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Teachers', Educational Specialists' and School Leaders' Perceptions of the Cumulative Impact of Education Reform Mandates

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TEACHERS', EDUCATIONAL SPECIALISTS' AND SCHOOL LEADERS'
PERCEPTIONS OF THE CUMULATIVE IMPACT OF EDUCATION REFORM
MANDATES

by

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ABSTRACT

TEACHERS', EDUCATIONAL SPECIALISTS' AND SCHOOL LEADERS'
PERCEPTIONS OF THE CUMULATIVE IMPACT OF EDUCATION REFORM
MANDATES

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Throughout the history of education, there have been changes in funding, organization, governance, and curriculum. As a result of these changes, education reform and mandates have become cyclical in nature. However, with so many structural changes, the purpose of reform mandates often fall short of the intended purpose; closing achievement gaps and allowing equal access for all students.

The purpose of this study is to examine the way in which teachers', educational specialists', and school leaders perceive the cumulative impact of education reform efforts that will be bounded by subject of mathematics. In a qualitative case study, a combination of 7 teachers, educational specialists, and school leaders were interviewed. An interview protocol was used to gather data regarding participants' perception of educational reform mandates as it pertains to mathematics. A code book was derived from the findings. Four themes emerged from the study: knowledge building and support, communication and honest conversations, and moral purpose and social justice concerns and reform being seen as a system of improvement or retrenchment.

Fundamental for sustainability, all stakeholders were active participants in the reform process. In addition, checks and balances, supports and communication were vital factors that needed to be addressed and revisited along the way to ensure that feedback

and improvements to the mandates were implemented with fidelity to ensure

sustainability.

Dedication

This dissertation is dedicated to my loving family whose love, support, and encouragement fueled me to continue when I wanted to give up; my dearest husband Kondo and son Kristo Litchmore and my loving parents Altamont and Edith Nevins.

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INTRODUCTION

STATEMENT OF THE PROBLEM

The Assumptions and Unintended Consequences of School Improvement

Over the past two centuries, the American educational system has gone through

continuous and fundamental changes in funding, organization, governance and

curriculum (Cuban, 2013, 2007, 1993; Ma, 1999; Ball, 1991). These changes are rooted

in the notion that if teacher quality is improved then that improvement will directly

impact student learning. While this assumption seems reasonable on many levels, a

careful examination reveals that changes in teacher quality are assumed to come about as

a result of structural changes in contrast to deeper second order changes. Second order

change can be defined as change that is more complex - change that exceeds existing

paradigms and requires the formation of new knowledge and skills (Ertmer, 1999). As

such, these cycles of school improvement efforts and mandates that are put in place by

policymakers present endless obstacles that result in unintended consequences that

impact all stakeholders (Ravitch, 2010, Cuban, 1993; 2013, Fullan, 2000).

Policymakers, school leaders, building level administrators and teachers are aware

of the notable challenges that each new improvement effort presents at their perspective

levels; however, there continues to be a disconnect because the intention of each

improvement effort is short lived and is then followed by a new improvement effort,

which continues the cycle of the challenges and complexities of school improvement

(Cuban, 1993, 2013; Ravitch, 2010; Fullan, 2000). Even with all these changes,

contemporary classroom practices have remained "eerily similar" to classroom practices

of the past (Cuban, 2013; Good, Grouws, & Ebneier, 1983). We live in a changing world yet our pedagogy remains similar to the pedagogy of years past (Kennedy, 2010; Cuban, 2013).

Cuban (2013, 2007) points to policy makers as central to these unintended consequences, emphasizing that school reform often fails to impact teaching practices due to their misplaced trust in structural reform, an understanding of schools as complicated rather than complex systems and the tendency not to distinguish teacher quality from the quality of teaching. These assumptions in turn "drive the policy logic among contemporary reformers" (Cuban, 2013, p. 113). This outlook has been historically framed by the science of management and its primary focus on the efficient and uniform operation of schools (Tyack, 1974, Tyack & Cuban, 1995), and continues to dominate our fields' outlooks, what some have called New-Taylorism or Neo-Taylorism (Gronn, 1982). All aspects of this model of schooling were explicitly designed through their structures, schedules, and regiments to be analogous to the industrial-age factory (Callahan, 1962).

Tyack (1974) describes this belief in structural reform as the search for the one best system, an assumption that the correct set of structures, schedules and regiments that would produce the desired outcomes. From this schooling-as-product orientation, (Cuban, 2013) points out that "changing teachers has been the dominant policy strategy to improve classroom instruction. Change the teacher; the logic goes, and you improve student learning" (p. 113). In this way, teachers are often seen much more as cogs in the larger machine; key participants in a clearly definable and managed system. Improve the efficiency of the system and improve student learning.

The assumption that improving teacher quality will result in corresponding changes to student learning has a certain amount of face validity, however a more careful examination reveals a set of underlying values and assumptions that can actually deflect us from our deeper goals of substantive, lasting and transferable learning. As Cuban (2013) emphasized policymakers have erred in thinking that teacher traits are predictors of student outcomes. "They assume that the personal traits of teachers; their intellect, determination, energy, and thoughtfulness, will produce student learning" (p. 117). This oversimplifies the complexity of teaching in complex systems and tends to assume that there are simple one-to-one causal relationship, what (Kennedy, 2010) described as the person overshadows the place. Moreover it excludes the students themselves from the equation and assumes that the learner is merely the passive recipient of standardized and known content.

These policymakers have tended to view schools as analogous to machines; a factor that produces a product. This assumes that schooling can be broken down into its antecedents and associated behaviors and consequences, outcomes, and understood as discrete structural elements that can be engineered and reengineered to produce the more efficient and effective system. This outlook can be held in contrast to systems and ecological models that see schools as complex multi-level and interrelated systems with no simple cause and effect relationships (Cuban, 2013; Quinn, 2007; The Broad Center, 2010; Bronfenbrenner, 1986).

Given this outlook policymakers often think about schools structurally; a machine perspective with all the parts well designed to produce predefined results. From this perspective policy defines the engineering or refinements to the machine along with the

school leaders' directives to assure that the workers, teachers, are carrying out their various predefined roles within the machine. As Cuban (2013) points out however, this involves "too many loose connections, unmapped but interdependent relationships, unpredictable events, and ambiguous directives combined into a web-like complex system confounding what policymakers seek, what administrators request, and what teachers end up doing" (p. 113)

Teacher Quality Vs. The Quality of the Teacher

Because policymakers have tended to attribute teachers quality to individual traits rather than the degree to which complex systems support students learning, they often confuse good and successful teaching. Cuban and others have asserted that this causes collateral damage to the profession by elevating the heroic charismatic teacher as the model of success (Gruwell and Freedom Writers, 1999; Mathews, 1988; Tough, 2008, cited in Cuban, p. 118). The collateral damage that is then developed can be directly linked to policymakers equating teacher quality to specific traits. Such traits become associated with schools that are in need of quality teaching, which then places teachers in contexts that require more of these specific traits. This distinction between quality teaching and teacher quality has contributed to the collapse of many classrooms and schools (Darling- Hammond, 2000, 2007; Brown, Smith, Stien, 1995; Cuban, 1993, 2007).

Teaching is a complex and multidimensional process that requires deep knowledge and understanding in a wide range of areas and the ability to synthesize, integrate, and apply this knowledge in different situations, under varying conditions, and with a wide diversity of groups and individuals (Hiebert et al., 2005; Ball & Bass, 2000:

Sanders & Rivers, 1996). Furthermore, being able to distinguish between good and effective teaching then becomes that much more pertinent. Thus the distinction between good and effective and successful teaching is being able to know the difference between the presence of particular features in ones' practices and the effective implementation of those practices that actually engage students in learning and help to foster student success.

However, part of the distinction that Cuban (2013) and others overlook is that schools and teachers don't actually produce anything but only serve as facilitators to student's direct and active engagement (Hiebert et al, 2005; Cohen, Raudenbush & Ball, 2003). Student learning is not so much as the result of what teachers do, but from what they, the students do, their active and deliberate effort and engagement. For example, meaningful assessments provide evidence that learners are able to make connections between their daily experiences and discipline-specific knowledge and practices. In addition, assessments will provide evidence that learners are able to link ideas across subjects and apply previously learned information with novel and experiential situations, thus formulating new knowledge and understanding (Duschl, 2008, Ford & Forman, 2006; Hiebert et al., 2005; Lee & Burkman, 2002).

While Darling-Hammond (2000) has pointed out "that policy investments in the quality of teachers may be related to improvements in student performance" it cannot be misunderstood as causing these improvements. In short the research evidence to date highlights that it is not so much the traits themselves, but that certain teacher behaviors fosters students as active agents in their own learning. In what seems to be missing from the literature is the observation that if that is where the impact comes from, ultimately the

learning behavior of the student, policy that does not similarly treat the teacher, educator, as an active agent in their own professional growth belies the core principal of active agency and significantly risks deflecting the purpose of focusing on teacher quality. (Darling-Hammond, 2004).

The research on teacher quality highlights that the structural changes policy makers assume will bring about improvements in student learning are ill conceived. The misconception is often related to the notion that one size fits all. Adler and Borys (1996) argued that in addition to policy makers making changes, the way in which the changes are made and implemented per context has a great deal to do with the success or failure of the implementation.   Each new structural change attracts teachers that are identified by specific traits and labeled as qualified teachers. However, teacher quality then becomes synonymous with quality teaching which begins the cycle of ineffective teachers, as it relates to the context in which they are teaching: thus, unsuccessful teachers, which indefinitely impacts student achievement (Cuban, 2013; Kress, Zechman & Schmitten, 2011; Sanders & Rivers, 1996).

Student achievement is directly correlated with the quality of teaching that students receive (Cuban, 2013; Wu, Hoy & Tarter, 2013). Students who experience consecutive ineffective teachers have significantly lower achievement compared to those who have consecutive effective teachers (Sanders & Rivers, 1996). It is also true and unfortunate that often the weakest teachers are relegated to teaching the neediest students; poor minority kids in inner-city schools (Jacob, 2007; Snipes & Casserly, 2009; Rodriguez, Murakami-Ramalho & Ruff, 2009). For these children, teachers can make or break them. The research shows that students who have two, three, four strong teachers in

a row will eventually excel, no matter what their background, while kids who have even two weak teachers in a row will never recover (Haycock, 2006; Jordan, Mendro, & Weerasinghe, 1997; Sanders & Rivers, 1996). Improve the quality of teaching and make it context specific and improve student achievement.

What aspects of teacher quality matter to student learning?

As more initiatives for student learning continues to be introduced across states a great deal of focus has been placed on teacher quality and how it impacts student learning. Policy makers continue to be key players in the reform movement which has resulted in an increase number or states enacting legislation that focuses on improving teacher recruitment efforts, improving teacher certification, or improving professional development (Darling-Hammond, 1997). Data were collected from 50-state policy survey conducted by the National Commission on Teaching and America's Future, the study examined the ways in which teacher qualifications and other school inputs, such as class size, are related to student achievement. Even though findings were mixed in various areas, several poignant themes emerged regarding teacher quality and student achievement, including teacher preparation, teacher certification, professional development, student poverty level and language status to name a few. So in short, many factors will impact the overall academic achievement for students.

General Academic Ability and Intelligence

As new standards for student learning have been introduced across the states, greater attention has been given to the role that teacher quality plays in student achievement (Desimone, 2013; Day & Smethem, 2009; Haberman, 1987; Handford & Leithwood, 2013).   More specifically, a great deal of attention has been given towards

the assumption that teachers' IQ is directly correlated with student achievement.

However, most studies report only small relationships that are statistically insignificant.

Two reviews of this research concluded that there is little or no relationship between

teachers' IQ and their students' achievement (Schalock, 1979; Soar, Medley, & Coker,

1983). Due to the lack of statistical significance that resulted from teachers' IQ and

student achievement, the next area of focus is on student achievement and teacher subject

matter knowledge.

Subject Matter Knowledge

Studies of teachers' scores on subject matter tests of the National Teacher

Examinations (NTE) have found no consistent relationship between this measure of

subject matter knowledge and teacher performance as measured by student outcomes or

supervisory ratings (Hiebert et al., 2005; Ball & Bass, 2000; Haney, Madaus & Kreitzer,

1986). While there have been a number of studies that have found positive relationships

between subject matter and student success most were more specific to math and science.

For example, Hawk, Coble, and Swanson (1985) found that teachers who were fully

certified in math experienced significantly larger gains in mathematics. In addition,

Druva & Anderson (1983) found similar results in the area of Science. Moreover, most

studies show small, statistically insignificant relationships, both positive and negative

regarding subject matter knowledge and student achievement (Andrews, Blackmon &

Mackey, 1980; Ayers & Qualls, 1979; Haney et al., 1986; Quirk, Witten, & Weinberg,

1973; Summers & Wolfe, 1975). Therefore, teaching students go beyond subject matter

knowledge; but successfully teaching students must work in concert with knowledge of

teaching and learning to collectively see increased student achievement.

Knowledge of Teaching and Learning

Not surprisingly, knowledge of teaching and learning studies have found a somewhat stronger and more consistently positive influence of education coursework on teachers' effectiveness. Teachers are not merely transmitters of content. The evidence to date supports this idea that knowledge of teaching and learning involves supporting and scaffolding student active agency. For example, Thames, Sleep, Bass and Ball (2003) noted the importance of knowledge of teaching and learning being equally important and connected to content knowledge. In addition, other studies placed emphasis on importance of teachers' content knowledge, but stressed even greater importance on pedagogical content knowledge and the knowledge of teaching and learning (Ball & Bass, 2003; Ball, Thames, & Phelps, 2007, Ma, 1999). Furthermore, the study highlighted the composition and structure of mathematical knowledge for teaching (MKT) which essentially highlights the importance of the knowledge of teaching and learning and content knowledge and how valuable they are together; going beyond the math, but making it meaningful for students (Thames et al, 2008), Similarly, a study conducted by Perkes (1967) found that teachers' who took classes in science were not significantly related to student learning, but teachers' who took classes in methods of teaching science were significantly related to student learning. In addition, teachers' who participated in methods of teaching science were more likely to incorporate hands on activities, laboratory techniques, and more discussions unlike teachers who took more science classes (Perkes, 1967). Yes, subject matter knowledge plays a role here, but as the research has highlighted it is not as significant as knowledge of teaching and learning.

Knowledge of teaching and learning can increase if teachers are provided with meaningful and purposeful professional development that is specific to the context in which they teach (Sanders & Rivers, 1996).

Professional Development

The kind and quality of in-service professional development as well as pre-service professional development may make a difference in development of subject knowledge as well as the knowledge of teaching and learning. Several studies have found that higher levels of student achievement are associated with mathematics teachers' opportunities to participate in sustained professional development grounded in content-specific pedagogy linked to the new curriculum they are learning to teach (Hiebert et al., 2005; Cohen & Hill, 1997; Wiley & Yoon, 1995; Brown et al., 1995; Ball, 1995). In these studies, both the kind and extent of professional development mattered for teaching practice and for student achievement.

The relationships between specific teaching practices and student achievement were often quite pronounced, and these practices were in turn related to teacher learning opportunities (Jacob, 2007; Cuban, 2013; 2004). Policy makers view teachers as imperative in the current system of accountability. Policy makers believe that improved student achievement depends greatly on the quality of teachers and teaching. Consequently, teacher professional development is a fundamental role in standards-based accountability by building teachers' capacity for addressing content knowledge as well as higher order thinking and other essential skills that are needed to improve student achievement (Hochberg & Desimone, 2010).

Teachers who had more professional reading achievement on the National Assessment of Educational Progress (NAEP) tests were more apt to incorporate the use of trade books and literature, integration of reading and writing, and frequent visits to the library, and were less likely to engage in extensive of use of reading kits, basal readers, workbooks, and multiple choice tests for assessing reading, practices that the NAEP analyses found to be associated with lower levels of student achievement (Darling-Hammond. 2007; 2000).

In short, thinking about teachers as essentially the cog in the machine treats teachers as passive recipients of improvement efforts for policy mandates and often utilizes professional development that is incongruent with the best evidence about learning and professional growth. Essentially the dominant science of management model tends to treat schooling as a logical and sequential set of parts that implemented efficiently and effectively will produce the desired outcome. While the identification and importance of most of these components can be rationalized and supported individually taken together the logical positivism frame of reference means that the individual actors are treated differently than the goals that we have for students, who are seemingly, at the very center of reform mandates and initiatives. This in turn creates the circumstances where our aspirations for students to have enriching engaging experiences and develop substantive lasting and flexible knowledge cannot be accomplished due to this basic incongruence between the machine like orientation of these policy mandates and our growing understanding of the science of learning.

We can let this phenomenon play itself out specifically in what Ryan (2010) called the perverse incentives of testing and accountability. Darling-Hammond (2000)

found a near inverse relationship between statewide testing policies and teaching, standards, and student performance; speculating that in states with less qualified teachers and lower performing students policy makers were more likely to seek improvements through structural factors such as testing strategies and curriculum controls; thus, investing more in testing and curricula. It may also be that states have trended toward different theories of reform, with some investing more in testing and others in curricula. As Darling-Hammond (2000) points out, "the lack of apparent relationship between testing programs and student achievement might be because, without other investments to improve teaching and schooling, tests alone do not transform teaching and learning (Darling-Hammond, 2000). Policymakers have to look deeper in an effort to find the right supports for schools based on internal and external contextual factors. There is not a one size fits all approach (Cuban, 2007; 2013).

How do Teachers Experience these Policymaking Failures?

While Cuban (2013) has argued that "examining policymakers ideas and beliefs, long disregarded, can help reduce the frequent policy wars" (p.119), this risks treating teachers as the product of policymaking and reform efforts rather than as active agents in their own professional growth, and actually fall victim to machine like metaphors of the science of management. Certainly these policy-making failures are significant and further study of these are warranted, however, because teachers are the ones who ultimately enact these policy mandates, understanding how they experience these cumulative impacts is equally important. Moreover, policymakers focused outlook of this phenomenon risks framing teachers as passive recipients of improvement mandates

and actually contributes to the associated goal displacement of failing to consider how policy enactors bring about sustainable second order change.

Given the importance of second order change in fostering real growth and improvement, it is critical to explore school improvement as complex and challenging sets of factors that collectively contribute to the overall success and sustainability of school improvement (Takona, 2012, Ravitch, 2010; Laczko-Keer & Berliner, 2002, Cuban, 1993; Datnow & Stringfield, 2000; Fullan, 2000). Factors such as the current context of accountability, equity and social justice concerns, structural factors, the role of school leaders, the role of teachers, and the dynamics professional development typically contribute to outcomes of improvement plans and the targeted context (Desimone, 2013; Scribner, 1999; Bol et al., 1998, Desimone, Smith, Ueno, 2006; Hallinger, 1992).

The implication of the aforementioned factors have posed challenges and complexities that address cultural and societal changes as well as internal and external changes which has undeniable influences on the perception that stakeholders have towards school improvement efforts. In short, school improvement efforts will continue to take place; however, the context of the improvement effort will bring about different challenges and complexities due to an ever-changing educational system and an ever-changing world (Desimone, 2013; Ravitch, 2010; Darling-Hammond, 2000).

Purpose of the Study

The purpose of this study is to explore the cumulative impact of school improvement efforts in a large urban division in order to understand the complex set of issues and conditions educators face. In order to understand the complexity faced by these educators this study is particularly interested in exploring the perceptions and

experiences of teachers, educational specialists and school leaders as it relates to cumulative impacts regarding education mandates and reforms. The study will look at educational reform in a broader sense, while focusing on the area of math for the purpose of this study.

Research Questions

1) *What are the perceptions of educators regarding the cumulative impact of continued cycles of school improvement mandates in a large urban division specific to math?*

   a) *Central office curriculum leaders*

   b) *Educational specialists*

   c) *Building leaders*

   d) *Teachers*

2) *Specifically what are educators' perceptions of*

   a) *structural reform*

   b) *schools as complicated or complex systems*

   c) *the differentiation between teacher quality and teaching quality*

   d) *how their behaviors can and do translate to student learning*

3) *Are the educators, particularly the teachers, better off as a result and by what criteria? Retrenchment or improvement?*

Significance of the Study

This study has particular significance as teachers, educational specialists, and school leaders are tasked with successfully implementing reform mandates regardless of the diverse educational settings in which they serve. In addition, the aforementioned

stakeholders are expected to successful close achievement gaps in diverse settings while addressing additional external and internal factors that have become a part of the culture of such demographics. Further, students attending such schools are expected to meet expectation requirements while being provide with supports that are not particularly addressing the additional internal and external factors that such schools face. This has undoubtedly resulted in cycles of reform.

For example, Rodriguez et. al, (2009) posited that urban schools' patterns include features such as being larger in size, having higher mobility rates, and having a more diverse student population. In addition urban school districts are characterized by having more internal and external challenges, having larger pockets of poverty, having more African American and Latino students, and are more influenced by politics. Taken together, such school districts result in teachers and teacher leaders leaving schools where students are in need of the most help (Jacob, 2007; Goddard et al., 2004).

In an effort to successfully implement reform mandates stakeholders should become aware of the climate and culture of the district in which they serve. More importantly, stakeholders should become a part of the policy making process; allowing their voice to be heard. Since the literature highlights the importance of contextual factors as it relates to student achievement and success, understanding the perception of teachers, educational specialist and school leaders could be the key to successfully implementing reform mandates and providing specific supports to specific schools; not a one size fits all approach (Cuban, 2013; DeAngelis & Presley, 2010; Goddard et al., 2004; Darling-Hammond, 2000).

Operationalized Key Terms

The following key terms are used during this study:

- *Coherence making refers to making sense of the disequilibrium in an effort to think creatively, to identify patterns that are retained and ones that must be change in an effort to find patterns of soundness (Fullan, 2001).*

- *Cultural awareness refers to one's sensitivity to issues of cultural diversity, sexism, racism, handicappism, classism, religious differences, multilingualism, and the commitment to educate in ways which will enhance human diversity and provide equal opportunity (Haberman, 1995).*

- *Educational specialist refers to a leader that specializes in a content area; whether math or reading.*

- *Equality refers to everyone getting the same amount of something (Espinoza, 2008).*

- *Equity (equitable) refers to the consideration and incorporation of individual students' characteristics and background and how it relates to supports that are provided (Espinoza, 2008).*

- *Knowledge building/building capacity refers to the ability to share knowledge and experiences with the intention of building understanding and commitment (Fullan, 2001)*

- *Moral purpose refers to acting with the intention of making a positive difference in the lives of the people it affects (Fullan, 2001).*

- *Reform mandates refer to requirements that are put on schools that schools are expected to fully and successfully implement with the intention of improving failed schools and sustaining schools that are doing well (*

- *Social Justice refers to a construct that has no fixed or universal meaning or definition (Bogotch, 2008) but includes the following concepts:*

- *Attention to marginalized populations of race, class, gender, disability, or sexual orientation. For the purposes of this study, the term social justice is used to refer to bias and prejudice based specifically on race and language;*

- *Shared understandings of social justice including equitable schooling and education and an examination of issues of race, diversity, marginalization, advocacy, and agency (Bogotch, 2002; Theoharis, 2007).*

- *School leaders refer to principals and assistant principal of public school*

- *Retrenchment refers to curtailment of educational reforms as perceived by participants*

Theoretical Framework

Figure 1. A Framework for Leadership (Fullan, 2001).

The theoretical framework reflects a theory of leadership development that is centered on enthusiasm, energy and hope (Fullan, 2001). This framework is identified as a theory of human development that focuses on a small number of core aspects of leadership that can assist in developing a new mind set. As a result, Fullan's leadership framework will assist teachers and leaders in addressing and possible changing the way in which they perceive reform initiatives. Leaders are encouraged to be enthusiastic, hopeful and energetic as they focus on five dimensions of leadership: moral purpose, understanding change, relationship building, knowledge building and coherence making. A brief description of each dimension of leadership as perceived by Fullan follows.

Five Dimensions of Leadership

Moral Purpose

Moral purpose is intentionally making a difference in the lives of others. Exhibiting moral purpose will assist in the development of relationships within a school.

If leaders are authentic, they will get buy-in from teachers and if teachers are authentic, they will get buy-in from students. Essentially, moral purpose means closing the gap between high performing schools and lower performing schools; high performing and lower performing students, by raising the level of achievement of all, while closing the gap. It is essential for leaders to understand the change process. Fullan (2001) highlights that moral purpose without an understanding of the change process is moral martyrdom. This is the only way for large scale, sustainable reform to occur and it is moral purpose of the highest order. Exhibiting moral purpose focuses on the means as well as the end. The theory of sustainability is that it is constituted by a trinity of environmental soundness, social justice, and economic viability. If any of these three are weak or missing the theory of sustainability says that that practice, what the organization is doing will not prove sustainable over time (Fullan, 2001). In short, one must understand the change process in order to represent moral purpose to the fullest; thus developing a system of sustainability.

Understanding Change

Change is inevitable, but understanding change can be powerful to an organization. Too much or too little change can bring chaos or stagnation (Hoy & Miskel, 2008). As noted by Fullan (2001), all successful schools experience "implementation dips." An implementation dip is the adverse result of a change that has been introduced. For example, scores will go down before they go up because the change is novel to the context and the organization. Although this happens, it should be addressed and measures should be taken to correct the concerns and a system of sustainability should result. Leaders who are knowledgeable of implementation dips are aware that there will

be potential dips in performance as innovations are being encountered to sustain change.

Understanding change involves getting feedback from all stakeholders. In many

instances, individuals who disagree with the change can provide insightful information

that was overlooked. This dialogue amongst stakeholders is the start to understanding the

change process as well as building relationships. The development of relationships are

good, but meaningful relationships are valuable in times of change (Fullan, 2001). A key

component of any change is the relationships that are developed during each stage of the

change process.

Relationship Building

Similarly to the previously mentioned dimensions, relationship building is

imperative in regards to change. Leaders should know their students as well as staff

members well enough to know whom they can depend upon in certain situations.

"Building relationships can be powerful or powerfully wrong" (Fullan, 2001). In short,

relationships should be meaningful and purposeful. Developing relationships within the

culture of the school as well as within the community can impact the success and

sustainability of a school. Students, teachers, and administrators need to know that what

they do is valued and more importantly that they are valued (Rodriguez et al., 2009;

Goddard, Hoy & Hoy, 2004). Once genuine relationships are developed, knowledge

building and sharing will be more cohesive and purposeful.

Knowledge Building

The ability to use knowledge can be very powerful, but without training

knowledge can be powerfully wrong (Fullan, 2001). The implementation of change can

be effective if proper training and professional development is taken into consideration

(Cuban, 2008). For example, many schools have implemented new computer programs but teachers were not a part of training sessions. Teachers are expected to share new knowledge with students; however, in many instances they have not been stimulated by the knowledge or properly trained on how to teach students the new knowledge (Desimone, 2010; 2013)

        . There has to be some sort of stimuli that makes its way to the long-term memory of the brain so that knowledge can be meaningful; a connection must be made (Hoy & Miskel, 2008). In short, knowledge is more than just knowing something; it is making a connection that can be used as needed (Hoy & Miskel, 2008). Knowledge building will certainly impact coherence making due to relationships that have been made and risks that have been taken.

Coherence Making

        Coherence making is the ability to accept the change for what it is, find opportunities, create ideas, find novel solutions, find values, and be realistic that there will be challenges with change (Fullan 2001). Coherence making will require and interrelate with moral purpose, understanding change, relationship building and knowledge from internal and external members to ensure that the percentage of good things happening in an organization is higher than the percentage of unpleasant things happening (Fullan, 2001). Each dimension can stand alone, but when stakeholders allow them to be interdependent of one another; a system of change that positively impacts all stakeholders will result. Taken together, the above dimensions for change are interdependent of each other in an effort address to organizational factors that are part of

changing the culture of an organization in an attempt to cultivate a system of

sustainability.

CHAPTER 2

Review of Literature

Chapter Overview

Taken together, the synthesis of literature and research regarding the implementation of educational reform initiatives in urban districts have highlighted specific factors as necessary in achieving sustainable and relevant change. Such factors include the current context of school improvement; accountability, equity and social justice concerns, the influence of structural factors, the role of school leaders and teachers, and the dynamics of professional development. The aforementioned factors are examined here in terms of their influences on effective and sustainable implementation and the impact it has on student achievement.

Current Context

Accountability

The current context of accountability has resulted from policies that have placed unprecedented demands on districts and evidence that districts are using improvement efforts that are research based (Coburn & Talbert, 2006). A noteworthy reform mandate was the development and implementation of the *Elementary and Secondary Education Act of 1965 (ESEA)*. The purpose of ESEA was to provide quality and equality in educating students. In addition, ESEA was enacted to provide additional resources to districts. Districts would be offered grants to assist with textbooks, special education, library books and other sound educational needs in an effort to provide quality and equal educational access for all students (ESEA, 1965). The Civil Rights Movement was occurring in conjunction with ESEA. As a result, ESEA and the Civil Rights Movement

have undoubtedly impacted the educational system of today. Furthermore, in 2001,

congress amended ESEA and reauthorized it as *No Child Left Behind Act of 2002(NCLB).*

NCLB authorized several federal education programs that were administered by the

states. Under the 2001 law, states were required to test students in reading and math in

grades 3–8 and once in high school. All students were expected to meet or exceed state

standards in reading and math by 2014.

The major focus of NCLB was to close student achievement gaps by providing all

children with a fair, equal, and significant opportunity to obtain a high-quality education.

The U.S. Department of Education emphasized four pillars within the bill:

- Accountability: to ensure those students who are disadvantaged, achieve academic
  proficiency.

- Flexibility: Allows school districts flexibility in how they use federal education
  funds to improve student achievement.

- Research-based education: Emphasizes educational programs and practices that
  have been proven effective through scientific research.

- Parent options: Increases the choices available to the parents of students attending
  Title I schools.

NCLB required each state to establish state academic standards and a state testing system

that meet federal requirements. Such reform efforts resulted in a great concern for the

students in the United States (NCLB, 2002). In particular, the NCLB significantly raised

the demands of student achievement data, which was undoubtedly influenced by

sanctions and mandates that have been placed on school districts (Corburn & Talbert,

2006). As a result, school districts were faced with challenges of meeting certain

standards in an effort to remain as a school or a district that is seen as being successful (Darling-Hammond, 2004; O'Day & Smith, 1993). The accountability system then became a system of reform; that failing systems must put in place to assist stakeholders in making sufficient progress that will address and fulfill the mandates and sanctions that have been placed on schools or districts (Darling-Hammond, 2004; Klein, Hamilton & Stretcher, 2000; Linn 2000).

The latest reauthorization of ESEA is the *Every Student Succeeds Act of 2015* (ESSA). Under ESSA, states will still have to test students in reading and mathematics in grades 3 through 8 and again in high schools and report data for subgroups; however, states will get wider discretion in terms of setting goals and the means by which they hold schools and school districts accountable to meeting those goals as well as how they intervene in low-performing schools. Moreover, ESSA asks states to incorporate other more ecologically complex factors into their accountability systems that address school climate, engagement and access to advanced coursework. In addition, states have to identify schools performing in the bottom 5 percent as well as high schools with graduation rates lower than 67 percent and intervene using evidence-based programs. If these schools don't make process the state can step in and implement their own plan. No changes to Title I funding were made, however there were some changes to the Title II formula that would help rural states (Klein, 2015).

The accountability movement, especially NCLB, has left many unanswered questions regarding school improvement and closing achievement gaps (Price, 2010). Price (2010) studied the fidelity of NCLB in terms of the labeling system that was used to identify and distinguish schools that were considered good-quality schools from poor-

quality schools. The study used alternative indicators of school quality; the NCLB subgroup test failure measure and a standardized testing proficiency measure to comparatively measure and exemplify the current system used by the Department of Education. The measure was based on school success regarding NCLB measures, subgroup failure, and percentage of students who scored proficient on the state test during the 2004-2005 school year. The results revealed that some schools' external factors impacted student overall success when compared to internal factors. In short, the disproportionate sanctioning of schools by their student configuration should be intentionally investigated before putting laws into place; thus addressing potential barriers of closing the achievement gap (Valencia, Valenzuela, Sloan, & Foley, 2001).

As mentioned earlier, the intention of each new reform initiative is to provide equal educational opportunities for all students while closing achievement gaps (Darling-Hammond, 2000). In addition to closing achievement gaps, teachers are expected to become familiar and comfortable with reform initiatives in an effort to successfully implement a program that results in the closing of achievement gaps (Darling-Hammond, 2004; Diamond, 2007; Loeb, Knapp, & Effers, 2008; Louis, Febey, & Schroeder, 2005; Swanson & Stevenson, 2002). The pressures and demands that are placed on teachers and teacher leaders have contributed to several factors that impact the way that reform initiatives are perceived. Additionally, teachers and teacher leaders of schools who are located in urban districts are faced with many other internal and external factors that impact the rate at which achievement gaps can potentially be closed (Berry, Ellis, & Hughes, 2014; Jacob, 2007; Darling-Hammond, 2000). Such factors should be considered by policy makers when placing mandates and sanctions on such schools

(Cuban, 2013, 2004). For example, teachers and teacher leaders are impacted by

pressures of the standards and accountability movement, assumptions about their roles,

the traditional notions of school leadership, and the structural movement of schools as a

factory model, and the history of public schools; particularly in urban schools. Structural

reform continues to reoccur; however, until there is a restructure of the structural reform

to address specifics as it relates to the context of the reform mandate, the reoccurrence of

reform will continue (Cuban, 2004, 2000).

Structural Reform

Structural reforms have been noted since the inception of the standards and

accountability movement. Some of the more notable and more recent structural reform

mandates were centered around teacher lead, student-centered, technology enhanced,

curricular changes, school choice, voucher and charter schools to name a few; however

with so many structural changes, the research notes that pedagogy has not changed

(Cuban, 2013, 1990; Hiebert et al, 2005; Ma, 1999; Ball,1991) With so many changes,

teachers continue providing instruction in the form of lecture, whole group activities,

question and answer recitations, textbooks, homework, blackboards/whiteboards, work

sheets, paper and pen and pencil assessments, and teachers continue to be the owners of

their classroom (Cuban, 2013).

A longitudinal study was conducted by Bol et al. (1998) that investigated

teachers' perception of a restructuring model and how their perceptions affect classroom

changes and student outcomes. Questionnaires were administered to 980 teachers with a

93% response rate. There were a total of 34 schools ranging from elementary to high

school involved in the research. In addition, to the questionnaires, focus groups were

conducted in each school. The study focused on three categories: professional

development, teacher collaboration, and resources. After the first year, teachers'

perceptions of the restructuring model included: lack of time for instructional planning

and preparation, lack of teaching materials, lack of funding, lack of resources, lack of

support and lack of instructional materials. In spite the aforementioned, teachers

perceived collaboration and planning with each other as being helpful and needed. The

study concluded that because teacher perceptions of support were in-line with effective

implementation, it is important to provide teachers with adequate tools, resources, and

involvement in the reform initiative process.

Stringfield, Datnow, Ross & Snivley (1998) conducted a study that investigated

structural reform in multilingual and multicultural contexts in an effort to ensure that

students from diverse racial, ethnic and socioeconomic backgrounds were experiencing

equal access to the curriculum and being offered and provided the necessary supports to

ensure success. The method that was used for this study was a mixed-methods

longitudinal study. The data collection that was presented in this particular study was

collected after the first complete year of the study. Thirteen culturally and linguistically

diverse elementary restructuring schools were a part of the study.

The finding for this study highlighted areas of success and challenges. Some

schools were seemingly implementing all aspects of the restructuring model that they

chose. Other schools noted that the reason why they did not fully implement the model

was because they did not have a full understanding of what to do. Further, some teachers

thought that what they were doing for their students was better than what the model

offered. Another noted factor was the movement of both teachers and students, so the

program could not be sustained because of mobility. Teachers were also upset because

they did not feel that they were a part of choosing the reform model that was decided for

them which impacted teacher buy-in. As a result, the structural reforms that were put in

place appear to yield unintended consequences of the reform. This then placed the

district in a position of another failed movement. Such structural factors have

unintentionally become linked to potential social justice and equity concerns due to the

plethora of additional internal and external factors that urban school district face (Stotko,

Ingram, & Beaty-O'Ferrall, 2007; Orfield & Gordon, 2001; MacPhail-Wilcox & King,

1988).

Equity and Social Justice Concerns

The educational system of the United States is filled with many inequities that

impact the overall implementation and sustainability of reform initiatives (Greene &

Anyon, 2010; Wilson, 1987; Dalaker & Naifeh, 1998). Such inequities have contributed

greatly to the overall failure and demise of many school districts (Darling-Hammond,

2007). Inequities in schools have resulted in a great number of court cases that made

attempts to make schools more equal and equitable. The landmark case of *Brown v.*

Board of Education (1954) was adjudicated to end segregation in public schools and

provide educational equity for all students. However, decades later, the achievement gap

between white and minority students continues to grow in opposing directions and

students attending schools in urban districts continue to face internal and external

structural factors that have subsequently segregated students into a failed system. The

majority of students affected by the aforementioned are non-white student who live in

urban areas (Darling-Hammond, 2007). Thus, the intended consequences of reform

initiatives that are driven by policymakers continue to leave many students behind.

A study conducted by Miller-Cribbs & Van Horn (2007) highlights many of the

aforementioned barriers. The method was a quantitative longitudinal study that derived

data from the first two years of an early childhood kindergarten cohort. The participants

were from all racial backgrounds. They participated in reading assessments during the

fall and spring semesters of each year. The findings revealed that students who were

more economically disadvantaged were all products of the same school. Such schools

were already faced with family risk factors that continue to be barriers for children and

families living in urban area, yet students attending such schools are expected to reap the

same results as schools that serve a more economically and ethnically diverse population.

Such concerns become cumulative; impacting and affecting not only students, but also

impacting the demands and expectations that are placed on the role of school leaders

(Darling-Hammond 2004; Elmore, 2004; Cuban, 2004; Hallinger, 1992).

The Role of School Leaders

School level leaders continue to take on the role of the instructional leaders of

their building. The role of the instructional leaders is directly associated with the scores

that results from the end of year examination that determines accreditation ratings. In the

era of accountability, test scores have become very intimidating for school leaders

throughout the United States (Byrd, Drews & Johnson, 2006). Elementary school leaders

are expected to perform in increasingly complex roles (Handford & Leithwood 2013;

Rodriguez, Murakami-Ramalho & Ruff, 2009; Hallinger, 1992), especially when

immersed in urban environments. School leaders are seen as managers and instructional

leaders of their building. However, as a result of trends in educational reform initiatives and in meeting political demands set by policymakers, school leaders are highly encouraged to change the mission of the school and the school's community in an effort to appease policymakers (Cuban, 2013; 2004; Hallinger, 1992). Moreover, the role of school leaders extends to include providing external and internal supports for teachers while building capacity and attempting to close achievement gaps (Greene & Anyon, 2010; Berry et al., 2014). Furthermore, school leaders are challenged with maintaining a climate of trust and sustainability in an effort to get teachers on board in attempts to retain them. Unlike other districts, leaders in urban communities are faced with the challenge of the community while trying to maintain the requirements set forth by policymakers. Leaders of urban schools inherit complexities and challenges that contribute greatly to the overall role that they play in leading an organization in the right direction (Myran, Sanzo, and Clayton, 2011; Budge, 2010; Starr & White, 2008). Leading in a culture of change continues to impact leaders in urban districts at levels that are ever changing; thus impacting the internal and external organization.

A study conducted by Rodrigues, Murakami-Ramalho, and Ruff (2009) highlights the challenges and complexities that urban school leaders face. Additionally, the study explored specific characteristics exhibited by urban school leaders that assisted them in being able to reconcile challenges of educational accountability within the constraints set by policymakers who are advocates for students within the context of accountability.

The method that was used was qualitative -specifically grounded theory viewed through the lens of inclusive social justice leadership. Participants included 16 urban elementary school principals from two southwestern states. Participants had taught

between 5 to 20 years and were vested in urban schools and the community for most of their careers. With regards to demographics, nine participants were male and seven were female. Eight participants were Caucasian, six Hispanic, and one African American, and one participant indicated other on the ethnicity section of the demographics section. Three major themes emerged from the study: the overall interpretation of the accountability system, ethical consideration for special programs, and building community through authentic action. The findings revealed that as mandated accountability measures evolved, inclusive social justice leadership practices were not pushed aside (Oliva & Anderson, 2006), but were integrated into the daily professional practices of some elementary school principals.

Further research magnifies the need for appropriate leadership training and the importance of developing partners in increasing the likelihood of success in urban districts. A study conducted by (Myran, Sanzo, & Clayton, 2011) highlights external supports that can be offered to schools. The study focused on the partnership of a university and a school district. Partnership programs can assist in the development of future leaders because they examine staff challenges, instructional focus, and the multiple roles of the building level administrator (Myran et al, 2011).

Four themes emerged from the study: the application of knowledge to specific district-based issues, leadership exploration, emergent and iterative program design, and embedded leadership training. The method of the study was design-based research paradigm. The participants of the program were aspiring leaders and school and central office administrators. Many areas were addressed regarding the impact and influence of school and university partnerships. For example, district level leaders were able to focus

on building internal leaders. Additionally, they were able to use and put research into practice, and resources were provided that may have not been an option without the partnership. In addition, other studies exemplify the positive impact of university and schools partnership programs (Myran et al., 2011; Forner, Bierlein-Palmer & Reeves, 2012). Partnerships are a great way to get the community involved and a great way to provide needed and additional supports to school.

All in all, the pressures presented by accountability towards school leaders contributes to decisions that they make regarding curricular programs for students, support for teachers and the community, and a laundry list of other factors that will impact the overall organization. Sometimes the overwhelming pressures that principal face towards student achievement on standards-based assessments influences and impacts the role that is required of teachers (Nichols, Glass, & Berliner, 2006). As a result the role of the building leader will directly impact the role that teachers are expected to contribute to the organization.

The Role of Teachers

In this climate of standards-based reform, teachers' and teacher leaders' perceptions are vital in ensuring student success (Certo, 2006; Datnow & Castellano, 2000, Sanders & Rivers, 1996). Teachers are facing challenges that require them to be accountable for student achievement, but at the same time, they do not feel valued, supported, or prepared for what policymakers of standards based reform require of them (Bol et al., 1998; Cuban, 2007; Datnow, 2000).

Although the intention of the framework of the standards-based movement is to build capacity; the result thus far is yielding many unintended consequences for teachers and teacher leaders. For example, teachers and teacher leaders have consistently expressed their lack of involvement in the discussion of standards-based reform initiatives (Cuban, 2013, 1990, Ball, 1991). However, the implementation of new standards, sanctions, mandates, and initiative are occurring daily (Cuban, 2013). Thus, the expectation for success is left to teachers and teacher leaders, but they do not have a voice in what is being implemented or how it is being implemented (Certo, 2006). However, the pressure for success remains clear (Certo, 2006). The added pressures of the accountability movement leave teachers feeling unvalued and professionally worthless; loss of self-efficacy (Goddard, Hoy & Hoy, 2004; Valli & Buese, 2007). Such feelings will become visible in the classroom and students' failure and lack of motivation will become an additional unintended consequence (Budge, 2010). As a result of not being heard or considered, it becomes hard for teachers to fully buy into mandates and initiatives. The notion of "when I close my door, I will do it my way becomes real" (Handford & Letihwood, 2013; Goddard, Hoy & Hoy 2004).

In addition, teachers will not buy into the reform initiative if a genuine sense of value and respect is not visible by reform developers (Handford & Leithwood, 2013). A genuine degree of implementation will be absent due to the lack of belief in the initiative (Spillane & Zeuli, 1999; Desimone, 2013). It is imperative to get teachers and teacher leaders on board with reform initiatives; teachers and teacher leaders' buy-in and belief of initiatives are factors that can positively attribute to successful and sustainable reform (Datnow & Stringfield, 2000; Datnow, 2000). In addition, Datnow and Stringfield (2000)

posited that the implementation of school reform models would more likely be effective when the state, district, design team, and school work together to ensure sustainability.

A mixed methods study was conducted by (Scott & Bagaka, 2004) that investigated the connection between teacher's participation in professional collaboration activities and in professional development and their perception of the effectiveness of the district reform efforts. The study aimed to determine the extent to which teachers' assessment of the effectiveness of school reform efforts can lead to school improvement in the proficiency rate on standard assessments. The design of the study emphasized the uniqueness of teachers and teacher leaders in school reform efforts specific to urban districts. The study consisted of survey given to 620 teachers from 82 elementary schools. The measure sought teacher responses in three areas. The first area included a Likert type scale whereby teachers and teacher leaders were asked to indicate the number of times per year they participated in specific professional collaboration activities. The second area asked teachers to rate how well their school was implementing district reforms. Lastly, using a Likert like scale, teachers were asked to indicate how much professional development they had received on particular reform-related areas that they were expected to implement? The results indicated that teachers' perception of school reform efforts were positively influenced by their engagement in professional collaboration and their participation in professional development activities. All in all, teachers and teacher leaders are in agreement with educational reform initiatives because they are needed; however, they want to be a part of the collaboration process that helps determine what reform will be implemented (Kennedy, 2005 ; Scott & Bagaka, 2004, Darling-Hammond, 1997). Professional development that is meaningful, specific, and

discussed in the context of accountability as it relates to each school is professional

development that will assist in developing a system of accountability (Hochberg &

Desimone, 2010).

Professional Development

As mentioned earlier, the role of the teacher is pivotal regarding student

achievement. The notion of professional development has always been to increase

teacher capacity while targeting areas of weaknesses; thus, closing the achievement gap

for all student. However, the relationship between particular characteristics of

professional development taken together with teachers' perceptions have impacted the

overall change in teacher's attitude and practice toward the implementation of the

specified professional development (Hochberg& Desimone, 2010; Desimone, Smith &

Phillips, 2013; Desimone, 2009; Desimone, Smith & Ueno, 2006).

A study was conducted by Garet, Porter, Desimone, Birman and Yoon (2001) that

emphasized the area of professional development in math and science. The focus of the

study was to compare effects of professional development with different characteristics

and how it was viewed by teachers. Three common themes that were viewed positively

by teachers emerged: content focus, opportunities for active learning, and coherence with

other teacher activities. The study revealed that teachers who actively participated in

professional development activities that were content specific to math reported more

enhanced skills and knowledge, thus, the improvement of teacher's willingness and

ability to instruct and put into practice what was learned. Additional studies' findings

mirrored the aforementioned study (Banilower, Heck & Weiss., 2007; Desimone, 2002,

2013; Cohen & Hill, 2000). Essentially each research emphasized the content area of

math and found that content specific professional development helps teachers become better instructional leaders and also helps teachers diagnose mistakes, and the ability to reteach in a manner that is specific to each child's needs. Teachers viewed content specific professional development as being helpful in ensuring that while they are learning, student are also learning. When professional development is meaningful the results are positive for all stakeholder.

The results of the above quantitative studies yielded positive characteristics of professional development as reported and perceived by teachers. However, the ultimate goal of professional development is to increase sound content and pedagogical teaching and learning (Desimone, 2009; Desimone, Smith, Ueno, 2006; Garet et al., 2001; Scribner, 1999), thus impacting student achievement; which was not evidenced in the studies.

In short, more research is needed on the direct correlation between professional development and student achievement. Nonetheless, a few studies revealed a link between professional development and student achievement. Kennedy (1998) conducted a study that highlighted professional development and student achievement. The result of the study found that content specific professional development taken together with teachers' willingness to implement the professional development with fidelity was effective for changing student learning.

Further, a quantitative study conducted by (Glazerman et al., 2008) looked at the effectiveness of teacher practice and student achievement. The study focused on two comprehensive teacher induction programs that included mentors, focused instruction and opportunities for novice teachers to observe seasoned teachers. However, after a year,

there was no significant impact on teacher practices or student achievement between the control group and the experimental group. The results may be due to the fact that the teachers were first year teachers and may have needed more time to practice responding to the program.

Similarly, (Garet et al., 2008), conducted a quantitative study that focused on effectiveness of two content specific professional development initiatives which resulted in a statistically significant impact on teacher knowledge and teacher practice. However, the professional development initiative did not result in an increase in student scores during the first year or years that followed. All in all, changes in teacher knowledge and instructional practice are a crucial step toward impacting student achievement (Hochberg & Desimone, 2010; Desimone, 2002, Garet et al., 2001, 2008; Mintrop & Sunderman, 2009).

Given this review of related literature, three general themes emerged regarding organizational change and the complexities therein: building educators' and organizational capacity, opportunities to try out, refine, and improve reform strategies, and collaboration, inclusion and consensus building. The above themes taken together with the building administrators and teachers are pertinent factors in transforming a school and the surrounding community.

For example, building educators' organizational capacity can be equated to stakeholders' ability to get a clear understanding of each new reform mandate and how it evolved and the intentions of each mandate as it relates to the particular context that must implement reform mandates and initiatives. Furthermore, building educators' and organizational capacity goes beyond academics, but extends to the communities that are

being serves. To reap a system of sustainability, individuals must build capacity in

teaching and learning, but also in social and emotional concerns (Berry et al.,2014;

Cuban, 2013, 2009). All in all building educators' organizational capacity will

undoubtedly impact the overall climate and culture of an organization which may

contribute to stakeholders' willingness to take risks.

Reform mandates have been associated as being a one size fits all approach.

However, taking risks to explore the effectiveness of each mandate would work better for

particular contexts. All stakeholders want their input to be considered especially when a

particular group of stakeholder are expected to fully implement mandates. Giving both

internal and external stakeholders the autonomy to collaborate in an effort to try out

reform mandates, to refine, reform mandates, and to improve reform mandates based on

student need, support, and achievement will add to the collaboration, consensus building

and inclusion of an organization (Bol et al., 998; Stringfield et al., 1998).

Collaboration, consensus building and inclusion may contribute to a more

cohesive organization (Darling-Hammond, 2007; Valencia et al., 2001). When

stakeholder are a part to the decision making process and their voices are being

considered, then relationships will develop which will change the overall climate and

culture of an organization (Fullan, 2001; Cuban, 2007, Darling-Hammond, 2007).

Leading in a culture of change goes beyond the school house, but it extends to the

climate, culture, preconceived notions, stereotypes, and context of students, teachers,

community members, and stakeholders that are somehow connected to the organization.

Thus the leader must know the external and internal context of the school while ensuring

that each member of the external and internal organization has a role and is aware of what

their role and when to act on regarding the duties that are applicable to their role in an

effort to transform an organization (Darling-Hammond, 2007; Cuban, 2007).

CHAPTER 3

Research Design and Methodology

Design and Overview

The research addressed and brought awareness to common themes that contribute to the perception that teachers, educational specialist and school leaders in urban school districts have towards educational reform mandates in the area of mathematics. The researcher used four philosophies of science, ontology, epistemology, rhetoric, and axiology to assist and influence the fifth philosophy of science – the methodology.

Ontology can be defined as the nature of reality – the researcher's perspective towards truth. The reality continuum sees truth as being objective or subjective. Objectivity in relationship to truth can be defined as a universal reality of what truth should look like in each context. However, subjectivity in relationship to truth defines reality as being contextual and relational (Guba & Lincoln, 2005; Ponterotto, 2005).

Epistemology can be defined as how one constructs knowledge. The continuum ranges from limited to unlimited knowledge. Limited knowledge can be viewed as knowledge that is finite and can be supported by research; thus not impacted or influenced by experiences. On the other hand, unlimited knowledge contributes knowledge changes in the research, the researcher's relationships pertaining to the study and the overall dynamic of the study (Guba & Lincoln, 2008; Hansen, 2004; Ponterotto, 2005).

In regards to axiology, the researcher's values and assumptions are taken into consideration as they influence research questions and design. The continuum ranges from objectivity to reflexivity. Objectivity can be defined as "sticking to the script" in an

effort to obtain un-biased results. Reflexivity involves the researcher making connections and sharing experiences in an effort to collaborate with participants in hopes of obtaining more information (Ponterotto, 2005).

Lastly, rhetoric or the various methods of presenting data in a qualitative study, ranges from the researcher's voice to the participant's voice. In short, one end of the spectrum relates to the researcher's voice and presents the findings based on the researcher's interpretation; whereas, the opposite end of the spectrum relates to the participant's voice and presents findings based on the participants' perspective (Cresswell 2006; Ponterotto, 2005).

Taken together, the four previously mentioned philosophies of science contributed to the final philosophy of science which is methodology. Therefore, a qualitative research approach was used. More specifically, the study applied a case study research tradition. According to (Cresswell, 2003, 2006), a case study approach "allows the researcher to study individual(s), events, activities, or processes or elements of a bounded system." In addition, Plummer (2001) noted that "case studies are distinguished from other qualitative traditions because cases are researched in depth and the data are delineated by time period, activity, and place." Thus, this research focused on uncovering the essence of participant's lived experiences of education reform mandates in the area of mathematics in their school district during the 2006-2015 academic school years.

The research paradigm that was used was social constructivist – allowing each participant's experience to bring multiple perspectives due to social interactions that impact how participants construct knowledge (Hays & Singh, 2012). In addition, social

constructivists seek to construct knowledge through social interactions in an effort to seek an understanding of how participants' knowledge is constructed (Patton, 2002; Ponterotto, 2005). The researcher explored how each participant's perception, or meaning, of education reform mandates was developed; knowing that one universal truth does not exist. In short, participants can only know what they have experienced.

Context

The context of the research was an urban public school district located in the United States. Based on district data collection during the 2015-2016 school year, the district's serves over 35,000 students of various racial and ethical backgrounds. I served as the primary researcher for this study. As the primary researcher, I actively self-reflected and practiced researcher reflexivity, in an effort to maintain authenticity. More specifically, Roger's core conditions in researcher reflexivity was used to address and maintain authenticity and validity. Roger's core conditions in researcher reflexivity consist of three components: authenticity, unconditional positive regard, and empathy. See Table 1 for an explanation of guiding questions that were used throughout the research. The primary researcher authentically identified her feelings regarding the topic prior to engaging in the research. In regards to unconditional positive regard, the primary researcher created a space of acceptance towards participants in an effort to delve deeper into the participant's experience (Rogers, 1961; Hays, 2012). In addition, adding empathy and honesty generated more valuable reflexivity.

Table 1

Using Roger's Core Conditions in Researcher Reflexivity

Using Roger's Core Conditions in Researcher Reflexivity	
Core Condition	Reflexive Questions
Authenticity	• What are my thoughts about my research topic? • How do I feel about my research topic? • What do I expect to find in the data from my participants? • How will these expectations shape how I interpret the data
Unconditional positive regard	• Are my reactions about my topic area or what I am discovering about my participants? • What judgment do I have about my participants and/or topic area?
Empathy	• Am I having reactions to my study that I am not identifying or not want to accept or acknowledge? • Am I seeing the data in my study in ways that are either aligned or not aligned with what participants actually said in their own words?

Notes: Roger's Core Conditions in Research Reflexivity (adapted from Hays & Singh, 2012).

Additional duties of the primary researcher included developing the interview protocol, data collection, transcription of interviews, and coding the transcriptions. During the transcription review and coding processes, the primary researcher coded interviews with accuracy, integrity, completeness and emotional content. The primary researcher contacted participants to ensure that they were in agreement with themes that emerged - member checking.

Participants

The selection of the school district for the study was determined by using purposeful homogeneous sampling because specific information and criteria for the sample were developed prior to entering the field (Miles & Huberman, 1994; Patton,

2002). Furthermore, convenience sampling was used as the sampling method.

Participants were relatively easy to access and they were relatively available upon request

(Schwandt, 2001).   Participants were from various ethnic and racial backgrounds and

held multiple roles within the constraints of the case.

A combined total of seven urban teachers, educational specialists, and school

leaders took part in the research.   This provided variation in the types of positions held

by each participant. Of the seven participants, all were female. Three of the participants

were African Americans, one was bi-racial and the remaining three were Caucasian.

Collectively, participants have a combined total of 173 plus years in the field of

education with a range of between 17 and 40 years.

Measures to Ensure Participant Safety

Prior to implementation, this study was approved by the Darden College of

Education's Human Subjects Committee at Old Dominion University. Participants were

given an informed consent that "described the purpose of the research study and provided

information about the researcher, the extent of participation, limits of confidentiality and

any foreseeable risks and benefits of participation and nonparticipation, and emphasis of

the voluntariness of participation" (Appendix, C) (Hays & Singh, 2012). In addition,

participants were made aware of what data were accessed and presented; member

checking.

Measure

The primary source of data collection was individual semi-structured interviews.

The interview protocol (Appendix D) focused on experiences that participants perceived

as impacting educational reform initiatives and mandates in urban schools and how they

impact teachers, teacher leaders, and administrators. The development of the interview

protocol was based on a blueprint of Fullan's framework for leadership (Table 2) (Fullan,

2001). The blueprint assisted in developing content validity in ensuring that each

participant was given the same opportunity during the research process.

Table 2: Semi-Structure Interview Protocol Table of Specification

Construct	Moral Purpose	Knowledge Creation	Understanding Change	Relationship Building	Coherence Making
2	1	2	1	1

Note: adopted from Fullan's Framework for Leadership (2001).

Furthermore, field notes and memo were used as a way to triangulate data allowing

another form of evidence to support and assist in describing findings (Mays & Pope,

2000).

Researcher Biases and Assumptions

Torff (2004) stated that "qualitative work is subject to researcher bias and

too often blurs the line between research and advocacy" (p. 25). Additionally,

(Johnson & Christensen, 2008) suggested that the researcher is a limitation of

qualitative research because qualitative studies tend to be exploratory and open-

ended. The researcher has a potential bias since she is an administrator in an

urban school district, particularly a school receiving Title 1 funds that serves a

high percentage of students who are from single parent homes, students who

receive free and reduced priced lunch, and students who are faced with

environmental and contextual factors that inevitably impacts their achievement. To

reduce the impact of this limitation, the researcher took measures to treat each

participant in a similar fashion by using the same interview protocol for each

participant. Another strategy the researcher used to increase trustworthiness was

what (Johnson & Christensen, 2008) referred to as "reflexivity" throughout this

study. Reflexivity is when a researcher engages in critical self-reflection about his

or her potential biases and predispositions.

Procedures

An email was sent to participants on January 4, 2015 (Appendix A) to inform

them about the study and to find out if they would be willing to participate in the study.

After agreeing to participate (Appendix B), participants and primary researcher agreed on

a meeting time and place where an informed consent form (Appendix C) was discussed

and signed. Each participant answered questions from a semi-structured interview

protocol. The interviews took approximately 60 minutes, consisted of 7 questions, and

was audio recorded.

The primary researcher used field notes (Marshall & Rossman, 1999), reflexive

field notes (Bogdan & Biklen, 2003) and memos (Corbin & Strauss, 2008) as a way of

supporting the research. After collecting data, data were analyzed and transcribed. The

primary researcher then coded each transcription line by line in an effort to find themes

within and among participants. Themes that emerged were then shared with individual

participants. After participants agreed on theme, the primary researcher gathered themes

among participants and developed a collapsed code book. The final codebook consisted

of four collapsed overall themes: Knowledge building and support, communication and

honest conversations, moral purpose and socials justice concerns, and reform resulting as a system of improvement or retrenchment.

Data Analysis

Unlike other methodologies, the sole purpose of a case study data analysis is to focus on understanding a phenomenon for which there is no in-depth understanding at that particular time (Creswell, 2006). In addition, "case studies are bounded systems; that is, they have boundaries of time, place and other delineations" (Yin, 2008). Through transcription, the primary researcher analyzed the case based on Stake's (1995) naturalistic generalization. Naturalistic generalization is one of Stake's data analysis forms that requires the researcher to actively interpret the case in a way that would enable the audience to relate to the case while comparing the case to findings from other cases (Stake, 1995). In addition, the primary researcher analyzed case descriptions; case descriptions are the details and facts of the case (Creswell, 2006). Similarly, the primary researcher used case descriptions to identify the major findings that helped the audience understand the case, boundaries, and its context more fully (Cresswell, 2006).

Strategies for Establishing Trustworthiness

Strategies of trustworthiness are put in place to ensure validity, reliability, and generalizability as it pertains to qualitative research (Kvale & Brinkmann, 2009). In qualitative research, validity is synonymous with research trustworthiness (Eisiner, 1991; Lincoln & Guba, 1985, 995; Guba & Lincoln, 1989). Trustworthiness in qualitative research can be defined as truth, value, and credibility (Lincoln & Guba, 1985, 1995). Because of the nature of qualitative research, the researcher's use of strategies of trustworthiness assisted in the trustworthiness of the research (Hays & Singh, 2012).

This research used several strategies to maximize trustworthiness: Credibility,

transferability, dependability, confirmability, authenticity, coherence, and ethical

validation.

Credibility. (Lincoln & Guba, 1985) defines credibility as the believability of the

study and transferability refers to the external validity of the study. Both credibility and

transferability were evidenced by the use of thick descriptions (Whittenmore, Chase, &

Mandle, 2001) and through the use of triangulation; using multiple participants'

experiences as a part of data collection and using a research team.

Dependability. Dependability refers to the reliability and consistency of the

study (Lincoln & Guba, 1985). Dependability was used to assist in recognizing

similarities between this study and other studies. This was measured through the coding

of the data by the primary researcher.

Confirmability. Confirmability, or the neutrality of the study, ensures that the

findings are in line with participants' reflection (Lincoln & Guba, 1985). Confirmability

was measured through the use of memos, field notes, thick description, and member

checking; the continuous consultation with participants (Guba & Lincoln, 1989), and

triangulation.

Authenticity. Authenticity, or truthfulness towards participants, was measured

by member checking, triangulation, field notes and thick description. Participants were

provided with themes that emerged from their interview. Participants were in agreement

with themes that emerged.

Coherence. Coherence, or the consistency of the research method, and credibility

were evidenced by an audit trail. An audit trail is a collection of evidence regarding the

research process. In addition, an audit trail provides physical evidence of systematic data collection and analysis procedures (Hays & Singh, 2012).

      Ethical Validation. Ethical validation, or engaging in research that informs practice, is the nature of the study (Hays & Singh, 2012). Furthermore, ethical validation refers to considering the qualitative research process as a moral and ethical issue (Angen, 2000). Ethical validation was evidenced by member checking, peer debriefing, and reflexive journaling.

      Due to the paucity of information regarding teachers, educational specialists, and school leaders' perception regarding school reform mandates in the area of math, especially in urban districts, the contribution of the research was substantial in supporting findings from the literature review as well as the conceptual framework. Thus substantive validity was measured through the use of field notes, memos, member checking, triangulation, and thick descriptions.

CHAPTER 4

Findings

Chapter Overview

This chapter presents the findings of the study. The findings will be presented in a manner that highlights the three major themes and one less dominant theme that emerged from the study and how they relate to the research questions which were derived from the conceptual framework as well as salient themes that were noted in the review of literature. In short, each theme will be followed by the following sub-themes: structural change, complicated v. complex, teacher quality v. quality of teaching, and teacher behaviors translated to student learning. Taken together, the aforementioned themes and sub-themes will conclude with participants' perception, resulting from experiences, of reform as a system of retrenchment or improvement which was noted as the fourth and final theme.

The primary researcher identified several themes that emerged. An attached codebook labeled (Appendix I) outlines the results and details that resulted from the study. All in all, 17 themes emerged. The themes that emerged were salient facts and details that were significant and meaningful to the study as well as participants (Yin, 2008). Once identified, these themes were studied for congruence as well as incongruences in an effort to collapse themes and highlight the significance of incongruences (Figure F, G, H,) (Yin, 2008). From this, four themes were identified and defined according to meaning gathered from interviewees. The themes that emerged: knowledge building and support, communication and honest conversations, moral purpose and social justice concerns, and a less dominant theme of participants'

perception of reform resulting in retrenchment or improvement.

Research Questions:

1) *What are the perceptions of educators regarding the cumulative impact of continued cycles of school improvement mandates in a large urban division?*

    a. *Central office curriculum leaders*

    b. *Educational specialists*

    c. *Building leaders*

    d. *Teachers*

2) *Specifically what are educators' perceptions of?*

    a. *structural reform*

    b. *schools as complicated or complex systems*

    c. *the differentiation between teacher quality and teaching quality*

    d. *how their behaviors can and do translate to student learning*

3) *Are the educators, particularly the teachers, better off as a result and by what criteria? Retrenchment or improvement?*

Research Background

The school division is located in an urban district on the east coast of the United States. The school division serves a diverse student and staff population. Students, in specified grade levels. are expected to take an end of year assessment that will be used to determine accreditation rating. Students are exposed to the same curriculum and are expected to be measured by the use of formative and summative assessments throughout the year; however, trends in achievement gaps between White and Black students continue to remain in concert with original trend data from the inception of standardized

testing. Black students continue to show incremental and varying growth; whether

increasing or decreasing. However, their White counterparts continue to make minimal

but upward progress. Such discrepancies have contributed to the reform initiatives that

have been mandated for the school district. As a result of the aforementioned,

achievement gaps between Black and White students continue to remain a concern

throughout the district; leaving such schools and districts to foster programs that can

assist in closing gap groups.

As a result of achievement gaps not closing but widening, the district was

mandated to implement a system of reform or initiatives that could be taken into

consideration in addressing achievement gaps between White and Black students. The

chart below depicts the reform initiatives that have been implemented in the district for

the past five years.

Table 3: district level math reform

Math Reform	Date	Schools
SOL Curriculum Change to 2009 Standards	Implemented in 2010-11 Assessed in 2011-12	ALL
NPS Curriculum Redesign (take out Norfolk based objectives and directly align to State Objectives)	First year of new design: 2014-15	ALL
Textbook Adoption	2015-16 – Kinder – Geometry 2016-17 – Algebra 2 and up	ALL
Destination Math	? End 2013-14	Title I Elementary Schools
Reflex Math (Not intervention; Fluency builder)	Begin 2014-15	All Elementary Schools
IXL (RTI intervention program)	No Set Start date but around 2011-12	10-20 schools throughout district (purchased by school) All 3 Levels

Math 180 (Intensive Intervention)	Begin 2014-15	Select Middle Schools
Power Teaching (Success for All grant that provided full time coach and training on Tier I instructional shift	Begin 2012-13	Select Middle Schools (end: June 2015) AOIS – Middle (end: October 2013)

Participants

The researcher conducted interviews with seven female educators who hold positions of: Elementary School Teacher (Caucasian), Middle School Math Specialist (African American), District Level Elementary Teacher Specialist (African American), 2 Elementary Math Specialist (Caucasian, Bi-racial), Elementary Principal (Caucasian), and Director of Mathematics for the Council of Great City Schools (African American). The researcher conducted interviews to determine perceptions of the cumulative impact of math reform mandates in an urban school district as it relates to the lived experiences of participants. Themes arose in each interview; many themes were common across participants; other themes were specific to individual participants.

After the interviews were conducted, the primary researcher coded each transcription line by line, looking for salient and key phrases. The primary researcher then grouped common themes and outliers accordingly. Themes were very consistent across participants except regarding social justice and ethical concerns as it relates to African American students. All participants consistently agreed that students in urban schools are not treated equitably in multiple aspects such as: proportionate representation of urban students in college preparation courses and advanced placement courses, equitable distribution of supplies and books, and highly qualified teachers. This was a challenge for the primary researcher because of experiences that have revealed similar

findings. The primary researcher shared her experiences in a manner that encouraged

participants to be equally transparent, allowing full disclosure; adding richness to

findings.

Findings

The emergence of the three themes taken together answered questions 1 and 2.

The themes are presented with sub-structures of questions 1 and 2 with the perception of

participants embedded throughout. The findings will conclude with research question 3

that unfolded as a separate fourth and final theme that added significance to the study.

Each participant was sent a code table from their interview (Appendix G);

allowing participants to agree, disagree, add more, or make changes- member checking.

The primary researcher then identified themes across and within participants (Appendix,

H). Once identified, themes were further studied for similarities which resulted in

collapsing themes into more finite themes. An attached codebook (Appendix, I) outlines

the details of the themes. As a result, the following four themes emerged from the study:

Knowledge building and support, communication and honest conversations, and moral

purpose and social justice concerns. Lastly, the result of reform mandates being

perceived as a system of retrenchment and improvement. While it did not emerge as a

distinct theme as the other three, it represented an important, a less dominant, theme that

emerged that the primary researcher considered excluding, but because of the richness

that it presented, it was presented as the fourth and final theme. The findings will be

addressed by themes and how each theme was related to each research question.

Knowledge Building and Support

Participants' perceptions of knowledge building and support were primarily focused on the district's expectations of teachers, school leaders, and educational specialist, and the lack of support, encouragement, and equity that is offered to schools in urban districts. Teachers were particularly frustrated with meaningless professional development that did not provide feedback, follow-up, or follow through. Additionally, teachers expressed their disconnection with the implementation of new initiatives and their voices not being heard while having to implement each cycle of new initiatives or mandates. Similarly, the perceptions of math specialists (at all levels) were commensurate with those of teachers.

Math specialists were particularly in agreement with professional development and how it impacts teachers and students. As noted by one Participant:

> Professional development is not what is use to be. We go and come back and then it is forgotten about. We are expected to use what we have been taught, but no one is going to come around to make sure that we are able to transfer what was taught and how it should look when it becomes active. We just do the best that we can. If no one is checking on us to make sure that we are doing it correctly, then it becomes clear that we will do what we want to do when doors are closed. We need to make sure that our PD is meaningful to our students.

Professional development, as noted by math specialists, has become a one size fits all approach which does not fit the culture of urban schools. Another salient concern of math specialist was the lack of support that they can provide for teachers. All remaining participants were in agreement that knowledge building and support are imperative in sustaining a successful program. Furthermore, participants agreed that meaningful professional development accompanied by follow-up sessions and appropriate supports are components of sustainability that are needed in urban schools to build knowledge and

capacity in teachers and school leaders while supporting all stakeholders. Appropriate

support was described by participants as support that addresses and finds solutions to

concerns such as: parental involvement, student engagement, cultural awareness,

classroom management, special education, mental health concerns, and teacher efficacy.

Taken together, the findings that emerged through the analysis were consistent with what

Fullan (2001) describes as knowledge building and what Desmione (2009; 2013)

describes as meaningful professional development.

Knowledge building as described by Fullan (2001) is a process that must take

place when change is taking place. For example, participant 6 noted:

> The district decides to do something and no one knows about it until after the fact.
> How does that look? That does not even make sense. How are we supposed to
> implement something that we do not know until after the fact and then we are
> given deadlines as to when it needs to be fully implemented, but now we have to
> work backwards because we are not 3 months into school and we have to stop
> what we are doing to find time to attend a mandatory training. It does not make
> sense. We are adults, let us know up front.

The above participant supported Fullan's view of knowledge building as noted

when you are going through the change process, leaders must focus the group on the new

information. Change does not happen when you place changed individuals into certain

roles; a new environment must be created, and colleagues have to be willing to share

information which requires people to listen which consequently requires the development

of relationships (Fullan, 2001). "The ability to use knowledge can be very powerful, but

without training knowledge can be powerfully wrong" (Fullan, 2001). The

implementation of change can be effective if proper training and professional

development is taken into consideration (Cuban, 2008; Desimone, 2009, 2013).

All in all, findings consistently supported the notion that participants want to know about change and want their voice to be a part of the change process. For example, Participant 2 noted that she had a leader that encouraged her to participate in math associations at the local, state and national levels.

> She encouraged me to take an active role so change could happen; she told me that you have an association of math educators who want to effect, who want to bring about change. You have to get involved with the associations at all levels so that you voice can be heard and so that you can build you capacity and awareness of math and how to help students access the curriculum.   She taught me how to take risks so that I could really dig deeper in finding out how to help students from all walks of life.

Similarly, Participant 3, shared powerful experiences on knowledge building and support.

> My building administrator allowed me to take risks, allowed me to go to professional development opportunities to build my knowledge. In addition, she allowed me to share out with the staff upon my return in an effort to ensure that knowledge was shared and support provided for teachers. Another thing that helps us with knowledge building and support is the fact that a group of math specialist meet once a month for dinner where we share knowledge, challenges and support. So we are continuously building our knowledge and capacity and we are continuously supporting each other and our teachers.

The aforementioned comments correlated to other comments that were specific to knowledge building and support. Even though knowledge building and support are needed to ensure sustainability, knowledge is only information until it becomes an active part of the organization (Brown & Duguid, 2000).

On the other hand, there was consensus among a few participants that stated that often times when teachers are asked what supports they need or what professional development would be beneficial, they are unable to verbalize their request in a manner that is supported by the overall need of the building. Instead they are asking for things that are perceived to bring out limited improvement.

> If you ask teachers what support they need, they will tell you they need more pencils, paper, toner, and items of that nature. They may even go as far as asking for new furniture, but they are not really going to know what to ask for. They are not going to know what professional development opportunities to ask for. They are not going to know what supplemental materials or supports to ask. Instead, building storages units for unopened books, outdated materials and obsolete methods of teaching children. Knowledge building and support must be intentional, purposeful, and data driven to reap the intended benefits of the system.

Overall, the theme of knowledge building and support emerged as necessary components in addressing change; not just structural changes, but change at all levels. In order to build knowledge, a foundation is needed and being a part of the change process will allow stakeholders to build knowledge while being supported in a meaningful and relevant manner.

The findings that emerged through the analysis suggest that participants were in agreement with Fullan's definition of knowledge building. Participants strongly agreed that when change is occurring, they should be informed regarding the new change. However, too often participants noted that change just happens without their input, and they want to be a part of the change process. They want to their voices to be heard. Similarly, cycles of improvement mandates were seen as hierarchical; coming from the top down.

Structural Change. Structural change as it impacts knowledge building was consistently noted by participants as an area of concern. The desire to build knowledge and support as mentioned earlier is something that all participants desired. However, participants noted that often times when they start becoming familiar with a structural change that has been put in place, a new structural change comes along which now makes the previous one obsolete or near obsolete. This now puts teachers and other

stakeholders in a predicament of never fully understanding a change whether it is a new

program, a new book series, a new schedule, or even a new superintendent. However,

they are now tasked with learning something new. This then becomes a system that

inevitably becomes a cycle of change that never really ends, but a cycle that keeps staring

over; a cycle that keeps moving, but never growing; a cycle of reform. (Cuban, 2013;

Kress et al., 2011).

Similarly, (Berry et al., 2014) share similar viewpoints as participants regarding a

great amount of structural changes and how it impacts becoming familiar with one

system and then being disrupted by another system whereby stakeholders are expected to

continue impacting students' lives and learn to fully implement the newest structural

change. Furthermore, participants noted that stakeholders are expected to go beyond just

learning a new initiative, but in many instances, they are expected to learn multiple new

initiative while trying to keep up with initiatives that were not extinguished. Participant 1

emphatically stated the following:

> I understand that change is needed. We all need change to grow. However, I
> have noticed that this district implements too many changes at one time. I would
> be okay with change if it was done in small meaningful pieces, but there are too
> many changes at one time and it becomes very overwhelming. If the focus was
> math reform, then that would be okay, but you have math reform, reading reform,
> the state reform, new lesson plans, and not to mention the new series that you
> have to be trained on and then the concerns with behaviors, special education and
> gifted students. We just need to focus on one thing at a time. And then we are
> expected to teach and go on with our daily routines, it becomes overwhelming.

Through and through, themes that emerged were similar between participants. The

overarching findings noted that structural mandates are so great in number that

knowledge building and knowledge sharing would require daily sessions to ensure

understanding and support. Participants shared common views across the board that were

in line with the follow:

> We have to learn the latest reform and when we finally think we may be able to
> implement it, then something new comes along. We then have to learn the new
> thing and are expected to implement the first thing with the new thing. Fidelity
> has gone out the door from the top down.

Given these findings, we can see notable and strong links to the literature as well as the

Fullan's framework for leadership. For example, as noted by Fullan (2001), "in many

organizations, the problem is not the absences of innovation, but the presence of too

many disconnected, episodic, piecemeal projects with superficial implementation." As a

result schools in urban districts are faced with challenges that continue to add to the

complexities that such school are faced with daily (Jacob, 2007; Quinn, 2007; The Broad

Center, 2010; Darling-Hammond, 1997; Hodgkinson, 1991).

Complicated v. Complex. Knowledge building was perceived as a complex

system by participants. Participants noted that working in an urban district that includes

a great deal of Title 1 schools come with additional challenges and unscheduled events

that interrupts what policymakers see as a complicated system (McGee, 2013; Cuban,

2013; Kress et al., 2011). Participants shared similar viewpoints as it related to additional

challenges:

> We have to use the new RTI thing. I mean the new guy seems energetic and all,
> but it becomes a checklist. I heard that at meetings, they actually go around to
> make sure that each principal has the correct documents that they were asked to
> bring. There is no sort of trust. We are expected to do the same as other schools
> with the same supports but we need different supports. RTI may be good, but we
> need to make sure it is specific to our students.

Teachers are leaving the profession for whatever reason, and new teachers have to be

trained which results in a lack of sustainability because retraining essentially has to take

place each year (DeAngelis & Presley, 2010; Borman & Dowling, 2008; Riley, 2006).

Instead of moving on, you have to start over each year; thus, a cycle of unsustainability

develops. There is a need for a support system to help teachers remain in the profession.

Participants' views supported finding from the literature review. For example,

Participant 2 stated:

> We need professional development, but I do not even think teachers really know
> what they need. It cannot be a one size fits all. We have to make sure that
> students are first and the PD that is offered to teachers are followed up to ensure
> that teachers understand what they are doing and what it should look like. We
> want to make sure that student learning is being scaffolded. Students should be
> able to build on what they learn now and use it for future learning.

The findings were in line with Desimone's take on systems of support; support systems

are put in place to build teacher capacity, to provide meaningful professional

development, and to produce a system of sustainability (Desimone, 2009; Desimone, et

al., 2013). However, teachers have to be willing to change and embrace the support that

is offered to them. Support will look different for new teachers than veteran teachers;

however, all stakeholders need to be a part of the knowledge building process as well as

the support process. Participant 2 noted:

> There is some sort of support, but not every school requires the same support. The
> district offers professional development opportunities that are specific to new
> teachers in an effort to address classroom management, routines and procedures,
> and to provide overall supports. However, showing teachers after school is
> different than coming out to schools and coaching new teachers in the act.
> Supports that are offered are not content specifics, so sessions are just touching
> the surface of content areas. This is good for new teachers, but they require more
> specific training that will help them become familiar with content. Teachers are
> leaving the profession and a better job needs to be done in addressing their needs.
> We talk about mindsets and educators need to change their mindsets.   New
> teachers come in thinking they have a great deal to offer and that they are aware
> of the latest research regarding education. As a result they are resistant to
> implement new ideas and want to do it their way even though their way is not
> working. Veteran teachers do the same thing, they believe that they have been
> teaching math like this for years and this is the way they learned it and they have

turned out okay. We end up hurting the children because we are not willing to change our mindsets or self-reflect.

Knowledge building and support are directly related to quality teaching. Educators in urban districts have to look beyond credential and look at the context in which they teach in an effort to find the right supports and strengthen their overall pedagogy by building knowledge (Cuban, 2013; Day & Smethem, 2009).

Teacher Quality v. Quality of Teaching. Collectively, participants viewed teacher quality as teachers having credentials and in some instances teachers also having content knowledge. Similarly, participants noted that quality teaching goes beyond having credential, but takes into consideration other aspects of education and the educational environment in which they serve. For example, Participant 2 noted:

> You have to be willing to make sure that students have access to the curriculum and if you see that a student is not learning then you have to be willing to go beyond the classroom door and dig deeper to see if connections and trust can be developed in order to reach students. I think that too often we think that all children come to school with the same home life. We have to remember that poverty does not make a child dumb. Poverty is a just a block that can be identified and addressed. We have to know that quality teachers will do all they can to bring out the best in students and build relationships in an effort to reach them where they are and take them beyond where they were once expected to reach. Teachers teaching in predominately urban district should have to take a class on cultural awareness; this will provide support systems for both teachers and students.

So, what is often seen as quality teaching by policy makers is essentially teacher quality which is great, but is in need of additional supports to address the needs of students, particularly in urban school districts. Policy makers have associated quality as traits that teachers have to offer; high test scores and other measurable pre-teaching test, rather than quality teaching; effectively producing life-long learners (Cuban, 2013; Darling-Hammond, 2010; Valli & Buese, 2007). All in all, participants were in agreement with

the aforementioned that schools are not set up where you can get a good picture of a teacher that exemplifies quality teaching due to circumstances and factors that are not controlled by the teacher, the leader, or the school districts. This disconnect impacts teacher behavior which will undoubtedly impact student learning; thus, student and teacher relationships.

Behaviors Translated to Student Learning. Knowledge building and support goes beyond structural changes. Knowledge building as it relates to contextual factors is imperative when it comes to all schools; but seemingly more so when it comes to schools located in urban districts. Stakeholders working in urban districts have to be supported when it comes to cultural awareness (Snipes & Casserly, 2009; Jacob, 2007). Cultural awareness can bridge gaps in education as well as bridge support systems between school and home while addressing concerns that seem to allegedly impede Black children from being successful (Solorzano, 1998, 2008; Sue, Bucceri, Lin, Nadal & Torino, 2009). Students are directly impacted by teacher behavior. Student can sense when a stakeholder is genuine. As noted by Participants 2 and 7, African American students, particularly male students, are not given equal opportunities to access the curriculum. Often times, African American male students are faced with a case of mistaken identity or too often they are dismissed and perceived as not knowing or unable to understand. Addressing cultural awareness by building knowledge, providing meaningful supports, and communicating can assist in finding a remedy for the disproportionality of African Americans students as a whole (Berry et al., 2014; Waxman & Huang, 1997).

Communication and Honest Conversations

Communication and honest conversations are powerful components of an organization. Communication alone is valuable, but communication paired with honest conversations suggest that relationships have been developed, trust has been acquired, and an environment of constructive criticism, constructive feedback, and encouragement has been developed (Fullan, 2001). Overall, themes emerged regarding communication and honest conversation revolved around trust. Participants noted that they would often hear about new mandates and initiative after the fact. In addition, participants noted that in some instances trust was a concern in buildings which would hinder progress and growth.

Stakeholders have to be willing to have honest conversation that is presented in a manner that is not offensive but constructive. In addition, stakeholders cannot take criticism personally, but criticism should be taken as a self-reflective measure that is used to address areas of concern; thus, assist in the development of a plan that will undoubtedly reap sustainability. As stated by Participant 5,

> Okay, there is a mindset where we think we teach the information to kids. Teachers do not realize that teaching math is teaching strategies, then students use those strategies to understand the concept that is being taught. You know what, I never thought about it, but nobody has ever said that to me. That is where it is hard to get teachers to see. To me, reform is about thinking in terms of how do kids learn, and how has education changed, and then you have to evolve. Like, how can you change to fit that?

Essentially, a fixed mindset will present challenges regarding communication and honest conversations. A fixed mindset will interrupt the intention of structural changes or any change. A willingness to embrace change, communicate, and invite and respect honest conversation are vital components that will impact change in an organization.

Structural Change. As mentioned earlier, it is imperative to communicate the structural changes that are a part of an improvement mandate. Honest conversations will either bring people together or get rid of people who do not want to be a part of the change (Fullan, 2001). Participant 4 mentioned that she was a part of a change process whereby administration removed the walls in the school building and encouraged grade levels to work together. This invoked communication and trust amongst teachers. When assessments came back teachers were expected to have similar results and if they did not, they had to discuss it with administration. The mantra that was developed by that administrative team was if we work together, we will ether fail together or succeed together. It was imperative to develop trust, take risk, and support each other as it related to complicated and complex concerns.

Complicated v. Complex. Communication alone can be seen as a complicated system; like a flow chart telling the leader what to say and hoping that the followers will follow.   However, communication paired with honest conversations was viewed as a complex system because honest conversations mean bringing to light situations and concerns that have been hidden or that needs to be addressed with a different set of lens. Communication will build trust. If stakeholders are communicating honestly, then teacher quality can become quality teaching. A sense of urgency has to be communicated honestly.

Teacher Quality v. Quality of Teaching. Similarly, communication and honest conversation as it pertains to teacher quality and quality of teaching was perceived as inequitable and shameful. The overall consensus was in line with current research (Cuban, 2013; Day & Smethem, 2009; Gardener &Talbert-Johnson, 2000). Furthermore,

teachers who are new to the profession are more likely to be assigned to Title 1 schools.

As a result of the challenges and complexities that are linked to Title 1 schools, many

new teachers leave the profession within the first 3-5 years, many new teachers leave the

district after they make tenure (Flores, 2007; Snipes & Casserly, 2009; Jacob, 2007;

Berry et al., 2014;). This leaves the district in a constant cycle of retraining and rehiring

teachers, which is essentially stagnation (Fullan, 2001). Participant 4 was very

passionate about attrition rates. She felt that if the district that she works in does not have

a vision for training and supporting teachers, teacher will end up leaving the district.

Participant 4 noted that members of the district human resources department interviewed

teachers and other stakeholders and asked them why they were leaving the district. This

was preposterous because they should not ask people why they are leaving, but they

should find out why teachers and other stakeholders are staying. Such behavior will

impact the overall climate and culture of a school and on a larger scale a district. This is

undoubtedly impact teacher behavior at many levels. Teacher behavior is directly

impacted by the lack of communication and honest conversations which has resulted in

teachers leaving the district or the profession altogether.

Teacher Behaviors Translated to Student Learning. The relationship between

teacher behavior and student learning is directly correlated to communication and honest

conversations. The efficacious behavior that is exhibited by teachers will protrude in all

that they do. This will impact the morale, climate, and culture of schools. Students may

not recognize all that is associated with the overall culture and climate of a school, but

they know if they are accepted and loved by teachers and staff members. (Pajares 1996;

Valencia et al., 2001).   According to McGee (2014), students know when they are valued

and appreciated. Behaviors that are exhibited from the top down, whether positive or negative, will essentially permeate into the schoolhouse. As mentioned earlier, new teachers are placed in schools where they face many challenges in attempting to manage a classroom, teach a curriculum while ensuring that it is aligned, and becoming culturally aware of the community in which they serve. Several poignant quotes were made regarding cultural awareness which essentially impacts student self-efficacy.

For example, several participants noted that Caucasian teachers wanted Caucasian students in their class because certain teachers feel more comfortable teaching student who look like them. Similarly, an African American student being placed in in the wrong class because his Caucasian guidance counselor got him mixed up with another African American student; even when he tried to tell her she was mixing him up with someone else.

Communication and honest conversations conducted with fidelity will help bring awareness to concerns that need to be addressed in order to develop into systems of sustainability and success. Furthermore, communication and honest conversations when conducted with fidelity will address potential moral purpose and social and ethical concerns that districts may face.

Moral Purpose, Social Justice and Ethical Concerns

Moral purpose can be defined as the act of intentionally making a positive difference in the lives of employees, customers, and society as a whole (Fullan, 2001). The stakeholders who are involved in developing the educational system of the United States take pride in making positive differences in the lives of students. Reform efforts and mandates date back to the early eighteenth century. The intention of each reform

effort was to put a plan in place that would allow equal access for all students (Cuban, 1990, 2013; Jacob, 2007; Berry et al., 2014). However, the cycle of reform continues to change because the needs of all students are not being met (Price, 2010; Gardener& Talbert-Johnson, 2000; Cuban, 1990).

Despite numerous reforms in education, Black learners continue to experience low levels of success (Berry et al., 2014). Regardless of the purpose of each new mandate, the language suggests that inequities will continue to remain a part of the educational system. For example, evidence from Curriculum and Evaluation Standards for school Mathematics (CESSM) suggest that standards were moving towards democratic vision by including "for all" language as to imply that mandates were only being implemented for certain children. However, critics view the "for all" language, as a seemingly inclusive phrase, as a system of manipulation that attempts to underestimate social and ethical injustices (Martin, 2003, 2013). This proves true because the "for all" language does not delve into the social and structural inequities faced by Black children, rather the language implies a one size fits all approach regardless of background (Martin, 2003, 2013). The follow message is poignant regarding Theoharis' theory of the difference between a socially just leader and an effective leader. Theoharis surmised:

> Education that does not serve minorities well cannot be described as good teaching or leadership. They assert that culturally relevant pedagogy is what good education should be and must be made available to all students. Social justice leadership goes beyond good leadership. Where the good leader speaks of success for all children, the social justice leader ends segregated programs that prohibit both emotional and academic success for marginalized children. Where the good leader leads the school in professional development and best practices, the social justice leader embeds that professional development in collaborative structures and a context that tries to make sense of race. Where the good leader collectively builds a vision of a great school, the social justice leader knows that any school cannot be great until the most fragile and the most vulnerable are given the same rich opportunities both academically and socially as their more privileged peers.

> Where the good leader employs staff and works collaboratively, the social justice leader demands that every child will be successful but collaboratively addresses the problems of how to achieve that success. Where a good leader uses data to understand the realities of the school, the social justice leader sees all data through a lens of equality. Where a good leader understands that all children need their individual needs met, the social justice leader knows that building community and differentiation are tools to ensure that all students achieve success together. It takes more than what traditionally has been understood as good leadership to achieve greater equality. At this moment in history, leadership that is not focused on and successful at creating more just and equitable schools for marginalized students is, indeed, not good leadership.
> (Theoharis, 2004, p.281).

Moral purpose and ethical concerns are inevitable concerns in schools and will impact all aspects of the education system if not addressed with fidelity. Attempts have been made to address such concerns but a solution to address such concerns has yet to been found. Educational systems will continue to address such concerns, but whether intentional or unintentional, consequences will follow.

Structural Change. From the early reform of the twentieth century through recent reform mandates, the need for moral purpose and social justice of Black learners have been ignored in an effort to focus on structural factors such as: economics and societal needs (Berry et al., 2008, Cuban, 2013). However, the energy that continues to be extinguished on structural changes rob Black children of sound education (Berry et al., 2014).

> The implicit messages is that Black children are not worth studying in their own right so a comparison group is necessary. Such framing suggest whiteness as the norm, positing Black children and Black culture as deviant (Guitierrez, 2008).

Too often, race, social justice, contexts, identities, conditions, and others areas relegated as issues not appropriate for mathematics education when in fact these issues are central to the learning and teaching of mathematics for all children, specifically Black children

(Berry et al., 2014). Unless the act of moral purpose is implemented with fidelity, social justice concerns will continue to be a part of each new reform mandate.

There was a consensus among participants regarding the additional factors and concerns that students bring to school that paralyzes stakeholders. However, such students are expected to make the same gains as their Caucasian counterparts; who often are not faced with mitigating circumstances as Black students. Participants made it clear that Black children are intelligent, but often times they are stifled due to factors that they have no control over. So what may appear as a lack of moral purpose or social injustices sometimes is the result of frustration, stress, and a lack of cultural awareness and supports which ultimately attributes to the complexities of education.

Complicated v. Complex. Moral purpose and social justice demonstrated with honestly and fidelity will help a complicated system run smoothly. However, because schools are complex systems moral purpose and social justice must be implemented with fidelity to assist with the dynamics, unpredictability, and unplanned events that may happen in schools (Cuban, 2013). In short, there is not a flow chart or algorithm that can teach a teacher how to treat students morally or socially just (Bandura, 1997; Haberman, 1995, 1987).

However, moral purpose and social justice executed correctly and with fidelity is an up and down process that can get messy (Fullan, 2001). It goes beyond a checklist. Teachers must find methods and strategies that will help them connect with students, accept students for who they are and where they come from, respect students, have high expectations for students, and build trust amongst and between students (Bandura, 1997; Haberman, 1995, 1987).

The previous are examples of complexities that are part of education and if they are not applied with integrity, student will know whether or not they are valued. As noted in the previous example of the African American student and his guidance counselor placing him in the wrong class because she got his mixed up with another African American student-- even though he tried to tell her. The student was left to take a class that would now put him behind. Furthermore, he was not able to take a college credit class as he had hoped to upon entering high school. The student was left with a missed opportunity because the counselor did not take the time to investigate. Such concerns could easily be addressed if connections were made and trust was developed. Becoming culturally aware can help teachers connect, which will essentially help teachers and impact student learning.

Teacher Quality v. Quality of Teaching. The implication that teacher quality, yet it has a profound impact, will solve the concerns or education specifically urban education has yet to be true (Darling-Hammond, 1997; Haycock, 1998; Rivers. 1999; Sanders & Rivers, 1996). Over decades, reformers have established structures that influence teacher recruitment, teacher preparation, and teacher evaluation; however, teachers continue to leave the profession (Moir, 2005). Where in earlier decades, the path to becoming a teacher was the result of successfully receiving credentials from a college or university teacher preparation programs; alternative routes in becoming a teacher has resulted in a steady flow of energetic and novice teachers (Riley, 2006).

As a result, teacher quality and quality teaching directly impacts moral purpose and social justice concerns. 50% of novice teachers leave the profession during their first 5 years of teaching (Riley, 2006; National Commission on Teaching and America's

Future [NCTAF], 2003; Haberman, 1987). Additionally, teachers who are more academically skilled, or highly qualified, leave at higher rates after only a few years in the profession compared to those who are less qualified (Boyd, Lankford, Loeb & Wyckoff, 2005; Lankford, Loeb, & Wyckoff, 2002). Moreover, new teacher attrition rates tend to be higher in schools serving relatively high percentages of minority, low income, and low-performing students (Boyd et al., 2005; Scafidi, Sjoquist, & Stinebrickner, 2007).

As a result, teachers who are seen as being highly qualified as well as teachers who are quality teachers are often overwhelmed by the challenges that many of their lower-income and minority students face. Coincidentally, this leads some staff to reduce expectations for achievement for lower grades and justify the students' lack of academic progress (Berry, et al. 2014; McGee, 2013). In regards to high school, lack of moral purpose and social justice concerns could be represented by the disproportionate representation of low-income minority students who are taking college ready and advanced placement courses (Snipes & Casserly, 2009; Martin, 2013; Flores, 2007). While moral purpose and social justice concerns may not be intentional, student learning is directly impacted when teachers' behaviors drive student success.

Teacher Behaviors Translated to Student Learning. The findings suggest that teacher behavior is directly correlated to contextual factors and lack of cultural awareness (Leonard, Brooks, Barnes-Johnson, & Berry, 2010; Ladson-Billings, 1995). Teachers go into education with the intention to produce life-long learners; however, they are not prepared for additional factors that they face that was not a part of the teacher preparation program. As a result, teachers become overwhelmed, frustrated and over worked as a

result of additional demands that are placed on them that are out of their locus of control.

As noted by Participants 2:

> You have to allow equal access to the curriculum. These students are very smart,
> but they have so many additional concerns going on at home, that they need to be
> supported differently to really get what they know out. We have to make it
> relevant, engaging, and meaningful for our children. Our children may not
> present like they know a great deal, but I can tell you one thing for sure; they
> know when they are liked. They know when a teacher really cares about them.
> Right here in this very class where we are sitting is a teacher who teaches Algebra
> one, and he only wants to see students in his class who look like him, particularly
> students who are male and Caucasian. He states that he cannot get along with
> other students. He is afraid or does not know how to build relationships with
> students who do not look like him and if the adults notice, just imagine how much
> more students notice. His class just has a sprinkling of African American students
> and it is very difficult for him to build relationships particularly with them

In short, students who need teachers the most are impacted negatively. Students are then

faced with higher teacher turnover rates, lack of consistency, feeling of abandonment,

which directly impacts student learning which in short lead to retrenchment and not

improvement.

Retrenchment or Improvement

Retrenchment, as defined by Merriam-Webster, is curtailment; curtailment is

defined as: To reduce or limit something to make less by or as if by cutting off or away

some part. So for the purpose of education reform, retrenchment will be defined as the

impact that reform mandates have on education that has resulted in unintended

consequences of the initial mandate or reform. Are the results of mandates cutting off or

cutting some part of the overall intention of the mandates, student progress, or do

mandates overall improve student progress? Improvement can be defined as the

effectiveness of a mandate that results in a substantial and measurable increase on the

target of the mandate.

Taken together, the findings suggest that teachers, educational specialist and school leaders perceive the cumulative impact of math reform mandates somewhere between retrenchment and improvement; they are contingent upon each other. The demands and reform mandates that are presented by the district will determine one or the other. If stakeholder are offered opportunities to build knowledge and receive support, engage in communication and honest conversations and intentionally do what is right for each child, regardless of contextual factor, then a definite system of improvement will project; thus, sustainability will occur.

Evidence of retrenchment and improvement were provided by participants. Participants shared experiences that completely supported retrenchment. For example, Participant 5 emphatically noted,

> I'm going to be honest with you. Honestly, I think our district, it is not clear cut about reform all the time. I think that it comes from the top. If I was to say most of the time, the district gives a mandate and then it trickles down to the rest of us, but I also think that principals, in some ways, they kind of do their own thing as well. Each school kind of says, hey, I am going to do this the way I think. Then it goes further down than that because as a math specialist, I can say, this is what I am going to do or this is what I think is best based on my background. Then the teacher even say, okay, I will take what this person says, and this person says, and I am going to do what I like. I think each person has a role in reform, in terms of how it is going to look and what is going to happen. We have to ride or die together. We have to build that trust and be willing to take risks to see if it will work or not. If you look at our district, the culture is bad. The morale is low. They think that it has something to do with…they tried, I guess it's a lesson plan thing, that's somebody's idea. Who do they ask? They ask people that were leaving the district why they're leaving the district? Instead, why don't they ask people that are here, that have been here for fifteen years or however long? Our morale is low. What can they do to address that? I don't think they really talk to the teachers and get their input. Again, they made a decision, let's do this lesson plans for people. Yet, they never talk to the teacher and ask them what their thoughts were or what they think needs to happen. Right now if you look at our district, everybody is doing something different. Nobody, you know teachers…They will send something out, then they change it, then they change it again. Teachers are just like, I'm going to do whatever I want. Who blames them?

As evidenced by participants, retrenchment occurs as a result of inconsistent practices

regarding knowledge building and support, communication and honest conversations, and

moral purpose and social justice which are commensurate with finding by Snipes and

Casserly (2009). Snipes and Casserly (2009) stated that the following factors impact

urban school systems and reform: political conflict and lack of focus on improving

achievement, inexperienced teaching staff, low expectations and lack of demanding

curriculum, lack of instructional coherences, high student mobility, and unsatisfactory

business operations. Even though factors were present that attributes to retrenchment in

school, there were examples and experiences that supported improvement.

Improvement of a mandate was noted by participants as something that impacted

the organization in a positive manner and resulted in measurable growth on the target of

the mandate. Throughout the interview process, participants were adamant about the

school district wanting to improve. Several participants noted that improvements are

made each year towards schools that are demographically located in specific regions of

the school district. So in short, the lower performing schools continue to be the schools

that exhibit minimal increases regarding end of the year assessments. However, if a

system is without the aforementioned, then new mandates will come too quickly forcing

districts into a cycle of retrenchment and a system that is unsustainable and ever failing.

So in short, change is inevitable. As stated by Fullan (2001):

> Leading in a culture of change means creating a culture, not just a structure, of
> change. It does not mean adopting innovations, one after another; it does mean
> producing the capacity to seek, critically assess, and selectively incorporate new
> ideas and practices all the time, inside the organization as well as outside of the
> organization.

Conclusion

Taken together and looking across the development of themes, perceptions of central office curriculum leaders, educational specialist, building level leaders and teachers were embedded throughout and within findings. All in all participants were in agreement that educational reform mandates are needed to address concerns that stakeholders of urban schools are faced with on a daily basis. Such concerns continue to build on the disproportionate representation of achievement gaps being closed in such schools. Perceptions by all participants were aligned with the desperate need for support that is specific in addressing the additional factors and concerns that have become a part of the culture of urban districts. Furthermore, perceptions of participants noted that efforts for improving such schools have been made; however, such efforts were focused on accountability data and in order to see an increase in accountability data, policy makers need to first look at equity data, support data, poverty data, teacher attrition data, mental and emotional health data, to name a few, in order to explicitly address and define factors that contribute greatly to the overall accountability data that is used to measure all students. Participants noted that leading in a culture of change will continue to be driven by policy makers and if some things are not addressed and changed, the culture of accountability will continue to be a cycle of reform.

Chapter 5

Discussion

The purpose of this study was to explore the cumulative impact of school improvement efforts in a large urban division in order to understand the complex set of issues and conditions educators face. In order to understand the complexities faced by these educators, this study was particularly interested in exploring the perceptions and experiences of teachers, educational specialists and school leaders towards education reform mandates specifically regarding the subject of mathematics. Results included common themes across all data sources. As mentioned earlier, the themes that emerged were: Knowledge building and support, communication and honest conversations, moral purpose and social justice concerns, and a less dominate theme of the impact of education reform mandates resulting in a system of improvement or retrenchment. Taken together, the finding were overall commensurate with the literature review.

Knowledge Building and Support

The overall themes that emerged regarding knowledge building and support were aligned with the overarching themes described in the theoretical framework regarding knowledge creation, knowledge building and building relationships. For example, participants noted the importance of being included in the change process as well as the support process; wanting their voices heard. Similarly Fullan (2001) stressed the importance of building relationships in an effort to build capacity and trust within the organization. The trust that is built will inevitably provide a system of knowledge sharing; thus, knowledge building and creation. Themes regarding communication and honest conversations were in line with Fullan's framework in all areas as was moral

purpose and social justice concerns. Taken together, themes that emerged are interdependent of each other and are needed factors in creating a culture of sustainability.

While participants were in agreement for the most part, there were some areas of subtle but notable differences. For example, teachers were concerned with support and what they perceived as support and what other stakeholder perceived as support. Even though each viewed support differently, support was sought as an intricate factor in achieving the demands that each new reform mandate brings about. Educational specialist viewed math reform as needed to ensure that teachers were using appropriate resources that are provided by the state department. In addition, educational specialists perceived math mandates as a way to ensure that all students were able to access the curriculum as well as supporting teachers. School leaders viewed math reform mandates as a system that is ever changing, but a system that is needed. In addition, participants perceived math reform mandates as needing to be clear and stakeholders needing to stand in unity in an effort to procure sustainability and progress for all students.

Across the board, the results support the finding from the literature review that suggest that such factors as the current context of school improvement, the influence of organizational factors, the role of school leaders and teachers, and the dynamics of professional development contribute greatly to the sustainability of reform mandates (Darling-Hammond, 2004; Valencia et al., 2001; Berry et al., 2014; Greene & Anyon, 2014). Taken together, the aforementioned factors are examined here in terms of their influences on effective and sustainable implementation and the impact that such factors have on student achievement.

The findings were in concert with studies that found that factors such as professional development, teacher attrition, lack of instructional coherence, low expectations, lack of demanding curriculum, and social justice and equity concerns are impacting the reform movement whether done intentionally or just a result of mitigating circumstances that have reaped unintended consequences of a movement that was purposed to close academic, social, and racial achievement gaps (Berry et al.,2014; Cuban, 2013; Desimone et al., 2013; Snipes & Casserly, 2009; Valencia et al., 2001).

In addition, the findings from this study were aligned with the dimensions of change from Fullan's framework for leadership: Moral purpose, understanding the change process, knowledge building, relationship building, and coherence making. As mentioned earlier, the 4 themes that emerged from the study were: Knowledge building and support, communication and honest conversations, moral purpose and social justice concerns, and the impact of education reform mandates resulting in a system of improvement or retrenchment

Knowledge building and support were consistently viewed by participants as going beyond verbalizing a new reform or mandate, but making sure that mandates and initiatives are fully understood by stakeholders; especially ones who are expected to implement mandates in the classroom. Furthermore, participants thought it was important to provide timely and relevant feedback and supports to address noted concerns. Providing relevant feedback would be a way to ensure that mandates were being implemented correctly and with fidelity. Further, feedback would indicate that the mandate is being monitored; hence, what gets monitored gets accomplished. Feedback and supports are vital in building relationships which will inevitably impact trust in an

organization; thus sustainability. Knowledge building and support are directly aligned

with the dimensions of knowledge building, relationship building, coherence making and

moral purpose. If teachers, educational specialists, and school leaders are a part of the

knowledge building process, whether as the builder or the ones being built, their

contributions are deemed as valuable.

While building knowledge, relationships and trust are being cultivated. The

cultivation of relationships will inevitably bring about risks and disequilibrium which is

coherence making; thus, allowing others to take risks while developing trust. Essentially,

disequilibrium paired with trust, risks, and relationships will evoke higher levels of

mutation and experimentation and fresh new solutions are more likely to be found

(Fullan, 2001).

However, disequilibrium without the other dimensions will equal a system that

continues to have high teacher turnover rates and low student achievement. For example,

one participant stated that the district is filled with disequilibrium, but no one knows what

to do. There are too many secrets and not enough honest conversations. She also noted

that the district continues to ask the wrong people why they are leaving; "why not ask the

people who are staying why they are staying?" Despite the numerous attempts to address

the concerns of education reform, schools continue to face challenges that seem endless.

While there are minimal increases in the areas of math, the increases continue to be

disproportionate for targeted student groups. The need for more appropriate and

meaningful systems of support are more imperative now than ever before (Berry et al.,

2014).

Moreover, support was seen as something that is needed to ensure sustainability. Overall, participants were in agreement, but there were some notable differences between roles. For example, classroom teachers perceived support as receiving professional development that they deemed important, support regarding classroom management, and having materials readily available on demand. On the other hand, non-teacher participants perceived support as providing meaningful professional development with feedback sessions and coaching session to ensure that teachers were implementing professional development with integrity and fidelity. Furthermore, non-teaching staff perceived support as a system of checks and balances, whereby observations were conducted that were specific to cultural awareness, classroom management, instructions, student engagement, student expectations- to ensure that teachers are differentiating lesson in an effort to meet the students' needs collectively and individually. Additionally, non-teaching participants posited that teachers were not aware of what supports they really needed. They saw teachers as viewing support as wanting more tangible items such as paper, ink, highlighters and markers, more tangible items. All in all, participants noted that supports that are offered to urban schools are not perceived as equitable because of the extraneous factors that are a part of the culture and hub or urban schools (Berry et al. 2014; Cuban, 2013; Jacob, 2007).

Communication and Honest Conversations

The second theme that emerged was communication and honest conversations. As previously mentioned, communication and honest conversations are vital in understanding the change process, building relationships, knowledge building, moral purpose, and coherence making. Understanding the change process is directly related to

communicating and having honest conversation; stakeholders need to be aware of the

change that is coming, but more importantly why the change is occurring and what part

they will need to play in the process. There needs to be a sense of transparency.

Communication and honest conversations will cultivate trust; thus relationships

will develop. Relationship building will result in knowledge sharing, knowledge

building, and coherence making. Taken together communication and honest

conversations will develop stakeholders into moral agents whose purpose is to

intentionally do what is right for each student ethically and justly.

Moral Purpose and Social Justice Concerns

The third theme that emerged was moral purpose and social justice concerns. The

overarching theme of moral purpose and social justice concerns is to do what is right for

all people intentionally. Even though participants experienced improvements regarding

moral purpose and social justice, there remains a sense of "if I don't see it, then it must

not exist."   As noted in a study conducted by (Rodriguez et al., 2009), a principal

highlighted his concerns:

> Our test scores are never going to be the best in the state, but you know, I don't
> care because we are going to do what is best for kids and that means that we have
> before school programs, after school programs, and we teach a rich curriculum. I
> do believe that the philosophy of No Child Left Behind is what we believed in
> anyway. Yet I think our legislation have done a terrible disservice and injustice
> for our children. And I worry about what our country is going to look like 10-20
> years from now.

All in all social justice and moral purpose concerns are visible in many if not all school

districts across the country. Policy makers have put many programs in place to address

such concerns, but there in not a one size fits all approach for something as vast as moral

purpose and social justice concerns. As mentioned earlier, even if an individual

perceives that they are treating students and all stakeholders in a socially just and morally

correct manner, a child knows a genuine heart and knows when someone is being is not

being genuine. The examples shared throughout this study demonstrate that the field of

education has made many attempts to address concerns; however, as noted by several

participants, there is a saying that states the one's perception is one's reality.

Whereas the aforementioned discussion supports literature regarding education

reform mandates as perceived by participants, participants shared salient experiences that

can bring new insight to the reform movement. Participant 2 shared experiences that

being an African American female working in an urban school district can sometimes be

challenging when trying to build relationships with parent, when trying to get parents

involved and when building relationships with students and colleagues. She went further

by expressing her concerns of being a "black" educated female in a "black" school and

furthermore a "black" church.

> You don't say what you could say because you do not want to give the impression
> that hey, I have the education and you don't. It is the same way within my
> church. I'm in a black church, a lot of older members. They don't know my
> educational background and I will never probably tell them unless somebody
> directly asks me. I don't share it. The reason I don't share it is because they feel
> intimidated and you know if that is how the older community feels, you know the
> younger one is feeling it too.

The above quote can bring light to potential self-efficacy concerns that are internalized

by African American female educators or can bring light to stigmas that are put on

African American female educators or stigmas that they put on themselves.

Further, Participant 7 shared experiences that were poignant to the reform

movement as it relates to moral purpose and equity concerns.

> To me, the main purpose of math reform in any regard, I mean throughout the years has been centered on the child in terms of how you can best get students, not just to do well on the Third International Math Science Study, the (TIMSS) study test or NAEP, but how can you get students to go deeper and really understand it, and how do you fix it so that you have equitable opportunities for all students. That means students of color, they have equal access. That students that are ELLs, they have equal access, students that are special ed, they have equal access, but sometimes equal access could be a bad word because sometimes equal does not…Sometimes reform has been focused on how do you keep the level of expectation up for all students?

Moreover, Participant 7 shared experiences that teachers and leaders in title one districts supported in an effort to receive what appeared to be recognition but was in fact a system that did not focus on the core of the child.

> It's when title one schools in urban districts have different sets of materials to use because they see those children as being behind opposed to the kids that are in more affluent schools. So the students in urban districts are getting materials that has been dumbed down. Or you have different sets of standards or expectations for the kids in the title one schools as opposed to the others. Allowing the kids in the more affluent schools to explore, but in the Title one schools, you want your children to be very rigid, doing worksheets, doing whatever. The differences are very obvious, but often times ignored or accepted.

Participant 7 also noted that when she was working at the district level, the superintendent did not want building level administrators communicating with curriculum and instructions personnel. He wanted things done a certain way. He wanted building level leaders to focus on their schools and he wanted curriculum and instruction personnel focusing on the curriculum and instruction. This did not make sense and that superintendent did not last very long in the district.

Taken together, reform will continue to occur and all stakeholders will need to put children at the core of each new mandate in an effort to build knowledge and provide meaningful systems of support, to communicate and have honest conversations, and to

treat each student with moral purpose while addressing and ending social justice

concerns.

Improvement or Retrenchment

The fourth and final theme that emerged was the perception of reform and how it

is viewed by participants; as a system of improvement or a system of retrenchment. This

theme was presented as a compilation of the three previous themes. Taken together,

participants were in agreement that the intention of each new reform mandate or initiative

was intended for improvement, but somewhere in the implementation and monitoring

process, the result crosses over to retrenchment. Essentially, an area of concern is noted

and then policy makers convene and come up with a plan to address the problem at bay.

As stated by participant 1,

> I think the purpose of any reform is to get people to understand, to conceptually
> understand the math, or whatever concern, and why they're doing what they're
> doing rather than either you get it or you don't. It is goes beyond just knowing
> the process, but understanding exactly why things happen. I think that we want to
> see improvement, but we have to get more of that conceptual knowledge. We
> want to see improvement, but we have to be willing to look beyond the surface.
> Policy makers cannot be the leaders of change.

However, participants were in agreement that while the aforementioned is intended for

improvement, it is also where retrenchment begins. Policy maker have been addressing

and playing an imperative role as it relates to school reforms, however, many of them do

not have backgrounds in education. This them becomes the starting point of

retrenchment. Additionally, teachers and other stakeholders who are not properly trained

and monitored on the new reform mandate also contributes to this system of

retrenchment. Policy makers are insightful, but they cannot be expected to assist in

finding a remedy to a problem that they are only seeing from one lens. As noted by

participants

> We cannot just focus on a blanket solution. We have to really build relationships
> with our students, but it goes further than that. We have to be able to connect
> with our students, we have to become culturally aware of our students and our
> families, and we have to be willing to find what will work for our students. We
> know that they can learn, but they learn differently. In addition, we know that
> they come with a great deal of additional factors that impact them daily. We have
> to be better prepared. Our toolboxes have to be full and our mindset has to
> change. They can learn and it is our job to dig deeper until we find out how they
> learn. We cannot think that a one size fits all approach will work for
> our students.

The aforementioned is in concert with literature regarding education reform being seen as

retrenchment. For example a study conducted by Buendia, (2010) highlights the fact that

educators, researchers, and policy makers have been studying urban educational reform

mandates and initiatives for more than 40 years, but the concern of urban education

continues to grow as a result of policy makers, the media, and the overall world view of

urban districts and family dynamics that have become linked to urban neighborhoods

(Katz, 1993; Kantor & Lowe, 2006).

These findings suggests that the system of reform will continue to be a cycle of

improvement that is interrupted by retrenchment or a cycle of retrenchment that is

interrupted by improvement; however, until the appropriate measures and supports are

put in place for each school based on context and students' needs, participants perceived

the system as a continuous cycle that will require change.

Implications

This study has the potential to contribute greatly to the field of education.

Specifically, this research will give a voice to the otherwise voiceless population; a voice

to the ones who are directly impacted by mandates that are put in place by policy makers who are far removed from mitigating factors that are imperative in reforming schools. Educational mandates and reforms will continue to be a part of the educational system in the United States. Schools throughout the country will continue to face concerns regarding communication and honest conversations, moral purpose and social justice concerns, and knowledge building and support. Additionally, stakeholders from some schools; particularly urban school districts must navigate through a plethora of unintended consequences and contextual factors in an attempt to provide equal educational access to students who are a part of a seemingly inequitable system.

Furthermore, it is important to promote awareness of these findings. Urban school districts throughout the United States are being negatively impacted by reform mandates without the consideration of contextual factors and what stakeholder view as meaningful and appropriate supports. Policy makers who are making decisions regarding educational mandates and reform may not be aware of the unintended consequences that result from contextual factors that are out of the locus of control of the school as well as students. This results in stakeholders of urban schools taking on additional pressures and demands that will undoubtedly impact student achievement. This added stress can foreseeably impact job satisfaction and job performance which is a contributing factor to unsustainability in all aspects; hence, a reoccurring system of reform.

Furthermore, professional development continues to be a concern regarding urban districts. Professional development is presented as a one size fits all approach that continues to fail urban schools. Professional development continues to be a one-time event that is not followed-up with implementation and feedback sessions. There needs to

be a mindset change of what professional developments are offered to such school.

Change needs to occur.

Changing aspects of reform mandates would be ideal due to the culture and

climate of urban schools and the unintended outcomes that have resulted from cycle of

reform as it pertains to students attending schools in urban districts. While accountability

is imperative to ensure that standards are being taught and measured, supports that are

available to schools should be specific to each school and the specific needs that they

warrant. There should not be a one size fits all approach.   Additionally, contextual

factors such as cultural awareness, teacher placements, and the duration at which teachers

remain at urban schools should be considered by policy makers and school districts.

Although new teachers may enter the workforce without a great deal of knowledge and

experience, veteran teachers are sometimes complacent, comfortable, and unwilling to

change (Valencia et al., 2001; Vallie &Buese, 2007; Takoma, 2012; Snipes & Casserly,

2004). Fullan (2001) refers to this inability to want to change as equilibrium. As defined

by Fullan (2001) the state of equilibrium is being so comfortable and complacent that

individuals are unwilling to change and take risks. The absence of conflict, change, and

taking risks, can be a sign of decay; prolonged equilibrium is death (Pascale, Millemann,

& Gioja, 2000; Fullan, 2001).

Limitations

Limitations are conditions that restrict the scope of the study or conditions that may affect

the outcome and cannot be necessarily controlled by the researcher (Creswell, 2003;

Patton, 2002). One limitation of this research study is researcher bias. Torff (2004) stated

that "qualitative work is subject to researcher bias and too often blurs the line between

research and advocacy" (p. 25). Additionally, Johnson and Christensen (2008) suggested

that the researcher is a limitation of qualitative research because qualitative studies tend

to be exploratory and open-ended. The primary researcher had a potential bias since she

is an African-American female assistant principal that leads in an urban Title one school.

The primary researcher took measures to step outside this personal bias whenever

possible, her partiality to this cause might have presented itself through her

interpretations of interview responses. Another strategy the researcher used to increase

trustworthiness was what Johnson and Christensen (2008) referred to as "reflexivity"

throughout this study. Reflexivity is when a researcher engages in critical self-reflection

about his or her potential biases and predispositions. After each interview was conducted,

Roger's Core Conditions in Reflexivity were walked through by the primary researcher.

In addition member checking was another form of trustworthiness that was used to

address additional biases.

      An addition limitation of the study was the fact that all participants were from the

same urban school district. This undoubtedly effects the generalizability of the study

regarding other urban districts. However, the literature review supported the findings; the

districts that were a part of the literature review were located throughout the United

States. Another limitation was the use of only one data collection source. Even though

the interviews provided a great deal of valuable information and insight, other collection

sources would have provided experiences from another lens. Specific recommendations

for future research are outlined in the following section.

Suggestions for Future Research

The concerns facing urban school districts are often far removed from the policymakers that are making policies and mandates and other stakeholders who are expected to embrace each new mandate. The next logical step would be to conduct a research whereby perceptions of math reform mandates could be viewed by probationary teacher and veteran teachers as well as well interviewing and observing participants from different urban school districts which will enable more generalizable findings. Additional research on the more global and ecological aspect of professional development were also added areas that were noted by participants as concerns that warrant further research.

Researcher Bias

The researcher had a personal bias since she is an administrator in an urban district. While she took measures to step outside this personal bias; at times her partiality to the cause may have presented itself during the interviewing phase. Even though bias may have been present, participants' interviews did not suggest that they were influenced one way or another; participants were very honest and forthcoming. In addition participants offered robust information regarding their experiences.   Member checking was also use to ensure that that participants' voices were being represented to their liking.

Conclusion

Researchers contend that while there are numerous factors taken into consideration while executing a plan to put mandates into practice, they also contend that schools located in urban districts continue to pose factors that have contributed greatly to the overall intended purpose of the reform mandate. However the evolution of reform mandates and its constricted definition of student achievement and success have created

a rigidity on stakeholders of urban districts that presents challenges regarding compliance of mandates while attempting to remain true to the intrinsic challenges that student in urban districts face.

This study demonstrated that perceptions of stakeholders in urban school districts are in agreement that schools are in need of meaningful and appropriate supports. Support should be fashioned in a manner that addresses schools' individually while including voices of all stakeholder in an effort to build knowledge and capacity while bridging gaps and dismissing myths about student and families that are a part of urban school communities. In spite of a growing pressure of states and test scores, participants posited a priority for moral purpose and social justice concerns. While policy makers are placing mandates on schools, they are not fully aware of the whole child and factors that attribute to whether or not children will respond to a particular mandate. Participants strongly noted that children in urban communities have the cognitive ability to succeed, but what needs to be adjusted is all the other factors that place unwarranted strains on students of urban districts that inevitably impacts the self-worth of the child; which impacts the motivations of the child; which will ultimately impacts the desire to expel dendrites.

Stakeholder and policy makers at all levels need to consider the factors that impede achievement gaps from decreasing as it pertains to students in urban schools. A deep commitment to finding the correct support and staff for such schools will be a first step that needs to take place in an effort to bring about some sort of change. This study focused on teachers, educational specialists, and school leaders in an urban school district to provide information that may be significant to the continuous cycle of reform and how

schools serving historically underserved populations continue to have the same expectations of their suburban counterparts. As supported by literature, the immense challenge of correctly restructuring urban schools continue to be noted throughout the United States. Ultimately, policy makers are going to have to visit such schools and districts to see that other measure need to be taken to address the specific challenges and complexities that have become a part of the culture of urban schools. All in all change is inevitable, and leading in a culture of change will be intentional, purposeful, and keeping children at the core of the change process and doing what is best for children.

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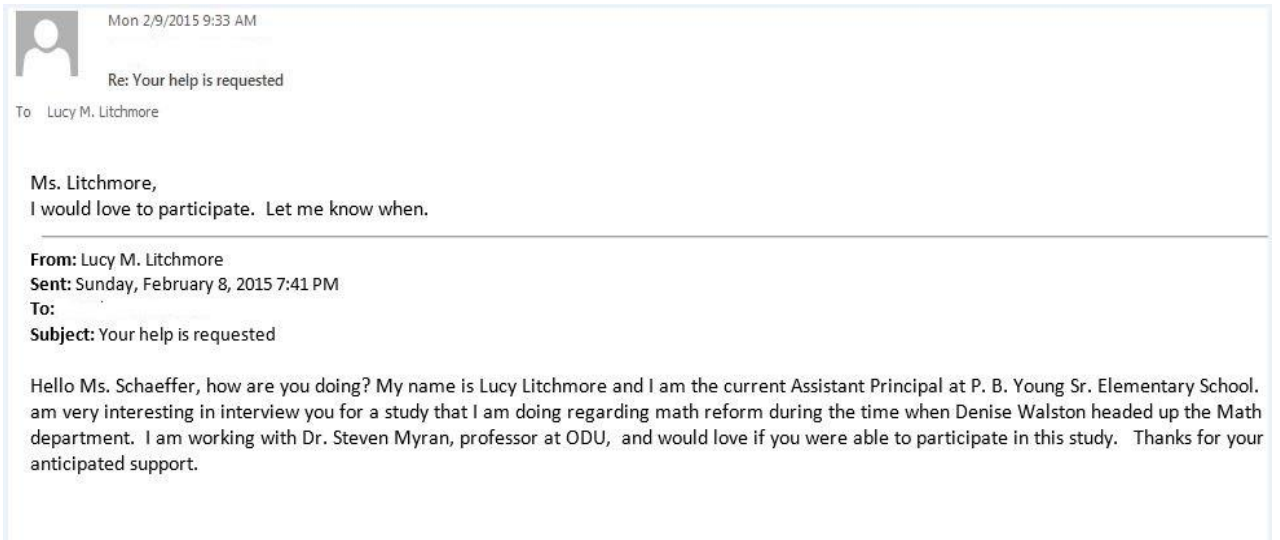Yin, R. K. (2008). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

APPENDICES

Appendix A: Invitation by email

Sun 2/8/2015 7:42 PM
Lucy M. Litchmore
Your help is requested

To
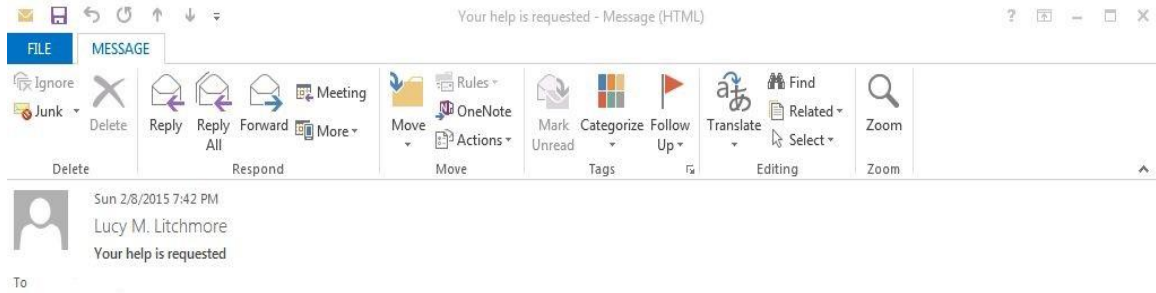
Hello Mrs. Gray, how are you doing? My name is Lucy Litchmore and I am the current Assistant Principal at P. B. Young Sr. Elementary School. I am very interesting in interview you for a study that I am doing regarding math reform during the time when Denise Walston headed up the Math department. I am working with Dr. Steven Myran, professor at ODU, and would love if you were able to participate in this study. Thanks for your anticipated support.

Appendix B: Response to participation

Mon 2/9/2015 9:33 AM

Re: Your help is requested

To   Lucy M. Litchmore

Ms. Litchmore,
I would love to participate. Let me know when.

From: Lucy M. Litchmore
Sent: Sunday, February 8, 2015 7:41 PM
To:
Subject: Your help is requested

Hello Ms. Schaeffer, how are you doing? My name is Lucy Litchmore and I am the current Assistant Principal at P. B. Young Sr. Elementary School.
am very interesting in interview you for a study that I am doing regarding math reform during the time when Denise Walston headed up the Math
department. I am working with Dr. Steven Myran, professor at ODU, and would love if you were able to participate in this study.   Thanks for your
anticipated support.

Appendix C: Informed consent

Title of Study: Teachers', Educational Specialists' and School Leaders' Perceptions of the Cumulative Impact of Mathematics Reform Mandates

Principle Investigator: Lucy N. Litchmore

Organization: Old Dominion University

Introduction: I am Lucy N. Litchmore, a doctorate candidate at Old Dominion University. I am conducting a research study on reform efforts in Title I schools and the process by which building level administrators commit to specific reform efforts.   I am going to give you information and invite you to be a part of this research. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about the research. This consent form may contain words that are not familiar to you. Please ask me to stop as we go through the information and I will take time to explain. If questions should arise later, please feel free to ask them.

Purpose of Research: The purpose of this study is to explore the cumulative impact of school improvement efforts in a large urban division in order to understand the complex set of issues and conditions educators face. In order to understand the complexity faced by these educators this study is particularly interested in exploring the perceptions and experiences of teachers, educational specialists and school leaders.

Research Intervention: In this study I will interview you and ask a selection of questions regarding the implementation, sustainability, and contextual factors that may influence and impact the intended consequence on reform initiative. The interview should take about forty-five minutes.

Participant Selection: You are being invited to take part in this research because your experience as a member of the math community with an urban school districts that has been impacted by reform initiatives.

Voluntary Participation: Your participation in this research is on a voluntary basis. It is your choice whether to participate or not. The choice that you make will have no bearing on your current position.

Duration: The duration of the research will take place over a two month period. We will revisit and discuss your answers to ensure that you are being represented correctly. We may also include e-mail and phone correspondence to ensure trustworthiness and validity.

Procedures: I will ask you a series of questions that will help me get a better understanding of Title I building level administrator's perspectives on educational reform. The interview will recorded on an audio tape. If you do not wish to answer any of the questions during the interview, notify me and I will move on to the next question. The information recorded is recorded in confidence and will only between the primary researcher (me) and the participant (you).

Limits of Confidentiality: The information that is collected from this research project will only be viewed by the principle researchers. Confidentiality will be resumed by using a number to represent you instead of your name. Only the primary researcher will be privy to participants because the primary researcher will be conducting the interviews.

Possible risks or benefits: The topic may be personal or emotional for you; however, if you feel uncomfortable, you do not have to continue answering questions. In regards to benefits, the research may help us find out more about the process and procedures of committing to reform effort in title I schools. In addition, the finding may help guide school level administrators in self-reflecting on how and why certain reform efforts were successful or unsuccessful

Assessment of Data: Data will be assessed by using a coding system. The coding system will look at common themes amongst interviewees. The themes will then become the overarching point of the interview.

Presentation of Data: Data will be represented in a codebook that will guide the findings of this study

Certification of Consent: I have been invited to participate in research about educational leaders and their experience and process of committing to a reform effort.

Print Name of Participant_____

Signature of Participant_____

Date_____

Appendix D: Interview Protocol

INTERVIEW PROTOCOL

1. Introduce self and have the interviewee tell their name and position and how familiar
2. What does education reform mean to you? What is the purpose of education reform?
3. Who decides on what reform efforts should be considered and implemented in your school? (how does that effect your faculty and staff, the building dynamics and morale (give example)
4. How are reform effort monitored and measured in your building and district?
5. What is the connection or relationship between policy and reform efforts?
6. How do you sustain or get teacher buy-in?
7. In the perfect world, what would education reform look like to you?
8. Is there anything else that you would like to add that I did not ask?

APPENDIX E: Guiding Interview Protocol

Initiating Interviews

An easy way to start an interview is to:
1. Introduce yourself to the participant
2. Remind him/her of the goals and projected length and the topic to be discussed
3. It is important to tell the participant that he/she will be interviewed as an expert or as a representative of a group of people or an organization
4. Remind that participant that his/her statements will be kept confidential at all times.
5. Go over informed consent

Additional Questions	Clarifying Questions
How did you learn about this problem	Can you expand a little on this
Why is this considered a problem	Can you tell me anything else
Under what circumstance does the problem arise	Can you give me some specific examples
What is the scope of the problem	
Which places are most affected by the problem *when does it usually occur *who are the main victims	
Have you noticed any changes in the situation over the past few years	
Which safety problems give rise to complaints	
How do you explain the problem	

Appendix F: Emerged Themes (Major)

Major Themes

Support	Moral Purpose
Knowledge building Building capacity Teacher talk Teachers sharing information Professional development How to use resources Honest conversation and feedback Observations (monitoring progress) Have to know the purpose of the resources	Keep children at the core Assessable to all students Understanding the change process
Mindset Change	**Social Justice Concerns**
Cultural awareness Experiences of students Contextual factors Student engagement Student capacity (own the learning) Learned it this way so the students need to be able to learn it the same way Math is equally as important as reading	Contextual factors Cultural awareness Inequities in materials Inequities in staffing (leave the school after being retrained so retrenchment occurs, lack of sustainability) Inequities in expectations Inequities in resources Schools require different levels of support We need to broaden student's experiences
Ethical Concerns	**Change is complex**
Lack of trust Lack of fidelity Lack of student and teacher expectation Lack of teacher and leader follow-through Lack of honest conversations and feedback	Lack of sustainability due to lack of communication, support, expectations, knowledge building, engagement , classroom management
Communication	**Policy**
Getting rid of math coaches (build teacher capacity) Superintendent not wanting curriculum to speak with building level administration Building relationships (trust) buy in Trust will impact risk taking (end complacency and stagnation) Sometimes teachers do not take advantage of voicing their concerns	Top down approach Practice until it is fully implemented to become a policy that everyone must follow Policy makers need to be involved, but they should not have the ultimate say A system of accountability is needed to make sure that students are being taught

Appendix G: Individual Themes

Emerged Themes Participant #7

Knowledge Building	Building capacity within teachers (it goes beyond memorizing) Remove contextual factor and teach the math in a way that levels the playing field for all students -Teach teachers how to analyze data in an effort to laser light focus areas of strength and weaknesses. -Teachers needs supporting in putting objectives together instead of trying to teach all of them at one time or trying to teach one at a time (knowledge building and sharing) -What's a thing that links all of these standards together and then how does it play out in terms of the assessment that I'm going to give and lesion that I'm going to teach from beginning to end
Knowledge of available resources	Do teachers really know what resources are available -Make sure resources are updated -Teachers need to know the importance of the framework
Support at all level	-teach teachers how to scaffold learning so that all student are using the same materials, but at a level that works for them. -the phrase Math is powerful –if that phrase is true, then what happens to those who are powerless -how do we help the powerless get power -professional development has to be meaningful -Specialist would visit schools and help teachers plan for upcoming weeks (visits were meaningful) -All hands on deck; building level administrators should know what is expected and what is going on at all levels
Communication	Teachers need time to communicate and collaborate with each other. -specialist and coordinators need to communicate -Take time as a team to visit each other's classrooms. -communication at all levels -the vision needs to be known by all stakeholders - a previous superintendent did not want curriculum department speaking with administration -collaboration is needed at all levels.
Honest Conversation	Someone from all levels must buy-in for a reform to be sustainable. You cannot just have one department. It is a team effort -when you walk into a school and you can determine which class is a one year vs. two year math class then that needs to be addressed -I believe my counselor got me mixed up with another kid another black kid

	-Administrators became unfocused when they were asked to do math problems -Teachers were more comfortable doing reading and writing, but not math -
Ethical Concerns	Inequities are evident when title one schools in urban districts have different sets of materials to use because they see children as ether being behind as opposed to kids that are in more affluent areas. -having different sets of standards or expectations for the kids in Title 1 schools -students in title one schools are expected to be rigid and title one school are expected to explore -some schools have purchase dumbed down materials for students in title one schools. -Are achievement gaps close at the end of 5th grade for Title One schools (No) -Are we saying that economic is determining how well the kids could do (we shouldn't) -School leaders (executive directors) should be over a variety of schools to ensure knowledge sharing and capacity building. -walked into a class and was able to determine if the class was a one year or two year math class due to the students in the class (the one year class was more non-black students and the 2 year class contained more black students. -Inequities in staffing -The more affluent school continued to have math specialist and the title one school had math interventionist (math specialist are more focused on strengthening Tier 1 instruction, interventionist provide support for tier 2 and or tier 3—The goal of RTI is to strengthen Tier 1 instruction.
Trust	-trust between coordinators and program leaders
Mindset Change	There is a difference between teaching math and doing math. -I taught more from an algorithm standpoint to get in the kids, to do worksheets -I have to move from worksheets to putting students at the cent to own their learning -how do we help kids learn it so they own it. -How do we make the problem simpler (break it down it is all relative) -how do we teach math for understanding rather than just getting kids to muddle through the process of being able to just do -it's the way I learned it, so that is how our students should learn it.
Moral Purpose	I knew the benefits of building relationships with the kids, but I did lots of worksheets (building knowledge)—My class was well behaved—I had management down.

	-It was 1977 when I started thinking, how do we help kids learn it so they own it so when they leave you, they've got it. -Building confidence in children -How can we get students to go deeper and really understand math -Are we teaching to help our students become powerfully literate or are we teaching them so they can just be the works that can just follow directions -It should be for all students not particular subsets of students
Policy	Policies have to be expected for all children (that has not yet occurred)
Social Justice Concerns	-How do we fix it so that you have equitable opportunities for all students -That means students of color, they have equal access. -That students that are ELL, they have equal access -Student receiving specially designed instruction have equal access -how do you keep children at the core Same opportunities are not available to all children due to context and experiences

Appendix H: Collapsed Themes

Collapsed Themes

Knowledge Building	Our knowledge of math needs to be broadened Build on weaknesses and strengths *How to use the framework *presenting information from RTI sessions to your staff * Teachers(all stakeholders) have to take ownership of building capacity, knowledge and students *Willing to build capacity *willing to share ne knowledge
Knowledge of available resources	Are we really teaching what we are supposed to be teaching *How to use resources appropriately *look beyond stuff and use resources that are valuable for teacher and especially students
Support at all level	*lack of support from district when new math standards came out *I think they feel super supported and I think morale around that area has been high due to results.
Communication	Acknowledge teachers for their good deeds and efforts *allow teachers to voice concerns *Lack of communication results in frustrated and overwhelmed teachers
Honest Conversation	Reform moved from no collaboration to collaboration *Provide meaningful feedback *If were are going to have honest conversations, then I will also need honest support
Taking Risks	Allowing new math specialist to make new test *Try something and if it does not work, try something else
Trust	New math specialist was able to build trust by working with students and being readily available to teachers *Leader had to trust math specialist to try something new

	*
Relationship Building	As a result of trust, relationships were built and teachers were more willing to take risks *she started working right away with children
Moral Purpose	She started working with children right away; math specialist *We have to put students first *It has to be intentional, we have to do it on purpose *All students can learn *All students should have access to all curriculums *You have to keep children engaged and find out how they learn
Contextual Concerns	School are not the same, but are expected to be judged on same standards without support *Students are coming in with concerns that are out of the locus of control of the student as well as the school *support is needed to address concerns – cultural awareness *How do you deal with all of the structural changes and then try to deal with challenges that children bring to school

Appendix I: Final Codebook

Support
Knowledge building
Professional Development
Purpose of Resources
Collaboration
Feedback
Moral Purpose
Accessible to all students
Honest and Fidelity for students
Mindset Change (moral purpose-social justice)
Cultural Awareness
Experiences
Contextual Features
Taking Risks
Communication
Honest Conversations
Feedback
Relationship Building
Trust
Top Down
Collaboration
Observation
Ethical Concerns-social justice
Honest Conversations
Working with Fidelity
Trust
Social Justice Concerns
Contextual Factors
Cultural Awareness
Inequities in Materials
Inequities in Staff
Inequities in Resources
Knowledge creation and building
Training
Resources
Professional development
Taking risks/building relationships
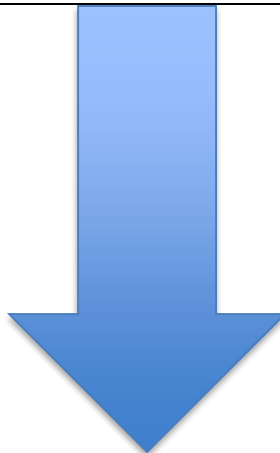
KNOWLEDGE BUILING AND SUPPORT

COMMUNICATION AND HONEST CONVERSATIONS

MORAL PURPOSE AND SOCIAL JUSTICE CONCERNS

REFORM SEEN AS IMPROVEMENT OR RETRENCHMENT

Appendix J: Thank You Letter

Dear   ,
Thank you so much for taking time out of your busy schedule to assist me in my
dissertation. Your participation was invaluable. You are definitely an expert in the area
of math. Again, thank you for emailing me to ensure that you were in agreement with
themes that emerged from out interview. Truly a find, you experiences and knowledge of
the cumulative impact of math reform mandates on students attending urban school was
undoubtedly rich and provided a wealth of information that greatly impacted my
research. Again thanks, and if I can assist you in the future please do not hesitate to send
me an email.

Lucy N. Litchmore

VITA

Lucy Nevins Litchmore

1865 Sunsprite Loop
Chesapeake, VA 23323
llitchmore@nps.k12.va.us

Education

Ph.D., Old Dominion University, expected May 2016
Education Foundations and Leadership

Ed. S., Old Dominion University, August, 2007
Administration and Supervision PreK-12

M.S., Old Dominion University, May, 2002
Early Childhood Education

B.S., Old Dominion University, May 2000
Interdisciplinary Studies

Honors and Awards

Nominated for National Outstanding Assistant Principal, 2015-2016

Professional Experience

2012-present Assistant Principal, Norfolk Public Schools

2010-2012 Interventionist

2007-2010 Literacy Teacher

2002-2007 Teacher, Norfolk Public Schools

2000-2002 SECEP

Professional Affiliations

National Association of Elementary School Principals (NAESP)

Virginia Association of Elementary School Principals (VAESP)

Elementary School Principal Association of Norfolk (ESPAN)

Phi Delta Kappa Honorary Education Society