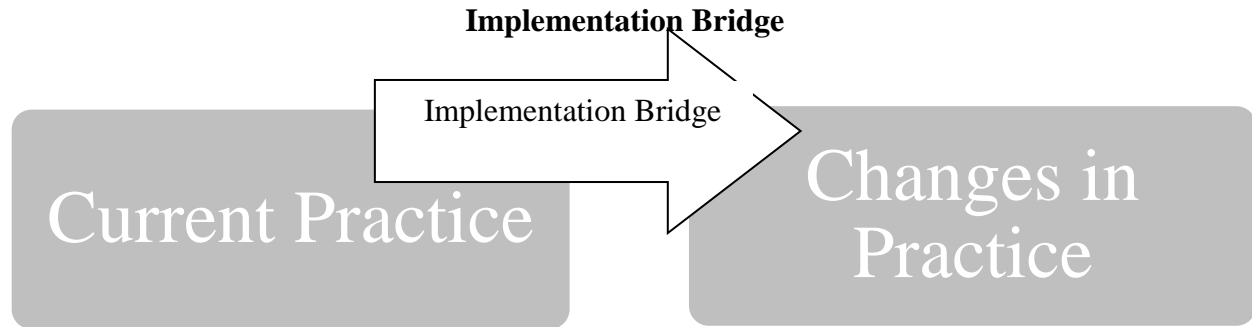


Figure 2. Implementation bridge outline

Hall and Hord (2011) stated,

In order for change to be successful, an Implementation Bridge is necessary. Each member of the organization has to move across the Implementation Bridge. As they learn to change their practices, there can be changes in outcomes. Without an Implementation Bridge, there is little reason to expect positive change in outcomes. Instead, there are likely to be casualties as attempts to make the giant leap fail.

Individuals and whole organizations may fall into the chasm. (p. 10)

Hall and Hord (2011) indicated that interventions are the key to the success of the change process. They cautioned against being too preoccupied with the innovation and use but encourage instead to focus on interventions or actions and events which influence the process (Hall & Hord, 2011).

Fullan (2011) suggested the most successful leaders begin by asking “what’s working, what could be working better and then look to research practices and theory to support what they have found” (p. xii). Sinek’s (2009) study on successful leaders specifies leaders must start with the question *why* before implementation of new strategies and ideas. If the *why* cannot be

answered, Sinek questioned the plausibility of beginning a new improvement. He indicated, “What you do serves as the tangible proof of why you do it” (Sinek, 2009, p. 76).

Unsuccessful Change Initiatives

On any given night on any news channel across the nation, someone is blaming one group or another for the problems in education. Kopp (2011) believed one of the problems with educational reform is misplacing the blame. She stated,

If we could just change parents, or the kids themselves, or educators or their unions, this line of thinking goes, our education woes would be solved. Yet just as the silver-bullet solutions ultimately prove insufficient in solving educational inequity, so too are these silver scapegoats underserving of all the blame. (Kopp, 2011, p. 133)

Kopp (2011) stated the keys to success are not “one-off mandates around charters, curricula, time in school, funding, and mentor programs” (p. 141) and believed the keys to success in educational reform is “local leadership and capacity to employ all the elements of strong vision, culture, accountability, and management that distinguish highly effective organizations” (p. 141).

“Paradigms form the boundaries or parameters of possible change. Proposed changes that do not fit within existing paradigms simply do not succeed” (Marzano et al., 1995, p. 164).

Kotter, a 1996 transformational change guru stated,

We often don’t adequately appreciate a crucial fact: that changing highly interdependent settings is extremely difficult because, ultimately, you have to change nearly everything. Because of all the interconnections, you can rarely move just one element by itself. You have to move dozens or hundreds or thousands of elements, which is difficult and time consuming and can rarely if ever be accomplished by just a few people. (p. 136)

Through the years professional development has sought to be the catalyst for change in the areas of classroom practices of teachers, in the attitudes and beliefs of teachers, and the learning outcomes of students (Guskey, 2002). Nevertheless, research consistently unveils failure of most professional development programs in the following two critical areas: “understanding the motivation behind engaging teachers in professional development, and understanding the change process directly related to what works for teachers” (Guskey, 2002, p. 382). Teachers typically believe professional development will be a benefit to them in terms of increasing knowledge and skills, contribute to their growth, and heighten their effectiveness with students. “Teacher practitioners also expect professional development to consist of specific, tangible strategies they can use daily to enhance student performance” (Guskey, 2002, p. 382). Professional development that fails to deliver these items has little impact on student improvement.

Guskey (2002) also noted many programs first try to alter teacher beliefs on new practices prior to implementation in order to gain the approval of teachers (Guskey, 2002). Instead, Guskey’s research birthed four steps a district must take in the area of professional development to implement successful change. This process is built on a theory that change is chiefly an experiential process for teachers. Guskey’s model of teacher change first calls for professional development, which leads to changes in teachers’ classroom practices, which leads to changes in student learning outcomes. And, if the professional development brought about changes in classroom practices and changes in student learning outcomes, if classroom practices and outcomes cause student success, teachers will have a change in their beliefs and attitudes (Guskey, 2002).

Research conducted by Putnam and Borko (2000) explained teacher resistance to change as “patterns of classroom teaching and learning have historically been resistant to fundamental change, in part because schools have served as powerful discourse communities that enculturate participants (students, teachers, administrators) into traditional school activities and ways of thinking” (p. 8). Kotter’s 30 years of research has confirmed that 70% of all major change initiatives are absolute failures (Kotter International, n.d.). While studying the literature on change initiatives one should not only understand the elements of successful change, but also learn from failures. Colin Powell (2009) once said, “There are no secrets to success. It is the result of preparation, hard work, and learning from failure” (p. 1).

In 1996, Kotter laid out eight common errors demonstrated in organizational change and five consequences resulting from the errors. The eight common errors are

1. Allowing too much complacency,
2. Failing to create a sufficiently powerful guiding coalition,
3. Underestimating the power of vision,
4. Undercommunicating the vision by a factor of 10, 100, or 1,000,
5. Permitting obstacles to block the new vision,
6. Failing to create short-term wins,
7. Declaring victory too soon, and
8. Neglecting to anchor changed firmly in the corporate culture (Kotter, 1996, pp. 4-14).

According to Kotter (1996), the five consequences of ineffective organizational change are “new strategies aren’t implemented well, acquisitions don’t achieve expected synergies, reengineering takes too long and costs too much, downsizing doesn’t get costs under control, and quality programs don’t deliver hoped-for results” (p. 16). Kotter (1996) recognized significant

differences between managing and leading. Managing change involves planning, budgeting, organizing staffing, controlling, and problem-solving. However, “leadership involves establishing direction, developing a vision for the future, developing strategies to implement the plan, aligning, motivating, and inspiring people to overcome the challenges of a new initiative” (Kotter, 1996, p. 26). Systemic change comes from highly inter-dependent systems. Systemic change is very difficult because “it is virtually impossible to only change one thing without it impacting and changing several other related components” (Kotter, 1996, p. 136). Several elements may need moved or rearranged before you can impact the true change required. Kotter recommends an eight-stage process to bring about successful change in organizations. The eight steps to successful organizational change are

1. establish a sense of urgency,
2. form a powerful coalition,
3. create a vision,
4. communicate the vision,
5. empower others,
6. plan and create short term wins,
7. consolidate improvements, and
8. institutionalize change. (Kotter, 1996, p. 21)

Another factor to consider in school change initiatives is our understanding of the ways different generations in the workforce from Matures born prior to 1946, Baby Boomers, born 1946-1964, Generation X born between 1965-1976, and Gen Y’s born between 1977-1995, communicate and process information. Dorsey’s extensive (2010) research on generational differences in the workplace are another areas leaders should consider when implementing

change. Dorsey (2010) said, “The challenge of leading a four-generation workplace is so new that many of the best business schools have only recently added the topic to their standard curriculum” (p. 30).

Schmoker (2011) concluded his study by reminding educators of the importance of a “coherent curriculum” (p. 217), one that is built for every course with common assessments and consistent monitoring. He reminded educators there is no excuse for not teaching “structurally sound” (Schmoker, 2011, p. 217) lessons. Schmoker warned those educators who make excuses for not teaching students to read and write effectively to cease and desist this mindset. He also believed without consistently monitoring implementation, student achievement growth will not occur. Schmoker (2011) said,

Because the only reason our schools haven’t made astonishing progress in the last 30 years of ‘reform’ is quite simple: very few schools ever implemented ‘what is essential’—the most powerful, simple actions and structures that would dramatically increase the proportion of students prepared for college or careers. (p. 2)

Kopp (2011) stated, “The urgency of the achievement gap makes us yearn for a quick fix that will close it. Yet everything we are learning from the most successful classrooms, schools, charter management organizations, and districts proves that there are no shortcuts” (p. 113).

Washington, DC Schools

One of the most noted and controversial chapters in educational reform came with the failing Washington, DC school system. The timeline of notable change for the DC schools follows as written by former DC chancellor, Michelle Rhee and former Washington, DC mayor, Adrian Fenty:

June 2007: Mayor Adrian Fenty appoints Michelle Rhee schools chancellor. Over the next year, she closes a number of schools, fires principals and central office employees, and offers buyouts to low-performing teachers.

July 2008: DC test scores on reading and math rise across the board.

June 2010: After nearly three years of negotiation, the DC teachers union accepts a groundbreaking contract that institutes pay for performance and ends tenure.

July 2010: Ms. Rhee fires 241 teachers and puts 737 on notice for being rated ‘minimally effective.’

September 2010: Mr. Fenty, who campaigned on a record of education reform, loses the Democratic primary.

October 2010: Ms. Rhee resigns (Rhee & Fenty, 2010).

After Rhee resigned from the Washington, DC school system in October 2010, Rhee founded a non-for-profit organization called “Students First.” According to *StudentsFirst.org*, StudentsFirst formed in 2010 in response to an increasing demand for a better education system in America. Our grassroots movement is designed to mobilize parents, teachers, students, administrators, and citizens throughout country, and to channel their energy to produce meaningful results on both the local and national level. Students First is a 501(c)4 organization based in Washington, DC. (Rhee, 2011a, para. 1)

According to the November 10, 2011 on-line edition of *The Daily Press*, Bostonians held a *Rhee Act* to show their distaste at Rhee’s latest initiative to privatize public education (Tatro, 2011). It will be interesting to see how Students First’s mission, “to build a national movement to defend the interests of children in public education and pursue transformative reform, so that

America has the best education system in the world” (Rhee, 2011b, para. 1) will play out in the current changing political climate.

Illinois School Improvement Grants

To bring the relevance of the research to current practices, an interview with the Grants and Programs spokesperson for the Illinois State Board of Education, Marti Woelfle, indicated the importance the State of Illinois has staked on educational reform and change in education. Historically, in years one and two of the School Improvement Grant funding process, the neediest schools did not necessarily receive grant funds; instead, the schools who could write a good competitive grant received funds. This type of inequity did not always occur, but did transpire (M. Woelfle, personal communication, April 21, 2011). Now schools are divided into reform models and labeled in Tiers 1, 2, and 3 by federal definition. Illinois saw a need to focus on investment on consistently low performing schools in Illinois. In Illinois, the most consistently, low performing schools are at the secondary level. Prior to 2011, the State of Illinois talked about school improvement efforts and schools awarded with School Improvement Grant monies could pick the interventions they wanted to use whether or not the initiatives showed consistent positive results through research studies (M. Woelfle, personal communication, April 21, 2011).

However, today the State of Illinois is committed to radical school improvement efforts. Currently schools awarded with School Improvement Grant monies cannot randomly or preferentially choose the interventions they would like to use. Schools now choose from four choices which are detailed and give specific frameworks for districts to follow (M. Woelfle, personal communication, April 21, 2011).

An external entity receives a one-year contract and is vetted before the process begins. Illinois screens consultants who provide turn-around services. The consultants must submit applications to become approved parties and is held equally responsible for the success of the schools the consultant supports. Consultants are offered a one-year contract and can be terminated by the state if consultants do not perform successfully. This means certain data points must show growth; such as discipline, student attendance, truancy, and teacher attendance. Turn-around is now radical. Principals are let go and no more than 50% of staff are released from teacher contracts (M. Woelfle, personal communication, April 21, 2011).

CHAPTER 3

METHODOLOGY

Educational change initiatives, whether whole district initiatives or grade level initiatives, have a definite impact on education. That impact can be positive or negative depending on the overall district implementation of the new reform initiative. The purpose of this study was to discover what school leaders can do to implement successful initiatives in the districts they lead. A survey developed for this research assisted in determining what districts can do to implement successful education initiatives as well as what districts should avoid to prevent unsuccessful initiatives, as perceived among multiple educational stakeholders. The survey asked district leaders, building leaders, and teachers which critical elements of school change processes are most important to them prior to and following implementation.

Research Questions

1. To what extent do the variables predict if initiatives are reinforced through individual work with staff members, stipends are not a motivator, and professional development is embedded in the change process?
2. To what extent do the variables predict if resources are allocated based on instructional priorities of an initiative, resources are used to determine annual priorities for faculty learning, staff strengths are focused on and matched with current

- responsibilities, consistent planning for the change initiative, and supports are in place for the initiative to continue when people leave the district?
3. To what extent do the variables predict if a district's resources are based on instructional priorities, consistent planning for a change initiative, staff strengths are matched with responsibilities, resources are used to determine annual priorities for faculty learning, and supports are in place for the initiative to continue when staff members leave the district?
 4. To what extent do the variables predict if there is effective district-wide communication, resources are allocated based on instructional priorities of the initiative, staff strengths are matched with current responsibilities, and consistent planning for a change initiative?
 5. To what extent do the variables predict if resources are based on the instructional priorities of the initiative, staff strengths are matched with staff responsibilities, resources are used to determine annual priorities for staff learning, teachers work together, sharing what they learn to help others learn more, and free flow of information to staff?
 6. To what extent do the variables predict if the belief the rational for the change initiative is important, staff strengths are matched with current responsibilities, resources are used to determine annual priorities for staff learning, teacher involvement in professional development to enhance teaching, and well-protected instructional time?

Null Hypotheses

H₀1. The variables do not predict if initiatives are reinforced through individual work with staff members, stipends are not a motivator, and professional development is embedded in the change process.

H₀2. The variables do not predict if resources are allocated based on instructional priorities of an initiative, resources are used to determine annual priorities for faculty learning, staff strengths are focused on and matched with current responsibilities, consistent planning for the change initiative, and supports are in place for the initiative to continue when people leave the district.

H₀3. The variables do not predict if a district's resources are based on instructional priorities, consistent planning for a change initiative, staff strengths are matched with responsibilities, resources are used to determine annual priorities for faculty learning, and supports are in place for the initiative to continue when staff members leave the district.

H₀4. The variables do not predict effective district-wide communication, if resources are allocated based on instructional priorities of the initiative, if staff strengths are matched with current responsibilities, and if consistent planning for a change initiative is ongoing.

H₀5. The variables do not predict if resources are based on the instructional priorities of the initiative, if staff strengths are matched with staff responsibilities, if resources are used to determine annual priorities for staff learning, if teachers work together sharing what they learn to help others learn more, and if free flow of information to staff is evident.

H₀6. The variables do not predict if belief the rational for the change initiative is important, if staff strengths are matched with current responsibilities, if resources are used to

determine annual priorities for staff learning, if teacher involvement in professional development to enhance teaching, and if instructional time is well-protected.

H₀6. The variables do not predict there will be strong lines of communication at all levels: belief the rational for the change initiative is important, staff strengths are matched with current responsibilities, resources are used to determine annual priorities for staff learning, teacher involvement in professional development to enhance teaching, and well-protected instructional time.

Description of Population

The *Illinois State Board of Education 2006 Annual Report* listed a total of 868 school districts in Illinois at the time of this study (Koch, 2010). Of the 868 school districts listed in the report, 49 districts serving 82 schools received state funds for the FY2010 School Improvement Grant. The population for this study consisted of district office administrators, building level administrators, and teachers from the 49 districts who received FY2010 School Improvement Funding. The on-line survey instrument was developed based on six critical elements of school reform: (a) professional development, (b) coaching, (c) communication, (d) sustainability, (e) resources, and (f) motivation. This study quantified how the six critical elements played a part in their districts' school improvement efforts through the FY2010 School Improvement Funding.

Survey Instrumentation and Data Collection Procedures

One integrated, on-line Zoomerang survey was created (Appendix A) and used to collect data regarding the relationship of the total school change initiative perceptions and the views of the total school change initiative implementation. Six critical areas for successful school initiatives were the foundation for the survey resulting in a total school change initiative perception section and the other 18 questions focused on the total school change initiative

implementation. A web link to the on-line Zoomerang survey was e-mailed to the population of district superintendents as provided by the Illinois State Board of Education's Innovation and Improvement department. The superintendents were then asked to forward the surveys to all district office administrators, building office administrators, and teachers involved with the FY2010 School Improvement Grant: Section 1003(g). The first page of the survey displayed the Informed Consent information contained in Appendix B. The survey instrument contained 38 questions. There were three questions for each of the six categories on the individual's perception of the importance of each category of school change initiatives. Likewise, there were three questions for each of the six categories on the individual's frequency of implementation for each of the six categories for successful school change initiatives.

Two Likert scales were utilized for 38 questions on the survey instrument. Sixteen of the questions concerning total school change initiative *perspective utilized the following Likert scale: 1 = Never True, 2 = Rarely True, 3 = Infrequently True, 4 = Occasionally True, 5 = Usually True, 6 = Always True* (Table 2). A second Likert scale concerning the total school change initiative implementation score utilized *1 = Never, 2 = Annually, 3 = Semi-Annually, 4 = Monthly, 5 = Weekly, 6 = Daily* (Table 3).

Table 2

School Change Initiatives Perceptions of Illinois Public School District Leaders, Building Leaders, and Educators Survey Instrument Category Prompts and the Corresponding Prompt Numbers

Category Prompt	Corresponding Prompt Number
Professional Development	1, 7, 13
Coaching	2, 8, 14
Communication	3, 9, 15
Resources	4, 10, 16
Sustainability	5, 11, 17
Motivation	6, 12, 18

Table 3

School Change Initiative Implementation of Illinois Public School District Leaders, Building Leaders, and Educators Survey Instrument Category Prompts and the Corresponding Prompt Numbers

Category Prompt	Corresponding Prompt Number
Professional Development	19, 25, 31
Coaching	20, 26, 32
Communication	21, 27, 33
Resources	22, 28, 34
Sustainability	23, 29, 35
Motivation	24, 30, 36

Table 4 illustrates the six categories with questions used to gather data for the total successful school change initiative perceptions. Table 5 shows the six categories involving the total school change initiative implementation.

Table 4

Six Critical Elements of Successful School Change Initiatives Indicators

Indicators	Prompts (SQ=Survey Question Number)
Professional Development	<ol style="list-style-type: none"> 1. (SQ1.) To what extent does professional development, which is embedded in the change process, affect the success of a change initiative (Hall & Hord, 2011, p. 7)? 2. (SQ7.) Professional development is provided during the educational reform process for the successful implementation of the initiative (Marzano, Waters, & McNulty, 2005, p. 42). 3. (SQ13.) Teachers in my school are regularly involved in professional development activities that directly enhance their teaching (Marzano et al., 2005, p. 51).
Coaching	<ol style="list-style-type: none"> 1. (SQ2.) Initiatives are reinforced through individual work with staff members regarding implementation (Marzano et al., 2005, p. 120). 2. (SQ8.) Conceptual guidance is provided in my school regarding effective implementation of practices of the initiative (Marzano et al., 2005, p. 164). 3. (SQ14.) The teachers in my building work together, sharing what they learn in their classrooms to help one another learn even more (Stigler & Hiebert, 1999, p. 146).
Communication	<ol style="list-style-type: none"> 1. (SQ3.) Strong and effective communication is frequently established across the district during school reform efforts (Marzano et al., 2005, p. 42). 2. (SQ9.) Throughout the education reform process, structures are in place that promote the free flow of information with the staff, such as daily bulletins, common Web pages, professional sharing during faculty meetings, and joint planning time (Marzano et al., 2005, p. 117). 3. (SQ15.) Lines of communication are strong between teachers, building leaders, and district leaders (Marzano et al., 2005, p. 163). 4.

Table 4 (continued)

Indicators	Prompts (SQ=Survey Question Number)
Resources	<ol style="list-style-type: none"> 1. (SQ4.) Resources are allocated based on instructional priorities of the initiative (Marzano et al., 2005, p. 108). 2. (SQ10.) Resources are used to determine annual priorities for faculty learning (Hall & Hord, 2011, p. 108). 3. (SQ16.) The instructional time of teachers is well protected (Marzano et al., 2005, p. 162).
Sustainability	<ol style="list-style-type: none"> 1. (SQ5.) Consistent planning for a change initiative ultimately affects the success of district-wide reform efforts (Hall & Hord, 2011, p. 8). 2. (SQ11.) Over time, I continue to support the reform/change initiative efforts (Hall & Hord, 2011, p. 14). 3. (SQ17.) Supports are in place so that when people leave our district, we are still able to sustain change initiatives (Fullan, 2001, p. 18)
Motivation	<ol style="list-style-type: none"> 1. (SQ6.) Staff strengths are focused on and staff strengths are matched with current responsibilities (Marzano et al., 2005, p. 117). 2. (SQ12.) The rationale behind the current initiative is important to me (Pink, 2009b, p. 130). 3. (SQ18.) Stipends for professional development are not a motivation for me (Pink, 2009a, p. 8)

Table 5

Six Critical Elements of Successful School Change Initiatives Implementation Indicators

Indicators	Prompts
Professional Development	<ol style="list-style-type: none"> 1. (SQ19.) During the FY2010 School Improvement Grant process, to what extent was professional development embedded in the change process which affected the success of a change initiative (Hall & Hord, 2011, p. 7)? 2. (SQ25.) During the FY2010 School Improvement Grant process, to what extent was professional development provided during the educational reform process for the successful implementation of the initiative (Marzano, Waters, & McNulty, 2005, p. 42)? 3. (SQ31.) During the FY2010 School Improvement Grant process, to what extent were teachers in my school regularly involved in professional development activities that directly enhanced their teaching (Marzano et al., 2005, p. 51)?
Coaching	<ol style="list-style-type: none"> 1. (SQ20.) During the FY2010 School Improvement Grant process, initiatives are reinforced through individual work with staff members regarding implementation (Marzano et al., 2005, p. 120). 2. (SQ26.) During the FY2010 School Improvement Grant process, conceptual guidance is provided in my school regarding effective implementation of practices of the initiative (Marzano et al., 2005, p. 164). 3. (SQ32) During the FY2010 School Improvement Grant process, the teachers in my building work together, sharing what they learn in their classrooms to help one another learn even more (Stigler & Hiebert, 1999, p. 146).

Table 5 (continued)

Indicators	Prompts
Communication	<ol style="list-style-type: none"> <li data-bbox="602 380 1435 520">1. (SQ21) During the FY2010 School Improvement Grant process, strong and effective communication is frequently established across the district during school reform efforts (Marzano et al., 2005, p. 42). <li data-bbox="602 527 1435 705">2. (SQ27.) During the FY2010 School Improvement Grant process, structures are in place that promote the free flow of information with the staff, such as daily bulletins, common Web pages, professional sharing during faculty meetings, and joint planning time (Marzano et al., 2005, p. 117). <li data-bbox="602 711 1435 848">3. (SQ33.) During the FY2010 School Improvement Grant process, lines of communication are strong between teachers, building leaders, and district leaders (Marzano et al., 2005, p. 163).
Resources	<ol style="list-style-type: none"> <li data-bbox="602 894 1425 995">1. (SQ22.) During the FY2010 School Improvement Grant process, resources are allocated based on instructional priorities of the initiative (Marzano et al., 2005, p. 108). <li data-bbox="602 1001 1425 1102">2. SQ28.) During the FY2010 School Improvement Grant process, resources are used to determine annual priorities for faculty learning (Hall & Hord, 2011, p. 108). <li data-bbox="602 1108 1425 1215">3. (SQ34.) During the FY2010 School Improvement Grant process, the instructional time of teachers is well protected (Marzano et al., 2005, p. 162).
Sustainability	<ol style="list-style-type: none"> <li data-bbox="602 1262 1430 1402">1. (SQ23.) During the FY2010 School Improvement Grant process, consistent planning for a change initiative ultimately affects the success of district-wide reform efforts (Hall & Hord, 2011, p. 8). <li data-bbox="602 1409 1430 1509">2. (SQ29.) During the FY2010 School Improvement Grant process, over time, I continue to support the reform/change initiative efforts (Hall & Hord, 2011, p. 14). <li data-bbox="602 1516 1430 1652">3. (SQ35.) During the FY2010 School Improvement Grant process, supports are in place so that when people leave our district, we are still able to sustain change initiatives (Fullan, 2001, p. 18)

Table 5 (continued)

Indicators	Prompts
Motivation	<ol style="list-style-type: none"> 1. (SQ24.) During the FY2010 School Improvement Grant process, staff strengths are focused on and staff strengths are matched with current responsibilities (Marzano et al., 2005, p. 117). 2. (SQ30.) During the FY2010 School Improvement Grant process, the rationale behind the current initiative is important to me (Pink, 2009b, p. 130). 3. (SQ36.) Stipends for professional development are not a motivation for me (Pink, 2009a, p. 8)

The 37-question, web-based Zoomerang survey (Appendix A) was sent to the district office superintendents from the 49 districts who received FY2010 School Improvement Grants. The superintendent forwarded the survey to building principals and teachers who participated in the FY2010 School Improvement Grant process in his/her district. The list of participants was obtained with permission from the Illinois State Board of Education. The Zoomerang link took participants directly to the survey contained in Appendix A. The survey data were kept on a password-protected computer as well as a password-protected website. No other person but me had access to the password-protected computer or website.

Method of Data Analysis

After the data were collected from completed surveys in Zoomerang, the raw data were downloaded into a Microsoft Excel™ spreadsheet and imported into SPSS for analysis. A series of multiple regression tests was performed to test the six nulls found in this study. Inferential and descriptive statistics were computed. Through the use of multiple regression, I was able to determine if any significant predictors existed in each null testing and the overall impact each predictor had on the criterion variable.

Summary

The purpose of this study was to examine and analyze district administration, building administration and teacher perceptions on change initiative factors, which the research state as being important to the success of school reform and educational initiatives. The study also examined the implementation levels of these change initiative factors during the FY2010 School Improvement Grant: 1003(g).

The collected data were analyzed to determine if perceptions on change initiatives predictors impact how district administration, building administration, and teachers implemented those predictors during the FY2010 School Improvement Grant: 1003(g).

CHAPTER 4

DATA FINDINGS AND ANALYSIS

Six research questions were designed to explore the variables pertinent to understanding the critical elements of school reform for effective school improvement initiatives. The six research questions are as follows:

Research Questions

1. To what extent do the variables predict if the belief in the rationale for the change initiative is important: initiatives are reinforced through individual work with staff members, stipends are not a motivator, and professional development is embedded in the change process?
2. To what extent do the variables predict if the belief in the rationale for the change initiative is important: resources are allocated based on instructional priorities of an initiative, resources are used to determine annual priorities for faculty learning, staff strengths are focused on and matched with current responsibilities, consistent planning for the change initiative, and supports are in place for the initiative to continue when people leave the district?
3. To what extent do the variables predict continued support of the change initiative: a district's resources are based on instructional priorities, consistent planning for a change initiative, staff strengths are matched with responsibilities, resources are used

- to determine annual priorities for faculty learning, and supports are in place for the initiative to continue when staff members leave the district?
4. To what extent do the variables predict the success of professional development when embedded in the change process: effective district-wide communication, resources are allocated based on instructional priorities of the initiative, staff strengths are matched with current responsibilities, and consistent planning for a change initiative?
 5. To what extent do the variables predict how consistent planning for a change initiative affect the success of district-wide reform: resources are based on the instructional priorities of the initiative, staff strengths are matched with staff responsibilities, resources are used to determine annual priorities for staff learning, teachers work together, sharing what they learn to help others learn more, and free flow of information to staff?
 6. To what extent do the variables predict there will be strong lines of communication at all levels: belief the rational for the change initiative is important, staff strengths are matched with current responsibilities, resources are used to determine annual priorities for staff learning, teacher involvement in professional development to enhance teaching, and well-protected instructional time?

Study Sample

Illinois district-level administration, building-level administration, and teachers from 82 different schools who were involved in the FY2010 School Improvement Grant: 1003(g) were surveyed based on their experience with the FY2010 School Improvement Grant: 1003(g) in his/her district. The school district and school grant recipients received monies and were required

to make changes while using the funds provided. Based on the individual responses of those who completed the 37-question survey, the following results were found.

Based on data found in Table 6, 18 of the questions concerning total school change initiative perspective utilized the following Likert scale: 1 = *Never True*, 2 = *Rarely True*, 3 = *Infrequently True*, 4 = *Occasionally True*, 5 = *Usually True*, 6 = *Always True*.

The data were based on the percentage of responses per category using a Likert scale. Another interpretation of the Likert scale could be number 1 meaning the same thing as *never important* to the success of an initiative and a rating is 6 could mean *always important* to the success of an initiative.

Table 6

Percentage Data Concerning Total School Change Initiative for Perceptions

Variable	Never True 1	Rarely True 2	Infrequently True 3	Occasionally True 4	Usually True 5	Always True 6
Extent professional development affects change initiative	0.0	0.0	3.7	14.8	51.9	29.6
Initiatives reinforced individual work implementation	0.0	0.0	3.7	14.8	59.3	22.2
Effective district-wide communication	3.7	14.8	0.0	33.3	33.3	14.8
Resources based on instructional priorities initiative	3.7	7.4	3.7	25.9	48.1	11.1
Impact planning on district-wide initiative	0.0	3.7	3.7	7.4	33.3	51.9

Table 6 (continued)

Variable	Never True 1	Rarely True 2	Infrequently True 3	Occasionally True 4	Usually True 5	Always True 6
Resources determine annual priorities for faculty learning	3.7	3.7	11.1	25.9	37.0	18.5
Match staff strengths current responsibilities	3.7	0.0	11.1	29.6	51.9	3.7
Professional development embedded reform process effective implementation	3.7	7.4	3.7	18.5	44.4	22.2
Guidance effective implementation initiative practices	0.0	11.1	7.4	25.9	37.0	18.5
Free flow information to staff	3.7	11.1	11.1	29.6	29.6	14.8
Continued support of change initiative	3.7	0.0	0.0	18.5	33.3	44.4
Belief rationale is important for initiative	0.0	3.7	0.0	7.4	40.7	48.1
Teacher involvement in professional development enhancing teaching	3.7	3.7	7.4	29.6	40.7	14.8
Teachers share learning and work together	0.0	11.5	7.7	30.8	34.6	15.4
Strong lines of communication at all levels	7.4	14.8	7.4	22.2	37.0	11.1

Table 6 (continued)

Variable	Never True 1	Rarely True 2	Infrequently True 3	Occasionally True 4	Usually True 5	Always True 6
Well-protected instructional time	4.0	12.0	4.0	4.0	60.0	16.0
Initiative continues after staff exit district	3.7	3.7	14.8	18.5	51.9	7.4
Stipends not a motivator	18.5	3.7	3.7	22.2	33.3	19.5

The majority of district administration, building level administration, and teachers perceived the importance of the variables in Table 6 and ranked these categories as 5 = *Usually True* or 6 = *Always True*: extent to which professional development affects a change initiative (81.5%), *initiatives are reinforced through individual work and implementation* (81.5%), *impact of planning district-wide for an initiative* (85.2%), and individual *belief the rationale for the change initiative is important* (88.8%).

Conversely, district administrators, building administrators, and teachers rated the variables in Table 6 as 1 = *Never True*, 2 = *Rarely True*, or 3 = *Infrequently True* in terms of this variable's importance in the success of a change initiative. *Strong lines of communication are in place at all levels* (29.6%) and *free flow of information to staff* (25.9%) received the highest percentage of low priority scores.

Based on data presented in Table 7, 18 of the questions concerning implementation of the FY2010 School Improvement Grant: 1003(g) utilized the following Likert scale: 1 = *Never*, 2 = *Annually*, 3 = *Semi-Annually*, 4 = *Monthly*, 5 = *Weekly*, 6 = *Daily*. During implementation of

the FY2010 School Improvement Grant: 1003(g), it appeared the majority of district administration, building level administration, and teachers responded their district demonstrated *continued support of the change initiative* (65.4%), *personal belief the rationale for the change initiative was important* (66.7%), and *instructional time was well protected* (65.4%).

Table 7

Data Concerning Implementation of School Change Initiative

Implementation Variables	Never 1	Annually 2	Semi- Annually 3	Monthly 4	Weekly 5	Daily 6
Extent professional development affects change initiative	11.1	3.7	7.4	37.0	22.2	18.5
Initiatives reinforced individual work implementation	7.4	3.7	18.5	25.9	37.0	7.4
Effective district-wide communication	14.8	7.4	11.1	37.0	22.2	7.4
Resources based on instructional priorities initiative	0.0	25.9	22.2	29.6	3.7	18.5
Impact planning on district-wide initiative	19.2	7.7	11.5	46.2	11.5	3.8
Match staff strengths current responsibilities	12.0	20.0	12.0	28.0	16.0	12.0
Professional development embedded reform process effective implementation	11.1	11.1	18.5	33.3	22.2	3.7
Guidance effective implementation initiative practices	7.4	11.1	14.8	37.0	25.9	3.7

Table 7 (continued)

Implementation Variables	Never 1	Annually 2	Semi- Annually 3	Monthly 4	Weekly 5	Daily 6
Free flow information to staff	14.8	3.7	11.1	22.2	33.3	14.8
Resources determine annual priorities for faculty learning	7.4	22.2	18.5	29.6	14.8	7.4
Continued support of change initiative	7.7	3.8	7.7	15.4	19.2	46.2
Belief rationale is important	3.7	3.7	11.1	14.8	11.1	55.6
Teacher involvement professional development enhancing teaching	11.1	3.7	14.8	37.0	29.6	3.7
Teachers share learning and work together	11.1	3.7	7.4	29.6	33.3	14.8
Strong lines communication all levels	22.2	3.7	11.1	18.5	37.0	7.4
Well-protected instructional time	11.5	11.5	7.7	3.8	23.1	42.3
Initiative continues after staff exit school	8.0	24.0	12.0	28.0	12.0	16.0
Stipends for professional development not important	48.0	8.0	12.0	4.0	0.0	28.0

During the implementation of the FY2010 School Improvement Grant: 1003(g) district administration, building administration, and teachers rated the following variables with the highest level of low priority responses: resources based on the instructional priorities of the initiative never happened 25.9% of the time based on a Likert scale with 1 = *Never*. In response to the variable, *stipends for professional development are not motivators*, 48% of respondents chose 1 = *Never*.

Table 8 reflects the perceptions of the variables that impact the success of educational change initiatives stood out due to the fact they all scored at or above a mean of a 5 threshold: *extent professional development affects the change initiative*, ($M = 5.07$, $SD = .78$) *initiatives are reinforced through individual work and implementation* ($M = 5.00$, $SD = .73$), *impact of planning on district-wide initiatives* ($M = 5.26$, $SD = 1.02$), *continued support of the change initiative*, ($M = 5.11$, $SD = 1.12$) and *individual belief the rationale is important* ($M = 5.30$, $SD = .91$). *Effective district-wide communication* ($M = 4.22$, $SD = 1.37$), *free flow of information to staff* ($M = 4.15$, $SD = 1.35$), and *stipends for professional development are not important to me* ($M = 4.04$, $SD = 1.74$) received the highest percentage of low priority scores.

Table 8

Perceptions on Successful Change Initiative Factors

Factors Focused on Belief	Mean	SD
Extent professional development affects change initiative	5.07	0.78
Initiatives reinforced individual work implementation	5.00	0.73
Effective district-wide communication	4.22	1.37
Resources based instructional on priorities initiative	4.41	1.22
Impact planning on district-wide initiative	5.26	1.02
Match staff strengths current responsibilities	4.37	1.01
Professional development embedded reform process effective Implementation	4.59	1.31
Guidance effective implementation initiative practices	4.44	1.22
Free flow information to staff	4.15	1.35
Resources determine annual priorities for faculty learning	4.44	1.25
Continued support of change initiative	5.11	1.12
Belief rationale is important	5.30	0.91
Teacher involvement professional development enhancing teaching	4.44	1.19
Teachers share learning and work together	4.35	1.20
Strong lines communication all levels	4.0	1.49
Well-protected instructional time	4.52	1.39
Initiative continues after staff exit school	4.33	1.18
Stipends for professional development not important	4.04	1.74

Table 9 presents the variables that scored at or above a mean of a 4 threshold and presents the frequency implemented during the FY2010 School Improvement Grant: 1003(g): *extent professional development affects the change initiative*, ($M = 4.11$, $SD = 1.50$) *continued support of the change initiative*, ($M = 4.73$, $SD = 1.59$), *belief the rationale is important*, ($M = 4.93$, $SD = 1.47$), *teachers sharing, learning, and working together*, ($M = 4.15$, $SD = 1.49$) and *well-protected instructional time* ($M = 4.42$, $SD = 1.89$). *Impact of planning on district-wide initiatives* ($M = 3.45$, $SD = 1.44$), *resources determine annual priorities for faculty learning*, ($M = 3.44$, $SD = 1.40$), and *stipends for professional development are not important to me* ($M = 2.84$, $SD = 2.17$) received the highest percentage of low implementation scores.

Table 9

Implementation of Variables during FY2010 School Improvement Grant: 1003(g)

Implementation Factors	Mean	SD
Extent professional development affects change initiative	4.11	1.50
Initiatives reinforced individual work implementation	4.04	1.32
Effective district-wide communication	3.67	1.49
Resources based on instructional priorities initiative	3.67	1.41
Impact planning on district-wide initiative	3.35	1.44
Match staff strengths current responsibilities	3.52	1.58
Professional development embedded reform process effective implementation	3.56	1.37
Guidance effective implementation initiative practices	3.74	1.29
Free flow information to staff	4.00	1.62
Resources determine annual priorities for faculty learning	3.44	1.40
Continued support of change initiative	4.73	1.59
Belief rationale is important	4.93	1.47
Teacher involvement professional development enhancing teaching	3.81	1.33
Teachers share learning and work together	4.15	1.49
Strong lines communication all levels	3.67	1.71
Well-protected instructional time	4.42	1.86
Initiative continues after staff exit school	3.60	1.58
Stipends for professional development not important	2.84	2.17

In order to look more closely at the means and standard deviations of the data, responses were divided into district office administration, building administration, and teachers. Table 10 examines responses of district office administration in terms of perceptions on variables that impact successful school initiatives. Table 11 scrutinizes responses of building office administration's perceptions on variables that impact successful school initiatives. Teacher perceptions are observed in Table 12.

Table 10

District Office Administration Perceptions on Variables that Impact Successful School Initiatives

Variables	<i>M</i>	<i>SD</i>
Extent professional development affects change initiative	5.09	0.94
Initiatives reinforced individual work implementation	5.18	0.75
Effective district-wide communication	4.45	1.57
Resources based on instructional priorities initiative	4.55	1.37
Impact planning on district-wide initiative	5.36	1.03
Match staff strengths current responsibilities	4.27	1.27
Professional development embedded reform process effective Implementation	4.55	1.29
Guidance effective implementation initiative practices	4.64	1.12
Free flow information to staff	4.18	1.47
Resources determine annual priorities for faculty learning	4.55	1.37
Continued support of change initiative	4.90	1.45
Belief rationale is important	5.09	1.22
Teacher involvement professional development enhancing teaching	4.36	1.29

Table 10 (continued)

Variables	<i>M</i>	<i>SD</i>
Teachers share learning and work together	4.70	1.16
Strong lines communication all levels	4.09	1.51
Well-protected instructional time	4.40	1.58
Initiative continues after staff exit school	4.45	1.51
Stipends for professional development not important	4.18	1.66

Four variables scored at or above the mean threshold of 5 for district office administration. The top four variables district office administration perceived to be most important were extent professional development affects the change initiative ($M = 5.09$, $SD = .94$), *initiatives reinforced through individual work and implementation* ($M = 5.18$, $SD = .75$), *impact of planning on district-wide implementation* ($M = 5.36$, $SD = 1.03$), and *individual belief rationale is important* ($M = 5.09$, $SD = 1.22$).

Scoring at or below a threshold of 4, three variables perceived to be least important to the success of an initiative according to district office administration are as follows: *free flow of information to staff* ($M = 4.18$, $SD = 1.47$), *strong lines of communication at all levels* ($M = 4.09$, $SD = 1.51$), *stipends for professional development are not important* ($M = 4.18$, $SD = 1.66$).

Table 11

Building Administration Perceptions on Variables that Impact Successful School Initiatives

Variables	<i>M</i>	<i>SD</i>
Extent professional development affects change initiative	5.10	0.57
Initiatives reinforced individual work implementation	4.90	0.74
Effective district-wide communication	4.30	1.06
Resources based on instructional priorities initiative	4.60	1.17
Impact planning on district-wide initiative	5.30	1.25
Match staff strengths current responsibilities	4.60	0.84
Professional development embedded reform process effective implementation	5.20	1.23
Guidance effective implementation initiative practices	4.80	1.23
Free flow information to staff	4.70	1.25
Resources determine annual priorities for faculty learning	4.80	1.23
Continued support of change initiative	5.60	0.70
Belief rationale is important	5.80	0.42
Teacher involvement professional development enhancing teaching	4.90	1.20
Teachers share learning and work together	4.60	1.17
Strong lines communication all levels	4.50	1.43
Well-protected instructional time	4.90	1.10
Initiative continues after staff exit school	4.50	0.97
Stipends for professional development not important	4.50	1.96

Five variables scored at or above the mean threshold of 5 for building administration.

The top five variables building administration perceived to be most important were extent professional development affects the change initiative ($M = 5.10$, $SD = .57$), *impact of planning on district-wide implementation* ($M = 5.30$, $SD = 1.25$), *professional development embedded in reform process for effective implementation* ($M = 5.20$, $SD = 1.23$), *continued support of the change initiative* ($M = 5.60$, $SD = .42$), and *individual belief rationale is important* ($M = 5.80$, $SD = .42$).

Scoring at or below a threshold of 4.5, four variables were perceived to be least important to the success of an initiative according to building administration are as follows: *effective district-wide communication* ($M = 4.30$, $SD = 1.06$), *strong lines of communication at all levels* ($M = 4.50$, $SD = 1.43$), *initiative continues after staff exit district* ($M = 4.50$, $SD = .97$), *stipends for professional development are not important* ($M = 4.50$, $SD = 1.96$).

Table 12

Teacher Perceptions on Variables that Impact Successful School Initiatives

Variables	<i>M</i>	<i>SD</i>
Extent professional development affects change initiative	5.00	0.89
Initiatives reinforced individual work implementation	4.83	0.75
Effective district-wide communication	3.67	1.51
Resources based on instructional priorities initiative	3.83	0.98
Impact planning on district-wide initiative	5.00	0.63
Match staff strengths current responsibilities	4.17	0.75
Professional development embedded reform process effective implementation	3.67	1.03
Guidance effective implementation initiative practices	3.50	1.05
Free flow information to staff	3.17	0.75
Resources determine annual priorities for faculty learning	3.67	0.82
Continued support of change initiative	4.67	0.82
Belief rationale is important	4.83	0.41
Teacher involvement professional development enhancing teaching	3.83	0.75
Teachers share learning and work together	3.33	0.82
Strong lines communication all levels	3.00	1.26
Well-protected instructional time	4.00	1.58
Initiative continues after staff exit school	3.83	0.75
Stipends for professional development not important	3.00	1.26

Four variables scored at or above the mean threshold of 4.80 for teachers. The top four variables teachers perceived to be most important were *extent professional development affects the change initiative* ($M = 5.00$, $SD = .89$), *initiatives reinforced through individual work and implementation* ($M = 4.83$, $SD = .75$), *impact of planning on district-wide implementation* ($M = 5.00$, $SD = .63$), and *individual belief rationale is important* ($M = 4.83$, $SD = .41$).

Scoring at or below a threshold of 3.17, three variables were perceived to be least important to the success of an initiative according to teachers are as follows: *free flow of information to staff* ($M = 3.17$, $SD = .75$), *strong lines of communication at all levels* ($M = 3.00$, $SD = 1.26$), and *stipends for professional development are not important* ($M = 3.00$, $SD = 1.26$).

In order to look more closely at the means and standard deviations of the implementation data, responses were divided into district office administration, building administration and teachers. Table 13 contains responses of district office administration in terms of implementation on variables that impact successful school initiatives. Table 14 scrutinizes responses of building office administration's implementation of variables that impact successful school initiatives during the FY2010 School Improvement Grant: 1003(g). Teacher implementation of variables during the FY2010 School Improvement Grant: 1003(g) are noted in Table 15.

Table 13

*District Office Administration Implementation of Variables that Impact Successful School**Initiatives during FY2010 School Improvement Grant: 1003(g) Process*

Variables	<i>M</i>	<i>SD</i>
Extent professional development affects change initiative	4.18	1.47
Initiatives reinforced individual work implementation	4.09	1.04
Effective district-wide communication	3.64	1.21
Resources based on instructional priorities initiative	3.45	1.21
Impact planning on district-wide initiative	3.60	1.17
Match staff strengths current responsibilities	3.18	1.25
Professional development embedded reform process effective Implementation	3.90	1.45
Guidance effective implementation initiative practices	3.90	1.38
Free flow information to staff	3.81	1.72
Resources determine annual priorities for faculty learning	3.27	1.35
Continued support of change initiative	4.50	1.78
Belief rationale is important	4.64	1.50
Teacher involvement professional development enhancing teaching	3.90	1.22
Teachers share learning and work together	4.55	1.37
Strong lines communication all levels	3.82	1.89
Well-protected instructional time	1.40	1.96
Initiative continues after staff exit school	4.09	1.51
Stipends for professional development not important	3.18	2.40

Four variables scored at or above the mean threshold of 4.50 for district office administration. The top five variables district office administration implemented most frequently during the FY2010 School Improvement Grant: 1003(g) were *continuing support of the initiative* ($M = 4.50$, $SD = 1.78$), *initiatives reinforced through individual work and implementation* ($M = 5.18$, $SD = .75$), *individual belief rationale is important* ($M = 4.64$, $SD = 1.50$), *teachers share learning and work together* ($M = 4.55$, $SD = 1.37$), and *well-protected instructional time* ($M = 4.40$, $SD = 1.96$).

Scoring at or below a threshold of 3.27, three variables perceived to be implemented the least amount of time during the FY2010 School Improvement Grant: 1003(g) according to district office administration are as follows: *match staff strengths to current responsibilities* ($M = 3.18$, $SD = 1.25$), *resources determine annual priorities for faculty learning* ($M = 3.27$, $SD = 1.35$), and *stipends for professional development are not important* ($M = 3.18$, $SD = 2.40$).

Table 14

Building Administration Implementation of Variables that Impact Successful School Initiatives during FY2010 School Improvement Grant: 1003(g) Process

Variables	<i>M</i>	<i>SD</i>
Extent professional development affects change initiative	4.60	1.51
Initiatives reinforced individual work implementation	4.60	1.43
Effective district-wide communication	4.40	1.43
Resources based on instructional priorities initiative	4.40	1.65
Impact planning on district-wide initiative	3.50	1.72
Match staff strengths current responsibilities	4.00	1.80
Professional development embedded reform process effective implementation	3.60	1.51
Guidance effective implementation initiative practices	4.20	1.23
Free flow information to staff	4.70	1.49
Resources determine annual priorities for faculty learning	3.80	1.69
Continued support of change initiative	5.40	1.58
Belief rationale is important	5.50	1.58
Teacher involvement professional development enhancing teaching	4.30	1.34
Teachers share learning and work together	4.40	1.43
Strong lines communication all levels	4.30	1.42
Well-protected instructional time	5.10	1.60
Initiative continues after staff exit school	3.56	1.88
Stipends for professional development not important	3.38	2.33

Four variables scored at or above the mean threshold of 4.7 for building administration. The top four variables building administration implemented most frequently during the FY2010 School Improvement Grant: 1003(g) were *free flow of information to staff* ($M = 4.70$, $SD = 1.49$), *continued support of the change initiative* ($M = 5.60$, $SD = .42$), *individual belief rationale is important* ($M = 5.50$, $SD = 1.58$), and *well-protected instructional time* ($M = 5.10$, $SD = 1.60$).

Scoring at or below a threshold of 3.8, five variables were implemented least frequently during the FY2010 School Improvement Grant: 1003(g) process according to building administration: *impact planning on district-wide initiatives* ($M = 3.50$, $SD = 1.72$), *professional development embedded in reform process* ($M = 3.60$, $SD = 1.51$), *resources determine annual priorities faculty learning* ($M = 3.80$, $SD = 1.69$), *supports are in place for initiative to continue after staff leave* ($M = 3.56$, $SD = 1.88$), and *stipends for professional development are not important* ($M = 3.38$, $SD = 2.33$).

Table 15

Teacher Implementation of Variables that Impact Successful School Initiatives during FY2010

School Improvement Grant: 1003(g) Process

Variables	<i>M</i>	<i>SD</i>
Extent professional development affects change initiative	3.17	1.33
Initiatives reinforced individual work implementation	3.00	1.10
Effective district-wide communication	2.50	1.52
Resources based on instructional priorities initiative	2.83	0.75
Impact planning on district-wide initiative	2.67	1.37
Match staff strengths current responsibilities	3.40	1.95
Professional development embedded reform process effective implementation	2.83	0.75
Guidance effective implementation initiative practices	2.67	0.52
Free flow information to staff	3.17	1.33
Resources determine annual priorities for faculty learning	3.17	0.98
Continued support of change initiative	4.00	0.89
Belief rationale is important	4.50	1.05
Teacher involvement professional development enhancing teaching	2.83	1.17
Teachers share learning and work together	3.00	1.41
Strong lines communication all levels	2.33	1.21
Well-protected instructional time	3.33	1.86
Initiative continues after staff exit school	2.60	0.55
Stipends for professional development not important	1.50	0.84

Two variables scored at or above the mean threshold of 4.00 for teachers. Teachers conveyed the following variables were implemented most frequently during the FY2010 School Improvement Grant: 1003(g): *continued support of the change initiative* ($M = 4.00$, $SD = .89$) and *individual belief rationale is important* ($M = 4.50$, $SD = 1.05$).

Scoring at or below a threshold of 2.83, nine variables were reported by teachers to have been implemented the least during the FY2010 School Improvement Grant: 1003(g) process. The nine variables according to teachers are as follows: *effective district-wide communication* ($M = 2.50$, $SD = 1.52$), *resources based on instructional priorities of the initiative* ($M = 2.83$, $SD = .75$), *impact of planning on district-wide initiatives* ($M = 2.67$, $SD = 1.37$), *professional development embedded in reform process for effective implementation* ($M = 2.83$, $SD = .75$), *guidance for effective implementation of initiative* ($M = 2.67$, $SD = .52$), *teacher involvement in professional development enhancing teaching* ($M = 2.83$, $SD = 1.17$), *strong lines of communication at all levels* ($M = 2.33$, $SD = 1.21$), *initiative continues after staff leave district* ($M = 2.60$, $SD = .55$), and *stipends for professional development are not important* ($M = 1.50$, $SD = .84$).

Individual work, stipends not a motivator, and professional development is embedded in the change process as predictors of belief rationale is important. Null hypothesis 1 examined whether the variables: *initiatives are reinforced through individual work with staff members*, *stipends are not a motivator*, and *professional development is embedded in the change process*: would serve as predictors of the criterion variable, belief in the rationale is important. Null 1 was tested using multiple regression. Multiple regression allows for a series of variables to be tested to determine whether a strong enough linear relationship exist between at least one predictor and the criterion variable.

The five assumptions of multiple regression were tested for all six of the nulls to ensure violations of these assumptions would not impact our ability to accurately predict the criterion variable. The assumption of independence was not violated as residuals did not show a systematic pattern and was free to vary. The assumption of linearity was not violated as the residual plots did not show evidence of a curvilinear relationship. The assumption of normality was not violated as the residual plots demonstrated a pattern of equal distance above and below the residual line. The assumption of homoscedasticity was not violated as evident in the residual plots because as x increased there was no widening or shrinking of residual distance. The assumption of no multicollinearity was not violated as all predictor variables all had a tolerance level above the .20 suggested level.

Table 16

Model Summary Statistics for Criterion Variable Belief Rationale is Important

Criterion Variable	R	R^2	Adjusted R^2	Shrinkage	SE of the Estimate
Belief Rationale Is Important	.688	.474	.405	.069	.704

Table 16 examined the correlation of the observed and predicted values of the criterion shown by multiple correlation coefficient of .688. This is thought of as a strong correlation between the predictors and the criterion. The coefficient of multiple determination demonstrated the amount of variance in the criterion variable that can be explained by the predictors. The coefficient of multiple determination (R^2) value of .474, which means 47.4% of the variance in the belief that the rationale is important can be predicted by the predictor variables. An unbiased estimate is given by the adjusted R^2 because it looks at the number of predictors and sample size

to give a more conservative figure on the amount of variance explained in the criterion variable. While R^2 was .474, adjusted R^2 was .405 resulting in a shrinkage of .069. The standard error of the estimate's role (.704) was to measure the variability or standard deviation of the points around the regression line. The distance of the residuals from the regression or prediction line as shown in Table 16 is a standard deviation of .704 units for *belief the rationale is important*.

To test the significance of R^2 , Table 17 shows the ANOVA was significant, $F(3,23) = 6.899$, $p = .002$. This ANOVA indicated at least one of the predictor variables (professional development, stipends, and individual work) can be used to predict the belief that the rationale is important throughout a change initiative.

Table 17

Unstandardized and Standardized Partial Regression Coefficients for Belief Rationale is Important

Independent Variables	B	SE	β	t	Sig.
Initiatives reinforced independent work implementation	.520	.252	.418	2.064	.050
Stipends for professional development not motivators	.306	.085	.584	3.602	.002
Extent professional development affects change initiative	.231	.224	.198	1.031	.313

The *belief the rationale is important* had two significant predictors. In Table 17, the first predictor, initiatives reinforced through independent work and implementation, was significant with $t(3,23) = 2.064$, $p = .05$. Holding all other variables constant, a one unit increase in initiative reinforced through independent work and implementation resulted in a .520 increase in

the *belief the rationale is important*. The second predictor *stipends for professional development are not motivators*, was significant with $t(3,23) = 3.602, p = .002$. Holding all other variables constant, a one unit increase in *stipends for professional development are not motivators*, resulted in a .306 increase in the *belief the rationale is important*. Through the use of the standardized partial regression coefficient it was evident that the perception that *stipends for professional development were not motivators* had the largest impact on *belief the rationale was important*. The extent professional development affects the change initiative was not a significant predictor.

Resources allocated on instructional priorities of initiative, resources determine annual priorities faculty learning, match staff strengths with current responsibilities, consistent planning for initiative, and supports in place for initiative to continue when people leave the district as predictors belief rationale is important. The second null hypothesis examined the variables: *resources are allocated based on instructional priorities of an initiative, resources are used to determine annual priorities for faculty learning, staff strengths are focused on and matched with current responsibilities, consistent planning for the change initiative, and supports are in place for the initiative to continue when people leave the district*; would serve as predictors in the perception that change initiative is important. Null 2 was tested using multiple regression. Multiple regression allows for a series of variables to be tested to determine whether a strong enough linear relationship exist between at least one predictor and the criterion variable.

Table 18

Model Summary Statistics for Criterion Variable Belief Rationale is Important

Criterion Variable	R	R^2	Adjusted R^2	Shrinkage	SE of the Estimate
Belief Rationale is Important	.757	.573	.472	.101	1.065

Table 18 examines the correlation of the observed and predicted values of the criterion shown by multiple correlation coefficient of .757. This is thought of as a strong correlation between the predictors and the criterion. The coefficient of multiple determination demonstrates the criterion's total variance (*belief rationale is important*) which is shared with the linear grouping of predictor variables. The coefficient of multiple determination (R^2) value of .573, which means 57.3% of the variance in *belief the rationale is important* can be predicted by the predictor variables. An unbiased estimate is given by the adjusted R^2 because it looks at the number of predictors and sample size to give a more conservative figure on the amount of variance explained in the criterion variable. While R^2 was .573, adjusted R^2 .472 there was a difference or shrinkage of .101 between R^2 and adjusted R^2 . The standard error of the estimate's role (1.065) is to measure the variability or standard deviation of the points around the regression line. The distance of the residuals from the regression or prediction line as shown in Table 19 is a standard deviation of 1.065 units for *belief the rationale is important*.

To test the significant of R^2 , Table 20 shows the ANOVA was significant, $F = (5,21) = 5.640$, $p = .002$. This ANOVA indicates at least one of the predictor variables (*initiative continues as staff leave district, impact planning on district-wide initiative, resources determine annual priorities for faculty learning, match staff strengths with current responsibilities, and*

resources based on instructional priorities of initiative) can be used to predict the *belief the rationale of the change initiative is important*.

Table 19

Unstandardized and Standardized Partial Regression Coefficients for Belief Rationale is Important

Independent Variables	B	SE	β	<i>t</i>	Sig.
Initiative continues after staff exits district	-.123	.346	-.099	-.357	.725
Impact planning on district-wide initiative	.340	.307	.237	1.109	.280
Resources determine annual priorities for faculty learning	.750	.282	.640	2.662	.015
Match staff strengths current responsibilities	-.110	.366	-.075	-.300	.767
Resources based on instructional priorities of initiative	.123	.351	.102	.350	.730

The *belief the rationale is important* had one significant predictor. In Table 19, the predictor, *resources determine annual priorities for faculty* was significant with $t(5,21) = 2.662$, $p = .015$. Holding all other variables constant, a one unit increase in *resources determine annual priorities for faculty learning* resulted in a .750 increase in the *belief the rationale is important*. Through the use of the standardized partial regression coefficient it was evident that *resources determine annual priorities for faculty learning* had the largest impact on *belief the rationale was important*. The *initiative continues after staff exits district*, *impact planning on district-wide initiative*, *match staff strengths with current responsibilities*, and *resources based on instructional priorities of initiative* were not significant predictors.

District's resources and instructional priorities, consistent planning for change, match staff strengths with current responsibilities, resourced determine annual priorities faculty learning, and supports in place for initiative continue when staff exit district as predictors continued support of the change initiative. Null hypothesis 3 investigated the variables *a district's resources are based on instructional priorities, consistent planning for a change initiative, staff strengths are matched with responsibilities, resources are used to determine annual priorities for faculty learning, and supports are in place for the initiative to continue when staff members leave the district; to determine whether they could serve as predictors of continued support of the change initiative.* Null 3 was tested by multiple regression. Multiple regression allows for a series of variables to be tested to determine whether a strong enough linear relationship exist between at least one predictor and the criterion variable.

Table 20

Unstandardized and Standardized Partial Regression Coefficients for Continued Support of Change Initiative

Criterion Variable	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	Shrinkage	<i>SE</i> of the Estimate
Continued support of change initiative	.764	.583	.479	.104	1.146

Table 20 examined the correlation of the observed and predicted values of the criterion shown by multiple correlation coefficient of .764. This is thought of as a strong correlation between the predictors and the criterion. The coefficient of multiple determination demonstrates the amount of variance in the criterion variable that can be explained by the predictors. The coefficient of multiple determination (*R*²) value of .583, which means 58.3% of the variance in

the *belief the rationale is important* can be predicted by the predictor variables. An unbiased estimate was given by the adjusted R^2 because it looked at the number of predictors and sample size to give a more conservative figure on the amount of variance explained in the criterion variable. While R^2 was .583, adjusted R^2 was .479 resulting in a shrinkage of .104. The standard error of the estimate's role (1.146) is to measure the variability or standard deviation of the points around the regression line. The distance of the residuals from the regression or prediction line as shown in Table 20 was a standard deviation of 1.146 units for *extent there is continued support of the change initiative*.

To test the significant of R^2 , Table 21 shows the ANOVA was significant, $F(5,20) = 5.604$, $p = .002$. This ANOVA indicated at least one of the predictor variables (*initiative continues as staff leave district, impact planning on district-wide initiative, resources determine annual priorities for faculty learning, match staff strengths with current responsibilities, and extent professional development affects change initiative*) can be used to predict the continued support of the change initiative.

Table 21

Unstandardized and Standardized Partial Regression Coefficient for Continued Support of Change Initiative

Independent Variables	B	SE	β	<i>t</i>	Sig.
Initiative continues after staff exits district	.094	.372	.071	.253	.803
Impact planning on district-wide initiative	.082	.331	.054	.249	.806
Resources determine annual priorities for faculty learning	.726	.303	.581	2.397	.026
Match staff strengths with current responsibilities	.028	.394	.018	.071	.944
Resources based on instructional priorities of initiative	.126	.378	.098	.332	.742
Extent professional development affects change initiative	.231	.224	.198	1.031	.313

The belief that *resources determine annual priorities for faculty learning* was the only significant predictor with $t(5,20) = 2.397, p = .026$ (Table 21). Holding all other variables constant, a one unit increase in resources determine annual priorities for faculty learning resulted in a .726 increase in the continued support of the change initiative. Through the use of the standardized partial regression coefficient, it was evident that *resources determine annual priorities for faculty learning* had the largest impact on continued support of the change initiative. *Initiative continues after staff exit district, impact planning on district-wide initiative, match staff strengths with current responsibilities, resources based on instructional priorities of the initiative, and extent professional development affects the change initiative* were not significant predictors.

Effective district-wide communication, resources allocated based on instructional priorities initiative, match staff strengths with current responsibilities, and consistent planning predict success of professional development. Null 4 investigated the variables, *effective district-wide communication, resources are allocated based on instructional priorities of the initiative, match staff strengths with current responsibilities, and consistent planning for a change initiative*, to determine if they served as predictors for the success of professional development when embedded in the change process. Null 4 was tested using multiple regression. Multiple regression allowed for a series of variables to be tested to determine whether a strong enough linear relationship existed between at least one predictor and the criterion variable.

Table 22

Model Summary Statistics for Criterion Variable Professional Development Affects Change Initiative after Implementation

Criterion Variable	<i>R</i>	R^2	Adjusted R^2	Shrinkage	<i>SE</i> of the Estimate
Professional development affects change initiative after implementation	.841	.707	.646	.051	.940

Table 22 examined the correlation of the observed and predicted values of the criterion shown by multiple correlation coefficient of .841. This is thought of as a strong correlation between the predictors and the criterion. The coefficient of multiple determination demonstrates the amount of variance in the criterion variable that can be explained by the predictors. The coefficient of multiple determination (R^2) value of .707, which means 70.7% of the variance in the belief *professional development affects the change initiative after implementation* can be

explained by the predictor variables. An unbiased estimate was given by the adjusted R^2 because it looked at the number of predictors and sample size to give a more conservative figure on the amount of variance explained in the criterion variable. While R^2 was .707, adjusted R^2 was .646, resulting in a shrinkage of .051. The standard error of the estimate's role (.940) measured the variability or standard deviation of the points around the regression line. The distance of the residuals from the regression or prediction line as shown in Table 22 was a standard deviation of .940 units for *professional development affect change initiatives after implementation*.

To test the significant of R^2 , the ANOVA was significant, $F(4,19) = 11.474, p < .001$. This ANOVA indicated at least one of the predictor variables (*FY2010 effective district-wide communication, FY2010 resources based on instructional priorities initiative, FY2010 match staff strengths with current responsibilities, FY2010 impact planning district-wide initiatives*) can be used to predict the *extent professional development affects change initiatives after implementation* as reflected in Table 23.

Table 23

Unstandardized and Standardized Partial Regression Coefficients for Professional Development Affects Change Initiative after Implementation

Independent Variables	B	SE	β	<i>t</i>	Sig.
FY2010 effective district-wide communication	.857	.158	.830	5.431	.000
FY2010 resources based on instructional priorities initiative	.057	.226	.052	.251	.805
FY2010 match staff strengths with current responsibilities	.013	.214	.014	.063	.951
FY2010 impact planning district-wide initiatives	-.039	.234	-.037	-.166	.870

The implementation of *effective district-wide communication* during the FY2010 School Improvement Grant: 1003(g) was the only significant predictor with $t(4,19) = 5.431, p < .001$. Holding all other variables constant, a one unit increase in *resources determine annual priorities for faculty learning* resulted in a .857 increase in FY2010 *professional development affects change initiative after implementation*. Through the use of the standardized partial regression coefficient it was evident that *FY2010 effective district-wide communication* had the largest impact on *FY2010 impact on planning district-wide initiatives*. *FY2010 resources based on instructional priorities of the initiative*, *FY2010 match staff strengths with current responsibilities*, and *FY2010 impact of planning district-wide initiatives* were not significant predictors.

FY2010 resources based on instructional priorities initiative, FY2010 free flow information to staff, FY2010 teachers share learning and work together, FY2010 match staff strengths with current responsibilities, and FY2010 resources determine annual priorities for faculty learning determine impact FY2010 planning on district-wide change initiatives. Null 5 looked at the following variables to examine to what extent do the variables: *resources based on the instructional priorities of the initiative*, *match staff strengths with staff responsibilities*, *resources determine annual priorities for staff learning*, *teachers share learning and work together*, *sharing what they learn to help others learn more*, and *free flow of information to staff*; serve as predictors if *consistent planning for a change initiative* affect the success of district-wide reform. For the purpose of testing null 5, a test of multiple regression was used. Multiple regression allows for a series of variables to be tested to determine whether a strong enough linear relationship exists between at least one predictor and the criterion variable.

Table 24

Model Summary Statistics for Criterion Variable Impact of Planning on District-Wide Change

Criterion Variable	R	R^2	Adjusted R^2	Shrinkage	SE of the Estimate
Impact of planning on district-wide change	.859	.738	.665	.073	.864

Table 24 examined the correlation of the observed and predicted values of the criterion shown by multiple correlation coefficient of .859. This is thought of as a strong correlation between the predictors and the criterion. The coefficient of multiple determination demonstrates the amount of variance in the criterion variable that can be explained by the predictors. The coefficient of multiple determination (R^2) value of .738, which meant 73.8% of the variance in *FY2010 impact of planning on district-wide change initiatives* can be explained by the predictor variables. An unbiased estimate was given by the adjusted R^2 because it looked at the number of predictors and sample size to give a more conservative figure on the amount of variance explained in the criterion variable. While R^2 was .738, adjusted R^2 was .665 resulting in a shrinkage of .073. The standard error of the estimate's role (.864) is to measure the variability or standard deviation of the points around the regression line. The distance of the residuals from the regression or prediction line as shown in Table 24 is a standard deviation of .864 units for *FY2010 impact of planning on district-wide change initiatives*.

To test the significant of R^2 , the ANOVA was significant, $F(5,18) = 10.146$, $p = .000$. This ANOVA indicates at least one of the predictor variables (*FY2010 resources based on instructional priorities initiative, FY2010 match staff strengths current responsibilities, FY2010 resources determine annual priorities for faculty, FY2010 teachers share learning and work*

together, and FY2010 free flow information to staff) can be used to predict the impact planning had on district-wide change.

Table 25

Unstandardized and Standardized Partial Regression Coefficients for FY2010 Impact Planning on District-wide Change Initiatives

Independent Variables	B	SE	β	<i>t</i>	Sig.
FY 2010 resources based on instructional priorities initiative	.302	.218	.293	1.385	.183
FY2010 match staff strengths with current responsibilities	.465	.198	.502	2.345	.031
FY2010 resources determine annual priorities for faculty learning	-.133	.220	-.131	-.604	.553
FY2010 teachers share learning and work together	.283	.151	.295	1.876	.077
FY2010 free flow information to staff	.077	.149	.085	.515	.613

The *FY2010 impact of planning on district-wide change initiatives* had one significant predictor. *FY2010 match staff strengths with current responsibilities* was significant with $t(5,18) = 2.345, p = .031$. Holding all other variables constant, a one unit increase in *FY2010 match staff strengths with current responsibilities* resulted in a .465 increase in the *belief the rationale is important*. Through the use of the standardized partial regression coefficient it was evident that *FY 2010 match staff strengths with current responsibilities* had the largest impact on *FY2010 impact of planning on district-wide change initiatives*. The extent *FY2010 resources based on instructional priorities, FY2010 teachers share learning and work together, FY2010*

resources determine annual priorities, and FY2010 free flow of information to staff were not significant predictors as presented in Table 25.

Well-protected instructional time, belief rationale is important, resources determine annual priorities for faculty learning, match staff strengths with current responsibilities, and teacher involvement in professional development enhance teaching predict FY2010 impact planning on district-wide change initiatives. Null 6 determined if the variables, *belief the rational for the change initiative is important, match staff strengths with current responsibilities, resources determine annual priorities for staff learning, teacher involvement in professional development to enhance teaching, and well-protected instructional time*, would serve as predictors of *strong lines of communication at all levels*. A test of multiple regression was used for null 6. Multiple regression allowed for a series of variables to be tested to determine whether a strong enough linear relationship exist between at least one predictor and the criterion variable.

Table 26

Model Summary Statistics for Criterion Variable Strong Lines of Communication at All Levels

Criterion Variable	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	Shrinkage	<i>SE</i> of the Estimate
Strong lines of communication at all levels	.856	.732	.661	.071	1.004

Table 26 examined the correlation of the observed and predicted values of the criterion shown by multiple correlation coefficient of .856. This is thought of as a strong correlation between the predictors and the criterion. The coefficient of multiple determination demonstrates the amount of variance in the criterion variable that can be explained by the predictors. The

coefficient of multiple determination (R^2) value of .732, which meant 73.2% of the variance in *strong lines of communication at all levels* can be explained by the predictor variables. An unbiased estimate was given by the adjusted R^2 because it looked at the number of predictors and sample size to give a more conservative figure on the amount of variance explained in the criterion variable. While R^2 was .732, adjusted R^2 was .661 resulting in a shrinkage of .071. The standard error of the estimate's role (1.00) was to measure the variability or standard deviation of the points around the regression line. The distance of the residuals from the regression or prediction line as shown in Table 26 is a standard deviation of 1.00 units for strong lines of communication at all levels.

To test the significant of R^2 , the ANOVA was significant, $F(5,19) = 10.373, p = .000$. This ANOVA indicates at least one of the predictor variables (*FY2010 belief rationale is important, FY2010 match staff strengths with current responsibilities, FY2010 resources determine annual priorities for faculty learning, FY2010 teacher involvement professional development enhance teaching, and FY2010 well-protected instructional time*) can be used to predict strong lines of communication at all levels as shown in Table 27.

Table 27

Unstandardized and Standardized Partial Regression Coefficients Predict Strong Lines of Communication at all Levels

Independent Variables	B	SE	β	t	Sig.
Belief rationale is important	1.138	.406	.599	2.801	.011
Match staff strengths with current responsibilities	-.702	.390	-.421	-1.799	.088
Resources determine annual priorities for faculty learning	-.198	.320	-.148	-.619	.544
Teacher involvement professional development enhancing teaching	.039	.374	.027	.105	.917
Well-protected instructional time	1.006	.329	.809	3.056	.007

The *FY2010 impact strong lines of communication at all levels* had two significant predictors. The first predictor, *FY2010 belief rationale is important*, was significant with $t(5,19) = 2.801, p = .011$. Holding all other variables constant, a one unit increase in *FY2010 belief rationale is important* resulted in a 1.138 increase in the *FY2010 strong lines of communication at all levels*. The second predictor, *FY2010 well-protected instructional time*, was significant with $t(5,19) = 3.056, p = .007$. Holding all other variables constant, a one unit increase in *FY2010 well-protected instructional time* resulted in a 1.006 increase in the *FY2010 impact strong lines of communication at all levels*. Through the use of the standardized partial regression coefficient it was evident that *FY2010 well-protected instructional time* had the largest impact on *FY2010 strong lines of communication at all levels*. The extent *FY2010 match staff strengths with current responsibilities*, *FY2010 resources determine annual priorities for*

faculty learning, and FY2010 teacher involvement in professional development enhancing teachers were not significant predictors as reflected in Table 27.

Summary

The results of the quantitative data tabulated in a Zoomerang, on-line survey, which was administered to 82 schools who received FY2010 School Improvement Grant: 1003(g) monies were analyzed to find statistical answers to the six research questions found in this study. All six research questions were proven to be significant through the use of multiple regression.

CHAPTER 5

CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS, AND SUMMARY

This research study was designed to examine the relationship of various predictors related to professional development, coaching, communication, sustainability, resources, and motivation on various criterion variables such as *belief the rationale of the change initiative is important*, *continued support of the change initiative*, *success of professional development embedded in the change process*, and *strong lines of communication at all levels*. An on-line Zoomerang survey was sent to 82 schools. These schools were chosen because they received funding from the Illinois FY2010 School Improvement Grant: 1003(g). Since part of the requirements of the grant included spending dollars on professional development and resources to support the change initiatives in each district, this small population of administrators and educators were chosen for this study. The response rate was low at $n = 29$ complete responses. The low rate of response does impact the generalizability of the study. However, the data were analyzed in order to draw conclusions on six hypotheses and to create a litany of recommendations for future research and study.

Conclusions from the Study

When district administrators, building administrators, and teachers were asked about their or her perceptions on variables that impact successful school initiatives, four variables scored above the 80% level. The individual *belief the rationale for the change initiative is important*

scored the highest at 88.8%. The second highest percentage occurred for the variable *impact of planning district-wide for an initiative* with 85.2%. The third and fourth variables were *extent to which professional development affects a change initiative* (81.5%) and *initiatives are reinforced through individual work and implementation* (81.5%).

Surveying the same district administrators, building administrators, and teachers, they were asked to rate how frequently the variables were implemented during their FY2010 School Improvement Grant: 1003(g) initiative which was illustrated in Table 6. Rated highest for implementation of the variables during the school change initiative was the personal *belief the rationale for the change initiative was important* (66.7%). The next two highest percentage variables were the *continued support of the change initiative* (65.4%) as well as *instructional time was well protected* (65.4%).

Table 7 reflected the mean and standard deviations of the variables perceived by district administration, building administration, and teachers to impact the success of educational change initiatives. The following variables scored above the mean threshold of five: *individual belief the rationale is important* ($M = 5.30, SD = .91$), *impact of planning on district-wide initiatives* ($M = 5.26, SD = 1.02$), *continued support of the change initiative*, ($M = 5.11, SD = 1.12$), *extent professional development affects the change initiative*, ($M = 5.07, SD = .78$) *initiatives are reinforced through individual work and implementation* ($M = 5.00, SD = .73$).

Again, the same district administrators, building principals, and teachers were asked to rank the implementation level of predictor variables during the FY2010 School Improvement Grant. The following variables that scored at or above a mean of a 4 threshold and demonstrated the frequency the variables were implemented during the FY2010 School Improvement Grant: 1003(g): *belief the rationale is important*, ($M = 4.93, SD = 1.47$), *continued support of the*

change initiative, ($M = 4.73$, $SD = 1.59$), *well-protected instructional time* ($M = 4.42$, $SD = 1.89$), *teachers sharing, learning, and working together*, ($M = 4.15$, $SD = 1.49$), and *the extent professional development affects the change initiative*, ($M = 4.11$, $SD = 1.50$).

In order to better understand how district administration perceived predictors of successful change initiatives the mean and standard deviations were examined on the sole responses of district administration. The analysis of this data found four variables scored at or above the mean threshold of 5. The top four variables perceived by district office administration to be most important for successful school change initiatives were *impact of planning on district-wide implementation* ($M = 5.36$, $SD = 1.03$), *initiatives reinforced through individual work and implementation* ($M = 5.18$, $SD = .75$), *extent professional development affects the change initiative* ($M = 5.09$, $SD = .94$), and *individual belief rationale is important* ($M = 5.09$, $SD = 1.22$).

District administrators were also surveyed on the implementation levels of the successful school change initiative variables during their districts implementation of the FY2010 School Improvement Grant: 1003(g) initiative. District administrators who were surveyed rated the following variables the highest during implementation of the FY2010 School Improvement Grant: 1003(g): *individual belief rationale is important* ($M = 4.64$, $SD = 1.50$), *teachers share learning and work together* ($M = 4.55$, $SD = 1.37$), *continuing support of the initiative* ($M = 4.50$, $SD = 1.78$), *well-protected instructional time* ($M = 4.40$, $SD = 1.96$), and *initiatives reinforced through individual work and implementation* ($M = 5.18$, $SD = .75$).

In an effort to recognize how building administration perceived predictors of successful change initiatives the mean and standard deviations were examined on the sole responses of the building administration. The analysis of this data found five variables scored at or above the

mean threshold of 5. The top five variables perceived by building administration to be most important for successful school change initiatives were *individual belief rationale is important* ($M = 5.80, SD = .42$), *continued support of the change initiative* ($M = 5.60, SD = .42$), *impact of planning on district-wide implementation* ($M = 5.30, SD = 1.25$), *professional development embedded in reform process for effective implementation* ($M = 5.20, SD = 1.23$), and *the extent professional development affects the change initiative* ($M = 5.10, SD = .57$).

Building administrators were also surveyed on the implementation levels of the successful school change initiative variables during their district's implementation of the FY2010 School Improvement Grant: 1003(g) initiative. Building administrators who were surveyed rated the following four variables at or above the mean threshold of 4.70 during implementation of the FY2010 School Improvement Grant: 1003(g): *continued support of the change initiative* ($M = 5.60, SD = .42$), *individual belief rationale is important* ($M = 5.50, SD = 1.58$), *well-protected instructional time* ($M = 5.10, SD = 1.60$), and *free flow of information to staff* ($M = 4.70, SD = 1.49$).

In order to comprehend how teachers perceived predictors of successful change initiatives the mean and standard deviations were examined on the sole responses of district administration. The analysis of this data found four variables scored at or above the mean threshold of 4.80. The top four variables perceived by teachers to be most important for successful school change initiatives were *extent professional development affects the change initiative* ($M = 5.00, SD = .89$), *impact of planning on district-wide implementation* ($M = 5.00, SD = .63$), *initiatives reinforced through individual work and implementation* ($M = 4.83, SD = .75$), and *individual belief rationale is important* ($M = 4.83, SD = .41$).

Teachers were also surveyed on the implementation levels of the successful school change initiative variables during their district's implementation of the FY2010 School Improvement Grant: 1003(g) initiative. Teachers who were surveyed rated only two variables at or above the mean threshold of 4.00 during implementation of the FY2010 School Improvement Grant: 1003(g): and *individual belief rationale is important* ($M = 4.50$, $SD = 1.05$) and *continued support of the change initiative* ($M = 4.00$, $SD = .89$).

Through the exploration of the data collected from the on-line Zoomerang survey, it was evident there are statistically significant relationships between successful school change predictors and the criterion variables, *belief the rationale of the change initiative is important*, *continued support of the change initiative*, *success of professional development embedded in the change process*, and *strong lines of communication at all levels*. The strongest relationships existed between *consistent planning for a district-wide change initiative* and the predictor variables: *resources are based on the instructional priorities of the initiative*, *match staff strengths with staff responsibilities*, *resources are used to determine annual priorities for staff learning*, *teachers work together, sharing what they learn to help others learn more*, and *free flow of information to staff* ($r^2 = .738$). Another strong relationship existed between *strong lines of communication at all levels* and the predictor variables: *belief the rationale for the change initiative is important*, *match staff strengths with current responsibilities*, *resources are used to determine annual priorities for staff learning*, *teacher involvement in professional development to enhance teaching*, and *well-protected instructional time* ($r^2 = .732$). The third strongest relationship existed between success of professional development when embedded in the change process and the predictors *effective district-wide communication*, *resources are allocated based on instructional priorities of the initiative*, *match staff strengths with current responsibilities*, and

consistent planning for a change initiative ($r^2 = .707$). A strong relationship occurred between continued support of the change initiative and the predictor variables *a district's resources are based on instructional priorities, consistent planning for a change initiative, match staff strengths with responsibilities, resources are used to determine annual priorities for faculty learning, and supports are in place for the initiative to continue when staff members leave the district* ($r^2 = .583$). There was a strong relationship concerning staff members belief the change initiative is important and the predictor variables *resources are allocated based on instructional priorities of an initiative, resources are used to determine annual priorities for faculty learning, match staff strengths with current responsibilities, consistent planning for the change initiative, and supports are in place for the initiative to continue when people leave the district* ($r^2 = .573$). Finally, there was a strong relationship between individual *belief the rationale for the change initiative was important* and the predictor variables *initiatives are reinforced through individual work with staff members, stipends are not a motivator, and professional development is embedded in the change process* ($r^2 = .474$).

H₁1. The variables predict if initiatives are reinforced through individual work with staff members, stipends are not a motivator, and professional development is embedded in the change process.

H₁2. The variables predict if resources are allocated based on instructional priorities of an initiative, resources are used to determine annual priorities for faculty learning, staff strengths are focused on and matched with current responsibilities, consistent planning for the change initiative, and supports are in place for the initiative to continue when people leave the district.

H₁3. The variables predict if a district's resources are based on instructional priorities, if consistent planning for a change initiative, if staff strengths are matched with responsibilities, if

resources are used to determine annual priorities for faculty learning, and if supports are in place for the initiative to continue when staff members leave the district.

H₁₄. The variables predict if effective district-wide communication is evident, if resources are allocated based on instructional priorities of the initiative, if staff strengths are matched with current responsibilities, and if consistent planning for a change initiative is ongoing.

H₁₅. The variables predict if resources are based on the instructional priorities of the initiative, if staff strengths are matched with staff responsibilities, if resources are used to determine annual priorities for staff learning, if teachers work together sharing what they learn to help others learn more, and if free flow of information to staff is evident.

H₁₆. The variables predict there if the belief in the rational for the change initiative is important, if staff strengths are matched with current responsibilities, if resources are used to determine annual priorities for staff learning, if teacher involvement in professional development to enhance teaching is evident, and if instructional time is well-protected.

Implications of the Study

Researchers who are interested in the topic of educational change and education reform will find important implications outlined in this study. Surveys were sent to superintendents from 82 Illinois school districts who received monies from the FY2010 School Improvement Grant: 1003(g). The superintendents were asked to forward the surveys to district administration, building administration, and teachers who were involved in the FY2010 School Improvement Grant: 1003(g) process. Educators surveyed were asked to rate their perceptions on 18 variables centered around professional development, coaching, communication, resources, sustainability, and motivation. They were then asked to rate their implementation of those 18

variables while carrying out of the FY2010 School Improvement Grant: 1003(g). The response rate was relatively low, and it was impossible to say why this was so. However, during telephone conversations with superintendents the primary discussion centered around an unfavorable reaction to the FY2010 School Improvement Grant: 1003(g) process. In general, four superintendents stated their district did receive the funds but, after learning what was required of them, their school boards decided to return the dollars to the state. Another superintendent did not wish to participate in the survey due to ongoing negotiations and heavy scrutiny from the press. Yet another district superintendent declined to participate due to the end of a strike and the desire to protect his staff from any negative connotations and to focus on a productive and positive future. Another possible motive for not completing the survey could have been due to the district not calling the initiative the FY2010 School Improvement Grant: 1003(g), as well as not understanding the prompts, not wishing to provide a response to the prompts, or possibly the survey length.

Due to the number of variables which were examined throughout this study, I designed three tables to help the practitioner visualize the findings in a more usable format. Appendix C outlines the predictor variables perceived to be most important to district administration, building administration, and teachers. Appendix D outlines the implementation of the variables in terms of frequency during the FY2010 School Improvement Grant: 1003(g) process. Appendix E lists all of the variables tested in research questions 1-6. Each significant predictor variable is identified underneath the criterion variable for the corresponding research question.

When district administration, building principals, and teachers were asked to rate their perceptions on the variables that serve as predictors for successful school change initiatives, the three groups of educators only agreed on two variables. They all agreed that one of the most

important variables for successful school initiatives is the individual belief that the rationale for the change initiative is important. All three groups agreed there must be continued support of the change initiative. Appendix C illustrates this information in detail. It is important to note when the same group of district administration, building principals, and teachers were asked to rank how often the variables were implemented during their district's FY2010 School Improvement Grant: 1003(g), they agreed on three variables.

All three groups reported during their experience with the FY2010 School Improvement Grant: 1003(g), three variables were implemented most frequently. The impact of planning on district-wide implementation was implemented consistently. Professional development impacted the success of the change initiative. The individual belief that the rationale for the change initiative was important was also agreed upon among district administration, building principals, and teachers. Appendix D demonstrates these facts more clearly.

Numerous implications can be drawn from this study. One of the associations that can be construed from this research is staff tend to believe the rationale is important when given time to individually work and implement the initiative. It is also important to recognize when staff believe the rationale for the initiative is important, they are not always motivated by stipends for professional development. Districts need to understand how important an individual's belief that the rationale for the initiative to be successful. It is essential for district and building leaders to find the best way to communicate the rationale effectively to all stakeholders. Unless there is staff buy-in and a belief in the initiative, stipends do not appear to be a predictor for the success of an initiative. This finding is supported in part by research by Kohn (Brandt, 1995) and Pink (2009a). Kohn's research found "individuals who were asked to perform tasks which required creativity and problem solving delivered lower quality work when people were offered a reward"

(Brant, 1995, para. 8). Pink's (2009a) research also found intrinsic motivation to be more powerful than extrinsic motivators, such as rewards.

District-wide planning of an initiative is another variable which is crucial to the success of professional development. Districts must budget resources for professional development centered around the change initiative in order for staff to believe the rationale for the initiative is important and to support the initiative. When planning district-wide professional development, it is important to match staff strengths with current responsibilities. Districts must protect instructional time of teachers. Protecting instructional time also serves as a predictor that communication will be more effective at all levels. Robbins and Finley's (1996) research cautioned, "As your organization grapples with its change initiatives, you will want to run reality checks to make sure you are learning, and not just training" (p. 125). Sinek's (2009) study, "What you do serves as the tangible proof of why you do it" (p. 76). And Marzano et al.'s (2005) research indicated the importance of protecting the instructional time of teachers (Marzano et al., 2005).

District administration would be wise to understand the impact of getting everyone on-board prior to beginning an initiative. While it may seem contrary to popular belief, this research demonstrated consistent district support of an initiative and belief that the rationale for the change initiative is important has a greater impact than paying teacher stipends. The idea that consistent district support of an initiative is important is seconded by the 2009 research performed by the Educational Research Service. The Educational Research Service found importance in "organizing and engaging the district office in support of each school. . . charges the district office to provide instructional coherence and support." (Educational Research Service, 2009, pp. 2-3).

The belief that the rationale for the change initiative is more important than being rewarded extrinsically has been supported by Pink's (2009a) research. Pink (2009a) defined purpose as a desire to do what we do in the service of something larger than ourselves. He also found that individuals with a drive to do things that matter are more effective than if-then rewards.

Recommendations for Further Research

The following are recommendations for further research on understanding change for effective school improvement initiatives and critical elements of school reform:

1. This study should be expanded to include a nationwide study of schools that have received federal and state dollars for school improvement initiatives and improved student academic scores in math in reading in all demographic areas.
2. It would be interesting to survey the districts who received the latest round of school improvement grant monies to analyze their perceptions of the critical elements of school change, how often they implemented the critical areas of school change, and study the demographic and achievement data of those districts.
3. Another possible recommendation would examine high achieving schools with increasing enrollment, high achieving schools with declining enrollment, low achieving schools with increasing enrollment, and low achieving schools with increasing enrollment and correlate the critical elements of school reform categories with belief systems and implementation of those critical elements by veteran teachers, who have taught for five or more years, and new teachers, who have taught less than four years.

4. This study could be expanded to include perceptions of board members on the critical elements of school reform. This could be compared with the district's demographic and academic data to see if there are any correlations.
5. This study could also be conducted using qualitative data in order to dig deeper into the districts' perspectives on the FY2010 School Improvement Grant. Three schools showed significant academic achievement, as well as schools who showed a significant decline in academic achievement, should be studied to find if any variables appear to have contributed to the success and or decline in student academic data.

Study Summary

Globally, this study examined critical elements of school reform that focused around the areas of professional development, coaching, communication, resources, sustainability, and motivation. Statistically, all six hypothesis statements were found to be significant. Specifically, the first research question discovered when initiatives are reinforced through independent work of the staff members, the *belief the rationale for the change initiative was important* was more likely to occur. The second significant predictor of question one found, when *stipends are not a motivator for professional development*, it was more likely a staff member's *belief the rationale for the change initiative was important*. Current research supports the results of question number one. Deci examined intrinsic versus extrinsic motivation and observed that external reward, such as money, would often result in a lessened motivation in human subjects (as cited in Pink, 2009b).

Research question 2 revealed when district resources are used to determine the annual priorities for faculty learning, it serves as a predictor for an individual's belief that the rationale

for the district school improvement initiative is important. Research by Hall and Hord (2011) support this finding as well. Their research asked educators to consider this as their first change principle:

Professional learning is a critical component embedded in the change process. Research focused on change process and on professional development reveals parallel finds, both of which identify the imperative of learning in order to use improved programs, processes, and practices. (Hall & Hord, 2011, p. 7)

Demonstrated in research question three was the belief that resources determine annual priorities for faculty learning. When school districts use resources to determine annual priorities for faculty learning, it can serve as a predictor that the staff member will continue to support the district's change initiative efforts. Hall and Hord (2011) also supported this finding in their research where they stated that successful school initiative must be sure "resources are used to determine annual priorities for faculty learning" (p. 108).

Analysis for research question 4 examined district administration, building administration, and teacher implementation levels of district-wide communication during the FY2010 School Improvement Grant: 1003(g). The analysis found when there was effective district-wide communication during the FY2010 School Improvement Grant: 1003(g) process, communication served as a predictor that the professional development delivered during the FY2010 School Improvement Grant: 1003(g) positively affected the change initiative after the implementation of the professional development. Marzano et al. (2005) specified, in order to ensure the successful implementation of an initiative, "professional development must be provided during the educational reform process" (p. 42). Marzano et al.'s research also supports

the importance of effective district-wide communication to the success of school reform efforts (Marzano et al., 2005, p. 42).

Research question 5's analysis of the data demonstrated one significant predictor. When staff strengths were matched with the staff member's current responsibilities during the FY2010 School Improvement Grant: 1003(g), it served as a significant predictor on the impact of the planning on the district-wide change initiatives during the FY2010 School Improvement Grant: 1003(g). Marzano et al.'s (2005) research also concluded the importance of matching staff strengths with current responsibilities. Hall and Hord's (2011) research also confirmed the importance of district-wide planning on the success of change initiatives.

Finally, the analysis in research question 6 showed there were two significant predictors. The first significant predictor was the staff member's personal belief that the rationale for the change initiative was important. This served as a predictor that strong lines of communication were evident at all levels during the FY2010 School Improvement Grant: 1003(g). Marzano and Walters (2009) warned that during many school initiatives, district leaders must face the fact that some staff members' perceptions will be that "communication has broken down and a preexisting culture of cooperation has been disrupted" (p. 108). Guskey's (2002) work supports the importance of using communication to "check on staff members, support staff members and to pressure staff members" (p. 388).

The second predictor for research question 6 was the importance of well-protected instructional time during the FY2010 School Improvement Grant: 1003(g) initiative which predicted that strong lines of communication were evident at all levels during the FY2010 School Improvement Grant: 1003(g). The importance of "protecting the instructional time of teachers" is another important element of successful school initiatives (Marzano et al., 2005, p. 163).

The annual Gallop Poll (Bushaw & Lopez, 2010) found, “Americans believe the most important national education program should be improving the quality of teaching” (p. 10). Although this may be true, it is important to understand the relationships found in this study as district’s move forward with change initiatives. Although simply *improving the quality of teaching* may sound rather simple, it is not. Dorsey (2010) believed that “all long-term school improvement hinges on developing the people within the school” (p. iii). By implementing the predictor and criterion variables found to be significant, you should be well on your way to implementing success school reform in your district.

What can leaders do? Based on the findings from this research, leaders should first ask, “What is the rationale behind the current change initiative?” If a district cannot answer this question, then I would recommend not moving forward with the initiative.

Once a district has agreed upon a rationale for the initiative, it is time to plan the district-wide initiative. The important next step is to formulate a game plan to bring all of the stakeholders “on board.” This plan must include a way to communicate the rationale for the initiative in such a way that the majority of the stakeholders also believe the rationale behind the change initiative has an important purpose.

Just communicating the rationale for the change initiative is not enough. District resources must be used to determine the annual priorities for faculty learning. In other words, districts must “put their money where their mouth is.” If a district does not have the resources to support a change initiative, this researcher believes the district should hold off on the initiative until funding is available to support professional development. Without this critical element, it is almost certain the stakeholders’ individual belief the rationale for the change is important will

diminish. When a district commits resources to annual priorities for faculty learning, stakeholders are more likely to continue their support of the initiative.

Districts must find ways for all stakeholders to receive professional development which is embedded in the school day and not scheduled as a stipend only, after school training. When districts' plan after school professional development, they cannot hold all stakeholders accountable if all stakeholders do not attend. This weakens the impact of quality professional development as well as the continued communication of the importance of the rationale for the initiative.

This is another reason why communication is so important. In order to ensure the successful implementation of the initiative as well as the effectiveness of the professional development, the district should effectively communicate to all stakeholders district-wide. Interestingly, when a stakeholder believes in the rationale behind an initiative, communication is perceived to be more effective district-wide. In many ways, communication is a double edged sword. If a stakeholder does not believe in the rationale behind the initiative, no amount of communication will convince the unconvincible. However, districts must not use this as an excuse to not communicate. After the district has found a way to communicate the rationale for the initiative and they have allocated monies for professional development, districts must also find ways to reinforce initiatives through independent work and implementation. Districts should also protect instructional time of teachers. When instructional time is protected teachers actually have the time to use the training they received during professional development to work independently and implement key components of the initiative.

Another important element of the planning process is identifying all of stakeholders' strengths. Once those strengths have been identified, it is important for district's to plan ways to

match staff strengths with their current job responsibilities. While this may not be entirely feasible, it is important to recognize the research behind this recommendation.

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APPENDIX A: Critical Elements of School Reform Survey

Understanding Change for Effective School Improvement Initiatives: Critical Elements of School Reform

Page 1 - Question 1 - Rating Scale - Matrix

To what extent does professional development, which is embedded in the change process, effect the success of a change initiative?

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 2 - Rating Scale - Matrix

Initiatives are reinforced through individual work with staff members regarding implementation.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 3 - Rating Scale - Matrix

Strong and effective communication is frequently established across the district during school reform efforts.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 4 - Rating Scale - Matrix

Resources are allocated based on instructional priorities of the initiative.

Never True	Rarely True	Infrequently True	Occasionally True	Frequently True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 5 - Rating Scale - Matrix

Consistent planning for a change initiative ultimately effects the success of district-wide reform efforts.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 6 - Rating Scale - Matrix

Staff strengths are matched with current responsibilities.

Never True	Rarely True	Infrequently True	Occasionally True	Frequently True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 7 - Rating Scale - Matrix

Professional development is provided during the educational reform process for the successful implementation of the initiative.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 8 - Rating Scale - Matrix

Conceptual guidance is provided in my school regarding effective implementation of practices of the initiative.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 9 - Rating Scale - Matrix

Throughout the educational reform process, structures are in place that promote the free flow of information with staff.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 10 - Rating Scale - Matrix

Resources are used to determine annual priorities for faculty learning.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 11 - Rating Scale - Matrix

Over time, I continue to support the reform/change initiative efforts.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 12 - Rating Scale - Matrix

The rationale behind the current initiative is important to me.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 13 - Rating Scale - Matrix

Teachers in my school are regularly involved in professional development activities that directly enhance their teaching.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 14 - Rating Scale - Matrix

The teachers in my building work together, sharing what they learn in their classrooms to help one another learn even more.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 15 - Rating Scale - Matrix

Lines of communication are strong between teachers, building leaders, and district leaders.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 16 - Rating Scale - Matrix

The instructional time of teachers is well protected.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 17 - Rating Scale - Matrix

Supports are in place so that when people leave our district, we are still able to sustain change initiatives.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 1 - Question 18 - Rating Scale - Matrix

Stipends for professional development are not a motivation for me.

Never True	Rarely True	Infrequently True	Occasionally True	Usually True	Always True
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 19 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, to what extent did professional development, which was embedded in the change process, effect the success of a change initiative?

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 20 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, initiatives were reinforced through individual work with staff members regarding implementation.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 21 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, strong and effective communication was frequently established across the district during school reform efforts.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 22 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, resources were allocated based on instructional priorities of the initiative.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 23 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, consistent planning for a change initiative ultimately effected the success of district-wide reform efforts.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 24 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, staff strengths were matched with current responsibilities.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 25 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, professional development was provided during the educational reform process for the successful implementation of the initiative.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 26 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, conceptual guidance was provided in my school regarding effective implementation of practices of the Initiative.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 27 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, structures were in place that promoted the free flow of information with staff.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 28 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, resources were used to determine annual priorities for faculty learning.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 29 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, I continued to support the reform/change Initiative efforts.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 30 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, the rationale behind the Initiative was important to me.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 31 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, teachers in my school were regularly involved in professional development activities that directly enhanced their teaching.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 32 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, the teachers in my building worked together, sharing what they learned in their classrooms to help one another learn even more.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

Page 2 - Question 33 - Rating Scale - Matrix

During the FY2010 School Improvement Grant process, lines of communication were strong between teachers, building leaders, and district leaders.

Never	Annually	Semi-Annually	Monthly	Weekly	Daily
<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

APPENDIX B: Letter of Informed Consent

January 15, 2012

Understanding Change for Effective School Improvement Initiatives: Critical Elements of School Reform

You are being invited to participate in a research study about critical elements of school reform. This study is being conducted as a part of a dissertation by Dee Ann Schnautz, doctoral student, and Dr. Terry McDaniel, professor, from the Department of Educational Leadership at Indiana State University.

You were selected as a possible participant in this study because of your district's participation in the Illinois FY2010 School Improvement Grant: Section 1003(g).

There are no known risks if you decide to participate in this research study. There are no costs to you for participating in the study. The information you provide will be used to learn more about stakeholder perceptions on change, implementation of change and the effect on student achievement. The questionnaire will take about fifteen minutes to complete. The information collected may not benefit you directly, but the information learned in this study should provide more general benefits.

This survey is anonymous. Do not write your name on the survey. While absolute anonymity cannot be guaranteed over the internet, the survey is password protected and housed on a password protected computer. IP addresses will not be collected. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study. Individuals from the Institutional Review Board may inspect these records. Should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary. By completing and submitting your responses online, you are voluntarily agreeing to participate. You are free to decline to answer any particular question you do not wish to answer for any reason.

If you have any questions about the study, please contact:

Dee Ann Schnautz
(Doctoral Candidate)
13080 East Sumter Road
Dix, Illinois 62830
Phone: (618) 244-8080
Email: dschnautz@mtv80.org

Dr. Terry McDaniel
(Committee Chair)
Indiana State University
Terre Haute, IN 47809
Phone: (812) 237-3862
Email: terry.mcdaniel@indstate.edu

If you have any questions about your rights as a research subject or if you feel you've been placed at risk, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indiana State University, Office of Sponsored Programs, Terre Haute, IN, 47809, by phone at (812) 237-8217, or by e-mail at irb@indstate.edu.

APPENDIX C: Implications of Study (Perception)

Variable	District Admin	Building Admin	Teacher
Impact planning on district-wide implementation	X	X	X
Initiative reinforced individual work and implementation	X		X
Professional Development impacts change initiative	X	X	X
Individual belief the rationale is important	X	X	X
Continued support of the change initiative		X	
Professional development embedded in reform process for effective implementation		X	

APPENDIX D: Implications of Study (Implementation)

Variables	District Admin	Building Admin	Teachers
Impact planning on district-wide implementation			
Initiative reinforced individual work and implementation	X		
Professional Development impacts change initiative			
Individual belief the rationale is important	X	X	X
Continued support of the change initiative	X	X	X
Professional development embedded in reform process for effective implementation			
Teachers share work and learn together	X		
Well protected instructional time	X	X	
Free flow of information to staff		X	

APPENDIX E: Research Questions and Results

Variables	1 Rationale	2 Rationale	3 Support	4 PD	5 Planning	6 Communication
Initiatives reinforced through individual work and implementation (1)	X					
Stipend for professional development not a motivator (1)	X					
Extent professional development effects change initiative (1 , 3)						
Initiative continues after staff exit district (2, 3)						
Impact planning on district-wide initiative (2, 3, 4)						
Resources determine annual priorities for faculty learning (2, 3, 4, 5, 6)		X	X			
Match staff strengths with current responsibilities (2, 3, 4, 5, 6)					X	
Resources based on instructional priorities of initiative (2, 3, 5)						
Effective district-wide communication (4)				X		
Teachers share learning and work together (5)						
Free flow information to staff at all levels (5)						
Belief rationale is important (6)						X
Teacher involvement professional development enhancing teaching (6)						
Well protected instructional time (6)						X