

THE COMMON CORE STATE STANDARDS: SCHOOL REFORM AT THREE SUBURBAN
MIDDLE SCHOOLS

By

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ABSTRACT

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A growing body of research supports the idea that large-scale school reform efforts often fail to create sustained change within the public school sector. Proponents of school reform argue that implementing school reform, effectively and with fidelity, can work to ensure the success of reform initiatives in public education. When implementing deep organizational change, both novice and veteran educators are challenged to learn new skills, reexamine their instructional practice and content knowledge, and re-shape their underlying beliefs and values about schools. The ways in which principals frame school reform initiatives and broker knowledge for their teachers can also aid teachers in both collective and individual understanding while supporting teacher's application of reform concepts. By supporting both individual and collective sense-making for teachers, principals can build and sustain networks of teacher learning and sound implementation of reform.

This dissertation investigated the importance of principal leadership and how information regarding the Common Core State Standards reform flowed both to the principal and from the principal to the teachers. This research also examined the educational and professional background of each participant-principal. The Common Core State Standards seek to minimize variance in K-12 curriculum across the United States by aligning grade level content expectations and increasing rigor. The Standards also require adjustments by instructional practitioners to target critical learning targets and to increase the depth at which they are taught. This study assessed the assertion that principal leadership practices impact what key elements of

reform individual principals frame and how three middle school principals constructed teacher knowledge.

The research reported here is a multi-case study developed through qualitative methods over a period of 7 months. Primary data collection was accomplished through a series of three interviews with each of three public, suburban middle school principals in a mid-western state. The first stage of this study examined each principal's background and educational experience. It aimed to create a profile of the individual principal and to identify any relationship between principal experience and perception of the Common Core State Standards reform. The second stage investigated how these three principals received information and built professional knowledge about the Common Core State Standards. The last stage sought to identify how these principals organized and disseminated Common Core State Standards information for teachers within their building and how they prepared their staff for adaptive change. This study also included a review of the documents that these principals used to both garner information about the Common Core State Standards and to disseminate information to staff members. Additionally, this study yielded secondary data for the analysis and triangulation with primary data. Transcriptions of interview data and field notes, along with interpretive comments of the researcher, were checked for validity with each participant.

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CHAPTER 1

INTRODUCTION

Public schools and school systems, as they are presently constituted, are not administered in ways that enable school leaders to respond to the increasing demands they face under standards-based reform (Elmore, 2000). Public education is currently confronted by one of its most challenging and fundamental transitions: providing all students with the support and instruction to meet new college readiness standards. These new benchmarks for education, the Common Core State Standards (CCSS), require educational leaders to be intentional and systematic about implementation and will change the planning and design of instruction K-12. The CCSS create a learning shift by preparing students to utilize higher order thinking skills, to communicate and reason their personal positions on real-life conflicts, and to develop the ability to interpret and apply data.

The CCSS provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The Standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy (Common Core State Standards Initiative, 2010).

The textbook-based instruction, still driving most public school classrooms, will no longer be an effective model for teaching these complex standards. Furthermore, the antiquated pencil and paper state assessment will be replaced by a digital, performance-based test where the assessment will adapt to measure each student's particular skill set. Not only is the educational paradigm forced to transform with the implementation of the CCSS, but the sophisticated

Smarter Balanced Assessment program for all public school students will tighten school accountability systems.

The national standardized assessments from Smarter Balanced, slated for implementation in the spring of 2015, will most likely accompany the CCSS and seek to equalize the measurement tool for all student learning. The local state-controlled assessment programs will no longer be in practice as a testing tool. Legislators and educators alike seek to level the playing field and to produce an educational system where standards align more with real-life circumstances and schools receive standardized testing data in a timely fashion to implement necessary instructional change. These reforms will not only cause the role of the teacher to evolve, but also place more demands on educational leaders to become abundantly resourceful on both curriculum and effective instructional methods. Researchers assert that the increased emphasis on accountability has numerous implications for the role of educational leadership (Goldring & Schuermann, 2009). Principals will have to decipher new state policies, understand their implications, and translate them into manageable school policies according to which their teachers can implement instructionally. It was a desire to understand how educational leaders provided their staff with this information and prepared them for second order change that drove my inquiry. This study aimed to identify how middle school principals received information and training about the CCSS and how they disseminated this information to instructional staff supporting a strong impetus of implementation.

It is important to state there was an intentional focus on the middle school level, as opposed to elementary or high school. As a current middle school principal, I understand the structure of middle school and have knowledge of the curriculum. I also assert the importance of observing principals in the context of school reform. Research argues for more inquiry into

standards implementation within schools and examining the role of the principal (Ogawa, Sandholtz, Flores, & Scribner, 2003). Much of the previous research on school reform has focused primarily on teachers as they are key arbitrators of instruction (Cohen & Hill, 2001). I argue that principals also effect school reform and are primary agents of change.

Problem Statement

Modern school reform has serious implications for public schools; schools must meet clearly defined academic standards or face possible penalty and economic sanctions through federal funding. Reform is a high stakes issue for the public school system as these new requirements identify publically for communities which schools are superior and those which are struggling. Although there are similarities between past and current reforms, there are also significant differences. The history of educational reform movements supports the perception that all school reform aims to improve educational quality, increase student outcomes, and advance instruction (Darling-Hammond, 1997; Rowan, 1996). However, modern school reform holds schools more accountable because schools are in competition with one another and often subject to public opinion. With the addition of charter schools and heightened accountability, individual school's performance can effect enrollment. Much current reform is high profile and public (Wilson & Ball, 1996). Curriculum standards and student mastery of these standards define the school's performance, individual teacher's instructional ability, and the effectiveness of the building principal. Furthermore, most teachers and educators are coming to grips with the concept that the CCSS will be changing what is taught. Current standards will be altered and become more in-depth; some content areas, such as mathematics, will change completely (personal communication, Anonymous, 2012). Teachers must get students to utilize higher order thinking skills and to think critically about complex topics. Teachers also must help their

students meet the standards for learning outcomes, preparing them for much more open-ended and ambiguous assessments that examine, at a much deeper level, what students have learned (Wilson & Ball, 1996). The CCSS will require teachers to re-vamp current curriculum and review pacing guides, making both difficult and complicated amendments. Teachers will be teaching the big ideas; furthermore, they will be looking to provide students with meta-cognitive strategies and the ability to process these big ideas and apply them to real-life situations. The problem for this dissertation was embedded within the actual implementation of the CCSS. It inquired into how policy ideas traveled from the legislature and took shape within three individual schools.

The CCSS will provide educators with the ability to define what students should know and be able to understand; however, what makes the CCSS so complex is that principals must work to interpret and make sense of this initiative for their staff. They must provide professional development that supports all teachers and their individual understanding as how to deliver the CCSS instructionally. Principals, essentially, will be one key bridge between the standards as legislated and the standards as implemented into the school sector. The way in which principals select or frame information from the CCSS for teachers will have implications for how the standards are incorporated into the school setting.

As defined by research, “framing refers to interpreting a situation in a particular manner; it is a social construction of phenomenon; therefore, it is subjective and selective” (Lindahl, 2010, p. 243). Principals are often responsible for implementing, or supporting the implementation process, of school reform initiatives. As part of that process, they read and absorb information about school reform. Principals allocate importance to pieces of the reform that they deem as vital for their teachers. As principals disseminate information to teachers, they

highlight or focus on portions of the information that they see as pivotal for staff and contributing to a committed implementation process.

A significant body of research suggests that teachers and principals interpret, adapt, and even transform reforms as they put them into place (Cohen & Ball, 1990; Desimone, 2002; Tyack & Cuban, 1995; Weatherly & Lipsky, 1977). In fact, some researchers claim that teachers actually shape policy more than their practice is shaped by it (Coburn, 2001). I project that infusing the CCSS into public education will be a multi-year enterprise for all educators and an adaptive challenge for schools if implementation of the CCSS is to approach the aspirations held by supporters. Furthermore, I posit that the way in which principals construct understanding and disseminate information about the standards will affect how teachers incorporate the CCSS into instruction. Although the CCSS strive to provide public education with more consistency, the flow of information and people's separate conceptualization of the standards within the school environment may perpetuate the lack of uniformity from classroom to classroom.

Purpose of the Research

Built on my assumption that placing the CCSS into practice will look different among the sample schools, I conducted a multi-case study of three public middle schools for the duration of seven months. Yin (1994) explained that case studies are well suited to exploring the "what" of poorly understood subjects and explaining "how" and "why" events occur. He also noted that case studies are useful for examining contemporary events over which researchers do not exert control (1994). These middle schools were under the jurisdiction of two separate intermediate school districts. I interviewed the three building principals, on three occasions, and reviewed documents that they received which they used to construct understanding about the CCSS

initiative. I also researched how these principals disseminated information to instructional staff through interpersonal meetings, documents, memoranda, and electronic mail (e-mail).

Undoubtedly, implementing any change in schools requires the commitment and action of many individuals. The assumption is that any given education professional is gathering information about the implementation of Common Core Standards from multiple sources. Articles appear in the public press or in professional publications. State policy implementation messages reach out through the website and through sponsored professional development meetings. District officials receive policy messages from national and state sources, interpret them, and disseminate information. Individuals at all levels have access to information through their own professional associations. School boards and members of the community discuss the value of CCSS, advocate to end the initiative, or take other intermediate positions. People talk to other people, negotiating the meaning of ideas and shifting policy positions.

Based on the literature, as well as on my own experience as a principal, I view the school principal as a central player in policy implementation. Various streams of research have focused on principals or teachers. Principals provide the scaffold between the concept of the new initiatives and the actual implementation. They are the ones responsible for placing the reform closest to the teachers and the classroom to ensure its effect on student learning. Researchers support the examination of principals within standards-based reform to understand the principal's point of view as previous studies typically have focused on teachers, particularly to learning how, from the principal perspective, the district developed and implemented standards-based curriculum (Ogawa et al., 2003). Other lines of research on the implementation of standards have focused on teachers because, in the end, they are key arbiters of instructional content and practice (Cohen & Hill, 2001). Even with the focus on teachers, there is a need for

research that examines instructional changes within schools. Rowan and Miller posited in their 2007 study of comprehensive school reform programs, "We began this article by remarking on the need for education researchers to study how instructional change processes are organized in schools and to examine the effects of these organizing processes on a variety of implementation outcomes," (p. 284). Within the school, the principal is largely responsible for implementing such organizing processes. Because this study explored the experiences of educators involved in school based reform, the methods used in collecting and analyzing data were of qualitative design (LeCompte & Preissle, 1993; Peltó & Peltó, 1978; Wolcott, 1994). This study allowed me to gauge the processes and methods that were used by three school leaders to implement large-scale, instructional change in a public school setting.

I did not attempt to follow the dissemination of policy information from the principals to teachers, expecting that the same message from a principal would likely be interpreted differently across teachers in the same building. The study of the principal's part in policy roll-out could rapidly become quite large and complex if the intention was to explore how teachers received various messages. Given the multiple sources of information that teachers access, a study of this sort would be beyond the resources available for the current study. As research on teacher sense-making about policy information and implementation has been done, I elected to focus on the central role of the principal.

The Complex and Evolving Role of Principal

The school organization has become increasingly more complex as the pressures of No Child Left Behind (2001) and heightened accountability challenge the traditional organizational design of the public school. The school itself is now the focus of policy pressure, with student outcome and achievement as the measurement tools. This fact of policy is also adopted by

researchers who consider the school, rather than the individual or a small group, as the primary unit of analysis and change. To meet current demands, principals are under pressure to improve student achievement (Brown, 2006). No Child Left Behind has made a challenging job even more daunting with its requirements of yearly academic gains. Schools and principals are no longer only responsible for teaching students; they also must increase student achievement in a timely fashion, implement a sound instructional program for all students, and create a coherent professional development program supporting teachers within their own learning community. Without completing the aforementioned tasks and increasing student standardized testing scores, school leaders can face harsh sanctions for both themselves and their buildings.

The responsibility of restructuring and reorganizing the school to fit reform efforts and meet expectations often falls primarily on the principal. Principals need to prioritize school reform (Hargreaves, 2000), by redesigning their school organizations to support teacher learning required to meet the demands of legislative reform. They work with staff to align teacher perspectives with reform efforts and to facilitate teacher understanding. Several researchers who have studied the role of individual capacity concluded that for systemic reforms to be realized, individual teachers must acquire knowledge, beliefs, and skills compatible with the conceptions of teaching and learning that underlie the reform agendas (Peterson, McCartney, & Elmore, 1996; Spillane, 2000). Principals support staff in construction of reform-knowledge and translate the reform so that teachers are able to conceptualize and make sense of the reform within their own classroom.

Principal's Sense-Making of School Reform

The lack of sustainability and extreme variance from classroom to classroom has been characteristic of previous, bureaucratic reform efforts (Rowan & Miller, 2007). Research

demonstrates that the public school institution is resistant to large scale, fundamental change due to its lack of supportive structures and its characteristic isolated environments (Louis & Kruse, 1995; Elmore, 2002). Public schools, often organized as "egg crates", perpetuate teacher isolation (Lortie, 1975). There are many reports of teachers feeling isolated in their own classrooms and buildings (Fullan & Hargreaves, 1996). As building leaders, effective principals work to understand the reform and present it to teachers in a manner that avoids overwhelming them or causing burn out. Principals aim to implement supportive structures and professional development to alleviate resistance from staff.

Teachers, who are the primary agents of change, are frequently the most opposed to the reform. Many of the comprehensive school-wide designs focus specifically on trying to change teaching practice, the one area of schooling that has proved the most resistant to change (Desimone, 2002). The conditions of autonomy and complexity of the public school often work against reform efforts (Bidwell, 1965; Meyer & Rowan, 1977). Although building leaders are often faced with resistance or “push back” from teachers due to their preconceived notions about school reform, effective principals construct teacher knowledge and build understanding about reform initiatives in order to create staff buy-in. Teachers need to feel included in the reform efforts and develop a sense of ownership (Barth, 1990; Fullan & Hargreaves, 1996). Without a process to allow staff time to understand and conceptualize large-scale reform within teachers' own settings, schools can often see pockets of reform within the organization. These pockets do not represent large-scale change and often leave the reform in a state of disarray.

To avoid implementation gaps that can handicap school reform, principals aim to help all teachers construct knowledge as they frame key points of the reform to influence teachers' sense-making of the plan. The term *framing* is defined by the researcher as principal's actions as they

interpret and highlight essential information for staff. School reform can be a colossal entity. By focusing on pieces of the reform, principals work to break down the content into manageable material. Thus, principals not only help the teachers construct knowledge about the reform, but they help teachers to understand what the reform looks like in practice. Teachers who perceived top-down decision making tended to resist the restructuring effort (Smith et al., 1997). Top-down reform can send the message that teachers are replaceable, rather than valued members of the organization. By framing the reform skillfully and in a way that appeals to teachers' intrinsic interests, principals have a tool to support teachers' knowledge of reform and to garner teachers' support for impending changes; principals can build the reform from the bottom up. With clear understanding of specific details, teachers may be better able to accept the change and understand how it will affect their classroom. The tool of framing can also help alleviate the consummate issue of top-down reform colliding with bottom-up driven organizational change. In middle schools specifically, research cites the complexity of the principal's role in school reform.

Valentine, Trimble and Whitaker (1997) stated the following:

Two inconsistent reform strategies form the organizational design of schools. The first strategy is centralized control, with bureaucratic, top-down, hierarchal structures for decision making. The other strategy is the professional autonomy of teachers in schools where supportive environments enhance the commitment and expertise of the teachers with structures like networks and collaborative partnerships for decision-making. (p. 342)

As cited in Biederstedt (1999), teacher-based reform efforts typically may begin with teachers and move from a grassroots effort forward (Sandidge, Russo, Harris, & Ford, 1996). Principals can work to reconcile these two forms of change to increase reform effectiveness. They can gauge what the teachers view as important and include these items in the topics that they frame. By recognizing and valuing teachers as contributing members of the organization, teachers can create the reform within their guidelines (Goodman, 1995).

Principals use framing to highlight or drive attention toward aspects of the reform that they deem important and essential to its success. The way in which a particular policy problem is defined or framed is crucial because it assigns responsibility (Schneider & Ingram, 1993; Stone, 1988). Principals extract pieces of information that they see as relevant for their staffs in an effort to truncate the enormity of the reform. By minimizing the threat of the reform, principals can work to motivate staff toward change. According to Cynthia Coburn (2006), in an article on sense-making theory and frame analysis, "...how individuals and groups frame the problem opens up and legitimizes certain avenues of action and closes off and delegitimizes others" (p. 344). When principals attend professional development or receive information about legislative reform they review documents, make inferences, and construct their own knowledge within their personal frame of reference. They may notice specific language or take away select information, while deciding not only what is important, but how exactly to infuse this information within the context of their school. This repeatedly occurs because legislative reform is delivered in complex language, which by itself, will likely not be understood by practitioners under pressure of deadlines for improvement. Principals help teachers by breaking down new regulations in language that teachers can understand and act upon. Sense-making theorists suggest that action is based on how people notice or select information from the environment, make meaning of the information, and then act on these interpretations, developing culture, social structure, and routines over time (Porac, Thomas, & Baden-Fuller, 1989). Although educators often receive consistent information from the agencies that enact school reform, what principals do with the information, the course of action they take, and how they motivate staff can vary from school to school. How principals make sense of new policies and frame aspects of these policies influence how teachers construct their own knowledge about the policy.

Principals use their interactions with teachers to frame issues that they believe are the most important or relevant. They can be strategic and use framing of these issues to mobilize staff to take action toward reform. Leaders have the ability to siphon information and release it incrementally to staff to create forward momentum and encourage change. Principals end up becoming mini-policy makers as they use formal authority to organize information and present ideas, which affect teacher's individual understandings of new requirements (Coburn, 2006). Other research supported this suggestion finding that local actors are policy makers in that their decisions and actions shape how policies play out in practice (Cohen, 1990; Weatherley & Lipsky, 1977). Principals use their understanding of policy, within the context of their school environment, to initiate change and to create collective responsibility and commitment among staff members. The CCSS seek to create uniformity among public schools. Although the CCSS are, in themselves, consistent, the ways in which school officials interpret and implement the CCSS will vary immensely. The State provided a common standards system by electing to follow the CCSS; however, they are also providing local autonomy for school districts for interpretation and application of the standards (Higgins, 2013). The focus of this study was the role of the principal in school reform and how that principal both received and disseminated information about the CCSS. In order to understand this adaptive phenomenon, it is necessary to dive into standards-based reform literature and to comprehend how the history of standards-based reform has evolved. I am defining the term *adaptive* as used by Heifetz (1994).

Adaptive work consists of the learning required to address conflicts in the values that people hold, or to diminish the gap between the values that people stand for and the reality they face. Adaptive work requires changing values, beliefs, or behaviors. Adaptive work can be used

when solutions to the problems that organizations face lie beyond their repertoire of solutions (Heifetz, 1994, p. 22).

Finally, in the next chapter, the researcher will also review the differences between previous standards-based reform change and the CCSS Initiative.

CHAPTER TWO

REVIEW OF THE LITERATURE

Standards-Based Reform Prior to Common Core

A review of literature suggests that the lack of understanding about the history or school change, the lack of understanding about the complexity of schools as organizations, and the failure of most change initiatives to impact classrooms, teaching, and learning have resulted in little significant improvement in American education over the past twenty-five years (Elmore 2000, 2002). It is important for the researcher to state that no matter how comprehensive school reform has been, it continually struggles to alter the public school organization. Improving the school organization is not the only dilemma that school reform encounters during the implementation process. Research discusses the variance of top-down reform initiatives from school to school and the inconsistencies that are created at the building level (Desimone, 2002). There is a need for teachers to be able to match reforms to their environment, thus local agents modify policy at the building level to help the reform to fit their school. Implementation of a policy is easier if the policy is consistent with other reform efforts at the school (Desimone, 2002, p. 443). Although schools maybe more aligned in present day practice as opposed to before the impetus of the modern reform era, top-down initiatives continue to appear inconsistently at the building level.

It is important for me to state that although consistency from school to school is often a primary goal of school reform, not all research suggests that this is advantageous for schools (Desimone, 2002). However, as a current middle school principal in a large metropolitan school district, I can attest to the push toward alignment among schools. There is a perception among many practitioners and legislatures that consistency from school to school will aid in leveling the

playing field for the state's accountability system. Thus, if all teachers are implementing the same educational standards, all schools can be measured on student achievement accordingly.

Before the impetus of school reform, schools were more erratic than consistent in terms of curriculum. The teacher had authority to decipher all educational content and material. With the impetus of standards-based reform ignited by *A Nation at Risk* (1983), officials pulled back the reins of local control and shifted to a top-down reform model in an effort to both increase student outcomes and reinforce uniformity. The following section will describe the evolution of the standards' movement prior to the CCSS Initiative and its effects on schools and curriculum.

Impetus of the standards-based movement. In 1983, the U.S. Government released a startling report regarding the American public school system entitled *A Nation at Risk* (NCEE, 1983). American schools were described as lackluster and regularly being outperformed by their foreign counterparts. The report specifically stated that within American schools there was a "rising tide of mediocrity" (NCEE, 1983, p. 15). Educational standards were created in an attempt to focus the education of American students and to support uniformity among American schools. Literature identifies this era as the beginning of the modern standards' movement (Kendall & Marzano, 1996). This unified effort fought to systematize schools by revising curriculum framework, increasing instructional time, and increasing graduation requirements (Tyack & Cuban, 1995). However, educational requirements often differed by state and local school district. There was an unprecedented amount of state control over school and classroom curriculum decision-making (Boyd, 1987). Many schools and teachers, who taught in isolation, were impervious to the external change. Without accountability and pressure tied to standardized-testing, educators could interpret state directives and modify them as they thought necessary. Many educators ignored the reform and argued that centralized control de-

professionalized teachers (Archibald & Porter, 1994). Due to reform efforts, teachers first began to conceptualize their loss of autonomy; and without support and buy-in, many of these reform efforts ceased at the classroom door (Berman & McLaughlin, 1975; Cuban, 1993; Elmore, 1996; Elmore & McLaughlin, 1988). Although particular teachers attempted to follow state standards, curriculum often differed within individual classrooms. Standards specify common targets for educators, but do not necessarily provide curriculum (Elmore, 1990; Rowan, 1990). Although the standards' movement of the 1980s worked to diminish school variance and improve student learning, its inability to make large scale, sustainable change resulted in subsequent reform efforts in the following decades.

Standards movements of the 1990s. Standards-based reform aims to clarify classroom instruction by defining what students should know at each grade level and works to create consistency among public educators by providing a frame of reference. However, in the 1990's, as American schools continued to struggle and fall behind on an international scale, the school organization persisted its resistance to change and standardization. "Large scale, sustained, and continuous improvement is what the existing institution of public schooling is specifically designed not to do" (Elmore, 2000, p.13). Although during this era top-down initiatives continued, their failure was evident and an effort to facilitate bottom up driven change and build teacher buy-in of initiatives took shape. Furthermore, there continued to be a gap between the standards and the curriculum (Kendall, 2011). Supportive school structures were placed to generate a focus on classroom teaching and student learning (Elmore, 2000; Spillane & Louis, 2002). These supportive structures, such as site-based management and teacher collaboration, afforded teachers with the ability to work on instruction collectively in order to incorporate the standards into practice. Individual state standards continued to drive the curriculum; however,

curriculum development within local school districts lagged behind (Kendall, 2011). Bottom up reform structures supported teachers working together and having control over curriculum changes to align them with the standards, but this took time. Not only was there a disproportion between standards incorporation and curriculum development, but there were vast inequities among public school systems from state to state (Boyd, 1987). This was made evident by both state and nationalized assessments that became embedded within the standards' movement of the 1990s.

Standardized tests came more to the forefront of educational reform during the 1990's and were implemented as a measurement tool to assess standards-based instruction (Ogawa et al., 2003). For the first time, teachers were not only expected to incorporate the standards into classroom instruction, but students were assessed on their knowledge of this material on mandated state assessments (Berger, 2000). Proponents of standardize testing and standards-based reform viewed the assessment piece as a means for teachers and administrators to receive timely and specific feedback on student performance and thus on their own instructional effectiveness (Ogawa et. al, 2003). However, many educators viewed this system as further loss of autonomy and increased centralized control (Royal & Rossi, 1999). Although state-driven standards promoted uniformity, it was often difficult for teachers to change the way that they had provided instruction for years. New content standards often resulted in a need for innovative instructional tools and a deviation from previous practice. Deviation and change do not come easy for practitioners in education and failure of educational reform is indicative of this phenomenon (Elmore, 1996). The inequity from state to state, and lack of overall student achievement, prompted the federal government to take action in the early millennium with No

Child Left Behind (2001). No Child Left Behind (NCLB) was a framework of federal reform with the purpose of minimizing disparity among schools and facilitating effective instruction.

No Child Left Behind. As individual state educational content standards took a back seat to federal school reform, American schools were demonstrating little significant improvement (Elmore 2000, 2002). With the implementation of NCLB in 2002, school reform became a more in-depth process with implications for all school employees. Printy (2010) found that No Child Left Behind raised the stakes and began to level playing fields, at least within states, for a baseline achievement level and expected rates of improvement. NCLB focused on four main ideas (a) accountability for results, (b) an emphasis on doing what works best based on scientific research, (c) expanded parental options, and (d) expanded local control and flexibility (United States Department of Education, 2004, p. 19). Again, educators were facing heightened accountability. However, what made NCLB more “high stakes” than earlier reform efforts was its tie to educational funding. Elmore (2003) stated that NCLB has been called the single largest nationalization of educational policy in the history of the United States. With legislation as permeating as NCLB, schools were responsible for identifying a new repertoire of tools to reach the increased goals of student proficiency. Before NCLB, schools were not held accountable by the law for increasing student achievement. Conversely, with the implementation of NCLB and Adequate Yearly Progress (AYP), schools were left with little choice but to make changes. In effect, achievement is the criterion for district and school success (Bellamy, Crawford, Marshall, & Coulter, 2005). As NCLB became rooted in educational policy, the school was even more the unit of analysis and educators the ones responsible for improving educational practices (Spillane & Louis, 2002). State education departments and local school districts began to express concern about NCLB’s tight timelines. After almost a decade of NCLB legislation, individual states were

granted waivers to NCLB regulation and federal school reform policies were amended to make exceptions to allow more local control.

Summary. The history of the standards-based reform movement provides a timeline of failure and unfunded initiatives that have unsuccessfully attempted to deeply transform the American public education system (Ogawa & Collom, 2000). In fact, some researchers question standards-based reform in its entirety. Is standardization and commonality among schools a positive shift in the once autonomous school paradigm? Some argue that educational standards inhibit teacher creativity and result in intensified preparation time (Borman, Hewes, Overman, & Brown, 2003). Regardless of perspective, most schools today continue to struggle with creating and delivering a concise, effective curriculum for all students (Marzano, 2003). Although there was a shift from top-down driven mandates for change to bottom-up, teacher-driven change in reform history (Louis, Marks, & Kruse 1996; Sergiovanni, 1996), the CCSS aims to reconcile these competing paradigms and create a nationally-driven educational system. The CCSS conveys to teachers what to teach, but local school districts and teachers can have the autonomy to devise curriculum.

Common Core State Standards-Based Reform

The CCSS aim to identify for all educators what we teach at any given time within a student's tenure. Kendall (2011) wrote, "The principle purpose of the CCSS Initiative is to identify for all stakeholders the knowledge and skills that students must acquire to succeed in college and career," (p. 27). The standards provide a frame of reference for the teacher to understand the flow of important topics, within their content area, from grade level to succeeding grade level. Prior to the CCSS, researchers such as Ainsworth (2003) suggested that educators identify *power standards* to make clear those standards that are necessary for students to learn

within their grade level in order to demonstrate mastery. Where the CCSS divert from other standards-based reform is that they attempt to be more clear, concise, and manageable for educators. According to one proponent "...the Common Core State Standards are specific enough that districts need not rewrite them" (Kendall, 2011, p. 30). The CCSS Initiative strives to incorporate simplicity and uniformity into large-scale educational reform. Table 1 provides a visual indicator as to the shift that that CCSS employs.

Table 1

A Comparison of Education Before Standards-Based Education, During the Standards Movement, and Under Common Core

Factor	Before Standards-Based Education	During the Standards Movement	Under the Common Core
Appropriateness of expectations to instructional time available	Time available=time needed.	Varies by state; no explicit design criteria. Often, not enough instructional time available to address all standards.	Standards are designed to require 85 percent of instructional time available.
Curriculum Support	Curriculum is defined by the textbook.	Standards drive the curriculum, but curriculum development lags behind standards development.	Standards publication is followed quickly by curriculum development.
Methods of describing student outcomes	Seat time; Carnegie units (emphasis on inputs over outcomes).	State-standards: criterion-based.	Cross-state standards; consortia of states.
Source of expectations for students	The expectations in textbooks or those described in Carnegie units; historical, traditional influences	Varies by state; over time, moved from traditional course descriptions to college- and career-ready criteria.	The knowledge and skills required to be college- and career-ready; international benchmarks; state standards.

Note. From “Understanding Common Core State Standards” by J. Kendall, 2011, Copyright 2011 by McRel. Reprinted with permission.

According to the Table 1, the CCSS will vary from previous school reform efforts for multiple reasons (Kendall, 2011). First, the CCSS framework allows educators to fit the standards into instructional time. “Standards are designed to require 85 percent of instructional time available” (Kendall, 2011, p.4). The CCSS are also designed to be concise and direct. They provide teachers with focus and allow them to place attention on key concepts for students. Previous reform efforts consisted of multiple standards and concepts per grade. Secondly, curriculum development will be more manageable. According to Kendall (2011), curriculum

development directly preceded the publication of the CCSS. Not only are practitioners able to access various resources via the Worldwide Web; they also have the ability to bypass the textbook. Teachers can learn about the standards and almost immediately create project-based learning and real world learning activities to support student learning. Teachers have the ability to collaborate with educators both within their individual school and on national basis through networks. Because the Standards are consistent from state to state, teachers across the United States can connect and collaborate on CCSS instruction. Lastly, among most states, there will be primarily one common standardized test. Teachers and principals will have student outcomes in a timely fashion which will allow for appropriate instructional changes. I am not positing that the CCSS will be easily implemented, but rather that consistency among states and the simplicity of the standards will aid in its inclusion into schools.

The Common Core State Standards

The English Language Arts' Reading Anchor Standards (Appendix A) and the Standards for Mathematical Practice (Appendix B) are each composed of fewer than 10 standards. This is a drastic shift from previous standard reform efforts. The idea is that providing more concentration on fewer standards in both English Language Arts and Math will highlight key concepts for teachers. This will also offer teachers the ability to dive deeply into the content and not become overwhelmed covering hundreds of content standards. Teachers can look at a multitude of resources including technology, real-world application, and project-based learning to build student mastery of CCSS concepts. By drifting away from textbook-based instruction, which research states as the focal point of instruction for at least three decades (Goodland, 1984), teachers can scaffold such skills as inference, interpretation, and supporting arguments with evidence. All of the aforementioned topics have been referenced as essential skills needed for

students to succeed in post-secondary education (Conley, 2005), and they are highlighted in the standards as a way to ensure students' future success. The CCSS provide teachers with the opportunity to be autonomous within their instruction and cultivate higher-level thinking skills through a coherent and organized curriculum. Research argues the concept that teaching fewer topics on a more meaningful, in depth level can support student learning (Schmidt, 2008).

Teachers can incorporate text from social media and other contemporary resources, which are sure to garner more student engagement than the antiquated textbook.

The educational inquiry into standards-based reform over the past three decades has been greeted with a firm stance that the “reform has failed” and that “American schools continue to fail”. Literature suggests that standards-based change tied to high-stakes testing can be problematic for teachers (Archibald & Porter, 1994). The CCSS strive to provide students with meaningful connections while the Smarter Balanced Assessment provides a clear definition of proficiency. Essentially, the performance-based strategy of the Smarter Balance assessment should align with CCSS instruction; thus addressing some criticism of educators. Legislatures also contend that the implementation of the CCSS will limit the differential between student achievement outcomes and close ever-plaguing achievement gaps. However, although the CCSS Initiative does hold promise, the implementation process continues be complex.

The implementation process will be crucial to the success and maintenance of CCSS instruction in public schools. School leaders will aid in creating either an effective instructional system that supports all students or one that again faces the fate of predicated reform efforts. Principals, specifically, are central figures in both the implementation and maintenance of the CCSS into their schools. These reforms cannot, by themselves, implement program-endorsed instructional innovations in schools; instead, they must rely on teachers and other staff to carry

out this work (Rowan & Miller, 2007). This reliance on individual educators presents two dilemmas for public education: (a) school officials are charged with implementing reform initiatives and maintaining equilibrium while presenting teachers with pressure from reform, and (b) school officials must make sense of the reform initiatives thus inferring their own ideas as to how the reform should function within their school.

The CCSS will again be a deep organizational shift, which attempts to change instruction at its core and increase school uniformity. The interaction of the principal with the CCSS and how the principal supports CCSS implementation can have strong implications for individual schools.

Principals and School Reform

I argue that principals are key agents within the school reform process. The researcher further contends that school reform is an adaptive challenge for educators. In the following section, the researcher will reference literature, including the framework of *adaptive leadership* (Heifetz, 1994) to demonstrate how principals can arbitrate change and support the implementation of school reform. Additionally, how principals provide reform information to teachers can produce a sense urgency resulting in momentum within the organization. Principals can ease tension by providing support and facilitating *sense-making* of reform initiatives for teachers (Coburn, 2001). To effectively incorporate school reform initiatives, principals can take multiple actions to move the school organization toward reform.

Adaptive change. Heifetz (1994) stated the following regarding adaptive leadership/work (a) adaptive work consists of the learning required to address conflicts in the values that people hold, or to diminish the gap between the values that people stand for and the reality they face, and (b) adaptive work requires changing values, beliefs, or behaviors. Adaptive

work is needed when solutions to the problems that organizations face lie beyond their repertoire of solutions, (p. 22).

According to literature, two categories of problems face schools. Problems can be either technical or adaptive and are defined by the following (a) technical problems are relatively clear-cut, if not simple, and can be solved by applying technical expertise; the outcome can be predicted with some confidence and (b) adaptive problems. Adaptive problems, by definition, are so complex and involve so many ill-understood factors that the outcomes of any course of action are unpredictable (Valesky & Owens, 2010, p. 271).

Schools have long dealt with and are accustomed to handling technical problems. However, the issue lies that within all of the new requirements brought forth by modern school reform, there are adaptive challenges. Adaptive work is an extremely involved process; thus, it is important to make clear its application within public school leadership practice. It mobilizes staff to address adaptive challenges by allowing stakeholders of the organization to feel pressure. Principals can use “pressure” to create urgency for change by disseminating information to teachers indicating the accountability piece of school reform.

Creating pressure for change. While principals work as knowledge brokers to create an informational capacity for teachers, they must also apply pressure and generate a need for the change among stakeholders. To be successful, reform efforts must include both pressure and support (McLaughlin, 1990). Pressure sends the message that the legislature is serious about the reform initiative; it helps to ensure that schools place the reform at the top of their priority lists. Heifetz (1994) defined this as allowing the issue to ripen. Thus, in order for teachers to change and depart from their current schema of solutions, they must understand the challenges they face and that these challenges may require actions and responses which are new to the teachers and

outside of their comfort zone. Organizational leaders can strategically release incremental information to staff. The incremental dissemination of information discharges portions of the information; enough to create unrest, but not enough to cause panic (Heifetz, 1994). Teachers understand that change is coming and that change is inevitable.

Building knowledge to support change. Support addresses issues of capacity, providing resources such as personnel, time, materials, and learning opportunities that schools may need to enact the reform vision. Support is necessary for the success of reform efforts (McLaughlin, 1990). Principals can use professional development as a primary mechanism to facilitate support for staff. This contributes to the evolving role of principal which some researchers claim has become more complex over time (Hallinger & Leithwood, 1994).

To effectively implement and support reform efforts, principals can plan strategically and intentionally map learning opportunities to foster a timely adaptation process for their staff. In the study of organizational change and policy effectiveness, it has long been realized that, given a promising practice, the method, type, and pace of implementation largely determine outcomes (Haynes, 1998; Newmann, Marks, & Gamoran, 1996). It is important to recognize that principals often bridge the gap between school reform and local implementation within the school. Specifically, principals are often provided with reform information at meetings or conferences and then must fit the reform into their school organization (Lindahl, 2010).

Principals use professional development as a tool to ensure fidelity of implementation and to monitor staff's progress. Research states that professional development is essential to the success of organizational change. Professional development and training opportunities are widely recognized as a critical component of school change efforts (Darling- Hammond & McLaughlin, 1995; Desimone, 2002; Huberman & Miles, 1984; Joyce, Murphy, Showers, &

Murphy, 1989; Lieberman, 1995; Louis & Miles, 1990; McLaughlin, 1976; Peterson et al., 1996). Research also argues that idea that principals can also become “teachers of teachers” while facilitating professional development (Resnick & Glennan, 2001). In an effort to benchmark the implementation process, principals can schedule professional development meetings with the goal of supporting teacher learning and brokering commitment from their staff. Principals use this time to: (a) check for stakeholder understanding of reform components, (b) incorporate discourse identifying barriers for teachers, and (c) provide further explanation or to revisit fundamental reform ideas to bolster implementation.

Literature indicates that teacher commitment is essential to the success of any change initiative. Numerous studies of school reform efforts have concluded that teachers are the key component of the success of any effort aimed at fundamental school change (e.g., Berman & McLaughlin, 1975; Cuban, 1984; Goodlad, 1984; Louis & Marks, 1998; Sizer, 1984, 1992; Tyack, 1990). By providing time for teacher collaboration and understanding of reform initiatives, principals can troubleshoot teacher’s negative sentiment or lack of understanding. Principals can create a mutual enterprise where teachers have a platform to ask questions and grasp concepts that otherwise may spawn resistance. Collaborative planning and collegial relationships contribute to positive school culture and have the potential to be more important to implementation than policy directives (McLaughlin, 1976, 1990; Purkey & Smith, 1983). By supporting policy and reform initiatives with professional development programs and time, principals create a professional network where teachers can exchange ideas and work collectively to apply change. Elmore (2000) pushed the field to relocate the authority and responsibility for improving teaching and learning, separating it from the sole control of those “up the chain” of the administrative hierarchy, and embedding that authority and responsibility in

the daily work of all those connected to the enterprise of schooling. By supporting teacher learning of reform, principals can motivate staff to take action and make progress toward change initiatives. However, creating pressure to initiate change and supporting that change with opportunity for learning is not the only mechanism that principals can use to work reform implementation. The principal can facilitate sense-making among staff where teachers understand the task at-hand and the principal eases the tension of resistance by constructing teacher knowledge.

Sense-making. Sense-making can be a tool that is effectively practiced by principals; however, if not utilized properly by the principal, it can work to create resistance. The principal must take the opportunity to lead sense-making at the impetus of change. When principals do not provide sense-making opportunities for teachers, teachers can work to sense-make collectively with other teachers. As cited by Coburn (2006) “Sense-making does not refer solely to individual processes...it is collective in that it is shaped by interaction, signaling, and negotiation,” (Coburn, 2001; Louis, Feby, & Schroeder, 2005; Porac et al., 1989; Trice & Beyer, 1993; Vaughan, 1996; Weick, 1995). Although the design of public schools historically has reinforced teacher isolation and autonomy, teachers often come together and use social interaction to discuss and understand new policy initiatives. If principals use sense-making as a tool, they can support the teachers in situating the policy within the framework of their work environment and collectively draw implications as to how this policy will affect what they do in their classrooms on a daily basis. Thus, teachers having discussion with one another and making their own assumptions can be minimized.

As the main constituents of change, teachers can socially construct problems and create implementation barriers due to the way in which they build knowledge from reform information.

The ways in which teachers enact policies are shaped by what they understand the meanings and implications of these policies to be (Coburn, 2006). The job of principals facing reform is two-fold. First, they must support teachers in making sense of reform implications; secondly, they need a strategic plan for the reform's implementation and maintenance. By planning strategically and building teacher knowledge of reform efforts, principals can avoid teachers having individual conversations and building resistance. By allowing teachers to make sense of change initiatives, principals can have a higher probability of effective reform implementation. Principals can also support sense-making of educational initiatives by framing aspects of the reform that they believe are most relevant and important for their individual school.

Framing. “When external changes are imposed and enforced, they may not be well-matched to the existing culture, behavior systems, or values of the school,” (Lindahl, 2010, p. 239). Although principals use sense-making to reconcile differences between school reform mandates and their current school practices, framing information can also work to garner teacher support. By framing key components of school reform, principals can build understanding as to how the proposed changes can fit their school. Lindahl (2010) defined framing as “interpreting a situation in a particular manner” (p. 243). Research further identifies three types of framing a) diagnostic framing which is used to affix blame, b) prognostic framing approaches solutions to the problem at-hand, and c) motivational framing to generate motivation (Lindahl, 2010; Snow & Benford, 1988). Principals can use framing as a tool to show how reform can be implemented within the school without overwhelming teachers. They can truncate the reform by focusing only on key aspects and components that they deem as essential. This can aid in minimizing threat and motivation teachers toward change. Principals can use framing to identify potential

issues with staff, discuss proposed solutions, and to create a plan of action and direction for the organization.

To avoid implementation gaps that can handicap school reform, principals must help teachers construct knowledge and frame key points of the reform to influence teachers' understanding. Smith et al. (1997) found that teachers who perceived top-down decision making tended to resist the restructuring effort. By using framing as a tool to support and garner teacher education of impending reform, principals can build the reform from the bottom up. With clear understanding of the intricate facts, teachers may be better able to accept the change and understand how it will impact their classroom. Principals use framing to highlight or drive attention toward aspects of the reform that they consider important and essential to its success. The way in which a particular policy problem is defined or framed is crucial because it assigns responsibility (Schneider & Ingram, 1993; Stone, 1988). Principals extract pieces of information that they see as relevant for their staffs in an effort to minimize the enormity of the reform language and create a sense of accountability and ownership among staff. How principals frame aspects of these policies influence how teachers construct their own knowledge about the policy. Principals can be strategic and use framing of these issues to mobilize staff to take action toward reform. They can siphon information and release it incrementally to staff to create forward momentum and encourage change. Principals use their understanding of policy, within the context of their school environment, to initiate change and to create collective responsibility and ownership among staff members.

Bottom up vs. top down reform. The majority of school reform efforts within the last four decades have followed a top-down change model; however, research suggests that this may contribute to the inability of reform to deeply effect the school organization. Elmore (2000)

called for a relocation of authority and responsibility to be given to local agents, embedding both entities in the daily work of those connected to the enterprise of schooling. Although legislatures and departments of education at both the national and state level drive the preponderance of school reform initiatives, it should be noted local buy-in from practicing educators can contribute to the success of reform. In the past top-down, hierarchal leadership approaches collided with bottom-up driven change. Under the pressures of school reform, this competition of paradigms inhibited change and increased frustration within schools. As supported by research, educational organizations are inherently hierarchical (Valesky & Owens, 2010); however, the need for increased teacher collaboration and leadership is forcing the demise of the school leadership hierarchy. The responsibility of restructuring and reorganizing the school to fit bottom-up reform efforts falls primarily on the principal. How principals motivate and organize staff toward common goals and encourage staff to create policy that supports top-down reform can positively affect the change initiative. Under current school reform initiatives, principals can work to redesign their school organization to reconcile top-down change with bottom-up teacher initiatives.

Summary. This chapter reviewed literature relevant to the proposed study of principals and CCSS implementation. It is important to note that although there is tremendous literature on school reform and school leadership, research on the CCSS is scarce. This is because the CCSS Initiative is less than 3 years old. However, it is clear from the research that reform initiatives and efforts to make American schools superior have affected the role of the principal.

Leithwood, Menzies, and Jantzi (1996) found that the literature on school leadership suggests the role of the principal has changed tremendously during the last 30 years. There has been a shift from principal as compliance manager to that of instructional and academic leader. Rather than

only managing directives from state and local controlled school boards, principals are charged with ensuring that teachers are effectively teaching and students are demonstrating high levels of academic achievement (Lezotte, 1994). This remains the case with the implementation of the CCSS. Principals must aim to understand the legislation, bring it into their school for local implementation, and aim to increase student achievement.

The following chapter will describe both the research design and methodology for this study, which examines this large-scale CCSS implementation in three suburban public middle schools.

CHAPTER THREE

METHODOLOGY AND SAMPLE

The purpose of this chapter is to discuss the research design, selection of the population and sample, survey instrument, and data collection and analysis procedures used in this study to examine the way in which three middle school principals both received and disseminated information regarding the CCSS. It is important that I state the limitations within this study. The data collected from this study was confined to three middle school principal's individual approaches to CCSS implementation. This is not a representation of a national or state approach to CCSS reform.

The CCSS reform is the latest attempt by government and educators to raise educational standards and student achievement outcomes across the American public school system. This reform, like its predecessors, will challenge teachers to change and modify how they execute instruction in the classroom. However, many educators are skeptical and resistant to making the instructional changes needed to support CCSS integration. The challenge of getting teachers to make changes in the substantive core of teaching and learning, then sharing this new knowledge widely with their colleagues, has been one of the most elusive goals for school reform efforts (Miller, 1995; Louis & Kruse, 1995). It is understood that school reform is often complex and difficult to implement especially at the classroom level. This study reaffirmed that position and delved into both the state and local control of the CCSS reform. Specifically, this study explored the way in which principals took in information from larger units of educational organization, including federal, state, intermediate school district and districts and the way in which they disseminated this information. The purpose of this chapter is to discuss the research design,

selection of the population and sample, survey instrument, and data collection and analysis procedures used in this study.

Design

The design of this study was qualitative. Qualitative methods are defined by researchers as, “any kind of research that produce(s) findings not arrived by means of statistical procedures or other means of quantification” (Strauss & Corbin, 1990, p. 17). This study investigated the flow of CCSS reform information to three public middle school principals and then observed how these principals disseminated information to their instructional staff. A multi-case study of three principals was selected as an appropriate method for data collection. In qualitative research, the researcher may at times define what kinds of people and how many of them can be studied (LeCompte & Preissle, 1993). A decision to complete three case studies was made based on the necessity of having enough participants to provide likely variation in responses and the limitation of time and monetary resources available to the researcher. By completing a multi-case study, I was able to discern both similarities and differences within three principal’s individual approaches to CCSS implementation.

In order to identify viable sample sites for this study, a diagnostic questionnaire was distributed to sixteen principals within a geographical region, all members of a large public school athletic association. The questionnaire sought to determine which principals in this larger pool would be willing to participate in the study and also would comprise a diverse sample. Based on the responses, I contacted four principals whose replies seemed to indicate that they would be willing to participate. These schools also represented two intermediate school districts and three local school districts. I made an effort to diversify the sample in order to further safeguard validity of the data collected by ensuring that the principals did not work together and

would not discuss the study with one another. Of those contacted, I selected three to take part in the study and all agreed. A Letter of Permission was requested by the Director of Academic Services in one of the sample districts and successively submitted to that individual prior to the study beginning. The remaining two principals provided both written and oral consent to participate in the study. As compensation for their participation, I provided each school with electronic tablets to support literacy, purchased with funds made available by a research grant from the College of Education.

Each sample principal was interviewed a minimum of three times, throughout a seven month period, to decipher how they received information about the impending implementation of the CCSS and to identify their methods of disseminating information to the school faculty. The principals also provided me other evidence of the processes by which information was both received and disseminated; these artifacts include pod-casts, memoranda, electronic mail, district meeting minutes and agendas, and intermediate school district meeting minutes and agendas. The above aforementioned qualitative data pieces were collected and utilized to provide empirical support to answer the research questions of this study. The following research questions guided this study:

1. How do principals from three separate school districts receive information and training on the Common Core State Standards?
2. How do principals disseminate information to their instructional staff regarding the Common Core State Standards? Specifically, what does each principal “frame” from the reform and how does the principal use this "framed" information to guide sense-making for staff?

Sample

In an effort to create a diverse sample, a questionnaire with 15 questions (Appendix C) was distributed to sixteen middle school principals in three municipal counties. The questions focused on school demographics, school funding, school reform, and individual principal leadership practices. Nine principals responded to the questionnaire and from this sample of nine, four principals were interviewed and three were subsequently selected for the study because their schools were diverse from one another and they were willing to make the time commitment.

The questionnaire completed by the principals provided the researcher with insight into each school's demographics and the principal's leadership practices. By reviewing the responses to the questionnaire, I was able to decipher that each building was distinct and could support variability within the data collection process. I personally met with each sample principal prior to the beginning of the study. It was imperative to meet with these principals and complete a qualitative approach to the research in order to gain a complete prospective of the individual principal's CCSS understanding. According to Patton (2000), qualitative researchers go to the location of the study because they are interested in the context. By reviewing data about the schools, I was also able to assess the schools on both a socio-economic and student achievement level to ensure that the three sample schools were diverse. I reviewed each school's annual report, submitted by the local school district to the state, in order to understand each school's demographics and student achievement outcomes.

Context was also important in this study because of the influence of the intermediate school district. This case study involved two intermediate school districts (ISDs); their individual approach to CCSS reform differed greatly. I was able to assert this claim after the

reviewing of meeting minutes and interviewing each of the sample principals. The three sample schools were located within two separate ISDs that composed a suburban area of a large city in a Midwestern state. Two of the sample schools resided within the same ISD. Both of these ISDs had their own superintendents and instructional staff who made major decisions involving large-scale school reform implementation. The influence of the intermediate school district contributed to differences in how the three principals received information about the CCSS and how they distributed it.

Intermediate school district one/school A. In an effort to support anonymity for the participants of this study, only some detail regarding the intermediate school districts will be stated during this dissertation. Intermediate School District One (ISD One) provided support for numerous local school districts, a number of public school academies, and also numerous non-public institutions. Middle School A, in the study sample, was under the jurisdiction of this intermediate district. ISD One asserted their goal as “providing a quality education to every student.” ISD One also governed more of the highly successful local school districts in terms of student achievement, (personal communication, anonymous, 2012). ISD One had begun training staff on the CCSS during the 2010-11 school year. I reviewed memoranda, meeting agendas, and meeting minutes that provided evidence of regarding ISD One's professional development for both teachers and administrators.

Intermediate school district two/schools B and C. Intermediate School District Two (ISD Two) stated that it aims at improving student achievement and maximizing economies of scale in staff development, purchasing, and administrative services. ISD Two supported local school districts with curriculum consulting, technology, special education compliance, and

professional development opportunities. ISD Two provided services for local school districts within both suburban and metropolitan areas in a Midwestern state.

Figure 1 illustrates the organization of the sample schools within their aforementioned intermediate school districts study:

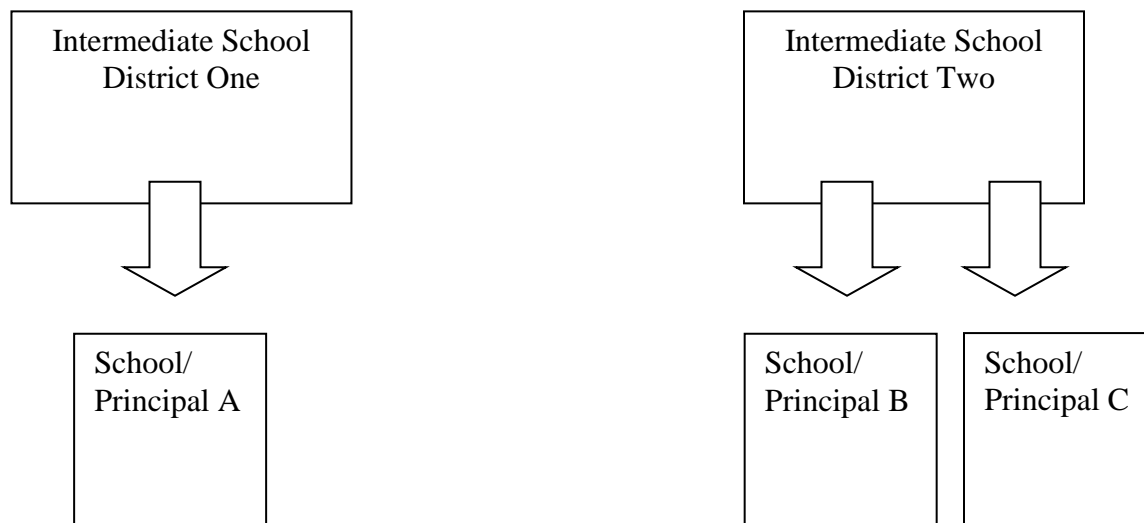


Figure 1. Organization of sample schools within intermediate school districts

School/Principal A . Bogdan and Bicklen (1998) argued that the written word is the most important approach to qualitative research, in both collecting data and in disseminating the results, (p. 4). Therefore, it was imperative that I visit the three sample schools on multiple occasions and take copious field notes in order to understand both the sample schools and each individual principal. Sample School A was located in an affluent suburb of a large metropolitan city. School A's local school district was known to be high achieving and instructionally strong. The district was composed of two high schools, two middle schools, and seven elementary schools. Sample School A's population consisted of over 875 students from diverse backgrounds; the school served grades six through eight. Sample School A was identified as

having socio-economic diversity as opposed to ethnic diversity. It is important to note that School A did not receive Title I or 31-A funding from the federal government; however, they did serve a small percentage of students who were economically disadvantaged as defined by the state. Title I funding refers to government aid that schools can receive if their Free and Reduced Lunch population surpasses 40%. Thirty-One-A funding can be provided by the federal government to schools where a large number of students suffer from high-risk factors. These factors can be identified as, but not limited to, abuse, poverty, imprisonment of a parent, or having a deceased parent.

Using the State assessment tool as an indicator of student achievement, School A was in the 88th percentile (personal communication, anonymous, 2011). School A's Eighth Grade Annual Yearly Progress outcome data was as follows:

- 70% proficient in Mathematics
- 89% proficient in English Language Arts
- 39% proficient in Science

All of these outcomes exceeded state averages on the state assessment tool.

In terms of instructional staffing, the school employed two administrators, 27 full-time general education teachers, 10 "shared" teachers, and five special education teachers. They also employed an ESL (English as Second Language) teacher, an Academically Talented Facilitator, a Careers Facilitator, and a Restorative Practices Facilitator.

School A's principal was extremely involved in the educational process by her own account. Education was a second career for her; she began her journey in education as a science teacher. She stated that she had a "love of curriculum, instruction, and students" (personal interview communication, Principal A, October 30, 2012). She also stated that it is her job to

support teachers in “becoming better and more effective” (personal communication, Principal A, October 30, 2012). After 3 years as assistant principal at a district middle school, the district’s Superintendent asked her to become principal at the other district middle school, a position she assumed in the fall of 2007. Principal A viewed herself as a strong instructional leader because this is “where her focus needs to be” (personal communication, Principal A, October 30, 2012). Principal A regularly met with her staff to discuss school reform and the CCSS Initiative. She followed the implementation expectations that had been created by the district and ISD One. She expected to see all teachers executing the plan in classrooms when she completed both formal and informal observations.

School/Principal B. Sample School B was located in a semi-affluent suburb of a large metropolitan city. Sample School B’s local school district was one of the largest public school districts in the state. The district contained three large high schools, five middle schools, and sixteen elementary schools. Sample School B’s population was composed of 767 students from diverse ethnic backgrounds including Asian, Black, Hispanic, and Caucasian. Sample School B did not receive Title I but did receive 31-A funding from the federal government. School B also housed the Gifted and Talented program for its district. The school had recently been labeled a *focus school* due to the large achievement gap between School B’s top 30% and bottom 30% of students according to the state assessment tool.

Achievement results on the state assessment tool indicated that School B was among the top 30% of performing middle schools in the state (personal communication, anonymous, 2011). School B’s outcome data was as follows:

- 57% proficient in Mathematics
- 76% proficient in English Language Arts

- 36% proficient in Science

All of these outcomes exceeded state averages on the state assessment tool. In terms of instructional staffing, School B employed two administrators, thirty-three general education teachers, and four special education teachers.

School B's principal became an administrator to have a "greater impact on students," (personal communication, Principal B, November 5, 2012). He stated that he was limited as a teacher and would be able to reach more students if he assumed the role as a principal (personal communication, Principal B, November 5, 2012). After completing an administrative internship in the district where he was a teacher, he accepted an assistant principal position in a district with similar socio-economic composition. After spending 8 years in that district as both an assistant principal and principal, he accepted the position of principal at a neighboring middle school, which served as the gifted and talented magnet school. Principal B had monthly staff meetings; however, he did not drive the CCSS reform initiative in his building.

School/Principal C. Sample School C was located in a middle-class suburb of a large metropolitan city. The local school district that encompassed School C is also among the largest in the state. Local School District C contained three high schools, a skills center, a technical high school, three middle schools, three upper elementary schools (grades 5-6), and 13 K-4 elementary buildings. Sample School C's population was composed of over 800 students from diverse backgrounds and served grades seven through eight. Sample School C was affected by both socio-economic diversity and ethnic diversity. Their ethnic subgroups were composed of Black, Latino, and Asian students. School C did receive Title I and 31-A funding from the federal government, which they used to support student learning.

On the state assessment tool, School C was in the seventieth percentile according to the State's accountability system (personal communication, anonymous, 2011). School C's Eighth Grade Annual Yearly Progress outcome data is as follows:

- 39% proficient in Mathematics
- 67% proficient in English Language Arts
- 14% proficient in Science

All of these outcomes exceeded state averages on the state assessment tool. In terms of instructional staffing, the school employed two administrators, 35 full-time general education teachers, two teachers funded through Title I, and five special education teachers. School C allocated staffing to support an increasing number of students with disabilities. Twelve percent of School C's total population was certified as entitled to receive special education services. This school also employed three teachers to meet the needs of self-contained special education students whom needed additional support.

School C's principal became a teacher because it was "in her nature" (personal communication, Principal C, November 7, 2012). Both of her parents were educators thus working at a school was a natural choice. As an assistant principal for 12 years, she was able to understand the role of school administrator and gain great knowledge of her district and the politics of education. After spending a year as interim principal at another district middle school, Principal C accepted the position of principal at her current middle school and was ready to begin a new chapter. Building a collective trust and foundation is important to Principal C. She does this by building personal relationships with staff members and by making sure that all staff has "access to all of the information that they need" (personal communication, Principal C, February 20, 2013). Regarding Common Core reform initiatives, Principal C stated that she is

now accustomed to the unfunded initiatives brought forth by educational reform (personal communication, Principal C, November 7, 2012). She did, however, state the changes brought on by the CCSS are positive for public education (personal communication, Principal C, February 20, 2013). The CCSS is resulting in instructional changes and a shift where teachers have more responsibility for increased student learning and mastery of content.

Table 2 provides a comparison of the three sample principals and their schools.

Table 2.
Cross-Comparison of Principals

Principal	Grade Level	Funding		ISD	Tenure as Principal
		Title I	31-A		
A	6-8	No	No	One	6 years
B	6-8	No	Yes	Two	2 years
C	7-8	Yes	Yes	Two	7 years

Each principal had had professional experiences with school reform as well as previous experiences outside of education. More extensive biographies of each principal are provided in Appendix G. However, details included here are the most salient for the present study.

Instrumentation

Following the sample selection, the researcher designed a timetable for data collection. First, contextual background on the ISDs, the districts, and the schools was gained from the internet and through personal interaction (the researcher is currently an administrator in ISD Two). The researcher visited each of the sample sites, prior to the first interview, to gain further perspective into the school community and the principal. These visits are critical because the action of the research subjects can be best understood when observed in the setting in which it occurs (Bogdan & Biklen, 1998). Because the sense-making among teachers within the school is a key focus of some questions to the principal, the researcher also wanted to gain some insight

into the nature of the school community, defined using the framework of Louis and Kruse (1995) where community is “school based, rather than a representation of teachers’ experience in other collegial groups, such as professional networks or organizations beyond the school,” (p. 769).

Due to the importance of confidentiality in research (Gliner & Morgan, 2000), all identifying information of the three research sites was kept confidential and individual information was only shared with the participating principals to check for validity. The primary data source consisted of interview transcripts. The interview protocols followed Seidman’s (2006) three interview series model. Seidman identified this three-tiered approach to the qualitative interview.

Seidman (2006) began by stating that researchers must examine the life history of each participant. “Interview One: Focused Life History-To put the participant’s experience in context by asking him or her to tell as much as possible about him or herself in the light of the topic at the present time” (p.17). Seidman argued that the second interview seeks to yield more solid information from the research subjects. “To concentrate on the concrete details of the participants’ present lived experience in this topic area of the study” (2006, p. 18). Last, in the third interview, Seidman encouraged the researcher to have the participant make sense or meaning of his or her experience: “Given what you have said about your work, what sense does this make to you?” (p.18).

I used this model to garner information from the participants through in-depth phenomenological interviewing. All of the interviews were open-ended in nature in an attempt to collect a wealth of information from each principal-participant. After each interview, I promptly created a brief memorandum and extensive field notes to aid in the analysis of all data.

All interviews were recorded, with the participant's permission, and subsequently transcribed.

Each series of interviews had a primary goal; they were as follows:

1. Interview One: to understand the professional, personal, and educational background of each principal-participant (Appendix D).
2. Interview Two: To understand how each principal-participant receives both information and training regarding the Common Core State Standards (Appendix E).
3. Interview Three: To understand the key themes of the Common Core State Standards' reform that these principals frame and to gauge the methods in which these principals disseminate information to teachers (Appendix F).

The following section will provide the reader with specifics on each interview protocol instrument that was utilized in the data collection process.

Interview A protocol. Interview Protocol A (Appendix D) served as a tool to understand each principal's educational and professional background. This interview also provided insight into the principal's personal background and was evidentiary as to why that principal entered the profession of education. People's behavior becomes meaningful and understandable when placed in the context of their lives and the lives of those around them, (Seidman, 2006). The use of a qualitative approach allowed the researcher to meet with each principal and discuss her or his professional training and educational background within the context of each person's individual school and personal upbringing. A qualitative method also allowed the researcher to understand the principal and his or her view of the professional role of principal. By understanding the principal's individual perception of "the role of building principal", I was able to gain insight into the principal's leadership practices and activities. I also acquired understanding of the principal's interaction with the staff when dealing with school

reform and impending change. By completing one-on-one interviews, I was able to create a comfortable environment where the participants shared candidly information about their personal and professional history. Patton (2000) encouraged interviewing people during research “to find out from them those things that we cannot directly observe. We cannot observe feelings, thoughts, or intentions” (p. 340). This allowed me to gain a complete understanding of the principal and aided in the conceptualization of each individual leadership style and decision making actions in terms of school reform.

Interview B protocol. For the second round of interviewing with each sample principal, I aimed to obtain a detailed account of how the individual principal received information about the CCSS and how the principal made sense of the reform initiative before sharing information with staff. The interviewee was asked to reconstruct their interactions with others and to provide extreme detail (Seidman, 2006). I probed for details on the individual principal’s professional development experiences regarding the CCSS, professional training provided by the district, and both written and oral information delivered to the principals to support their understanding of the CCSS. I was able to investigate the implications, from each principal’s perspective, that were created from the individual school’s CCSS implementation plan. Interview number two allowed the researcher to gain a deeper understanding of the type of information that was provided to each principal, as well as to identify from whom the principal was receiving specific information. Interview protocol two was able to make distinct the ways in which principals from different districts received information.

Interview C protocol. The last round of personal interviews with each principal-participant targeted their experience with the CCSS implementation process and evaluated their dissemination of information to teachers. This interview examined both “what” was shared with

the teachers by the principal, as well as, “how” the information was distributed to teachers. These protocols, again, followed Seidman’s model (2006) to gain perspective into the principal’s sense making of the previous information provided to them. Interview Protocol C was important to the study because it offered the researcher insight into the individual principal’s strategy for placing the reform into the teacher’s classrooms. In the case of putting the CCSS into practice, most principals seem to be a driving force. Firestone and Louis (1999) concluded that, functioning as leaders, principals can serve to transform school cultures or to maintain them. This made the actions of the principal pivotal to their staff’s understanding and willingness to work toward CCSS implementation. School reform often meets its nemesis at the classroom door; researchers posit that teacher’s uncertainties can work against reform, (Darling-Hammond & McLaughlin, 1995). The organization of schools and lack of time for collaboration forces most implementation processes to be difficult. Many researchers believe that the organization of the school itself inhibits change and works against deep-second order transformation (Cusick & Wheeler, 1988; Louis & Kruse, 1995). Interview C allowed the researcher to conceptualize the principal’s approach to large-scale change while also providing insight into the individual principal’s approach to building leadership. The researcher asserts that these leadership activities effected how the principal-participants worked to implement the CCSS in its infantile stage.

Artifacts. For a secondary data set, I also reviewed multiple documents, including meeting agendas, meeting minutes, and electronic mail (e-mail) to help assess the flow of information to the building principal. Bogdan and Bicklan (1998) asserted that the written word is the most important approach to qualitative research, in both collecting and disseminating results, (p.4). It is important to note that beyond the interview data, I was able to assess that

principals were given a multitude of information through electronic mail, face-to-face meetings, meeting minutes, and memoranda. This information, although different when comparing the three districts, aimed to create uniformity within each individual district since the home district for each participating principal included more than one middle school. Interview protocol two allowed me to gain a sense of the degree to which information that flowed to the principals, within the same district, was uniform. The individual districts strove to provide their principals with consistent, unvaried information.

Data Collection

The data collection portion of this research took place during the 2012-2013 academic school year. Interview protocols and the research design of this study were approved prior to data collection by the University's IRB program. Primary data was composed of personal interviews with each principal-participant. Secondary data included artifacts and documents.

Table 3 provides an overview of the secondary data collected by the researcher.

Table 3
Secondary Data Artifacts

Principal	Annual Report	Principal Meetings		Department Head Meetings		MEAP Data	District CCSS Data	ISD CCSS Data
		Agenda	Minutes	Agenda	Minutes			
A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
B	Yes	Yes	Yes	Yes	No	Yes	No	No
C	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

All recorded and transcribed pieces of data were shared with the principal-participants, in a timely fashion, after the respective interviews to ensure validity. I conducted follow up communication via phone and e-mail also help to clarify answers given by each principal-participant.

The researcher, again, followed Seidman (2006) in the approach and organization of all data for this qualitative study. During qualitative research, it can be difficult to keep track of all participant information. Seidman acknowledged the attention needed for detail and “managing the extensive files that develop in the course of working with transcripts of interviews” (p.112). In the following section, I will discuss the data analysis procedures for both the primary and secondary pieces of data.

Primary data: Interviews. Files, specifically the primary data in this case, must be managed in a manner to “trace interview data to the original source on the interview tape at all stages of the research” (Seidman, 2006, p. 112). I personally recorded and then transcribed each interview. Seidman encouraged this approach further positing “interviewers who transcribe their own tapes know their interviews better” (p.114). I listened to and transcribed the audio recordings immediately after the conclusion of each interview. This was done to further ensure the validity of the data collection. Seidman argued that this is a primary method of creating text from interviews. I continued to follow Seidman’s approach when aggregating the data from the principal’s interviews. It is important for the researcher to remain objective and not to impose his or her personal beliefs upon the data. “The researcher must come to the transcripts with an open attitude, seeking what emerges as important and of interest from the text” (Seidman, 2006, p.117). This was imperative to maintain the integrity of the study because the researcher is also a middle school principal. The researcher began data analysis of the interviews by looking for trends among the three principal’s responses; she used a bracket system to mark passages that were of interest (Marshall, 1981; Seidman, 2006). By employing the brackets as a strategy to acknowledge similarities and differences among the principal’s individual responses, I was able to discern parallels and variances in the both the information flow to and from the principals.

Patterns and trends of data were identified through the process of examining and rereading interview transcriptions (LeCompte & Preissle, 1993). Figure 2 demonstrates the steps that I took to analyze the data.

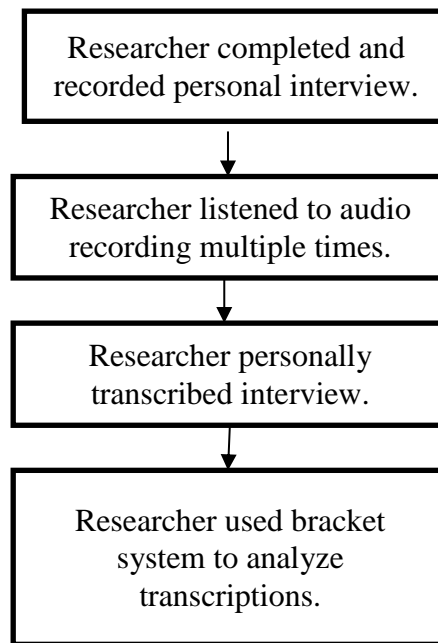


Figure 2. Examining Interview Protocols

I collected secondary data to further support the findings within this study. Secondary data consisted of meeting agendas and minutes, documents shared with the principals from the intermediate school district and the local school district, electronic mail communication, each school's annual report, and individual school's state assessment data. The following section will discuss analyzing of secondary data and artifacts.

Secondary data: Artifacts. The documents provided, e-mails, and other communications were examined for emerging trends and evidence aiding the researcher in the identification of information flow of the CCSS. The information, findings, and patterns are presented later in this study with qualitative descriptions and tables. I followed a similar

approach in the data analysis process of secondary data that was completed with the primary data analysis.

I organized all of the artifacts in binders by sample principal. I then used a bracket system to extract pertinent information. The researcher attempted to reduce and organize the material into a form that was manageable. The reduction was made by noting important pieces of information and marking both similarities and differences among the three principals. “Reducing the data is a first step in allowing the researchers to present their material and then to analyze and interpret it” (Seidman, 2006; Wolcott, 1994). The artifacts and other data were then grouped into categories that made sense (Seidman, 2006). I organized similar pieces of data together and then noted to which principal each individual data belong. I did this in an attempt to keep track of participants and preserve data close to its original source (Seidman, 2006). I then created a profile of each principal-participant and deciphered the ways in which each principal received and disseminated CCSS information. Seidman encouraged the creation of a profile to ensure that the words of the participant are presented (2006). Once the profiles were created, I began to mold the data into text. The text represents my construction of a tangible idea of each principal’s reception and dissemination of CCSS information.

Summary

The first objective of this study was to understand the ways in which three middle school principals were provided with information regarding the CCSS and to identify specifically what information they were given. The second objective was to identify the methods that these principals used to disseminate information to their teachers and to ascertain the specific information that they were sharing. A cross-case analysis was used to examine similarities and

differences among the three sample principals. To achieve this, I employed a qualitative approach using Seidman's model of interviewing (2006).

Essentially, local control of large-scale school reform can create differences in both the understanding and implementation processes within individual schools. Although research asserts that the standards, themselves, have had a positive effect on education, there is little consensus regarding the impact that the standards ultimately will have in classrooms by way of districts and schools (Rowan, 1996). This study gauged how large-scale educational reform traveled to three individual middle school principals and their schools. It also reviewed the interpretations that these principals made from the information that was provided to them from numerous sources. The results and outcomes of this study will be discussed in the following chapter.

CHAPTER FOUR

RESULTS AND OUTCOMES OF RESEARCH

The following chapter will discuss the outcomes of this inquiry into CCSS implementation. This chapter will specifically address the flow of CCSS information to and from each sample principal. Regarding information flow to the principal, the researcher will discuss the role of the intermediate school district, as well as, other sources that provided CCSS information to each of the principals. When examining the flow of information from each principal, the researcher will focus on two pieces of information (a) to whom does each principal provide CCSS information, and (b) what information does each principal frame for these individuals. All outcomes of this research are based upon data collected primarily during the spring of 2013.

Role of Intermediate School Districts

There is a substantial amount of top-down driven change, coming from the direction of the legislature, driving the CCSS initiative. The CCSS promises higher and uniform standards among all states to improve education on a grand scale (Association for Supervision and Curriculum Development, ASCD, 2012). Research supports the idea that providing uniform expectations for the performance of all students can equalize content and instruction thus improving schools (Ogawa et al., 2003). However, both of these entities, education and instruction, have proved resistant to reform efforts in the past (Cuban, 1984; Desimone, 2002; Tyack & Tobin, 1994). Therefore, local agencies may be more actively involved to support this second order change. I define the CCSS as a second order change citing Heifetz (1994). Adaptive work requires changing values, beliefs, or behaviors (Heifetz, 1994, p. 22). Teachers will have to learn and employ new skills to support CCSS instruction in schools. There will be

an effort to incorporate real-life learning and application of CCSS concepts. Administrators alike will face a need to adapt. As instructional leaders, administrators must have some degree of understanding of content areas to recognize and support quality instruction (Stein & Nelson, 2003). As evaluators, administrators will also need to have comprehension of what instruction looks like under the CCSS.

The role of the intermediate school district, in providing information to the three sample principals in this study, offered one of the main differences in terms of the source of information for these principals and for the pathways through which information reached them. One of the intermediate school districts, District One, took an active role, not only in terms of providing information, but in affording principals the opportunity to create curriculum and coherent units for implementation of the CCSS at the building level. The other intermediate school district, District Two, served more as a conduit of information, passing information regarding the changes to the CCSS to members of individual district's central office employees and teacher-leaders who then gave the material to the building principals. There was no evidence indicating Intermediate School District Two facilitated curriculum work or anything other than indirect information to notify or educate building principals about the CCSS. ISD Two did provide information directly to central office personnel and to teacher leaders who had responsibilities for disciplinary curriculum planning and generating ideas of supplemental material that could aid CCSS instruction. The section that follows examines how the ISDs worked with the relevant principals.

Intermediate school district one/Principal A. Commencing in the 2010-2011 school year, nearly 3 years before data were collected for this dissertation, Principal A began receiving information from Intermediate School District One (ISD One) regarding impending changes and

the CCSS. The information encompassed not only the standards themselves, but also examined the Smarter Balanced Assessment tool, which has been designed as the universal exam for measuring student outcomes. In September of 2011, Principal A was invited to, and attended, an informative session at ISD One with colleagues. She was given insight into the ELA and Math Standards, as well as the Common Core Literacy Standards. This informational session began Principal A's journey to building knowledge of the CCSS Initiative.

Principals present were provided with time to read, understand, and interpret the CCSS and how they might differ from the current standards' system. According to research, principal's building understanding of subject matter is important and related to their leadership (Stein & Nelson, 2003). The principals had the opportunity to ask questions and receive answers, though they might have been tenuous at the time. Principals were able to inquire into the timeline for Smarter Balanced testing and gain information about the state's adoption of the CCSS. Questions were described by Principal A as surface during this time because the CCSS was relatively unfamiliar to most educators.

The principals at the meeting were provided with a schedule of professional development dates and a plan to include instructional staff in the creation of units that followed the CCSS. These teams of educators, created in 2011, included a consortium of teachers and administrators from ISD One's local school districts. They were referred to as *pilot and review teams*. The pilot and review teams were content specific and aimed to create consistent, teacher-friendly units ready for implementation. The creation of these pilot and review teams, organized and facilitated by ISD One, provided an avenue for Principal A and her teachers to become involved in devising Common Core units and curriculum. It also provided time for Principal A to become familiar with the CCSS and conceptualize how instruction might need to shift within the walls of

the classroom as the teachers began to implement the CCSS. According to Principal A, training at ISD One was an important first step in her own understanding of what she should expect to see in classrooms in terms of CCSS instruction.

Principal A's district has long held a strong vision and expectation of continuous improvement; as explained during qualitative interviews by Principal A. Operating within each content area and convening at ISD One, the pilot and review teams worked to provide teachers with a frame of reference and a starting point for CCSS implementation. As research has indicated in other cases, the educators in Principal A's district took the information about the CCSS, tried to consider the guidance, and began to plan for consistency in instruction. The curriculum standards provided teachers with a common sequence of targets at which to aim instruction. Standards can improve the effectiveness and efficiency of instruction by specifying common targets, suggesting instructional strategies, and assessing the performance of students and teachers (Elmore, 1990; Rowan, 1990).

Although principals began to receive CCSS information during the 2010-2011 school year from ISD One, intensive work where CCSS units were devised by pilot and review teams did not begin until the 2011-2012 school year. As stated by Principal A, pilot and review teams were composed of both teachers and administrators; although the documents provided to the researcher did not indicate the position of each person on the list. The documents solely provided individual's names, contact information, and the district that they represented. Table 4 is a summary of the data provided to the researcher by Principal A.

The ELA and Math Pilot and Review Teams met regularly throughout the 2011-2012 school year, including during summer months, to examine the CCSS and to devise effective Common Core units. Principal A indicated that teachers were not compensated for their work on

the pilot and review teams; the teacher’s participation was voluntary. However, teacher leaders within the building were approached by the principal and encouraged to participate. Principal A further stated that members of ISD One were part of these teams; however, the work and

Table 4
Pilot and Review Team Information

Pilot/Review Teams	Total Members of Team	Districts Represented	ISD Representatives	District A Representatives
Team A	72	25	1	2
Team B	66	19	1	2

decision making was executed by the local school district representatives.

ISD One utilized an on-line curriculum-mapping program to store the pacing guide, learning activities, and the unit work completed by each pilot and review team. This made all of the collaborative curriculum work accessible to the educators within ISD One. Although ISD One indicated that usage of these CCSS units was voluntary, within District A there was an understanding that these units would be modified by the Subject Area Committees (SACs) and then used in classrooms. Principal A specified that she would hold teachers accountable by looking for evidence of these units during classroom instruction. “One of the greatest strengths of positional administrators acting as instructional leaders is the accountability they bring to the reform process by virtue of their positions as evaluators” (Stein & Nelson, 2003, p. 428).

Principal A stated during her second interview that the CCSS units were detailed and usable. She assumed that many districts probably just used them as “turnkey packages” (personal communication, Principal A, March 13, 2013). Principal A followed this comment by stating that District A always preferred to look things over and make adjustments. These adjustments were carried out by the SACs within District A.

In her second interview, Principal A specified that teachers and administrators in her district worked to tweak and modify the units. SACs, composed of teachers and administrators within District A, modified the units in order to align them with District A's curriculum maps and common assessments. Principal A stated that the units were viable, as stated by her teachers, and that the role of ISD One was moderate in her building's implementation of the CCSS. Principal A further elaborated during her interview what she meant by moderate. She said that in both Language Arts and math, School A was using the units that were developed collaboratively through the consortium at the county level (personal communication, Principal A, May 20, 2013). Principal A further indicated that SAC teachers piloted the units during the 2012-2013 school year and that the units were going to be the backbone of School A's CCSS instruction.

Figure 3 indicates the timeline of CCSS Initiative events within District A.

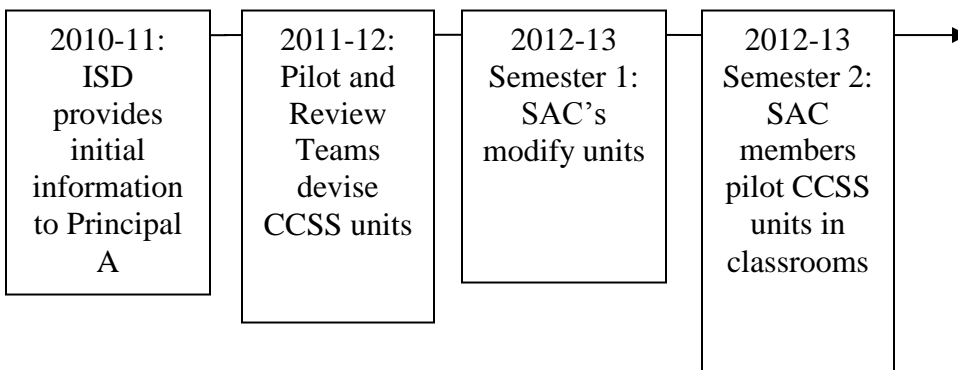


Figure 3. Timeline: District A

Principal A believed that the CCSS units created at the county level particularly supported her English Language Arts teachers in their transition to CCSS instruction because, "change is difficult for them" (personal communication, Principal A, March 13, 2013). In her opinion, the English Language Arts teachers were the most resistant to the reform. Principal A stated that these teachers wanted to continue use of their anthology textbooks and follow instruction similar to previous years. Principal A believed that with guidance from the SAC's

and members of the pilot and review teams, and the expectation of the district, the English Language Arts department would become more receptive.

Intermediate school district two/Principal B and Principal C. I will be discussing both Principal B and Principal C within this section because both of these sample middle schools lie under the jurisdiction of Intermediate School District Two (ISD Two). Research has begun to uncover how curriculum standards are implemented and with what results, but much remains to be understood about the variability of implementation by local districts and schools, (Ogawa & Collom, 2000). Although interpretation and variances can take place at every level of educational reform implementation, neither Principal B nor Principal C indicated that they received direct support from or were invited to CCSS curriculum work by ISD Two. This fact made noticeable, for the researcher, a level of discrepancy at the Intermediate School District level that had important consequences for how this study unfolded and for the opportunities for principals to come to understand the CCSS, particularly when contrasted with Principal A in ISD One. While both Principal B and Principal C acknowledged receiving information regarding the CCSS from their respective instructional departments, neither principal attended direct training with ISD Two.

Principal B did not provide evidence or acknowledgement of working with ISD Two directly. Principal B did indicate, however, that representatives from his district attended informative meetings at the intermediate school district level. Principal B stated that department heads from core content subject areas, as well as curriculum coordinators from his district were provided with CCSS material and curriculum alignment changes that were going to be helpful for CCSS implementation. Principal B further stated that both the department heads and curriculum coordinators for the district did return from these meetings at ISD Two and de-

briefed with him about the resources needed to support CCSS implementation in his building. However, Principal B did not provide evidence that demonstrated direct information flowing to him from ISD Two.

Principal C, whose school is also located within ISD Two, described the role of ISD personnel as “minimal” in terms of direct CCSS support to Middle School C. This was in response to the researcher probing into the influence of the respective ISDs on CCSS information dissemination to each of the sample principals. Principal C indicated that district central office members and some department heads had been to ISD Two for professional development and meetings. Principal C was unsure to the specifics of the professional development because she did not personally attend these trainings. She stated that all of the district officials who did attend training at ISD Two were responsible for sharing CCSS information with the principals at principal meetings. Although information was shared with Principal C, she indicated that the majority of information regarding the CCSS was then, and continued to be provided to her directly from persons in District C’s Central office. Specifically, Principal C indicated that individuals from her district who attended training with ISD Two were provided with documents. According to Principal C, these documents contained “grade level lay outs and best practices that staff are supposed to be doing” (personal communication, Principal C, February 20, 2013). However, the department heads who attended the training at ISD Two were in possession of the documents. According to her interview, Principal C was not familiar with the documents, nor was she able to provide a copy. Principal C did not provide data evidential of receiving direct information or training from ISD Two.

Summary. Most school reform efforts have struggled to successfully change the school organization and may have only affected districts and schools on the surface (Ogawa & Collom,

2000). Perhaps the inclusion of the ISD within the formula of school reform can aid districts in the implementation process and work to provide consistency among local school districts within the same ISD. However, variability among implementation of school reform by local districts remains to be evident (Ogawa et al., 2003). Although the previous section reviewed the role of the ISD in CCSS implementation, the following section will examine the local school district and their methods of disseminating information to the three sample principals.

Flow of CCSS Information to Principals

District A. Spillane (1996) found that district policy could affect the enactment of state curriculum initiatives and that the vertical and horizontal segmentation of the district organization contributed to variation in the implementation of state curriculum policy (Spillane, 1998). After reviewing multiple sources of qualitative data, including interviews, meeting memoranda, and meeting minutes, it was clear that Principal A was receiving consistent information regarding the CCSS from multiple sources at the district level including, Subject Areas Committees (SAC) and the Assistant Superintendent's Office. According to Principal A, this was also her estimation (personal communication, Principal A, March 13, 2013). With the alignment of information being provided to Principal A, there was not an issue of confusion or lack of reform understanding with Principal A. I was able to substantiate Principal A's position of district-consistency after reviewing minutes from both District A principal meetings and SAC meetings. The information coming from the Assistant Superintendent's Office, via principal meetings, was clear, constant, and evident in all data pieces reviewed by the researcher. Due to the fact that Principal A attended both SAC and principal meetings, she was able to confirm the alignment between the two flows of information. Figure 4 demonstrates the flow of information to Principal A from District A:

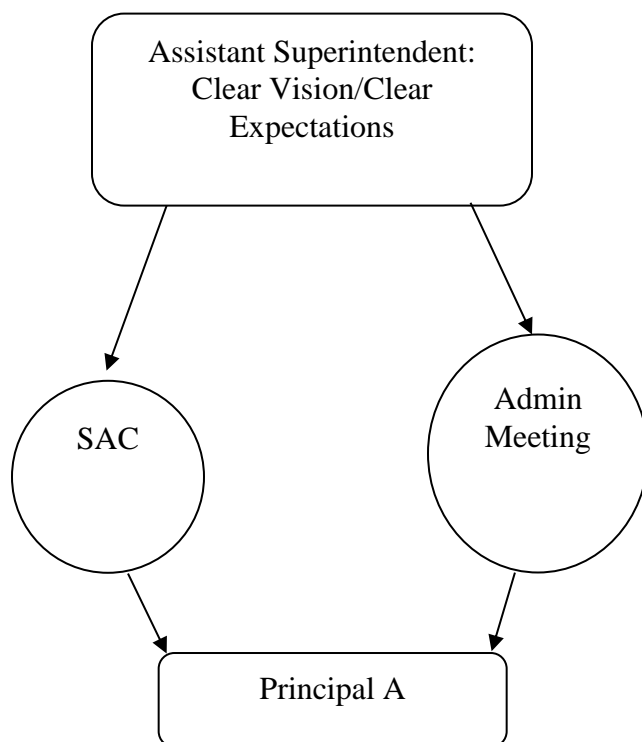


Figure 4. Information Flow to Principal A

The researcher suggests that District A had a very systematic approach to their CCSS implementation. According to literature, this can work to improve student outcomes (Smith & O'Day, 1991). Principal A was not only provided with information regarding the CCSS, but she also participated in training and dialogue with her colleagues about what CCSS instruction would look like in the classroom. The principals, with the support of the Assistant Superintendent's office, constructed knowledge about the CCSS and Common Core practice. The systematic approach to school reform and information flow to Principal A was two-fold:

1. Principal A participated in regular district principal meetings where information would be provided to her from the Assistant Superintendent's Office.

2. Principal A participated in a Subject Area Committee, composed of administrators and teachers, in order to receive curriculum information and to be part of the curriculum development process.¹

Principal meetings. Research supports the practice that curriculum and instructional information in local school districts regularly derive from the Assistant Superintendent. Teachers and school administrators agreed that the assistant superintendent for instruction had initiated standards-based reform to sharpen the focus of the district's curriculum (Ogawa et al., 2003). During the principal meetings in District A, information was provided to Principal A in a multitude of methods to ensure understanding of both the CCSS reform and the expectation of how instruction would need to shift to support CCSS implementation. Principal A indicated that numerous items were covered at principal meetings, beginning in the 2010-2011 school year to support principal learning. This was prior to the impetus of the pilot and review teams at the ISD level. After ISD One become more involved with the creation of pilot and review teams during the 2011-2012 school year, the CCSS became a running agenda item at District A's principal meetings. Items regularly covered included:

1. Articles from various educational journals including ASCD (Association for Supervision and Curriculum Development)
2. On-line videos (The Hunt Institute)
3. District A's Intranet encompassing Common Core resources and websites
4. Smarter Balanced Consortium
5. Smarter Balanced Sample Exam Items

¹ The researcher notes that Principal A began as a member of the Math SAC; however, she was moved to the ELA SAC by the Assistant Superintendent to provide support.

Principal A was responsible for regularly reviewing articles and information regarding the CCSS and then subsequently discussing and assessing implications from this literature at district principal meetings. Principals were able to construct and devise a concrete idea of what the CCSS were and the implications that it had for all teachers within their buildings. Considering herself to be a member of a learning community of principals (Louis & Kruse, 1995), Principal A was able to build knowledge about the CCSS by reflecting on literature and information with colleagues.

Principal A stated that “District A has a strong vision and flow of information.” She further posited that this flow of information went in two directions: (a) from the Assistant Superintendent to the Principals, and (b) from the Assistant Superintendent to the Subject Area Committees. Principal A asserted that this model ensured that educators in this district were “always receiving the same information and messages” (Principal A, personal communication, March 13, 2013). Below, the researcher will discuss the organization and responsibilities of the Subject Area Committees (SAC) practiced within District A.

Subject area committees (SAC). Subject Area Committees were an important tool for District A in both allowing educators to receive and disseminate information. These committees were designed to have membership of teachers and administrators. Principal A, who was initially a member of the Math Subject Area Committee, was moved to the English Language Arts Subject Area Committee by the District, as she said, “to provide support” (personal communication, Principal A, March 13, 2013). As I previously stated, Principal A asserted that the ELA Department was most resistant to the CCSS curriculum changes and wanted to follow previous year’s instruction. Principal A was asked by the Assistant Superintendent to move from the Math SAC to the ELA SAC to provide information on the CCSS initiative and to reiterate

District A's expectations regarding the CCSS. Principal A guided the teachers by regularly discussing District A's expectations regarding the CCSS Initiative and sharing information that she received from both ISD One and District A principal meetings. During the ELA SAC meetings, teachers and administrators continuously worked on curriculum mapping and developed ideas for modifying instruction.

While participation in these meetings gave members the chance to create products through their work, the process of creation was preceded by information coming to all members. Thus, membership on a SAC was also a means of information flow to Principal A. Although inevitably the information coming to the SAC was congruent with the material provided in the District A's principal meetings, Principal A was able to review the information and provide input during the English Language Arts SAC meeting. According to Principal A, not all principals were or are part of a SAC; therefore, this provided her with an advantage. Subject area knowledge is critical for administrators and educational leadership (Stein & Nelson, 2003). Principal A received information regarding school reform and the CCSS on more than one occasion and through different venues. She was also able to interact and talk with teaching staff at the SAC, which gave her a better understanding of what implementation of CCSS entails. SACs were used as a vehicle for teachers to provide input and to give feedback on instructional decisions made by District A's administration. Principal A indicated during her interview that use of the principal meetings and SAC meetings were an effective method for providing consistent, clear information to all staff (personal communication, Principal A, March 13, 2013). Principal A believed that the inclusion of both principal meetings and SAC, as an added value, aided in disseminating District A's strong vision for CCSS instruction.

District B. Principal B received information regarding the CCSS from two primary entities: (a) Two District Curriculum Coordinators, and (b) a professional organization, The State Association of Secondary Principals. As shown in prior research, interviewing principals allows the researcher insight as to how that district approaches the aspect of large-scale educational reform. Ogawa and colleagues (2003), for instance, interviewed school principals to learn how, from their perspectives, the district developed and implemented standards-based curriculum. I reviewed qualitative data from interviews and district documents; analysis indicated that District B provided Principal B with less specific information regarding the CCSS. By utilizing the descriptors *less specific* and *summary*, I assert that Principal B was provided with information regarding what had occurred at joint meetings between the curriculum coordinators and department heads after the conclusion of the meetings. Principal B did not attend these meetings and was not part of the decision-making process. Figure 5 organizes that data that was provided by Principal B and reviewed by the researcher.

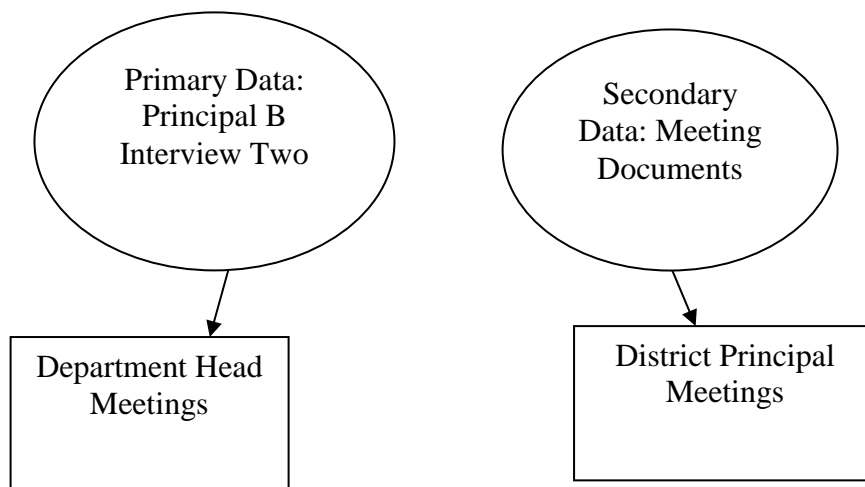


Figure 5 Data Review: Principal B

Within District B, there were two primary entities responsible for CCSS implementation, the District Curriculum Coordinators and the Department Heads. These individuals were sent to extensive trainings to garner information regarding the CCSS. These trainings were usually facilitated by ISD Two. The District Curriculum Coordinators were the ones responsible for being informed about the CCSS. District Coordinators, specifically, would then share what Principal B called *summary* information utilizing face-to-face meetings, e-mail, or memoranda.

District Curriculum Coordinators. Principal B stated that he received information regarding the CCSS directly from two District Curriculum Coordinators. According to Principal B, the District Curriculum Coordinators had responsibility for curriculum and professional development within the four core content areas (personal communication, Principal B, February 22, 2013). One of these individuals was responsible for English Language Arts and social studies; the other Curriculum Coordinator facilitated math and science for District B. The Curriculum Coordinators worked directly with respective department heads to facilitate curriculum work within District B. Principal B defined curriculum work as the following:

1. Re-writing common assessments to align with the CCSS
2. Re-aligning curriculum and re-assigning grade specific subject areas to parallel the CCSS (personal communication, Principal B, February 22, 2013).

According to Principal B, this curriculum work was completed at the Curriculum Center located next door to Middle School B. Principal B, and other principals who worked in District B, then received updates and information at principal meetings and via electronic mail primarily from curriculum coordinators. Principal B stated that the CCSS and curriculum work would be a brief portion of the meeting agenda and that the agenda would also focus on “day to day operations and business of District B” (personal communication, Principal B, February 22, 2013). Principal B was provided with, in his terms, summary information of CCSS development within his district. This accounted for the fact that Principal B is not a pivotal force in CCSS implementation within his own school. After reviewing field notes, interviews, and documents, I ascertained the following model for information flow to Principal B:

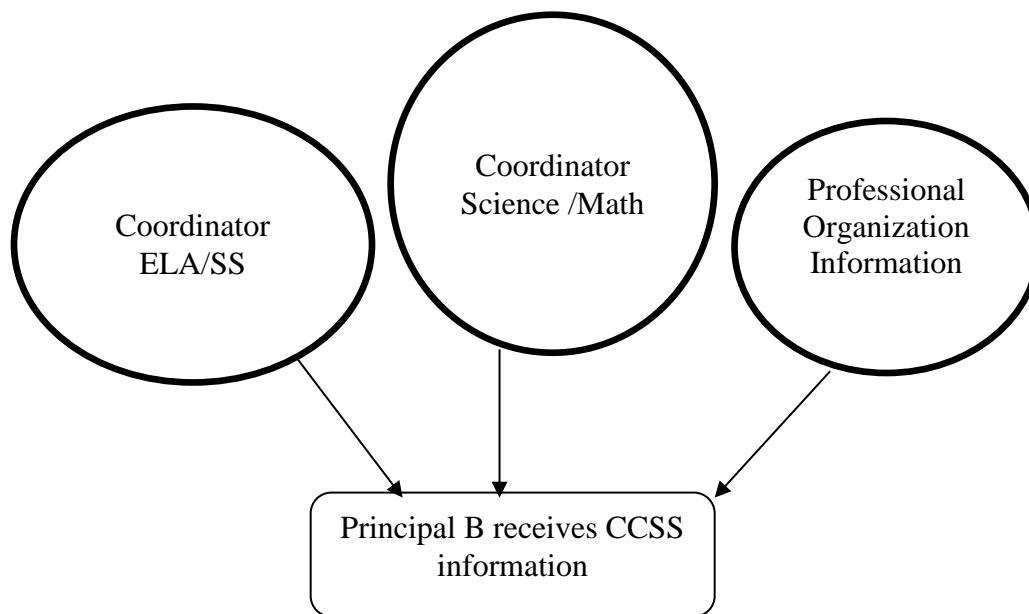


Figure 6. Information flow to Principal B

Principal B provided data that supported his own assertion that he was provided with summary information. Principal meeting minutes indicated that Principal B was told by the Curriculum Coordinators what occurred at curriculum development meetings where department heads worked to align curriculum to the CCSS and re-write assessments. Principal B further posited that the majority of the curriculum work in District B was executed by the Curriculum Coordinators and Department Heads. Principal B was not directly involved in curriculum work, but was provided with memoranda as to how the work was being completed. This was the primary method in which Principal B learned about the CCSS within his district. He was not averse to having little access to CCSS information or not being an active part of the implementation process, but rather Principal B understood that it was not his responsibility. In summation, Principal B ascertained from the information that he was provided from the District Curriculum Coordinators, that the CCSS have the following implications for District B:

1. Curriculum in District B had to be re-aligned to support CCSS learning.
2. Common assessments had to be re-worked to align with CCSS.
3. Students had to develop higher order thinking skills in order to be successful.
4. Students had to learn to address real-life, complicated issues.
5. Principal B would be responsible for ordering teacher resources to support CCSS

learning within the classroom. A list of these items would be delivered to him by the District Curriculum Coordinators and/or department heads (personal communication, Principal B, February 22, 2013).

It is important to note, that Principal B stated that he did not receive direct CCSS training from School District B. Interviews and documents that I reviewed did support this statement. Rather other agents within District B, specifically curriculum coordinators and department heads, were responsible for attending direct training on the CCSS and facilitating District B's implementation. However, Principal B did receive information from an entity outside of District B regarding the CCSS. This entity is a professional organization that networks secondary school principals within the mid-western state where the study was located.

Professional organization. Principal B indicated that he was extremely involved in a statewide professional organization of secondary principals. The Executive Director of this organization was his former colleague, and they were still in contact at the time of this study. Professional networks are a primary method that many educators use to garner information and to build knowledge around the context of their work. Louis and Kruse (1995) posited that what educators do outside of their classrooms may be crucial to school restructuring and may help them to do their essential work better. Principal B indicated that this professional organization was also a primary agent in his building of CCSS knowledge. Because the CCSS is a nationally-

driven reform effort affecting almost all public schools, the professional organization of principals often distributed information to its members. Principal B stated that he received a regular e-blast with information and accessed information on the organization's website. Principal B also provided the researcher with some informative articles, which he had received from the state organization and had read, concerning the CCSS Initiative. He did not attend any of the workshops offered by the organization regarding the CCSS, but was able to construct knowledge from the information provided to him. Principal B stated that the information that he received from his professional organization was similar to that provided by the District Curriculum Coordinators, but found that it was more specific to state level concerns about the standards. This information was broader and did not address the intricacies of local school district implementation.

District C. Principal C identified three primary methods through which she received information regarding the CCSS from District C. Principal C was provided with material and information at monthly principal meetings; she identified the primary source of that information as District C's Director of Secondary Education. Aside from principal meetings, Principal C indicated that she also constructed knowledge about the CCSS from content-specific pamphlets and a series of videos created by central office members at District C. These individuals included District C's Director of Academic Services, the Director of Secondary Education, and the Director of Elementary Education. What makes the usage of the pamphlets and videos interesting to the researcher is that these materials also disseminated information to all teachers within District C. Principal C stated that this plan ensured consistent and correct information for distribution to all practitioners regarding the CCSS and District C's plan for implementation (personal communication, Principal C, May 20, 2013). Principal C stated on numerous

occasions that all information regarding the CCSS flowed out of District C's Board Office. She believed that this flow of information provided support for both administrators and teachers in the learning process of the CCSS.

Figure 7 provides a visual aid to help communicate the researcher's perception of CCSS information flow to Principal C:

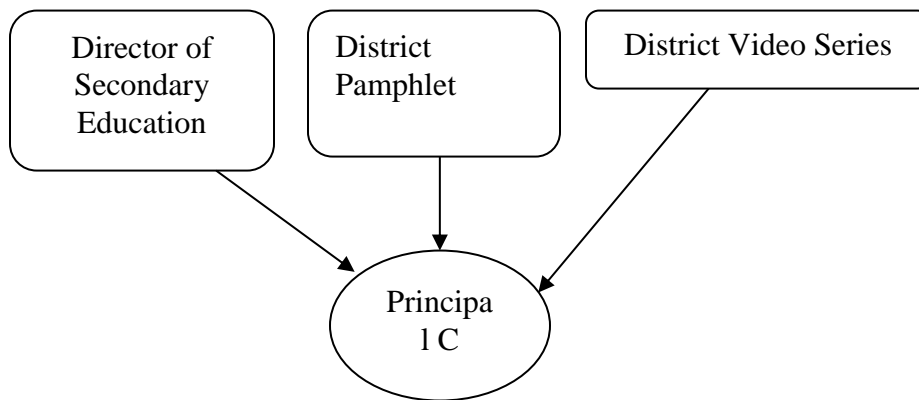


Figure 7. Information Flow to Principal C

Principal meetings. During interview two, Principal C provided information to the researcher regarding monthly principal meetings, at District C, where the CCSS were regularly discussed during the 2012-2013 school year. It was evident from the data collected that the following were themes regularly covered at Principal C's meetings:

1. What are the Common Core State Standards?
2. What is the Smarter Balanced Assessment?
3. Sample Items from the Smarter Balanced Assessment
4. District Plan for implementation including pamphlets entitled: Examining the Common Core State Standards for English Language Arts and Mathematics
5. District Plan for implementation including four-part video series
6. Difficulties of funding curriculum purchases for Common Core implementation

Figure 8 provides a brief timeline of District C’s approach to CCSS information dissemination.

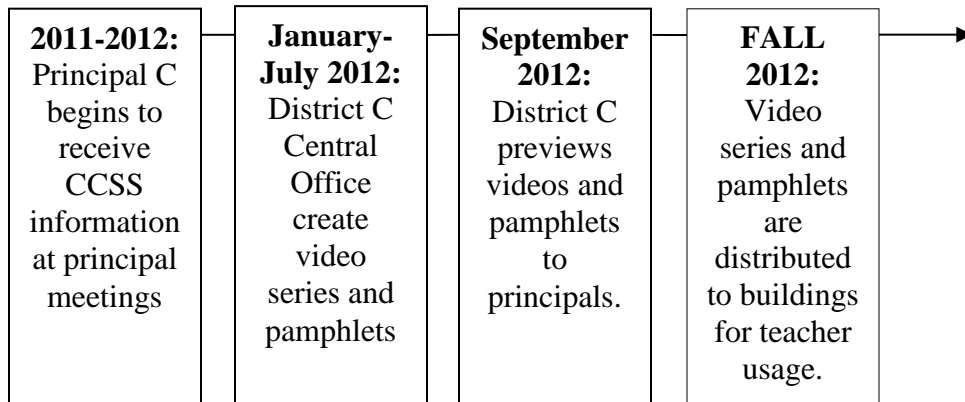


Figure 8. Timeline: District C

At these principal meetings, Principal C was frequently provided with material and information about the CCSS by District C’s Director of Secondary Education. Principal C stated that school reform usually comes out through “media sources as its starts to trickle.” She stated that “you hear rumblings and once they become formalized, they become law” (personal communication, Principal C, November 7, 2012). Principal C further stated that District C is “very good at communicating new laws” (personal communication, Principal C, November 7, 2012). She specified that there was a formal process in place for educating principals at district meetings about new laws and initiatives, explicitly the CCSS:

1. District C’s Director of Secondary Education provided principals with copy of the Common Core State Standards legislation (Common Core State Standards Initiative, 2010).
2. The principals discussed the legislation and its implications.
3. Principals examined becoming aligned and compliant with legislation.

Principal C frequently posited that District C was clear and consistent in the information that was provided to her at principal meetings regarding the CCSS. She also stated that District

C had a clear plan for implementation of the CCSS, and that the pamphlets and video used to support practitioner learning were aligned with information and material provided to Principal C at these meetings. I agreed with this position after reviewing principal meeting minutes, the videos, and the pamphlet for mathematics. Principal C was firm when she stated that there was a district plan for CCSS implementation and that there would not be individual school implementation plans. This was further supported for the researcher by other data provided by Principal C such as District C's CCSS document and the informative video series.

District C's pamphlets: Examining the common core state standards. Additional data provided did support Principal C's position that information flow about the CCSS in District C was one-directional and consistent to all principals. One of the data sources was a bound document, or pamphlet, provided initially to all principals, entitled *Examining the Common Core State Standards*. This was prepared for all educators in District C, in both English Language Arts and mathematics, by individuals responsible for curriculum in District C's Central Office. The pamphlet was essentially a descriptive CCSS handbook, which itemized the shift that schools would need to make regarding classroom instruction, clearly listed all of the CCSS, provided a timeline of when teachers would cover individual concepts, and provided other resources for educators to access. "Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace" (District C Academic Services, 2013, p. 4). The pamphlet further provided resources to guide teachers from skill-based, repetitive practice to incorporate real-world applications. Examples of the resources listed in the pamphlet were:

1. Websites where educators could access narrative problems for both English Language Arts and Math, as literacy was an important concept with the CCSS.

2. Resources where educators could read and gain insight into project-based learning.

These examples were exclusive to the CCSS.

3. Websites where educators were able to go and view examples of Common Core instruction within a classroom setting.
4. Webinars where educators could partake in interactive learning sessions, have reflective dialog with fellow educators, and work to understand the CCSS and its practical application (District C, Academic Services, 2013).

Principal C stated that *Examining the Common Core State Standards* was an excellent resource to support learning and for her construction of knowledge about the CCSS. By providing a copy to every educator within District C, responsibility for implementation became a shared event due to the expectation that all educators were to review this document and dive into CCSS knowledge and practice. Elmore (2000) pushed the field to relocate the authority and responsibility for improving teaching and learning, separating it from the sole control of those "up the chain" of the administrative hierarchy, and embedding that authority and responsibility in the daily work of all those connected to the enterprise of schooling. This document placed the reform at the fingertips of Principal C because she could review resources at anytime, depicting her own schedule. This document was accompanied by a four-part video series of informational dialogue, created by District C, updating educators about the CCSS. Principals within District C were initially responsible for viewing the videos, and understanding their content, prior to its viewing at the building level.

District C's Common Core State Standards video series. Borman, et al.'s (2003) meta-analysis study of comprehensive school reform and achievement during the 1990s referred to a more general review of reform suggesting that site-based management reforms failed to affect

student outcomes positively, in large part because the schools failed to develop coherent statements of beliefs or models for guiding the work and decision-making (Murphy & Beck, 1995). The CCSS exhibits perhaps the largest instructional shift that public schools have been privy to since the implementation of No Child Left Behind in 2002. These Standards' force teachers and administrators to change traditional practice and incorporate a deep-learning process for all students. Because the CCSS dramatically change instruction, districts are assuming control of implementation, and removing it from building principals, to safeguard a thorough implementation process producing consistency and fidelity. In District C, members of central office created a four-part video program to introduce and roll-out CCSS information to all staff, including principals. Principal C asserted that this practice would allow a common message to flow to all of District C's employees. Principal C was accountable for viewing all of these videos, which were narrated by District C's Director of Academic Services and essentially walked Principal C through the CCSS and their implications for instruction. These videos also examined the Smarter Balanced assessment program, which is slated to accommodate the CCSS and serve as the measurement tool for student outcomes. The purpose for reviewing the Smarter Balanced assessment and sample test items, through District C's video series, was to familiarize educators with the types of problems and performance-based assessments that their students will be expected to complete. Utilizing the video series as a vehicle to emphasize the importance of CCSS implementation, the Director of Academic Services discussed the following inferences from CCSS legislation:

1. General overview of the instructional shift needed to support the CCSS using the Depth of Knowledge (Webb, 2006)
2. The CCSS were more concise and manageable for educators.

3. The CCSS required teachers to teach at a deeper level to increase knowledge and application skills for students.
4. The need for students to synthesize and participate in project-based learning in all content areas.
5. Curriculum underwent changes in order to support CCSS in the classroom.
6. The Smarter Balanced Assessment problems will be performance-based and require students to analyze and extract data.
7. The Smarter Balanced Assessment will be given to all students utilizing a computer; thus technology will be needed to support this in all schools.

I was able to see both alignment and commonalities among the three techniques, shown in Figure 8, utilized to inform Principal C of impending changes created by the CCSS. Principal C was able to build her knowledge by attending principal meetings during the 2012-2013 school year, accessing the resources from District C's *Examining the Common Core State Standards'* pamphlet, and viewing each of the videos created by District C. I believe that this configuration of CCSS information, which was also emphasized by District C, supported Principal C in framing key topics for Middle School C's teachers.

CCSS Information Flow from Principals

The second part of data collection and data analysis in this study aimed to identify how each sample principal initiated the process of CCSS implementation within their respective middle schools. It is vital to state that during the 2012-2013 school year, most districts were still in the process of gathering and disseminating information regarding the CCSS. Districts, as a whole, continued to remain within the neophyte stages of implementation, planning learning

opportunities for the fall of 2013. Although the implementation process was early, I posit that full inclusion of the CCSS into public schools will be a multi-year process.

This portion of the study will discern the following (a) to whom does each principal disseminate information, and (b) what does the each principal frame as key components of the CCSS reform? Novice teachers look foremost to principals for guidance and direction on how they should perform in schools (Wood, 2005). I posit that all teachers are novice regarding CCSS legislation. Most educators are not familiar with, at least in practice, CCSS application within the classroom setting. Furthermore, they have a lack of understanding of how to move their classroom practice to support student aptitude measurement using the Smarter Balanced assessment. This assessment will be critical to schools, as it will most likely be the universal measurement tool for the State's accountability system beginning in 2015. Classroom teachers across the state will be looking to their principal and instructional leaders for support, professional development, and guidance as to how the CCSS will operation within their school. Researchers posit that staff commitment and empowerment can help reform design. Finally, for external models of school change to make an important impact within schools, teachers and administrators must support, buy into, or even help co-construct the reform design (Borman et al., 2000; Borman et al., 2003; Datnow & Stringfield, 2000). What principals do with their information and how principals frame the CCSS reform for their teachers will impact how teachers react and motivate toward this change.

Principal A. Principal A was self-described as an instructional leader. She defined this as, "...needing to be in classrooms and making it a priority to see my teachers teaching. I need to be up on best-practice and important research. This allows me to support them and give them viable and constructive criticism" (personal communication, Principal A, October 30, 2013).

Literature and research also posits that instructional leadership requires leaders who are able to balance the instructional program, set goals, scrutinize curriculum, evaluate staff, and provide feedback (Elmore, 2000; Waters, Marzano, & McNulty, 2005). Glickman (1985) asserted that instructional leaders provide direct assistance to teachers. A sound instructional program was important to Principal A; therefore, communicating CCSS information and district expectations to all teachers was essential for Principal A. As stated previously, I argue that District A exhibited a strong flow of information from the Assistant Superintendent's office to Principal A. This information was also aligned and consistent with all information that Principal A was providing to teachers. The researcher was able to take this position after reviewing Middle School A's staff meeting minutes and interviewing the principal. The teachers were the primary individuals to whom Principal A distributed CCSS information.

Before disseminating information to all teachers, Principal A met with Department Heads and other teachers that were members of subject area committees (SAC), to revisit all of the information previously provided by the Assistant Superintendent's office. Principal A did this to ensure that any and all outgoing information was consistent in delivery to the teachers. She stated that this process, and the inclusion of teacher-leaders, helped to disseminate information to all instructional staff. Principal A further stated that she did not want anyone going "renegade" and trying to implement CCSS on their own. She emphasized, that the "District's plan is the District's plan and that is what I expect to see in the classroom" (personal communication, Principal A, May 20, 2013).

After meeting with teacher-leaders within Middle School A, and determining that all of the information was consistent, Principal A would disseminate information at weekly staff meetings using both presentations and reflective discussion. Principal A believed that through

reflective discussion, the teachers had access to two-way information. Principal A stated that teachers were able to bring any concerns to her regarding the change initiative and that she could address them on site. For example, she worked with the staff at Middle School A to create a concept map to organize “what our plans and worries were for Common Core implementation” (personal communication, Principal A, May 20, 2013). Principal A asserted that creating understanding and addressing apprehension helped to alleviate tension and resistance from teachers. By involving Middle School A department heads and other teacher-leaders in the flow of information process, Principal A stated that she “distributes leadership because these teachers can answer questions and work to alleviate staff concerns” (personal communication, Principal A, May 20, 2013). She also empowered these teacher-leaders to present to staff and facilitated professional development learning opportunities during staff meetings. Literature supports the practice of empowering teachers to facilitate large-scale instructional change. Marks and Louis (1997) found in their study examining teacher empowerment and its effects on classroom instruction that they strongly support the argument that empowerment will positively influence teachers’ efforts to improve instruction (p. 263). These teacher-leaders aided Principal A in the dissemination of information by talking with colleagues and modeling some of the assignments and instruction, that they were already practicing, which aligned to the CCSS. From the data provided to the researcher, it was concluded that information shared at weekly staff meetings and through memoranda from Principal A was clear, effectively communicated, and congruent with District A’s approach to CCSS implementation.

Principal B. It is important for me to restate that Principal B did not attend direct training on the CCSS; therefore, in his own words, he had a “lack of complete knowledge of the Common Core State Standards” (personal communication, Principal B, February 22, 2013). This

was further supported by Principal B's statement that he had learned "bits and pieces about the CCSS" but planned to rely on his Department Heads for the dissemination of information (personal communication, Principal B, May 20, 2013). Principal B had allocated monthly staff meetings at Middle School B for the sharing of information about the CCSS. However, Principal B did not facilitate these meetings; the time was given to department heads allowing them the opportunity to share what the CCSS were and implications for instruction at Middle School B.

It was evident, after I reviewed qualitative data, that Principal B did not view himself as a primary agent in CCSS implementation within Middle School B. The Department Heads were responsible for the content and curriculum knowledge; Principal B was responsible for supplying resources. Principal B stated that department heads were exclusively responsible for sharing content information with all teachers. Principal B met with the teachers-leaders, after information dissemination, to assess teaching supplies and instructional material that teachers would need to implement the CCSS fully into classroom learning. Principal B asserted that although he did not share content specific information with teachers regarding the CCSS, he did inform the staff that Common Core implementation would "be a process and is going to take time" (personal communication, Principal B, May 20, 2013). It was obvious that Principal B was not provided with an abundant amount of information regarding the CCSS from District B. I further suggest that this lack of information directly affected both the amount and type of information that Principal B was providing to teachers. The majority, if not all of the curriculum changes and curriculum alignment information, was shared by teacher-leaders within District B. This model is not new to school reform, as supported by literature; some educational reform does focus on the leadership exercised by teachers (Camburn, Rowan, & Taylor, 2003). Principal B

further stated that he could not learn all four subject areas at the same time and that he counted on department heads, within Middle School B, to aid in the flow of information to teachers.

Principal C. Principal C stated that over the past 6 years as principal of Middle School C, she had worked to distribute leadership (, personal communication, Principal C May 20, 2013). She defined this by providing department heads with a more active role. She further stated, “department heads can make decisions and they know that they have my support in terms of material and release time” (personal communication, Principal C, May 20, 2013). Principal C also stated that she “has never ascribed to the top-down leadership models” (personal communication, Principal C, November 7, 2012). Researchers’ definition of distributed leadership support Principal C’s assertion. Gronn (2002) and Spillane (2005) defined distributed leadership as forms of collaboration practices by the principal, teachers, and members of the school improvement team in leading the school’s development. It was apparent, after reviewing meeting minutes and District C documents, that all educators within District C received similar and consistent training regarding the CCSS during the 2012-2013 school year. It was also evident, after reviewing meeting minutes that Principal C regularly circulated information to department heads where they would collectively interpret and then share information with all teachers.

According to Principal C, dissemination of CCSS information to all teachers within District C was executed at the district level. The primary resources for this distribution, discussed previously by the researcher, were the pamphlet entitled *Examining the Common Core State Standards* and the four-part video series created by District C’s Director of Academic Services. Principal C stated that it is her role to support this plan, from District C, by disseminating additional and consistent information at both monthly teacher meetings and

department head meetings within Middle School C. Principal C directed all flow of information to department heads and teachers within Middle School C. All of the information flow was delivered face to face; Principal C states that very little was sent via electronic mail (personal communication, Principal C, May 20, 2013). It was apparent to me that both Principal C and Middle School C Department Heads were responsible for building learning opportunities for all teachers that focused on CCSS information. In communities of practice both principals and department chairpersons are instrumental in shaping opportunities for teachers to learn (Printy, 2010). These learning opportunities were offered through activities and information dissemination at regular staff meetings.

In summary, two of the sample principals provided evidence of CCSS information flowing from the principals directly to teaching staff. The third principal provided evidence that he shared summary information with the staff, by using department heads, but did not deliver direct information personally. Although the CCSS reform is top-down, there does exist an amount of local control and autonomy for individual school districts. There is not a clear role, or specific actions, that each principal should take to begin widespread implementation. As I posited previously, this study was limited to the examination of three public middle school principals and their approach to CCSS implementation. The districts and principals themselves made their own assumptions and “framed” pieces of the reform that they deemed as the most important. It is possible that this allows the reform to become integrated into the individual schools and not only affect the surface (Ogawa & Collom, 2000). The items that were framed by each principal will be identified by the researcher in the next section of this dissertation. These highlighted items, derived from the CCSS Initiative, can support teachers in their sense-making (Coburn, 2001) and conceptualization of practical use.

CCSS Topics Framed by Each Principal

In order for school stakeholders to understand how proposed changes fit with the existing identity of the school, the framing of those proposed changes is crucial (Lindahl, 2010).

Principals extract and interpret information from large-scale school reform. They regularly construct and re-construct information, from a multitude of sources, and embed it within the context of their own school community to build personal understanding. Principals work to make sense of school policy and minimize it into manageable content for their teachers.

According to Snow and Benford, as cited in Lindahl (2010), there are three identifiable forms of framing:

1. Diagnostic Framing- used to identify the problem and affix blame
2. Prognostic Framing- refers to the preferred solutions or approaches to addressing the problem
3. Motivational Framing- is used to generate enthusiasm for action (p. 243).

After reviewing qualitative data including interviews, meeting agendas, and meeting minutes, it was obvious which components, of the CCSS reform, each principal framed for teachers. I assert that each principal focused on the below listed key themes, from the CCSS, to make the parts of the reform more noticeable for staff and, in some cases, to support collective sense-making among teachers (Coburn, 2001).

Principal A. Principal A was concrete in what she believed were the important pieces of information from the CCSS. She highlighted the following components for her staff, and these components were constantly revisited at staff meetings to provide teachers with time to digest and understand their implications:

1. The CCSS will require more rigor in our classrooms. Students will have to complete complex tasks and bring information together.
2. We must start looking at how we present content in our classrooms. We must be teaching complex concepts together and not just in isolation (personal communication, Principal A, May 20, 2013).

Principal A followed a prognostic approach. She stated that her staff needed to feel the urgency for change. Teachers of Middle School A were correct in assuming that they had a lot to celebrate regarding their most recent standardized testing scores. However, as stated by Principal A, change was on the horizon and Middle School A's staff were going to be held accountable to that change.

In order to frame topics and then support collective sense-making for her teachers, Principal A had a clear structure in place. At staff meetings, teachers would take part in "constant dialog and discussion," asking each other "what does CCSS instruction look like in your classroom?" Principal A built in time, during contractual meeting hours, for staff to partake in discussion and reflection because she believed that it would "build ownership and help teachers to understand by showing what they do in practice" (personal communication, Principal A, May 20, 2013). Lindahl (2010) asserted that framing refers to interpreting a situation in a particular manner and that it is a social construction of phenomenon. By having the teachers discuss rigor in the classrooms and tying difficult concepts together during instruction, teachers could compare and contrast their approach with their colleague's approach. They were able to collaborate and create ideas on how to effectively increase rigor in the classroom and improve instruction scaffolding difficult concepts for students. This practice for framing and delivering challenging information to staff is supported by Coburn (2001) in case study of a California

elementary school. Coburn stated, “When confronted with new messages, the early-grade teachers tended to turn to their colleagues to make sense of them” (p.151). The teachers did not talk with their colleagues in isolation at Middle School A to construct knowledge. With the guidance of Principal A, teachers had collective and relevant conversation to build knowledge during staff meeting time.

Principal B. Although Principal B did not construct in-depth, personal knowledge about the CCSS and its implications for curriculum, he was able to highlight and frame one key aspect of the reform for his teachers. Principal B was upfront about the challenges that plagued him during his first two years as Principal of Middle School B. Principal B stated that the majority of Middle School B’s teaching staff was strong-willed and did not necessarily collaborate and share ideas (personal communication, Principal B, November 5, 2012). He stated that they were all strong teachers, but that change was difficult for them. Particularly, they struggled with mandated change and top-down driven reform from administration (Principal B, personal communication, November 5, 2012). Principal B framed and revisited one key component of the CCSS on numerous occasions:

- The CCSS was adopted by the State. There will not be any deviation from this curriculum. This is the direction that District B will be taking (personal communication, Principal B, May 20, 2013).

Principal B took a diagnostic approach to framing. Principal B believed that he needed to be explicit with this expectation because teachers within Middle School B had been resistant to change from prior initiatives. The statement was clear, this is the direction of the district and we will all be following this direction. Principal B framed this topic to encourage teachers to work together examine their instruction. However, as supported by literature, the challenge of

getting teachers to make changes in the substantive core of teaching and learning, then sharing this new knowledge widely with their colleagues, has been one of the most elusive goals for school reform efforts (Miller, 1995, 2000; Louis & Kruse, 1995). Principal B's plan will be to revisit this concept during the August professional development dates for the 2013-2014 school year and at weekly staff meetings. He stated that both professional development time and staff meeting time will be used to emphasize that "the Common Core State Standards must be taught and visible in your classroom" (personal communication, Principal B, May 20, 2013).

Principal C. Principal C received direction and support for the CCSS implementation process directly from Central Office at District C. The materials that provided Principal C with information were consistent with information that was shared with all District C teachers during the 2012-2013 school year. District C's educators were participating in professional development, supporting the construction of knowledge around the CCSS, utilizing district-created documents and a district-created video series. Although this process supported Principal C in her assembly of CCSS knowledge, Principal C also built her own assumptions about the implications of the CCSS initiative. She used her knowledge and interpretations of the CCSS to frame key information for the teachers at Middle School C. I argue that Principal C took a motivational approach to framing in highlighting these key pieces of material:

1. The CCSS require a collective responsibility from all teachers. Not only Language Arts teachers are responsible for reading and writing improvement. This is a collective goal in the School Improvement Plan.
2. Teachers must examine their content delivery to support students in making connections among all content (Principal C, personal communication, May 20, 2013).

After interviewing the principal and establishing her position on collective responsibility, it was made clear that collective responsibility was important to Principal C. Collective responsibility for student learning captures the shared conviction among a school's teachers that all students can and will learn if given the opportunity (Lee & Smith, 1996; Marks & Louis, 1997). Principal C stated that it has long been an issue that teachers at Middle School C have been historically focused on their individual content area. Principal C believes that the inclusion of the CCSS and shift in curriculum will result in students needing to build more extensive literacy and writing skills. According to Principal C, teachers at Middle School C have previously referred to this as a "Language Arts problem" (personal communication, Principal C, May 20, 2013). To combat this mentality and motivate teachers toward action, Principal C will be meeting with all departments, independently, to disseminate the same message to all teachers: reading and writing will be a collective goal at Middle School C. Therefore, we all need to support these goals, within our classrooms, by incorporating more activities that support building student literacy skills. These meetings will take place in the fall of 2013. By asserting a collective responsibility for building goals, Principal C works to levy commitment from all teachers (Marks & Louis, 1997). Through channeling and building teacher commitment behind Middle School C's CCSS implementation plan, Principal C may be better able to support extensive inclusion of the Standards in classrooms.

Principal C also framed instructional delivery as a primary effect of CCSS inclusion at Middle School C. She stated that teacher's content delivery will be critical in helping students to make deep connections with content. Principal C cited the Depth of Knowledge document created at the University of Wisconsin (Webb, 2006), which she used as a tool to communicate for teachers, emphasizing the need to teach at a deeper level. The Depth of Knowledge Levels

organized instructional practices and vocabulary into four levels from simple to more complex for students. These levels focused on the following concepts: (a) Level One, Recall; (b) Level Two, Skill/Concept; (c) Level Three, Strategic Thinking; and (d) Level Four, Extended Thinking. This document also provided teachers with suggested activities that they were able to incorporate into classroom instruction to support learning at all four levels. Levels three and four are most closely associated with the CCSS and provide insight into helping students learn at a “deeper level”. Both Principal C and the video series created by District C referred to the Depth of Knowledge document as a concrete resource for teachers. By framing a tool that supports learning activities and higher-level vocabulary in the classroom, Principal C provided a reference for teachers to build knowledge of CCSS instruction and a practical method for incorporating this instruction into classrooms.

Framing through a Lens of Adaptive Leadership

In his book “Leadership Without Easy Answers” (1994), Dr. Ronald Heifetz discussed the theory of contingency. This theory argued that the appropriate style of leadership is contingent on the requirements of the particular situation. “No single constellation of leadership traits can be associated with the term leadership. That is why there are various forms of leadership” (Heifetz, 1994, p. 17). During the data collection and data analysis of this study, I observed differences in each principal’s approach to CCSS information dissemination. When examining the steps that each sample principal took when leading their respective staffs toward the CCSS reform, I viewed evidence of adaptive learning primarily facilitated by the principal.

Principal A. By utilizing a prognostic approach to framing the impending changes created by the CCSS reform, Principal A worked to build an environment that supported the adaptive learning process for Middle School A’s staff. Middle School A faced a reality of

having impressive student outcomes as measured by the state assessment program; however, due to the accountability process within the state, their achievement gaps identified them as a Focus School. The state's accountability tool recognized Focus Schools as schools that exemplified a large achievement gap between the top 30% of students and the bottom 30% of students.

Principal A had to work with her staff to generate higher outcomes on the state test for the students identified in the bottom 30% of Middle School A. However, in a building that was considered an excellent school, it was difficult for stakeholders to understand that there was a concern about achievement gaps. Principal A worked with staff adaptively to change their perspective and helped teachers to realize that they could no longer rely on having most students score well on the state assessment. Heifetz defined adaptive work as changing values, beliefs, or behaviors; when solutions to the problems that organizations face lie beyond their repertoire of solutions (Heifetz, 1994, p. 22). Principal A had to facilitate adaptive work at Middle School A due to the states new accountability system. Teachers would have to change instruction in the classroom to meet the needs of students that were not performing on the state assessment; or School A could face possible penalties or sanctions. By learning effective delivery of the CCSS from teacher leaders and SAC members, teachers in Middle School A could work to connect challenging concepts for all students to understand.

Principal B. Principal B faced a different challenge than Principal A. Middle School B was located in a large suburban district where there were four other district middle schools. It was clear after multiple communications with Principal B, that each of these middle schools previously had the autonomy to make the majority of instructional decisions at the building level. Principal B had stated that the middle schools within District B functioned as “five charter middle schools,” (personal communication, Principal B, May 20, 2013). I suggest that within

District B, there was not clear direction and information coming from a central location or person of authority. In fact, Principal B had stated that most of the instructional focus of the District B's central office officials was directed at the three large high schools.

Using a diagnostic approach to framing, Principal B informed staff that District B would be implementing the CCSS and that there would not be the opportunity for autonomy at the classroom level. Teachers at Middle School B had been practicing without limitation for many years; therefore, the implementation of the CCSS did have implications for them. It is important to restate that Principal B did not exemplify a great knowledge of the CCSS and regularly relied on department heads for both information dissemination and CCSS implementation at the building level. Although Principal B was not viewed by the researcher as an instructional leader, he still faced the mandate of working to implement the CCSS into Middle School B's practice. By stating a clear expectation to teachers that the CCSS would be the backbone of Middle School B's instruction, Principal B created pressure for the teachers to move toward this adaptive challenge. Although Principal B did not present to teachers or directly discuss with them what CCSS would look like in practice, he regularly stated to them that they needed to access the information from department heads because within District B, CCSS instruction would be expected. Although Principal B did not exhibit the CCSS content knowledge that both Principals A and C yielded, he understood that teachers within Middle School B would have to change current values and practice in order to implement the CCSS with fidelity.

Principal C. I posit that Principal C took a motivational approach to framing CCSS information for staff. Further, she had the support of District C, able to access both the videos and pamphlets to support District C's CCSS implementation initiative. Principal C's predicament differed greatly from both Principal A and Principal B. Although there were

adaptive actions which needed to be taken to support CCSS implementation, Principal C was not identified as a Focus School on the state's accountability list. Therefore, Principal C had a laser focus on the increase of overall student achievement, rather than also needing to focus on achievement gaps.

Principal C had indicated that Middle School C was quite compartmentalized in terms of school improvement goals. Specifically, teachers at Middle School C lacked a sense of collective responsibility for the student achievement goals that drove the school improvement plan. Principal C had been explicit about her belief that all teachers within Middle School C were responsible for literacy and math. Principal C was charged with bridging the gap between what staff believed was their responsibility and how the state's accountability system defined the responsibility of the teacher. The CCSS aims to reinforce the need for both reading and writing across the curriculum. Additionally, the CCSS Literacy Standards for both Science and Social Studies support a cross content inclusion of all literacy components. Principal C understood this concept and worked with both department heads and her staff to generate a sense of collective responsibility among staff. She regularly spoke with staff about threading content together and delivering difficult concepts with one another so that students would be able to understand and make connections. Heifetz defined leadership as an activity to mobilize staff (Heifetz, 1994). Principal C worked diligently to direct staff and to move them toward accepting responsibility for all content and student outcomes. Principal C regularly revisited both District C's expectations, as well as her own expectations with all staff.

Adaptive Actions of Each Principal

The review of the literature included a section on what adaptive leaders do to share responsibility for implementing change with the people on the ground. In the following section,

I will briefly address the adaptive actions that each principal executed to support CCSS implementation at their building.

Principal A. Principal A exercised the following to support her staff in the adaptive learning process. Principal A allowed the issue of CCSS implementation to ripen; she strategically released information, and utilized professional development to build a capacity for adaptive learning at Middle School A. Principal A acknowledged that teachers in her building were accustomed to impressive student outcomes. The reality that they were identified as a focus school by the state's accountability list created some dilemma for Middle School A. Staff had to work rigorously to decrease the achievement gaps within Middle School A. With the exception of teachers who were members of Subject Area Committees (SACs), Principal A was the primary resource of CCSS knowledge at Middle School A. Principal A regularly used staff meetings and professional development opportunities to share CCSS information with her staff and to align curriculum to the CCSS. She further used this time to build knowledge capacity for teachers so that teachers could understand CCSS instructional delivery and execute this within their classroom. Principal A was sure to provide teachers with CCSS information, and to manage the amount of information shared guaranteeing that her staff was not overwhelmed. Principal A also provided opportunity for teachers to share CCSS lesson plans; thus allowing teachers to understand the CCSS at a practitioner level. By constructing CCSS knowledge and incrementally releasing that knowledge to staff, Principal A was able to manage the equilibrium within Middle School A and regularly provide a forum for teachers to learn and understand the CCSS.

Principal B. Principal B clearly placed the responsibility of implementing the CCSS reform on his teachers and utilized professional development time to support the implementation

process. As I previously stated, Principal B admittedly did not have vast knowledge about the CCSS reform nor how the CCSS should resonate within the classroom instructionally. Principal B viewed CCSS knowledge and instructional implementation as the responsibility of the teachers and department heads of Middle School B. He relied on department heads to share CCSS information with all staff and to provide examples of CCSS instruction. Principal B was clear about his directive to the teachers of Middle School B: he would be in classrooms and would be looking for evidence of CCSS instruction. This created a sense of urgency for teachers at Middle School B as teachers understood that this would have implications for teacher evaluations. Although Principal B did not ascertain first-hand knowledge of the CCSS, he provided time for teachers to learn about the CCSS from their colleagues and was clear about his expectations.

Principal C. Principal C yielded both extensive knowledge about the CCSS Initiative and the intricacies of how District C facilitated large scale reform. Furthermore, Principal C understood that staff buy-in would be crucial to facilitating a successful CCSS implementation process. I argue that Principal C worked to mobilize staff toward the change by brokering commitment from the teachers and supporting CCSS knowledge building. District C's systematic approach included pamphlets and videos, which all instructional employees were expected to view. With this tangible support from District C, Principal C had access to uniform materials that both she and department heads could use at staff meetings to construct CCSS knowledge. Principal C had previously built a network of leaders at Middle School C during her tenure. These leaders were the department heads at Middle School C, and Principal C regularly empowered these department heads to share information and to provide her with feedback regarding CCSS material. Principal C understood that these teacher-leaders had the ability to support her in the implementation process. Principal accessed their knowledge and power as

building leaders to disseminate CCSS information and expectations to all staff. By empowering department heads to share information, Principal C was able to motivate Middle School C staff in the direction of CCSS implementation with little resistance.

Each of the sample principals exhibited adaptive leadership qualities within their practice of CCSS implementation. It is important to note that although CCSS legislation begins uniformly, the ways in which individual principals approach CCSS implementation can vary from building to building.

Summary. This section focused on how three middle school principals both received and disseminated information regarding the CCSS. The following chapter will examine each sample site and complete a cross-case analysis of the three principals. I will address significant differences and similarities among the three sample principals.

CHAPTER FIVE

CROSS-CASE ANALYSIS

In the following chapter, I will complete a cross-case analysis of the three middle school principals covering the following domains: biographical information of each principal, information flow to each principal from their respective intermediate school district (ISD), an evaluation of the individual district personnel responsible for providing each principal with CCSS information, the structure of principal meetings within each district, and the challenges, brought on by the CCSS implementation, as dictated by each sample principal. I posit that in some cases, there were significant differences between the three sample principals. After spending over seven months collecting qualitative data from each of the three principals, I have both extensive and intricate information about each District's approach, and each principal's approach, to CCSS implementation. In the section below, I attempt to distinguish both parallels and variances among the three principals identified in this study.

Biographical Information of Sample Principals

I began data collection interviewing each of the three middle school principals about both their professional and educational backgrounds. Seidman (2006) argued the need for qualitative researchers to learn about the participant's experience within context by asking him or her to tell as much as possible. Each of the three principals was questioned about their educational background and the professional circumstances that led to them becoming a principal. I assert that these experiences provided the principals with the opportunity to construct knowledge about the school organization, the role of principal, and school reform. When comparing the three principals, each one's background was diverse and supported the idea that previous practice and

interaction with school reform contributed to the way in which the principals addressed CCSS implementation within their building and how they executed the role of principal.

Principal A. Principal A previously worked as a certified public accountant (CPA), prior to becoming a teacher, and had a strong business background. This experience provided Principal A with a spectrum, and understanding of professions, outside of education. Principal A also was an adjunct instructor at the collegiate level, at three local universities, where she was able to build her practice of teaching, instructing college students on business and accounting. By her own admission, Principal A was decisive, organized, and paid attention to detail. As an instructional leader she was in classrooms, providing feedback, and relieving ineffective teachers. Due to her business background, Principal A was the consummate instructional leader, able to multitask and create equilibrium within her professional practice. She handled the managerial component to administration while providing her staff with instructional direction and clear expectations. She had a firm handle on time management and did not appear to be overwhelmed, but rather dealt with the issues at hand. As an instructional leader, Principal A balanced a strong instructional program with the demands of compliance and paperwork (Elmore, 2000; Waters et al., 2005).

A primary indicator of Principal A's ability to balance the demands of principal was provided to the researcher in the form of data. The data was composed of documentation that Principal A's school was designated as a "Focus School" by the State's accountability system (personal communication, anonymous, 2012). Although School A was high-achieving by all accountability measures, there was a large gap between School A's top 30% of students and the bottom 30% of students. Principal A provided evidence that Middle School A housed District A's Talented and Gifted program (TAG) for accelerated students. She acknowledged this as a

possible cause for the achievement gap (personal communication, Principal A, October 30, 2012). Being identified as a Focus School had resulted in the need for Principal A to complete extensive paperwork and numerous pieces of compliance for the state. Principal A asserted that she completed the majority of the paperwork to “guard” her teacher’s instructional time. By completing the work, she freed up barriers and tasks that teachers would otherwise have had to complete. When there were paperwork and compliance issues that teachers had to address, Principal A allocated meeting time for staff to work on these. She did this to guarantee that teachers in Middle School A were not overwhelmed and to protect them from teacher burn-out. Principal A believed that providing her teachers with instructional focus, and building in time for managerial tasks, helped maintain the integrity and success of Middle School A (personal communication, Principal A, March 13, 2013).

It was evident that Principal A had both a broad understanding of curriculum and a strong business element to her practice. Principal A was directly involved in District A’s curriculum work because she was a member of the English Language Arts’ Subject Area Committee (SAC). Her ability to manage tasks, and her involvement in curriculum work, afforded her the opportunity to address the daily business of Middle School A and to effect classroom instruction. The skill of managing demands allowed Principal A to regularly be in classrooms providing feedback to teachers. Principal A was clear about her belief that instruction was where her focus needed to be (personal communication, Principal A, October 30, 2012).

Principal B. Principal B began his career as a high school social studies teacher. Principal B was also active outside of the classroom becoming a member of the School Improvement Team, sponsoring extra-curricular activities, and completing an administrative internship. According to Principal B, this provided him with the opportunity to “get an idea of

how much work would go into projects and how to deal with different personalities” (personal communication, Principal B, November 5, 2012). After completing his administrative internship, Principal B became an assistant principal in a suburban district. He spent eight years at this building, serving as both assistant principal and principal, before accepting his current position as principal of Middle School B. Principal B envisioned himself as a collaborative leader “supporting the teachers and stakeholders like an upside-down pyramid” (personal communication, Principal B, November 5, 2012). He viewed his focus as (a) the safety of the building and (b) making sure that teachers had the supplies they needed to facilitate their classrooms. As provided in qualitative the term support, as defined by Principal B, indicated resources, not necessarily instructional direction for teachers (personal communication, Principal B, May 20, 2013). Principal B did not emphasize the urgency of Common Core implementation to staff, but rather had a reliance and trust in others to complete Common Core inclusion into Middle School B.

I argue that Principal B’s experience as a social studies teacher could have affected his approach to CCSS inclusion within Middle School B. Although District B clearly had individuals responsible for creating an implementation plan, Principal B had an intentional focus on the purchasing of resources needed to support the teachers and CCSS instruction. Both Principal A and Principal C appeared to be essentially preoccupied with the influence of the CCSS on teaching within their building; however, Principal B was relaxed and confident that Department Heads and District Curriculum Coordinators were taking the steps necessary for full implementation. I suggest that because of Principal B’s history as a social studies teacher, it is possible that he did not feel a sense of urgency and accountability as a teacher. Social studies was the last discipline to be held liable by the state accountability tool. This began during the

2011-2012 school year when all four core content areas were statistically included in the equation (personal communication, Anonymous, 2012). In comparison to math and English Language Arts teachers, whom have been directly responsible for student scores since No Child Left Behind (2001), social studies teachers have been ancillary to school accountability. Rather, they have been responsible for including literacy and writing to support English Language Arts and other disciplines. Principal B also stated that outside of summary information provided to him by District B's Curriculum Coordinators, his strong association with the state secondary principals' group influenced the information that he received (personal communication, Principal B, February 22, 2013).

Principal B's affiliation with the state secondary principals' association accounted for many of the articles and much of the information that he received about the CCSS. Principal B provided information that these artifacts discussed CCSS issues more on a state level rather than individual districts (personal communication, Principal B, February 22, 2013). It is vital that I note that there are continued efforts, within the state legislature, to repeal the CCSS initiative. That being said, much of the information that Principal B received in both e-blast and memorandums from the state principals' organization dealt directly with the legislation and political talking points of the CCSS. Prior to the third interview, there was a strong push by politicians to reexamine the CCSS adoption and possibly remove it from public school mandates.² Principal B was the only sample principal to indicate a strong association with the state principal group; therefore, I acknowledge that Principal B may have been influenced by this flow of information. Historically, educational reform has been difficult to implement

² At the time of this research, periodicals documented the possibility of the legislature repealing the CCSS (Higgins, 2013).

(Rowan, 1996; Ogawa & Collom, 2000); and subsequently replaced by a subsequent educational initiative. This has left educators almost apprehensive each time a new reform initiative is presented. I suggest that this also could contribute to Principal B's relaxed approach to CCSS implementation within Middle School B.

Principal C. As an administrator in District C for over 18 years, Principal C understood the demands of administration and the intricate workings of District C. Spending her tenure as an educator in District C, first as a teacher, then as an assistant principal, and ultimately as a principal, Principal C had a broad understanding of curriculum and knowledge of District C. Principal C also took the responsibility of becoming the Foreign Language Facilitator in District C and admittedly was able to dive into curriculum (personal communication, Principal C, November 7, 2012). She had been witness to past reform and understood District C's approach to large-scale standards' reform. Research supports interviewing principals because from their perspective, they are able to understand how districts develop and implement standards-based curriculum (Ogawa et al., 2003). I posit that Principal C's clear understanding of both curriculum and District C was critical in her construction of knowledge around the CCSS. Principal C made evident, through interviews, that curriculum and classroom instruction was where her focus needed to be for CCSS implementation (personal communication, Principal C, May 20, 2013). She was compelled to support teacher knowledge and teacher education by providing her staff with pertinent reform information and allowing time for reflective dialog. An important piece to Principal C's handling of her building's shift to Common Core instruction was her emphasis on building trust with teachers. Principal C articulated her perspective of the shift caused by CCSS implementation. "As a building principal, I support my staff in switching from

traditional teaching where teachers lead the discussion to more of a shift toward democratic running of the classroom” (personal communication, Principal C, May 20, 2013).

Principal C regularly stated during interviews that providing time for teachers in Middle School C to learn and adjust to the CCSS was important. She also confirmed that building trust with her staff was important to her (personal communication, Principal C, November 7, 2012). Principal C understood the teachers’ predicament and wanted to support them during this change. Although District C had a clear implementation plan, Principal C felt a personal responsibility to make “it happen in her building” (personal communication, Principal C, May 20, 2013). Again, this could be attributed to her tenure and loyalty to District C. Although there was a district process in place, Principal C assumed responsibility to create professional learning opportunities within her building to help ease the difficulty that staff faced with this shift in educational practice. Administrators can effectively orchestrate activities that facilitate improvement in teaching in the classroom (Stein & Nelson, 2003). She placed department heads, within Middle School C, also in a position to disseminate information. Principal C trusted her department heads and worked closely with them to ensure that information flow was consistent and constant. By creating this condition, Principal C allowed teacher-leaders to lever effective conditions for reform (Talbert & McLaughlin, 1994). Although the direction of information flow was clear to Principal C, she had the foresight to utilize her authority and trust from staff to facilitate a solid flow of information to teachers. When comparing District C’s principal meeting minutes with information distributed by Principal C to department heads, I noted that CCSS information was aligned. Principal C’s knowledge of her district and school organization allowed her to effectively understand and support District C’s implementation plan.

Role of the ISD in CCSS Information Flow

It was made evident, after completing copious personal interviews and reviewing documents from each principal, that ISD One and ISD Two had different approaches to CCSS information dissemination. Principal A's school was located within ISD One and Schools B and C were located within ISD Two.

ISD One. ISD One began providing CCSS information directly to Principal A during the 2010-2011 school year. Principal A attended informative meetings at ISD One. Principal A stated that this information was more overview and that direct work with teachers and principals on the CCSS, facilitated by ISD One, began in the fall of 2011 (personal communication, Principal A, March 13, 2013). I reviewed memoranda, meeting agendas, and meeting minutes that provided evidence of ISD One providing professional development for both teachers and administrators supporting the building of CCSS knowledge through learning opportunities. Documents further supported the idea of both increased collaboration and educators working as professionals. There was a diversion from previous practice of teachers working in isolation and diminished teacher professionalism (Talbert & McLaughlin, 1994). ISD One offered opportunities for teachers and administrators, from local school districts, to be part of the decision-making process and facilitated CCSS unit building for both English Language Arts and mathematics. ISD One created content-specific pilot and review teams to evaluate the CCSS and to devise units that followed the CCSS. These units and lesson plans were subsequently shared with the local school districts within ISD One with the goal of creating uniformity and consistency among CCSS instructional delivery. ISD One built in time for educators within the county to come together, interpret the CCSS, build knowledge about the reform, and transform the CCSS into practitioner-friendly units. This model of reform implementation and

instructional change provided principals and teachers with the latitude to write CCSS curriculum. Teachers will interact, exchange professional expertise, and collaborate (Raudenbush, Rowan, & Cheong, 1993). Although the meetings took place both during the summer and school year, educators from numerous districts came together to devise coherent units and lesson plans that aligned to the CCSS. Principal A was a participant in ISD One and its CCSS planning activities. Principal A indicated that this work did provide a frame of reference for what she expected to see practiced in classrooms within Middle School A (personal communication, Principal A, March 13, 2013).

ISD Two. The CCSS support for the local school districts within ISD Two's jurisdiction was found to be less direct than ISD One. Although there were conferences regarding the CCSS reform available for local districts through ISD Two, I found that they played a minimally active role in CCSS implementation and in creating coherent instructional units for all local school districts to follow. Not one of the artifacts provided to the researcher by Principal B or Principal C demonstrated influence from ISD Two. Furthermore, most teachers and building administrators from Districts B and C did not attend direct training with ISD Two, rather professional development opportunities were attending by those Districts' central office personnel. ISD Two did not appear to offer the amount of teacher-driven informative sessions with a consortium of teachers from various districts as ISD One. Both principals from sample School B and sample School C provided artifacts demonstrating individual district-driven plans that did not show evidence of direction from ISD Two. ISD Two provided more support to central office officials in comparison to ISD One's providing information and training for classroom teachers and building principals.

District Personnel Responsible for Providing Information to Principal

Significant differences were noted when comparing the information flow to the three principals. Specifically, I found a difference when comparing District A and District C to District B. It was clear that both Districts A and C had a systematic approach for information dissemination. I found that the information always began within a place of authority, explicitly an assistant superintendent or director of curriculum, and then trickled down consistently to the principals at meetings. The CCSS information was clear, consistently provided to the principals, and then aligned with information that Principal A and Principal C shared with teachers. It was obvious that both District A and District C had procedures and practices for information dissemination to avoid confusion and to support stakeholder understanding. It was also apparent that the persons in these positions of authority had significant tenure within the respective districts. This was made apparent through qualitative data collected including videos, memoranda, e-mails from the principals, meeting minutes, and meeting agendas.

Through the data provided, it was evident that District B had less of a systematic approach to information dissemination. I also believe that this could be because the Curriculum Coordinators in District B were new to the district. The majority of CCSS information provided to Principal B derived from the Curriculum Coordinators. After reviewing qualitative data, the researcher could not substantiate that there was a primary individual, with formal authority, delivering information to the Curriculum Coordinators in District B. Rather, the Curriculum Coordinators received most of their CCSS information and materials from ISD Two. Principal B did indicate that there was a Director of Secondary Education within District B, but that he was often engaged with the high schools.

Table 5 organizes the district personnel that were responsible for CCSS information flow to the principals.

Table 5
District Personnel Responsible for CCSS Information

District	Person Responsible for CCSS Information	Tenure of Person
A	Assistant Superintendent	1 Year
B	Curriculum Coordinators	1 Year
C	Director of Academic Services (Curriculum)	10 years

It is important for me to provide the reader with the following facts regarding District A's and District C's formal authority figure for curriculum information. District A's former Assistant Superintendent had been in the district for over 15 years. According to Principal A, the former assistant superintendent provided curriculum direction and had a strong vision for District A. CCSS information began flowing from the former Assistant Superintendent to Principal A beginning in the 2010-2011 school year. Before District A's Assistant Superintendent retired in June 2012, she trained her replacement to maintain District A's clear vision and forward momentum. The new Assistant Superintendent was also responsible for facilitating the principal meetings within District A. The principals were accountable to the Assistant Superintendent. They were required to submit annual goals and regular reflections throughout the year, while meeting with the Assistant Superintendent two times each month.

The primary individual responsible for distributing information to principals in District C was the Director of Academic Services (Curriculum). This individual was responsible for overseeing all curricula within District C, from kindergarten through grade 12. The Director of Academic Services had been in this position for over 10 years. She was the person responsible

for creating the CCSS informational pamphlets and videos, in conjunction with her staff. She and her staff regularly provided Principal C with information focusing on the CCSS at monthly principal meetings. The Director of Secondary Education, who works beneath the Director of Academic Services, often aided the Director of Academic Services in disseminating information to Principal C. Although there is much research on standard-based reform, there is a lack of literature about the variability of implementation in local districts and schools (Ogawa, et al., 2003). From the reviewing of data, I argue that experience and tenure of the individual providing information to the sample principals could account for variability from district to district. I was provided with qualitative data that demonstrated a strong flow of information directed toward both Principal A and Principal C from a district authority figure.

Committee and Meeting Structures

I also noted considerable differences among the agendas and minutes of committee meetings and principal meetings attended by the sample principals throughout the 2012-2013 school year. Each sample principal reported attending monthly or bi-monthly principal meetings to receive information on the CCSS; however, the amount of time focused on the CCSS, within the meetings, varied from district to district. Both Principal A and Principal C provided evidence of an intentional focus of these meetings on CCSS information. District A further supported this intentional focus by providing documents and evidence of sub-committee meetings entitled Subject Area Committee (SAC) meetings. During these meetings, teachers and administrators reviewed information provided by District A and collaboratively modified the CCSS units devised by the pilot and review teams of ISD One. Principal B provided data that demonstrated summary information being shared at District B's Principal Meetings.

Table 6.
Meeting and Committee Structure

	Principal A	Principal B	Principal C
Intervals of Principal Meetings	Twice per month + Subject Area Committee meetings	Monthly	Monthly
Direct Quote from Principals	“The sample Smarter Balanced Assessment problems that I saw at my principals’ meeting were also used at Subject Area Committee. Again, this district has a very clear vision and is strong in providing consistent information.”	“Our Curriculum Coordinators work with Department Heads on updating and rewriting our curriculum to align with the standards. They attend many workshops at ISD Two and provide summary information to the building principals at our monthly meetings.”	“At principal meetings, we discuss Common Core and the Smarter Balanced assessment. Chunks of time are allocated to discuss “What is the Smarter Balanced assessment? What does the Smarter Balanced assessment look like?” The Board Office is providing information so that same message is given to all staff.”
Supporting Quote from Principals	“The Smarter Balanced assessment problems and the CCSS units shared at SAC meetings are the same examples utilized in principal meetings.”	“Curriculum Coordinators work directly with department heads to provide information to teachers. Teachers then meet with me about resources needed to support these changes.”	“The videos and pamphlets shared at district principal meetings will be distributed to all teachers.”

Although all three principals attended district meetings to accrue information about the CCSS, I found that each district’s meeting structure was distinct. District A met more frequently than Districts B and C. This was made evident in meeting minutes provided by Principal A from both principal meetings and subject areas committee meetings. Principal A also provided

evidence that there existed a “principal-community” at District A; at principal meetings principals engaged in professional conversation and worked to collectively understand the CCSS. Principal A stated that the “clear expectation in District A comes from the top down” (personal communication, Principal A, March 13, 2013). District A’s clear expectation is communicated by the constant revisiting and restating of the information to ensure that the Assistant Superintendent, Principal A, and teachers who are members of subject area committees all garner and share the same information.

District B met one time per month as a principal group. Although summary information was shared with the principals regarding the CCSS to increase alignment among District B’s five middle schools, the information shared focused more on resources than on curriculum. As stated by Principal B, the curriculum work in District B was the responsibility of the District Curriculum Coordinators and District Department Heads. I suggest that the CCSS curriculum information from District B essentially “bypassed” Principal B and went directly to teachers. Principal B’s monthly principal meetings did have some representation of CCSS information; however, that information was more of an overview of the process being completed by curriculum coordinators and teachers. Principal meetings within District B also contained day-to-day business items for District B, as well as, discussion about upcoming building events. Lastly, Principal B discussed with the researcher, the lack of alignment among District B’s five middle schools and stated that District B’s Instruction Department, with the support of the middle school principals, were working to parallel these building’s instructional programs (personal communication, Principal B, May 20, 2013).

Principal C stated, “all Common Core State Standards’ training from District C took place at secondary principal meetings” (personal communication, Principal C, February 20,

2013). These meetings occurred on a monthly basis and supported Principal C's construction of CCSS knowledge. District C began with sharing overview information with all principals, and then shifted to focus on Smarter Balanced sample items and the Depth of Knowledge practice (Webb, 2006). Principal C also felt that there was a strong principal-community, at these principal meetings, where she worked with colleagues to understand and interpret CCSS information. According to Principal C, 75% of meeting agenda items were facilitated by District C's Board Office personnel. Principal C also stated that the Director of Secondary Education and the Director of Academic Services (Curriculum) regularly provided consistent and sufficient information about the CCSS initiative. The principals collectively watched the informative videos and debriefed on their content creating a laser-focus on curriculum at these meetings. According to Principal C, this deliberate focus was further supported by the pamphlets that were provided to all principals, within District C, entitled "Examining the Common Core State Standards". Principal C believed that consistent information dissemination was necessary for District C to ensure that "all educators were receiving the same information" (personal communication, Principal C, May 20, 2013). This was supported to the researcher with extensive qualitative data. The meeting minutes from each principal meeting within District C were completed and distributed by the Director of Secondary Education in order to provide principals with a reliable frame of reference for all information. Monthly principal meetings provided Principal C with adequate CCSS information and time for her to discuss and reflect on the information provided.

Common Core Challenges Perceived by Principals

Research supports the belief that standards-based reform can increase student achievement outcomes (Ogawa et al., 2003; Rowan, 1996); however, challenges regularly

impede the implementation process within local districts. The challenges indicated by each participating principal were different at each middle school. Table 7 demonstrates the individual district's approach to CCSS implementation and the challenges faced, with data taken from one-on-one interviews:

Table 7
Principals' Perceptions of Challenges: CCSS Implementation

	Principal A	Principal B	Principal C
District Approach to CCSS Implementation	Systematic	Not Systematic	Systematic
Perceived Challenges of Implementation	<ul style="list-style-type: none"> • Creating “urgency” in high performing school • Not creating fear among staff 	<ul style="list-style-type: none"> • Creating consistency between five district middle schools • Providing all district teachers with same “message” 	<ul style="list-style-type: none"> • Changing instruction and assessment at same time • Finding technology to support both

Both Middle School A and District A yielded impressive student outcomes as measured by the state standardized assessment tool (Anonymous Department of Education, 2012). Thus, Principal A asserted that a great challenge, which she faced, was the complacency of teachers. In order to support the CCSS initiative in Middle School A's classrooms, Principal A believed that she need to generate a sense of urgency among her staff without creating panic. She did this by discussing two main topics with staff at Middle School A:

1. There will be a new state standardized assessment tool for student achievement in less than 2 years.
2. We will be held accountable to this tool through our professional evaluation system.

Principal A believed that District A's process in place for disseminating information did provide her with support for creating this urgency. Staff knew that change was coming and that

they were going to have to modify instruction to scaffold student learning of critical thinking skills and application. Many teacher-leaders were privy to this information, prior to the entire staff, because they were members of District A's various subject area committees. Furthermore, Principal A regularly shared samples of the Smarter Balanced assessment, which had been previously shown at subject area committee meetings and district principal meetings, to demonstrate for staff the shift that was needed. Principal A also shared with teachers how the professional evaluation and observation tool for District A would be tied to the state assessment and individual teacher's outcomes via their students. Stein and Nelson (2003) stated that observation is a ubiquitous function of principals. Principal A was able to ease their anxiety by providing release time for teachers who needed additional time to understand the new curriculum and digest the instructional shift facing classrooms. There was, however, a clear message from Principal A: "when you receive the new curriculum, this is what you will be doing" (personal communication, Principal A, May 20, 2013). Principal A was upfront in her interviews stating, "I have always built in time for release time for teachers. They know that I will give them time and that they can come and ask me. They know that I am supportive of teachers, but that I have high expectations and there will be none of this 'we are not following the new curriculum'" (personal communication, Principal A, May 20, 2013).

Principal B indicated that a primary challenge, which he faced with the implementation of the CCSS, was the inequity and lack of uniformity among District B's five middle schools. Review of qualitative data revealed that District B lacked the systematic approach to reform observed within Districts A and C. Therefore, it was not unexpected when Principal B repeatedly stated during interviews that the middle schools within District B were not aligned. In fact, Principal B referenced that there was a joke among the middle school principals within

District B that they had “five charter middle schools” (personal communication, Principal B, May 20, 2013). Primarily evidenced by the fact that each building teaches different elective classes, there was an effort driven by the district to create more instructional and curriculum alignment among the five schools. Principal B also believed that the principals needed to come together and create more uniformity among the buildings. Principal B suggested that teachers within District B were not hearing the same information regarding the CCSS because of each building’s isolation from the others. He furthermore believed that District B needed to “find a time and place for teachers, from all buildings, to hear the same message” (personal communication, Principal B, May 20, 2013).

Kruse, Louis, Bryk and Associates (1995) advanced the argument that the school, rather than the individual or a small group, is the primary unit of analysis and change. Printy (2010) and Brown (2006) argued that not only is the school now the unit of analysis, but principals are ultimately responsible for increasing student performance. Principal C indicated that she felt responsible for her school and its implementation of the CCSS. It was obvious that Principal C, like many principals, was feeling the strain of accountability and change. She asserted that the CCSS were overwhelming, affecting all content areas in both instruction and assessment at the same time. She further stated, “It is like redecorating every room in your house at once, while you are living in it” (personal communication, Principal C, May 20, 2013). Principal C believed that by creating a community of collective responsibility, she could facilitate ownership among the teachers of this large-scale reform process. Changing all facets of the classroom at one time was perceived by Principal C as immense; however, she understood District C’s message and conveyed it to teachers at Middle School C. Principal C further stated that there was a challenge of providing technology for staff, not only for instruction but additionally for the Smarter

Balanced assessment. This assessment would require computers and technology that could support the assessment software. Principal C suggested that instruction at Middle School C could be improved by increased inclusion of technology; therefore, she was working with her department heads to purchase technology for classroom teachers and to provide professional development for teachers to build understanding of how they might utilize these instructional tools (personal communication, Principal C, May 20, 2013). Principal C indicated that her school was a Title I building, as identified by Middle School C's free and reduced lunch population, and she would be able to access categorical funds for technology purchases.

The aforementioned topics are the observable differences and similarities among the sample principals and the districts within this study. I do not ascertain that these will be challenges that all principals will face when implementing the CCSS. I discussed a cross-case analysis of the three middle school principals covering the these domains: biographical information of each principal, information flow from their respective ISDs, an evaluation of the individual district personnel responsible for providing each principal with CCSS information, the structure of principal meetings within each district, and the challenges, brought on by the CCSS implementation, as dictated by each sample principal. In the my opinion, a key factor attributing to the variance among districts lies in whether or not that district has a systemic, clear approach to school reform. I argue that without a systemic approach, less uniformity and more variance are involved in large-scale implementation of school reform.

The following chapter will discuss and review implications for future research of large scale, standards-based reform.

CHAPTER SIX

CONCLUSIONS AND IMPLICATIONS OF THIS STUDY

The final chapter of this dissertation is composed of two sections: (a) a brief summary of the study conducted, and (b) conclusions and implications of the findings for CCSS implementation among this cross-case study for both researchers and practitioners. This section will specifically address how this study reaffirms what is previously known about both policy and policy implementation. It will also examine implications for practitioners and how school districts can work to implement large-scale reform systematically.

Summary of Study

The purpose of this study was to examine my assumption that information flow both to and from individual principals regarding the CCSS would vary within three sample public middle schools. This research consisted of a multi-case study for the duration of seven months. The organization of this study was three-fold:

1. Understand each principal's educational and professional background
2. Identify how the three principals were provided with CCSS information and identify which individuals or entities provided the information.
3. Identify the information that each principal shared regarding the CCSS and the individuals that received this information.

The three sample middle schools were under the jurisdiction of two separate intermediate school districts within a mid-western state. Each principal was interviewed on three occasions; follow up contact was made with each principal when clarification was needed for my research. Additionally, the principals provided material data, exemplifying both information given to them and information flowing from them to others. All interviews were personally transcribed from

both field notes and audio-recordings. The transcribed interviews were then submitted to each principal-participant to check for validity.

Research has suggested that principals provide the scaffold between the conceptualization of new educational initiatives and their actual implementation. They are the ones responsible for placing the reform closest to the teachers because without support, reform cannot effect change alone (Rowan & Miller, 2007). Research on principal's perspectives remains scarce, but there continues to be a need to understand the role of principals within large-scale school reform (Ogawa et al., 2003). Because this study explored the experiences of educators involved in school based reform, the methods used in collecting and analyzing data were of qualitative design, (LeCompte & Preissle, 1993; Peltó & Peltó, 1978; Wolcott, 1994). I attempted to understand the flow of CCSS information both to and from each principal-participant.

By completing a multi-case study, I was able to construct knowledge and understanding regarding local school district control and implementation of large-scale, top-down educational reform. This study reaffirmed previous research findings that large-scale school reform begins to differentiate and change at the local implementation level. At the time of this dissertation, the CCSS initiative was still in its infantile stages and faced resistance from some state-level legislatures. I attempted to examine the impetus of each principal's implementation process within a middle school context. I further claim that large-scale implementation of educational policy will be a multi-year enterprise for each school.

Conclusions and Implications

This study presented the ways in which three sample principals, from three local school districts, worked to begin CCSS implementation in their respective buildings. I will address the following key points regarding this study (a) how this study affirms what we previously know

and understand about school reform and reform implementation, (b) how this research can inform future studies examining school reform, and (c) how this study helps us to better understand practice regarding educational policy and school reform.

Support of previous research. Previous research suggests that standards-based reform creates a common sequence for teachers to follow and works to tighten loosely organized curriculum that does not identify knowledge and skills that students must demonstrate (Darling-Hammond, 1997; Ogawa et. al, 2003). It is understood that standards-based reform begins, within the hierarchy of policy implementation at the legislative level, and then trickles down to impact local schools and districts. However, the exact impact and implications that standards-based reform has on local districts remains an enigma. Research has begun to uncover how curriculum standards are implemented and with what results, but much remains to be understood about what happens at the local level (Ogawa et. al, 2003). What is known and understood is that standards-based reform has failed to successfully transform American schools for 3 decades (Desimone, 2002). This study advocates the idea that local implementation inhibits the consistency and intentionality of top-down, standards-based reform.

Curriculum standards are expected to influence the instructional practice of teachers by providing the content that teachers should cover. These common targets for teachers suggest instructional strategies and assess the performance of the students and teachers (Elmore, 1990; Rowan, 1990). Standards also aim to influence and support coherent professional development programs in order to sustain teacher learning and allow teachers to practice as professionals (Ogawa et.al, 2003; Rowan & Meyer, 1977). Teachers are able to cover content parallel to their colleagues and employ instructional strategies that make sense for content delivery to students. Standard-based reform proponents argue that educational standards can work to align and create

consistency among the American educational system where local control has often created inequities. By providing common targets for students, schools can work to minimize variance from both district to district and among classrooms within the same building. Moreover, by providing uniform expectations for the performance of all students, standards can equalize content and thereby close the achievement gap, which further demonstrates the inequity among American schools (Ogawa et. al, 2003). This study on the CCSS provided another example of standards-based reform starting cohesively at the top and becoming more loosely organized at the local level. It was clear that the CCSS information that was provided by the legislature primarily derived from the Common Core Initiative (2010) and National Governors Association (2010). This information was found to be coherent and consistent. The important piece of this study for future research on standards-based reform, and CCSS research specifically, is that modifications and changes that occur to the reform effort at the local level result in inconsistencies. I content that local agents make interpretations and modify policy as they work to understand and implement the reform.

As discussed earlier, this study did not engage teachers in talking about their instructional implementation of CCSS. The various ways in which teachers implement the standards would magnify the variation in policy action, particularly if they act independently. However, if teachers work within their teacher communities to provide leadership for coherent implementation and norms of practice to their colleagues, bottom-up initiatives can have a more systematic influence on instruction in support of the standards (Coburn, 2001; Printy, 2008). When the influence of teacher communities is strong, principals need to adjust their own instructional leadership to be focused on creating conditions within which teachers take the lead on improving their professional practice (Coburn, 2001; Printy, 2008), involving reorganizing

school operations or reconciling school operations with teacher initiatives. This possible situation, of course, is beyond the scope of the current study, though is probably starting to occur in at least one of the study schools.

How this research informs future studies. This study agrees with previous research that standards-based reform begins as a coherent entity at the legislative level (Ogawa et. al, 2003). I contend that the CCSS legislation is clear, concise, and accessible to all educators. The actions that occur once the reform leaves the legislative level and moves toward local implementation contribute to inequity and variance. Legislatures and standards-based reform aim to create consistency and common targets for educators. However, local control composed of both ISDs and local school districts create differences during the implementation process. Future research, which examines standards-based reform, must probe into the role of both the intermediate school district and the local school district in order to understand how such discrepancy to tightly organized school reform efforts can occur.

Many policymakers, educators, and scholars advocate the use of curriculum standards to improve students' academic performance. This broad support has resulted in the adoption of standards at all levels of education policy and governance (Ogawa et. al, 2003). Evidence from this study suggests that ISD and local school district control of large-scale educational reform contribute to reform inconsistencies among individual schools. This is because large-scale educational reform historically leaves the implementation process to the discretion of local agents and standards' impact may be only surface (Ogawa & Collom, 2000). In the case of the CCSS, the legislature approved the Standards and the state adopted them as practice. Intermediate and local school districts were then charged with interpreting and implementing the CCSS at a localized level. ISDs and LSDs were able to use discretion, make interpretations, and

work to fit the reform within their school. There was not direction or procedural information provided to local districts as to how local implementation should transpire. Rather, discretion and autonomy was afforded to individual school districts and district personnel. Each of the three local school districts and both of the intermediate school districts within the boundary of this study employed a diverse approach to CCSS implementation. Therefore, I was able to discern that although each of the schools was working to implement the CCSS, there were drastic differences in their individual approaches. I will begin by briefly revisiting inequities in the ISDs approaches to CCSS implementation within the participating schools of this study.

Within the boundary of this study, both ISDs sent information to the principals either directly or indirectly. The researcher defines the terms “directly” and “indirectly” as the following:

1. Direct Flow of Information (Principal A): principal attains information from informative sessions or curriculum work facilitated by ISD.
2. Indirect Flow of Information (Principal B/Principal C): principal receives information through third party participation. Third party receives direct information from ISD and then disseminates information to principal.

This flow of information was found to be direct regarding ISD One and indirect in ISD Two. The approach of ISD One, to support teacher-creation of CCSS units and build educator knowledge through hands-on experience, provided School A with collaborative CCSS units and lesson plans. ISD Two’s indirect approach, where central office personnel attended training and disseminated information, allowed opportunity for personal interpretations to be created. I assert that these interpretations were then shared with the building principals in Schools B and C. It is

possible that had Principal B and C attended ISD Two's training, their interpretation of the CCSS may have been different.

As evidentiary in District A, there was a tangible plan for working the CCSS into schools in place from ISD One. This plan included the production of CCSS lesson plans and units generated by a consortium of classroom teachers. By executing this process, members of ISD One's local districts were allowed access to coherent, quality lesson plans and have a frame of reference which to use while developing CCSS practice in their own classrooms. I argue that this process could result in less variance among the buildings within ISD One, but that it also attributed to the inconsistencies observed when comparing District A with Districts B and C. I further posit that future studies on large-scale school reform should consider the implications of ISD influence and their role in top-down reform. Discretion and autonomy at the local school level also contributed to variance within the CCSS reform in these three schools and should be taken into consideration by future researchers. At the local school district level, there were also differences when comparing the implementation processes. Again, district personnel were afforded the opportunity to take information, make inferences, and interpret CCSS reform. Two of the districts, A and C, followed a more systematic approach. I argue that both Districts A and C had a strong information flow from people that were responsible for curriculum implementation to stakeholders. This flow of information flowed through formal channels directly to principals, teacher-leaders, and classroom teachers. The researcher argues that classrooms within Districts A and C will exhibit less variance as compared to District B. The researcher was not able to discern a systematic approach in District B. Although Curriculum Coordinators were responsible for disseminating information to teacher-leaders and principals, Principal B stated that the middle schools within District B were not aligned (personal

communication, Principal B, May 20, 2013). The researcher could not decipher clear paths of informational flow within District B. The researcher argues that within District B, there is strong evidence that there will continue to be a lack of alignment among classrooms after CCSS implementation.

This study affirms the position that local district control of large-scale reform implementation can contribute to variance. I suggest that these inequities in implementation can be caused by the ways in which districts both interpret and disseminate information. Citing the three sample principals, I observed that each principal received information from various sources. Within individual school districts, several personnel can be responsible for reform implementation. These agents construct information and make inferences about school reform within the context of their district. They may frame or emphasize information from the school reform initiative that is specific to their school district or school policy. Spillane (1996) supported this statement and found that district policy could affect the enactment of state curriculum initiatives and that the vertical and horizontal segmentation of district organization contributed to variation in the implementation of state curriculum policy. Standards-based reform aims to sharpen school's focus and improve student achievement; however, local school control can adjust the intent of legislation providing opportunity for local agents to construct personal assumptions and modify the reform.

Implications for practitioners. This research asserts that this study also has implications for practitioners. Smith and O'Day (1991) argued that as part of an overall systemic approach to reform, standards can improve instruction. The CCSS creates an immense challenge for local school districts and principals. Not only are new curriculum standards being implemented, but criterion-referenced tests will soon follow to indicate school and teacher

effectiveness. These tests will be directly tied to funding and the State's accountability list (personal communication, anonymous department of education, 2013). The decision of the state legislature to include these comprehensive, standardized tests beginning in the spring of 2015 increases pressure on educators to implement the CCSS swiftly and effectively in order to align instruction. Thus, districts that exercise a systematic approach to reform implementation create an environment more likely to support consistency among schools. The three districts within this study all used distinct methods to implement the CCSS. It was clear to the researcher that in two of the three districts, there was a systemic approach driven from the top down the chain of hierarchy. Although the plans for both District A and C derived from a person of authority (Assistant Superintendent/Director of Academic Services), bottom-up driven change from teachers-leaders to support implementation also contributed to the systemic approach.

Within Districts A and C, the principals were also highly active in the implementation process. During interviews, each principal discussed in detail what they expected to see instructionally in classrooms after CCSS implementation. Principals A and C were key arbitrators in their district's implementation process. They were responsible for supporting CCSS implementation and for disseminating information to staff. This contrasts with what I observed in District B.

After researching CCSS implementation within District B for seven months, I suggest that Principal B's knowledge of the CCSS was less assertive than Principal's A and C. Principal B was not a key agent in CCSS implementation within his building. He did not attend professional development or training. Rather, Principal B received information from curriculum coordinators and a professional organization. Principal B did not provide me with specifics about CCSS implementation within Middle School B and the implications that it may have for

classrooms. In contrast, Principal B planned to depend on both curriculum coordinators and the department heads to ensure CCSS implementation. Principal B trusted teachers within Middle School B to suggest instructional tools for purchase that would support CCSS implementation. He did not see his role as an instructional leader, but rather the person responsible for fiscally supporting the CCSS. I argue that Principal B may have seen this as his role because he was not provided with CCSS learning opportunities by District B. Perhaps Principal B's lack of knowledge about the CCSS initiative, and District B's lack of systemic approach resulted in Principal B's more passive approach to CCSS.

Summary. Today, school principal's effectiveness is often directly tied to increased student outcomes and school accountability. Therefore, the role of the principal in large-scale reform is important as they can be utilized to further facilitate reform efforts. While standards-based reform attempts to increase student outcomes and improve education as a whole, local control can contribute to variance during the implementation process. This study asserts that perhaps a systemic approach to local school reform implementation can aid in tightening standards-based reform and diminishing inequities that plague local control. Lack of a systemic approach continues to create inequity among schools when standards-based reform appears to be coherent at the legislative level. By understanding the impending reform and developing a systematic approach to implementation, school officials and principals can work to reduce inconsistency at the school level. This study affirms previous research stating the school organization is complex and reform can be challenging to implement (Elmore, 2000). Top-down reform travels from the minds of the legislature, to local school districts, and finally to the door of the schoolhouse. Districts have the ability to build supportive conditions and facilitate a capacity for change. To support implementation with fidelity, districts can access principals as

key agents of the change and provide a systematic approach to information dissemination ensuring that all stakeholders are able to construct parallel understanding around the reform.

APPENDICES

APPENDIX A

Common Core State Standards ELA Anchor Standards

The K–12 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Key Ideas and Details

- CCSS.ELA-Literacy.CCRA.R.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- CCSS.ELA-Literacy.CCRA.R.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
- CCSS.ELA-Literacy.CCRA.R.3 Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

Craft and Structure

- CCSS.ELA-Literacy.CCRA.R.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
- CCSS.ELA-Literacy.CCRA.R.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
- CCSS.ELA-Literacy.CCRA.R.6 Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

- CCSS.ELA-Literacy.CCRA.R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.¹
- CCSS.ELA-Literacy.CCRA.R.8 Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
- CCSS.ELA-Literacy.CCRA.R.9 Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

- CCSS.ELA-Literacy.CCRA.R.10 Read and comprehend complex literary and informational texts independently and proficiently.

Note on range and content of student reading

To build a foundation for college and career readiness, students must read widely and deeply from among a broad range of high-quality, increasingly challenging literary and informational texts. Through extensive reading of stories, dramas, poems, and myths from diverse cultures and different time periods, students gain literary and cultural knowledge as well as familiarity with various text structures and elements. By reading texts in history/social studies, science, and other disciplines, students build a foundation of knowledge in these fields that will also give them the background to be better readers in all content areas. Students can only gain this foundation when the curriculum is intentionally and coherently structured to develop rich content knowledge within and across grades. Students also acquire the habits of reading independently and closely, which are essential to their future success.

APPENDIX B

Common Core State Standards Mathematics

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important “processes and proficiencies” with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council’s report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one’s own efficacy).

Standards in this domain:

1. **CCSS.Math.Practice.MP1 Make sense of problems and persevere in solving them.**

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, “Does this make sense?” They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

2. **CCSS.Math.Practice.MP2 Reason abstractly and quantitatively.**

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of

creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

3. **CCSS.Math.Practice.MP3 Construct viable arguments and critique the reasoning of others.**

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

4. **CCSS.Math.Practice.MP4 Model with mathematics.**

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

5. **CCSS.Math.Practice.MP5 Use appropriate tools strategically.**

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with

tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

6. **CCSS.Math.Practice.MP6 Attend to precision.**

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

7. **CCSS.Math.Practice.MP7 Look for and make use of structure.**

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y .

8. **CCSS.Math.Practice.MP8 Look for and express regularity in repeated reasoning.**

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle

school students might abstract the equation $(y - 2)/(x - 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Connecting the Standards for Mathematical Practice to the Standards for Mathematical Content

The Standards for Mathematical Practice describe ways in which developing student practitioners of the discipline of mathematics increasingly ought to engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle and high school years. Designers of curricula, assessments, and professional development should all attend to the need to connect the mathematical practices to mathematical content in mathematics instruction.

The Standards for Mathematical Content are a balanced combination of procedure and understanding. Expectations that begin with the word “understand” are often especially good opportunities to connect the practices to the content. Students who lack understanding of a topic may rely on procedures too heavily. Without a flexible base from which to work, they may be less likely to consider analogous problems, represent problems coherently, justify conclusions, apply the mathematics to practical situations, use technology mindfully to work with the mathematics, explain the mathematics accurately to other students, step back for an overview, or deviate from a known procedure to find a shortcut. In short, a lack of understanding effectively prevents a student from engaging in the mathematical practices.

In this respect, those content standards which set an expectation of understanding are potential “points of intersection” between the Standards for Mathematical Content and the Standards for Mathematical Practice. These points of intersection are intended to be weighted toward central and generative concepts in the school mathematics curriculum that most merit the time, resources, innovative energies, and focus necessary to qualitatively improve the curriculum, instruction, assessment, professional development, and student achievement in mathematics.

APPENDIX C

Diagnostic Questionnaire

Please indicate one of the following for all questions below

A-Strongly Agree

B-Agree

C-Neutral or Not Applicable

D-Disagree

E-Strongly Disagree

1. Your Name_____ Building/District_____
- (Please fill out #1 so that I am able to view individual responses. Thank you).
2. My building is diverse socio-economically.
3. I receive Title I and 31-A monies in federal support.
4. It is my responsibility to work with staff and create a vision for my building.
5. I am very honest with my staff about impending external demands and legislative demands.
6. When new legislation or school accountability reform occurs, I immediately inform my staff of all information regarding this legislation.
7. I facilitate learning for my staff to help teachers meet new regulations and to create solutions to new challenges.
8. It is my responsibility to “filter” information that I give to my staff to ensure that they do not become overwhelmed by outside pressures (ex: legislation).
9. I believe that sometimes school stakeholders have to modify their belief system in order to adapt to change.
10. The teachers in my building regularly review student outcome data and have dialog about classroom instruction.
11. I provide structures to support teacher collaboration.
12. As a staff, we are beginning to implement the Common Core Standards for ELA and Math.
13. I believe that implementation of the CCS (Common Core Standards) will have an effect on classroom instruction.
14. At my school, it is evident that there is trust among the staff.

If you answered yes for #11, please provide an example of how you do this in your school:_____

Please feel free to include any comments regarding the above questions:_____

APPENDIX D

Interview Protocol One

Draft of Principal Questions

Interview #1:

Goal of Interview #1: To put the participant's experience in context by asking him or her to tell as much as possible about him or herself in the light of the topic at the present time (Seidman, 2006).

1. Why did you become an educator?
2. Tell me about your professional experience as an educator?
3. Why did you decide to become a principal?
4. How did you become Principal of _____Middle School?
5. How did you prepare to become a building principal?
6. Please describe yourself as a building principal:
7. What matters most to you as a building principal?
8. How did you learn about previous school reform and change initiatives such as No Child Left Behind and standards-based reform?
9. Could you take the most recent school reform initiative that you have dealt with in the past and describe how you took actions to implement the reform?
10. Could you please define the skills that you think are necessary for principals to have in order to prepare their staff for impending change or school reform?
11. Have you had any experiences within the realm of education that have been barriers to implementing past reform initiatives?
12. (If yes) Please describe those experiences:
13. Does your district have a person who works to implement school reform or is that the responsibility of the school principal?

APPENDIX E

Interview Protocol Two

Principal A

Interview #2

Goal of Interview #2: To concentrate on the concrete details of the participants' present lived experience in this topic area of the study (Seidman, 2006).

1. What type of training, professional development, or information about the Common Core State Standards have you received?
2. (If yes) From whom did you receive this training, professional development, or information?
3. Would you say that most of the information about Common Core derives from the Assistant Superintendent's office?
4. What is SAC?
5. Please provide a detailed explanation of the information that you received about the Common Core State Standards:
6. Is information given to you through personal meetings, principal meetings, memos, etc...? Please define how you receive information:
7. What type of information is included in the memos that you receive about the Common Core State Standards?
8. Describe your role in implementing the Common Core State Standards. Do you devise an implementation plan? If yes, what does that plan look like?
9. Do you collaborate with other individuals when planning for Common Core implementation for your teachers?
10. How do you reference information about the Common Core State Standards? What types of resources do you use?
11. Are you referencing other school reform implementation plans? If so, what do they look like?
12. Are there any other materials that you reference for information regarding the Common Core State Standards?

Interview Questions Probing for Clarity from Principal A's Interview #1:

1. You stated during your first interview that "being a strong instructional leader is where your focus has to be." Please give me your definition of a "strong instructional leader." What does that look like in terms of actions and practice?
1A. What does this look like in practice?
2. You previously stated that you support your teachers to make their jobs easier. Can you explain for me what that means? How are you able to support them? Can you give me 2-3 examples?
3. You referred to teacher burn-out and that it worries you. You stated that you aim to remove barriers to avoid teacher burn out. What does this mean? What barriers are you removing and how are you removing them?
4. In the previous interview, you discussed the act that you were made a Focus School on the Michigan Top to Bottom List. What does this mean? What effects does this have on both you as a building principal and on your staff? What implications does this have?

5. You said that in your district, there is an expectation of “continuous improvement.” What does that mean? What does that look like in your school? From where does this expectation come?
 - 5A. Are you using any other strategies outside of differentiated instruction?
 - 5B. Where does the expectation of continuous thinking come from in this district?

Principal B

Interview #2

Goal of Interview #2: To concentrate on the concrete details of the participants’ present lived experience in this topic area of the study (Seidman, 2006).

1. What type of training, professional development, or information about the Common Core State Standards have you received?
2. (If yes) From whom did you receive this training, professional development, or information?
3. Did you receive training or information from a district official?
4. (If yes) What is his or her role in the district?
5. Describe your relationship with this person:
6. Please provide a detailed explanation of the information that you received about the Common Core State Standards:
7. Is information given to you through personal meetings, principal meetings, memos, etc...? Please define how you receive information:
8. What is the content of these meetings?
9. Describe the agendas for these meetings?
10. What do the minutes from these meetings state?
11. What type of information is included in the memos that you receive about the Common Core State Standards?
12. Describe your role in implementing the Common Core State Standards. Do you devise an implementation plan? If yes, what does that plan look like?
13. Do you collaborate with other individuals when planning for Common Core implementation for your teachers?
14. If so, who are these people and what are their roles within the school organization?
15. How do you reference information about the Common Core State Standards? What types of resources do you use?
16. Are you referencing other school reform implementation plans? If so, what do they look like?
17. Are there any other materials that you reference for information regarding the Common Core State Standards?
18. If so, please describe:

Interview Questions Probing for Clarity from Principal B’s Interview #1:

1. In your first interview, you stated that you are a “collaborative leader.” Can you please define this for me in your own terms? What does this look like in practice? What makes you collaborative?
2. You stated that you are at the bottom of an upside-down pyramid? Please describe why you used this analogy? What does it mean?

3. In the previous interview, you discussed the fact that you were made a Focus School on the Michigan Top to Bottom List. What does this mean? What effects does this have on both you as a building principal and on your staff? What implications does this have?
4. You stated that you receive information regarding school reform from the MASSP and the Curriculum Coordinators in your district. Please describe the information that you receive from MASSP. Please describe the information that you get from the Curriculum Coordinators in your district.
5. Are there any differences between the pieces of information that you receive from MASSP and the Curriculum Coordinators? If yes, what are these differences? Do you see any similarities in content?
6. In our first interview, you discussed the importance of building good rapport with staff and “having them on board.” How do you do this as a building principal? How do you know that they are “on board?”

Principal C

Interview #2

Goal of Interview #2: To concentrate on the concrete details of the participants’ present lived experience in this topic area of the study (Seidman, 2006).

3. What type of training, professional development, or information about the Common Core State Standards have you received?
4. (If yes) From whom did you receive this training, professional development, or information?
5. Did you receive training or information from a district official?
6. (If yes) What is his or her role in the district?
7. Describe your relationship with this person:
8. Please provide a detailed explanation of the information that you received about the Common Core State Standards:
9. Is information given to you through personal meetings, principal meetings, memos, etc...? Please define how you receive information:
10. What is the content of these meetings?
11. Describe the agendas for these meetings?
12. What do the minutes from these meetings state?
13. What type of information is included in the memos that you receive about the Common Core State Standards?
14. Describe your role in implementing the Common Core State Standards. Do you devise an implementation plan? If yes, what does that plan look like?
15. Do you collaborate with other individuals when planning for Common Core implementation for your teachers?
16. If so, who are these people and what are their roles within the school organization?
17. How do you reference information about the Common Core State Standards? What types of resources do you use?
18. Are you referencing other school reform implementation plans? If so, what do they look like?
19. Are there any other materials that you reference for information regarding the Common Core State Standards?
20. If so, please describe:

Interview Questions Probing for Clarity from Principal C's Interview #1:

1. In your previous interview you talked about building a collective trust with your staff, could you help me understand how you build trust with the teachers?
2. You also referred to the importance of building a strong foundation? What do you mean by foundation? How do you make a foundation strong?
3. What kinds of things do you do with your teachers? What kinds of things build the foundation?
4. You said that having empathy and creating "consensus building" in your school is also important. How do you work to create empathy for your staff and build consensus among them?
5. Why is there a need to build consensus?
6. You also stated that your leadership style is "very nurturing," can you please explain this to me? What does this look like in practice?

APPENDIX F

Interview Protocol Three

Principal A
Interview #3

Goal of Interview #3: To reflect on the meaning of the experience (Seidman, 2006).

1. Given what you previously stated about your Common Core knowledge, professional training, and construction of knowledge about this reform, what does implementation of the Common Core State Standards mean for you as a building principal?
2. Given the implementation plan that was devised for teachers, what does the implementation of the Common Core State Standards mean for your staff?
3. How does the way in which you were trained on the Common Core State Standards affect your implementation methods?
4. How does your leadership style and practice effect Common Core implementation in your school?
5. Given what other experience you have had with school reform initiatives, how did this help you to understand and implement the Common Core State Standards?
6. How did interaction with school reform as a principal differ from your interaction with school reform as a teacher?
7. How do you see your building continuing with Common Core implementation and maintenance?
8. How will you specifically disseminate information to teachers about the Common Core?
9. What do you think are the most important things that teachers need to understand about the Common Core?
10. How will you emphasize these “key points” of the initiative?
11. Please describe any positive outcomes that you have seen from the Common Core State Standards Reform:
12. Please describe the most challenging aspects of the Common Core State Standards initiative:

Interview Questions Probing for Clarity from Principal A’s Interview #2:

1. Do you think that the Oakland Intermediate School District plays a large role in your building’s Common Core implementation? If yes, how do they do this?
2. You stated in your previous interview that you are an instructional leader? What does this look like in terms of Common Core implementation? How does an instructional leader work to support and execute implementation?
3. You stated that were previously a member of the district’s Math Subject Area Committee and that now you are a member of the English Language Arts Subject Area Committee. Do you see a difference in how these two entities are working to implement the Common Core?
4. During our last interview, you stated that at a staff meeting you and your staff had a “dialog” about Common Core implementation and that your staff articulated their worries regarding this. What were some of the worries that staff articulated? How do you, as a building principal, plan to address these concerns?
5. You also stated that you are working with elective teachers so that they can support the Common Core in your building. What type of work are you doing with them? Are you

disseminating the same information to the electives about Common Core that you are disseminating to core content teachers?

Principal B

Interview #3

Goal of Interview #3: To reflect on the meaning of the experience (Seidman, 2006).

1. Given what you previously stated about your Common Core knowledge, professional training, and construction of knowledge about this reform, what does implementation of the Common Core State Standards mean for you as a building principal?
2. Given the implementation plan that was devised for teachers, what does the implementation of the Common Core State Standards mean for your staff?
 - 2A. Any changes with instructional delivery?
 - 2B. How will they be trained?
3. How does the way in which you were trained on the Common Core State Standards affect your implementation methods?
4. How does your leadership style and practice effect Common Core implementation in your school?
5. Given what other experience you have had with school reform initiatives, how did this help you to understand and implement the Common Core State Standards?
 - 5A. What are your District Common Assessments?
6. How did interaction with school reform as a principal differ from your interaction with school reform as a teacher?
7. How do you see your building continuing with Common Core implementation and maintenance?
 - 7A. How are you involved in the maintenance program?
8. How will you specifically disseminate information to teachers about the Common Core?
 - 8A. Did you or teachers disseminate information this year?
9. What do you think are the most important things that teachers need to understand about the Common Core?
10. How will you emphasize these “key points” of the initiative?
11. Please describe any positive outcomes that you have seen from the Common Core State Standards Reform:
12. Please describe the most challenging aspects of the Common Core State Standards initiative:

Interview Questions Probing for Clarity from Principal B’s Interview #2:

1. What is the role of the Wayne County Intermediate School District in your building’s Common Core implementation?
2. You stated in your previous interview that you are a collaborative leader? What does this look like in terms of Common Core implementation? How does a collaborative leader work to support and execute implementation? Define support?
3. You stated that Department Heads are doing a lot of the “direct” work for Common Core implementation. Can you please describe this for me?
4. During our last interview, you stated that you are not directly involved in the curriculum changes brought by Common Core in your district. What decisions (if any) do you have to make as a building principal regarding Common Core?

5. You stated that most of the professional development for all staff regarding Common Core will be next August. When will this PD be planned? Are you going to be part of the planning process?

Principal C

Interview #3

Goal of Interview #3: To reflect on the meaning of the experience (Seidman, 2006).

1. Given what you previously stated about your Common Core knowledge, professional training, and construction of knowledge about this reform, what does implementation of the Common Core State Standards mean for you as a building principal?
2. Given the implementation plan that was devised for teachers, what does the implementation of the Common Core State Standards mean for your staff?
3. How does the way in which you were trained on the Common Core State Standards affect your implementation methods?
4. How does your leadership style and practice effect Common Core implementation in your school?
 - 4A. How are Department Heads “more active?”
5. Given what other experience you have had with school reform initiatives, how did this help you to understand and implement the Common Core State Standards?
6. How did interaction with school reform as a principal differ from your interaction with school reform as a teacher?
7. How do you see your building continuing with Common Core implementation and maintenance?
8. How will you specifically disseminate information to teachers about the Common Core?
9. What do you think are the most important things that teachers need to understand about the Common Core?
10. How will you emphasize these “key points” of the initiative?
11. Please describe any positive outcomes that you have seen from the Common Core State Standards Reform:
12. Please describe the most challenging aspects of the Common Core State Standards initiative:

Interview Questions Probing for Clarity from Principal C’s Interview #2:

1. What is the role of the Wayne County Intermediate School District in your building’s Common Core implementation?
2. Your district is using a series of videos to disseminate information regarding the Common Core to all staff. Will this be their primary mean of disseminating information? Will you also be providing training or professional development at the building level?
3. 2A. Will there be building level professional development?.
4. As far as developing the curriculum for the Common Core, will this be done at the building level or the district level? Who will be involved in this? What will the process look like?
5. In your previous interview you stated that you are more of a “support” person in the implementation process. What does this mean? What does this look like in practice?
6. Do you have some autonomy and decision making ability at the building level regarding Common Core? If so, what does this look like?

APPENDIX G

Biographies of Principals

Middle School Principal A

Middle School Principal A entered education as a second career. Her initial career path was in accounting; however, she was able to teach collegiate accounting classes outside of her daily work schedule to adolescents and found that she had a great interest in teaching. When her accounting career reached a crossroad, and she was looking at become a partner or entering corporate accounting, Principal A thought that a career move would be appropriate. Her interest in teaching and education drove her professional choice and passion to enter public education. As a secondary science teacher in a middle class district outside of a mid-western, metropolitan city, she really cultivated her love of curriculum, instruction, and students. She had a positive relationship with her building principal at this school and he strongly encouraged her to consider the idea of education administration. After earning her Education Specialist degree, Principal A acquired the position of Assistant Principal at an affluent suburban district in a mid-western state. Her position at this school allowed her to work closely with the former principal, who would become her mentor. She was able to cultivate her own leadership style and learn both the managerial and instructional aspects of a building principal's role. After 3 years as Assistant Principal at this middle school, the district's Superintendent asked her to become principal at the neighboring middle school within District A. She assumed this position in 2007. Principal A sees herself as a strong instructional leader because this is where her focus needs to be (personal communication, Principal A, October 30, 2012). She also aims to encourage her teachers to lead and believes that her door is always open for them to bring their own ideas. Principal A stated that she is an effective principal due to her ability to make difficult decisions (personal communication, Principal A, October 30, 2012). She also cites hiring effective staff and removing ineffective staff as a major focus of her job. Principal A credits her success and the success of her school to the great teachers in her building.

The researcher notes that Principal A's business background could attribute to her focus and ability to manage a multitude of tasks. Meeting notes reviewed by the researcher and taken by Principal A, demonstrate someone who is driven, on-task, and very involved in the school's instructional program. Due to Principal A's background in business, the researcher asserts that Principal A is able to take charge of curriculum changes and monitor School A's implementation process with vigor and thoroughness.

Middle School Principal B

Principal B has been at his current position for just over 2 years. Principal B's middle school has fewer than 800 students enrolled but is part of one of the largest public school districts within this mid-western state. Although the demographics at this middle school are quite diverse, this school does contain the Gifted and Talented program and serves as a magnet school for District B's middle school population. Unlike Principal A, Principal B has always been involved in public education. Due to a positive and influential relationship with his own elementary principal and coaching student athletes for many years, he had always planned to become a teacher and educator. After teaching high school social studies for 6 years at a large, public school and being involved in that school's school improvement process, Principal B became an assistant principal at another suburban district. For 6 years he was an assistant

principal before becoming Principal at that school for 2 years. He left that position in 2010 to accept his current position as Principal of Middle School B. Principal B envisions himself as a collaborative leader and defines that as positioning himself at the bottom of the pyramid trying to support others (personal communication, Principal B, November 6, 2013). Principal B did state that it was a difficult transition to this current position due to the staff being very involved, effective teachers. He stated that this was a barrier because teachers wanted to be involved in all aspects of decision making and as stated by the Assistant Superintendent, "teachers in this district did not know their place." Principal B is very involved in the state organization of secondary school principals and feels competent about his leadership abilities. He believes that he has a good rapport with staff and that resisters will either come with him or disappear. Principal B recently hired a new assistant principal and is working to revise school policy and implement new practices to support student learning at all levels.

The researcher notes Principal B's experience as a social studies teacher as a possible contributor to his approach to the CCSS implementation process in School B. Principal B, by his own admission, was not knowledgeable about the CCSS and not immensely involved in the CCSS implementation process within School B. The researcher believes that because Principal B was a former social studies teacher, it is possible that Principal B had not formally been held accountable to previous school reform initiatives. When Principal B was a teacher in the late 1990s, school reform was not tied to funding or teacher evaluations in most public school districts; thus, he had not personally felt the pressure of school reform. Furthermore, Principal B was clearly involved in the secondary principals' association within this state. At the time of this study, the CCSS was meeting great opposition from legislatures. It is possible that because Principal B received much of the information on the CCSS from the state secondary principals' organization, he may have thought that it would not be implemented due to legislative opposition.

Middle School Principal C

Principal C has the longest tenure of the principals in this study. She has been an administrator for 18 years. Principal C majored in Spanish during college and briefly considered entering international business; however, her parents were both teachers and she thought that education would be a good fit for her professionally. After her first few years of teaching, Principal C began to examine master's programs at local universities. During her tenure as a teacher, most public school districts were in the process of downsizing. She believed that this was shocking and thought that a master's in administration would bring job security and be more viable than other programs. Principal C taught at the middle school level for 6 years before becoming an administrator at another middle school within her district. By all standards, Principal C was a young administrator. Principal C made the move to administration and served at two district middle schools as an assistant principal before moving to a principal position in 2006. She also credits her involvement in district curriculum committees, and her twelve years of experience as an assistant principal, as reasons why her transition to building principal was extremely smooth. She stated that she knew who to talk to, who the contacts were, and where all of the political mine-fields lay (personal communication, Principal C, November 7, 2012). Principal C finds that the unfunded initiatives in public education are always interesting and difficult to implement. She credits her supervisor and Director of Secondary Education for being at the forefront of initiatives and providing both her and her colleagues with timely information. She also stated that she and principals from other buildings have meetings to interpret and write

new policy from legislation that trickles down from the state. Principal C believes that understanding one's staff and building a collective trust among faculty are two of the skills needed to prepare staff for impending change. Principal C also notes the importance of understanding reform and communicating that understanding to all teachers.

Principal C has the longest tenure as both an educator and an administrator in this study. She has been privy to school reform initiatives for two decades. The researcher asserts that due to this experience, Principal C understood the expectations of District C and knew that teacher involvement in reform was the key to success. Principal C's positioning of School C Department Heads to disseminate information about the CCSS further aided in creating teacher buy-in of the CCSS initiative. As a former teacher in District C, Principal C knew how to support the reform at the building level to ensure implementation with fidelity.

APPENDIX H

Note from Researcher on Communicative Processes

This research further supports the belief that the school organization is resistant to change. It is noted by the researcher that the primary method of information dissemination regarding CCSS implementation within these three districts occurred via oral communication, written memoranda, and video. It is recognized that social media was not a method utilized by any of the three districts and that very little communication was completed using electronic mail. It was obvious to the researcher that communicative measures utilized by all district personnel were quite traditional. The researcher posits that this could be because CCSS information was an extremely important process due to the state's accountability measures. It is possible that these three districts avoided social media and technologically advanced methods of information dissemination to minimize confusion and tighten lines of communication.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Ainsworth, L. (2003). *Power standards: Identifying the standards that matter most*. Denver, CO: Advance Learning Press.
- Archibald, D.A. & Porter, A. (1994). Curriculum control and teachers' perceptions of autonomy and satisfaction. *Educational Evaluation and Policy Analysis*, 16, 21-39.
- Barth, R. S. (1990). A personal vision of a good school. *Phi Delta Kappan*, 71(7), 512-516.
- Bellamy, G.T., Crawford, L., Marshall, L., & Coulter, G. (2005). The fail-safe school challenge: Leadership possibilities from high reliability organizations. *Educational Administration Quarterly*, 51(3), 383-412.
- Berger, J. (2000). Does top-down, standards-based reform work? A review of the status of statewide standards-based reform. *NASSP Bulletin*, 84, 57-65.
doi: 10.1177/019263650008461210
- Berman, P., & McLaughlin, M. W. (1975). *Federal programs supporting educational change: Vol. 4. The findings in review*. Santa Monica, CA: RAND.
- Bidwell, C. E. (1965). The school as formal organization. In J. G. March (Ed.), *Handbook of organizations* (pp. 972-1022). Chicago, IL: Rand-McNally
- Biederstedt, E. (1999). Restructuring for what?: A study of teacher experiences of school-based reform at Apple Grove Elementary School (Doctoral dissertation). Available from the ProQuest Dissertations and Theses database. (UMI No. 9932613)
- Bogdan, R., & Bicklen S. (1998). *Qualitative research for education: An introduction to theory and methods*. Boston, MA: Allyn and Bacon.
- Borman, G., Hewes, G., Overman, L., & Brown, S. (2003). Comprehensive school reform and achievement: A meta-analysis. *Review of Educational Research*, 73, 125-230.
doi: 10.3102/00346543073002125
- Brown, P. (2006). Preparing principals for today's demands. *Phi Delta Kaplan*, 87(7), 525-526.
- Coburn, C. (2001). Collective sensemaking about reading: How teachers mediate reading policy in their professional communities. *Educational Evaluation and Policy Analysis*, 12, 145-170. doi: 10.3102/01623737023002145
- Coburn, C. (2006). Framing the problem of reading instruction: Using frame analysis to uncover the microprocesses of policy implementation. *American Educational Research Journal*, 43, 343-379. doi: 10.3102/00028312043003343

- Cohen, D. K., & Ball, D. L. (1990). Policy and practice: An overview. *Educational Evaluation and Policy Analysis*, 12, 347-353. doi: 10.3102/01623737012003233
- Cohen, D. K., & Hill, H. C. (2001). *Learning policy: When state education reform works*. New Haven, CT: Yale University Press.
- Common Core State Standards Initiative. (2010). Common core state standards. Available from <http://www.corestandards.org/the-standards>
- Cuban, L. (1984). Transforming the frog into a prince: Effective schools research, policy, and practice at the district level. *Harvard Educational Review*, 54(2), 129-151.
- Cuban, L. (1993). *How teachers taught: Constancy and change in American class-rooms 1880-1990* (2nd ed.). New York, NY: Teachers College Press.
- Cusick, P. & Wheeler, C. (1988). Educational morality and organizational reform. *American Journal of Education*, 96, 231-255.
- Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597-604. EJ501259
- Darling-Hammond, L. (1997). *The right to learn: A blue print for creating schools that work*. San Francisco, CA: Jossey-Bass.
- Desimone, L. (2002). How can comprehensive school reform models be successfully implemented? *Review of Educational Research*, 72 (3), 433-479. doi: 10.3102/00346543072003433
- Elmore, R. F. (1990). On changing the structure of public schools. In R. F. Elmore & Associates (Eds.), *Restructuring schools: The next generation of educational reform* (pp.1-28). San Francisco, CA: Jossey-Bass.
- Miller, E. (1995), Idealists and cynics: The micropolitics of systemic school reform. *Harvard Education Letter*, 12(1-6), 3-5
- Elmore, R. F. (1996). Getting to scale with good educational practice. *Harvard Educational Review*, 66(1), 1-26.
- Elmore, R. F. (2000), Leadership for effective middle school practice. *Phi Delta Kappan*, 82(4), 268.
- Elmore, R.F. (2002). *Bridging the gap between standards and achievement*. Washington, DC: Albert Shanker Institute.
- Elmore, R. F., & McLaughlin, M. W. (1988). *Steady work: Policy, practice, and the reform of American education*. Santa Monica, CA: RAND.

- Firestone, W. & Louis, K. (1999). Schools as cultures. In J. Murphy & K. Louis (Eds.). *Handbook of research on education administration* (2nd ed. (pp. 297-322). San Francisco, CA: Jossey-Bass.
- Fullan, M. & Hargreaves, A. (1996). *What's worth fighting for in your school?* (Rev. ed.). New York, NY: Teachers College Press.
- Gliner, J.A., & Morgan, G. (2000). *Research methods in applied settings: An integrated approach to design and analysis*. Hillsdale, NJ: Lawrence Erlbaum.
- Goldring, E., & Schuermann, P. (2009). The changing context of K-12 education administration: Consequences for Ed. D. program design and delivery. *Peabody Journal of Education*, 84 (1), 9-43. doi: 10.1080/01619560802679583
- Goodlad, J. I. (1984). *A place called school: Prospects for the future*. New York, NY: McGraw-Hill.
- Goodman, J. (1995). Change without difference: School restructuring in historical perspective. *Harvard Educational Review*, 65(1), 1-29.
- Hallinger, P., & Leithwood, K. (1994). Introduction: Exploring the impact of principal leadership. *School Effectiveness and School Improvement*, 5, 206-218. doi: 10.1080/0924345940050301
- Hargreaves, A. (2000). Four ages of professionalism and professional learning. *Teachers and Teaching: History and Practice*, 6, 151-182. doi: 10.1080/713698714
- Haynes, N. M. (1998). Lessons learned. *Journal of Education for Students Placed at Risk*, 3(1), 87-99.
- Heifetz, R. (1994). *Leadership without easy answers*. Cambridge, MA: Harvard University Press.
- Higgins, L. (2013, July 15). Will the Michigan change its mind on education standards? *Detroit Free Press*. Retrieved from <http://www.freep.com/article/20130715/NEWS06/307150016/common-core-education-standards-michigan>
- Huberman, A. M., & Miles, M. B. (1984). Rethinking the quest for school improvement: Some findings from the DESSI study. *Teachers College Record*, 86(1), 34-54.
- Joyce, B., Murphy, C., Showers, B., & Murphy, J. (1989). School renewal as cultural change. *Educational Leadership*, 47(3), 70-77.
- Kendall, J. (2011). *Understanding common core state standards*. Alexandria, VA: ASCD.
- Kendall, J. & Marzano, R. (1996). *Content knowledge: A compendium of standards and benchmarks for k-12 education* (2nd ed.). Alexandria, VA: ASCD.

- LeCompte, M.D. & Preissle, J. (1993). *Ethnography and qualitative design in educational research*. New York, NY: Academic Press.
- Lee, V. E. & Smith, J. B. (1996, April). *High school size: Which works best and for whom?* Draft paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Leithwood, K., Menzies, T., & Jantzi, D. (1996). School restructuring, transformational leadership, and the amelioration of teacher burn out. *Anxiety, Stress, and Coping*, 9, 199-215. doi: 10.1080/10615809608249402
- Lezotte, L.W. (1994). The nexus of instructional leadership and effective schools. *The School Administrator*, 50(7), 31-39. EJ484942
- Lieberman, A. (1995). *Restructuring schools: Dynamics of changing practice, structure, and culture*. New York, NY: Teachers College Press.
- Lindahl, R. (2010). Framing school improvement as deuterio learning: The road less travelled. *Planning and Changing*, 41, 234-248. EJ952389
- Lortie, D. C. (1975). *Schoolteacher*. Chicago, IL: University of Chicago Press.
- Louis, K. S., Febey, K., & Schroeder, R. (2005). State-mandated accountability in high schools: Teachers' interpretations of a new era. *Educational Evaluation and Policy Analysis*, 27, 177-204. doi: 10.3102/01623737027002177
- Louis, K. S. & Kruse, S. (1995). *Professionalism and community: Perspectives on reforming urban schools*. Thousand Oaks, CA: Corwin Press.
- Louis, K. S., Kruse, S., & Bryk, A. (1995). Professionalism and community: What is it and why is it so important in urban schools? In K. S. Louis & S. Kruse (Eds.), *Professionalism and community: Perspectives on reforming urban schools* (pp. 3-22). Thousand Oaks, CA: Corwin Press.
- Louis, K.S., & Kruse, S. D. (1995). *Professionalism and community: Perspectives on reforming urban schools*. Thousand Oaks, CA: Corwin Press.
- Louis, K. S., & Miles, M. B. (1990). *Improving the urban high school: What works and why*. New York, NY: Teachers College Press.
- Louis, K. S. & Marks, H. (1998). Does professional community affect the classroom? Teachers' work and student experiences in restructuring schools. *American Journal of Education*, 106 532-575.
- Louis, K. S., Marks, H., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal*, 33, 757-798. doi: 10.3102/00028312033004757

- Marks, H. & Louis, K. S. (1997). Does teacher empowerment affect the classroom? The implication of teacher empowerment for instructional practice and student academic performance. *Educational Evaluation and Policy Analysis*, 19, 245- 275. doi: 10.3102/01623737019003245
- Marshall, J. (1981). Making sense as a personal process. In P. Reason & J. Rowan (Eds.), *Human inquiry* (pp. 395-399). New York, NY: Wiley.
- McLaughlin, M. (1976). Implementation as mutual adaptation: Change in classroom organization. *Teachers College Record*, 77, 339-351. 475
- McLaughlin, M. (1990). The RAND change agent study revisited: Macro-perspectives and micro realities. *Educational Researcher*, 19, 11-16. doi: 10.3102/0013189X019009011
- Meyer, J. W. & Rowan, B. (1977). Institutional organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83, 340-363.
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform: An open letter to the American people: A report to the nation and the Secretary of Education*. Washington, DC: Author
- Newmann, F. M., Marks, H. M., & Gamoran, A. (1996). Authentic pedagogy and student performance. *American Journal of Education*, 104(4), 280-312.
- No Child Left Behind Act of 2001. 20 U. S. C. §6301 P. L. 107-110 (2002).
- Ogawa, R. T., & Collom, E. (2000). Using performance indicators to hold schools accountable: Implicit assumptions and inherent tensions. *Peabody Journal of Education*, 75(4), 200-215. 175. doi: 10.1207/S15327930PJE7504_9
- Ogawa, R., Sandholtz, J., Martinez-Flores, M., & Scribner, S. (2003). The substantive and symbolic consequences of a district's standards-based curriculum. *American Educational Research Journal*, 40, 147-176. doi: 10.3102/00028312040001147
- Patton, M. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Pelto, P. & Pelto G. (1978). *Anthropological research: The structure of inquiry*. New York, NY: Cambridge University Press.
- Peterson, P. L., McCartney, S. J., & Elmore, R. F. (1996). Learning from school restructuring. *American Educational Research Journal*, 33, 119-153. doi: 10.3102/00028312033001119
- Porac, J. F., Thomas, H., & Baden-Fuller, C. (1989). Competitive groups as cognitive communities: The case of Scottish knitwear manufacturers. *Journal of Management Studies*, 26, 397-416. doi: 10.1111/j.1467-6486.1989.tb00736.x

- Printy, S. M. (2008). Leadership for teacher learning: A community of practice perspective. *Educational Administration Quarterly*, 44(2), 187-226. doi:10.1177/0013161X07312958
- Printy, S. (2010). Principals' influence on instructional quality: Insights from US schools. *School Leadership and Management*, 30, 111-126. doi: 10.1080/13632431003688005
- Purkey, S. C., & Smith, M. S. (1983). Effective schools: A review. *Elementary School Journal*, 83, 427-452.
- Rowan, B. (1990). Commitment and control: Alternative strategies for the organizational design of schools. In C. B. Cazden (Ed.), *Review of research in education* (Vol. 16, pp. 353-389). Washington, DC: American Educational Research Association.
- Rowan, B. (1996). Standards as incentives for instructional reform. In S. H. Fuhrman & J. A. O'Day (Eds.), *Rewards and reform: Creating educational incentives that work* (pp. 195-225). San Francisco, CA: Jossey-Bass.
- Rowan, B. & Miller, R. (2007). Organizational strategies for promoting organizational change: implementing dynamics in schools working with comprehensive school reform providers. *American Educational Research Journal*, 44, 252-297. doi: 10.3102/0002831207302498
- Raudenbush, S., Rowan, B., & Cheong, Y. (1992). Contextual effects on the self-perceived efficacy of high school teachers. *Sociology of Education*, 65, 150-167.
- Royal, M. A. & Rossi, R. J. (1999). Predictors of within school differences in teachers' sense of community. *Journal of Educational Research*, 92, 259-266. doi: 10.1080/00220679909597605
- Sandidge, R., Russo, C., Harris, J., & Ford, H. (1996). School-based decision making American style: Perspectives and practices throughout the United States. *Interchange: A Quarterly Review of Education*, 27, 313-329. doi: 10.1007/BF01807410
- Schneider, A. & Ingram, H. (1993). Social construction of target populations: Implications for politics and policy. *The American Political Science Review*, 87, 334-347.
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (3rd ed.). New York, NY: Teachers College Press.
- Sergiovanni, T. (1996). *Leadership for the schoolhouse*. San Francisco, CA: Jossey-Bass.
- Sizer, T. R. (1984). *Horace's compromise: The dilemma of the American high school*. Boston, MA: Houghton Mifflin.
- Sizer, T. R. (1992). *Horace's school: Redesigning the American high school*. New York, NY: Houghton Mifflin.

- Smith, L. J., Maxwell, S., Lowther, D., Hacker, D., Bol, L., & Nunnery J. (1997). Activities in schools and programs experiencing the most, and least, early implementation successes. *School Effectiveness and School Improvement*, 8, 125-150. doi: 10.1080/0924345970080106
- Smith, M. S., & O'Day, J. (1991). Systemic school reform. In S. H. Fuhrman & B. Malen (Eds.), *The politics of curriculum and testing: The 1990 yearbook of the Politics of Education Association* (pp. 233-267). Bristol, PA: Falmer.
- Snow, D. A., & Benford, R. D. (1988). Ideology, frame resonance, and participant mobilization. *International Social Movement Research*, 1, 197-217.
- Spillane, J. P. (2000). Cognition and policy implementation: District policymakers and the reform of mathematics education. *Cognition and Instruction*, 18, 141-179. doi: 10.1207/S1532690XCI1802_01
- Spillane, J. P. (2005). *Distributed leadership*. San Francisco, CA: Jossey-Bass.
- Spillane, J. P. & Louis, K.S. (2002). School improvement processes and practices: Professional learning for building instructional capacity. *Yearbook of the National Society for the Study of Education*, 10, 83-104. doi: 10.1111/j.1744-7984.2002.tb00005.x
- Stein, M. & Nelson, B. (2003). Leadership content knowledge. *American Educational Research Association*, 25, 423-448. doi: 10.3102/01623737025004423
- Stone, D. (1988). *Policy paradox and political reason*. Glenville, IL: Scott Foresman.
- Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.
- Talbert, J., & McLaughlin, M. W. (1994). Teacher professionalism in local school contexts. *American Journal of Education*, 102, 123-153.
- Trice, H.M. & Beyer, J.M. (1993). *The cultures of work organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Tyack, D. (1990). "Restructuring" in historical perspective: Tinkering toward utopia. *Teachers College Record*, 92(2), 170-191.
- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.
- Valentine, J.W., Trimble, S. & Whitaker, T. (1997). *The middle level principalship*. Columbus, Ohio: National Middle School Association.
- Valesky, C. T. & Owens, G. R. (2010). *Organizational behavior in education: Leadership and school reform* (10th ed.). San Francisco, CA: Pearson.

- Waters, T., Marzano, R.J., & McNulty, B. (2005). *School leadership that works: From research to results*. Alexandria, VA: ASCD.
- Webb, N. L. (2006). *Depth of knowledge levels*. Wisconsin Center of Educational Researcher. Madison, WI: University of Wisconsin Press.
- Weatherley, R., & Lipsky, M. (1977). Street-level bureaucrats and institutional innovation: Implementing special-education reform. *Harvard Educational Review*, 47, 171-197.
- Weick, K.E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.
- Wilson, S. & Ball, D. L. (1996). Helping teachers meet the standards: New challenges for teacher educators. *The Elementary School Journal*, 97, 121-138.
- Wolcott, H. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks: Sage.
- Wood, M. (2005). The fallacy of misplaced leadership. *Journal of Management Studies*, 42, 1101-1121. doi: 10.1111/j.1467-6486.2005.00535.x
- Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Newbury Park, CA: Sage.