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Listservs, Learning Communities, And Baby Steps: North Dakotan Rural Educators And The Implementation Of The Common Core State Standards

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LISTSERVS, LEARNING COMMUNITIES, AND BABY STEPS: NORTH DAKOTAN RURAL EDUCATORS AND THE IMPLEMENTATION OF THE COMMON CORE STATE STANDARDS

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ABSTRACT

The Common Core State Standards mark the latest state-led efforts to standardize K-12 education in the United States. The initiative aims at providing a clear and consistent framework to inspire students to develop strong foundational knowledge and deep conceptual understanding, skills considered critical for shaping students' college and career readiness and successes. Given the continuing importance of educators' role in translating the new content standards into achievable goals, it was useful for stakeholders to understand how educators in rural districts in the state of North Dakota were developing the local capacity to navigate the changes.

This qualitative study used a grounded theory methodology to understand the perspectives of teachers and administrators in rural school districts about their efforts to garner local instructional strategies and curriculum resources to implement the Common Core. Consistent with the study framework, 22 participants (14 teachers, 2 instructional coaches, 5 principals, and a superintendent) from five rural school districts participated in two separate sessions of interviews. Non-participant observation was used to contextualize the interview data. Strauss and Corbin's (1998) systematic approach to concept and category development was used as a lens to analyze the data. Open and intermediate coding techniques were used to identify and refine codes, concepts, and categories for the development a proposed theory.

The study findings showed that the alignment process signified a profound shift for educators. While schools used local and regional professional learning communities to provide training for educators, specific guidelines and Common Core-aligned curriculum materials to

gauge successful implementation were lacking. Teachers explored multiple sources to supplement the already existing materials. The implementation process required a significant amount of time, which put pressure on teachers' instructional and planning time. In addition, both administrators and teachers felt the pressure from the anticipated drop in students' test scores, based on the comparative rigor emphasized by the new state assessment criteria. Recommendations for additional time for teacher training and collaboration are discussed.

CHAPTER I

INTRODUCTION

In 2001, the No Child Left Behind Act (NCLB) was passed into law to reauthorize the Elementary and Secondary Education (ESEA) Act of 1965. The law prescribed a number of accountability measures, including more extensive grade-level testing requirements and a timeline for students to be proficient in English Language Arts (ELA) and mathematics (Mills, 2008; Jennings, 2012). For instance, the accountability mandates obligated schools to various testing requirements and annual assessments in reading and mathematics across grade levels 3 through 8. At the high school level, emphasis was placed on students' outcomes, based on race, ethnicity, and other identifiable groups that might be at risk (Thompson & Barnes, 2007). Also, schools were required to demonstrate "adequate yearly progress" (AYP), based on state standard tests outcomes and report students' progress in reaching targets for achievement (Jennings, 2012; Mills, 2008; Thompson & Barnes, 2007; Farmer et al., 2006).

Part of the accountability framework was for states and schools that received Title I funding to ensure that every teacher teaching in a core content area, as prescribed by federal standards, was "highly qualified" (Webb, 2006; Schuster, 2012). Accordingly, states, local educational agencies, and local authorities of school districts, over the past decade, have focused attention on meeting the mandates of the NCLB policy. Schools in particular had been working hard to meet the state-prescribed yearly goals for student proficiency (Mills, 2008; Jennings,

2012; Thompson & Barnes, 2007). While the accountability measures of NCLB policy influenced states to set clear expectations and targets for students' academic outcomes in crucial areas of ELA and Mathematics (Jennings, 2012; Taylor et al., 2010), such measures also produced some unintended consequences which required adjustments (McDonnell, 2012). In-depth analyses of the overall impact of the accountability policy by researchers yielded a number of troubling issues, including the persistent equity gaps and the increasing number of schools that were failing to meet the states' targets for student proficiency (Jennings, 2012; Philips & Wong, 2010; Taylor et al., 2010).

In addition, there was a growing evidence of discrepancies between students' proficiency level on the National Assessment of Education Progress (NAEP) and those reported by individual states (NCTM, 2013; Taylor et al., 2010; Daggett & Gendron, 2010). For instance, Taylor and his colleagues' report on the progress made by states, districts, and schools in the implementation of the accountability provisions of NCLB in 2006-2007 showed a statewide adoption of the flexibility provisions of the accountability systems. They reported wide variations in terms of the rigor of the state standards, the type of assessments used, and how states determined AYP and set their annual proficiency targets. In other observations, assessment outcomes on students' proficiency based on states' standards had been found to be considerably lower than the NAEP standards (Phillips & Wong, 2010; NCTM, 2013).

Over the years, some researchers and policy analysts have grown increasingly concerned, arguing that the variations and the lack of adequate and consistent rigorous content alignment of states' benchmarks under the NCLB mandates have had critical implications on what students should know and be able to do by the end of their K-12 experience (Carmichael, Martino, Porter-Magee, & Wilson, 2010). Governors, chief state school officers, business leaders, and college

faculty demonstrated increased concern that K-12 students were not adequately prepared for college education experience and that students were becoming less globally competitive in the world of work (Grossman, Reyna, & Shipton, 2011; National Governors Association (NGA), the Council of Chief State School Officers (CCSSO), and Achieve Inc., 2008). Such arguments pushed to the forefront the consideration of new facets of standard-based education. A case was made for states to have rigorous and common educational standards for ELA and mathematics (Kober & Rentner, 2011; Carmichael, Martino, Porter-Magee, & Wilson, 2010; Mathis, 2010; Jennings, 2012; Weldon, 2012).

Leading the efforts in this direction, the National Governors Association (NGA) Center for Best Practices and the Council of Chief State School Officers (CCSSO) in June 2010, released the newly developed Common Core State Standards (CCSS) in ELA and mathematics for K-12 education (Grossman, Reyna, & Shipton, 2011; NGA & CCSSO, 2010; Kober & Rentner, 2011). Making a case for educational importance of the CCSS, the NGA and CCSSO argued:

> We need standards to ensure that all students, no matter where they live, are prepared for success in postsecondary education and the workforce. Common standards will help ensure that students are receiving a high quality education consistently, from school to school and state to state. Common Core standards will provide a greater opportunity to share experiences and best practices within and across states that will improve our ability to best serve the needs of students. (NGA & CCSSO, 2010, p. 1)

Purported to be drawn from international best practices grounded in research (Porter et al., 2013), the new standards are believed to be better aligned with college and workforce expectations (Carmichael, Martino, Porter-Magee, & Wilson, 2010; NGA & CCSSO, 2010). As

of July 2013, 45 states and the District of Columbia had adopted the CCSS in ELA and mathematics (Kober, McIntosh, & Rentner, 2013; Weldon, 2012). Following the adoption of the CCSS in the last three-to-four years, participating states and schools have been aligning their instructional and assessment techniques, and professional development programs with the requirements of the new standards.

Problem Statement

Proponents of CCSS argue that the new standards are more ambitious because while they incorporate a set of clear and realistic goals for success, they also allow students, regardless of where they live, to experience high-quality education (Grossman, Reyna, & Shipton, 2011; Porter et al., 2013; Carmichael, et al., 2010; NGA & CCSSO, 2010; Weldon, 2012). The underlying argument is that the framework of the CCSS not only incorporates inputs from scholars, teachers, school leaders, professional organizations, and parents (NGA & CCSSO, 2010), but they are also grounded in evidence from best performing states and high-performing nations (Eilers & D'Amico, 2012; King, 2011). However, with most states and school districts committing resources to implementing the new standards (Kober, McIntosh, & Rentner, 2013; Jennings, 2012; Kober & Rentner, 2011), the ability of rural schools to build the capacity to progressively drive the requirements of the new standards is critical.

Experts agree that a successful implementation of the new standards would require complex curricula, instructional, and administrative adjustments at the school and classroom levels (Grossman, Reyna, & Shipton, 2011). Part of the efforts to deal with such complexities is for states and school districts to mount sustainable and supportive institutional structures to facilitate the process of successful transition. Ongoing professional development programs for both teachers and administrators, continued collaboration by teachers, and continued partnership

among CCSSO and NGA state representatives, content experts, researchers, national organizations, and community groups are considered critical in the successful implementation (Jennings, 2012; Kober, McIntosh, & Rentner, 2013; King, 2011). In effect, the implementation of the CCSS requires every K-12 classroom to have "well qualified teacher" as well as an "effective instructional leader" (Jennings, 2012). However, the implications for meeting the conditions for successful implementation of the new education standards put additional weight on the challenges that are already facing most rural school districts. Given their resource limitations and the unique conditions under which many of them operate (Thompson & Barnes, 2007; Jamerson, 2005; Powell et al., 2009), it is critical to learn about how the rural schools are garnering local efforts to implement the new requirements.

A continuous review of how schools were doing under the NCLB requirements has shown a number of structural, institutional, and resource constraints that challenged rural schools' capacity to meeting students' yearly goals (Reeves, 2003; Powell et al., 2009; Jamerson, 2005). Available evidence suggests that rural schools were more challenged than urban and suburban schools in meeting the provisions of NCLB. For instance, Jamerson (2005) reported that funding formulas in many states do not favor rural districts. The financial difficulties (Barley & Brigham, 2008; Jordan & Jordan, 2004) and the under-funded state and federal mandates (Arnold, Newman, Gaddy, & Dean, 2005) affect rural schools. Also, rural schools experience a persistent enrollment decline, siphoning off per-pupil state aid, placing more burdens on local communities (Jamerson, 2005; Harmon, Gordanier, Henry, & George, 2007). In addition, rural and small school districts face the challenge of recruiting and retaining a qualified teacher workforce (Barley, 2009; Barley & Brigham, 2008). As a result, teachers get assigned to perform multiple-grade teaching assignments (Barley, 2009). Literature reports

inadequate professional development opportunities for teachers and administrators, due to their geographical and collegial isolations (Jamerson, 2005; Beeson & Strange, 2003).

As states and school districts implement the new standards, these challenges could be drawbacks undermining rural schools' transitional efforts towards an effective implementation of the CCSS. While the implications of the new state standards are not unique to rural schools, the culmination of numerous resource constraints raise concerns about the prospects of rural schools to meet the conditions necessary for achieving full implementation. The hundreds of miles that set some rural areas apart (Johnson & Strange, 2009), the collegial isolation (Jamerson, 2005), and the institutional, instructional, and administrative challenges that are already facing many rural school districts (Powell et al., 2009) could become disincentives for prompt and continuing professional collaboration efforts and the sharing of essential knowledge and resources within and across states. These and other conditions draw attention to understanding how rural educators (teachers and administrators) are adjusting their curriculum development programs and pedagogies to meeting the expectations of the new standards. More importantly, the question remains, How are rural educators are building the capacity to share implementation strategies and to mount and maintain school improvement processes (Harmon, Gordanier, Henry, & George, 2007)?

The Adoption of CCSS in the State of North Dakota

North Dakota was among the 45 states that adopted the CCSS for both English language arts/literacy and mathematics (Kober, McIntosh, & Rentner, 2013) and one of the six Regional Educational Laboratory (REL) central states that made full commitment toward students' assessment on the Common Core by April 2015 school year (REL, 2011). After a committee of content and instructional experts studied and reviewed the CCSS, the state voted unanimously

for its adoption. Dr. Wayne G. Sanstead, then state superintendent, officially signed the adoption of CCSS on June 20, 2011 (ND Department of Public Instruction). In a press release, Dr. Sanstead stated:

> North Dakota schools embody a long-standing tradition to build on success and to improve. These standards establish our measures for success. These standards anchor us and guide us. If we are to continue to improve as an educational system, then it is these standards that will help lead us to our goal. The North Dakota content standards are that important to us all. (p.2)
>
> (http://www.dpi.state.nd.us/news/2011/press_release6_20_2011.pdf).

Following the adoption of the new standards, educational authorities in ND have been working to put in place key structures, including the provision of timelines toward full implementation, collaboration to determine the content focus of state professional development efforts, and how to assist teachers to transition to implement the CCSS (REL, 2011). Following the adoption, the curriculum leaders and content specialists across the state met and developed a curriculum template for ELA and mathematics. The initiative was part of the efforts to provide schools with guiding frameworks for implementation.

The Common Core and the Political Debate

The Common Core State Standards (CCSS), a state-led initiative, represent the most recent reform effort to transform K-12 education in the U.S. While the new standards have gained a nationwide adoption, their continuous implementation has been drawn into ongoing political debates by various interest groups across states. The political disconnect seems to shape the trajectory of public discourse on education. For instance, Supovitz, Daly, and Del Fresno (2015) used Twitter to explore the ways in which social media influenced conversations on the Common Core. Between September 1, 2013 and March 4, 2014, the authors tracked and

analyzed nearly 190, 000 tweets that were authored by about 53,000 distinct actors. Supovitz and colleagues found that non-education affiliates tended to align with anti-Common Core/outside education group. Amongst education practitioners, nearly two-thirds were anti-Common Core, while about a quarter was supportive of the Common Core.

The adoption and implementation of the new standards have come under attack in, at least, a dozen states, with several coalitions of conservatives and anti-Common Core groups mounting and leading protests to stop the Common Core. The conservative backlashes and pushbacks have also been entrenched in legislative instruments to haul states' commitment to continue with the implementation of the new standards and other related assessments. Activists attempt to use legislation bills to influence states to either pull out of the CCSS and/or the associated tests. As of the beginning of 2015, some states (Alaska, Texas, Virginia, and Nebraska) had not adopted the Common Core. Indiana became the first state to officially withdraw from the Common Core. Minnesota adopted the Common Core ELA standards, but not those in mathematics.

In the state of North Dakota, there have been some conservative groups and other community members advocating for a stop to the implementation of the requirements of the new standards. Recently, a legislation bill to limit the implementation of Common Core State Standards by the state was botched, following the House Education Committee voting 9-4 to give a do-not-pass recommendation (The Bismark Trubune, February 2015). However, the bill would still go to the House floor for a vote by the entire chamber.

The ongoing political and legislative attacks on whether states should pull back on their commitments to implement the Common Core and its related assessments fuel important discussions on certain constituents of the initiative. For instance, the creators of the Common

Core maintain that the goal is not to have more tests, but to have smarter and better tests that would help students, parents, and teachers (CCSSO & NGA, 2010). However, opponents seem to be concerned about the high-stakes that are being increasingly attached to testing and testing outcomes. The other major concern is that even though the initiative is supposed to be a state-led effort, there seems to be a growing concern about federal intrusion into local control and takeover of state education policies through other federal funding programs.

Purpose of the Study

The purpose of this study was to draw on the perspectives of rural educators (teachers and administrators) to propose a theoretical perspective that would explain the curricula, instructional, and professional choices, practices, and strategies and strategies that North Dakota's rural were engaged in, as they transitioned to implement the Common Core Standards. The study was informed by an overarching question; how are rural teachers and administrators developing the capacity to implement the curricula and instructional alignment requirements of the CCSS? The following sub-questions were used to further clarify the direction of the study.

1. What are the perspectives of teachers and administrators on their preparedness to implement the changes required by the new standards?
2. What curricula and instructional adjustments are educators making to align the instructional contents to the new state standards?
3. How are administrators and teachers increasing their knowledge in the implementation of the new standards?
4. How are rural small schools sharing implementation strategies?
5. What are the challenges facing rural small schools in the implementation of the CCSS?

Significance of the Study

The adoption of the Common Core has significant implications for teaching and learning. As schools initiate actions to implement the requirements of the new standards, it is useful for stakeholders to understand how rural educators are combining individual and collective efforts to implement the Common Core. The bulk of the studies on Common Core are nationwide survey reports (e.g., Kober, McIntosh, & Rentner, 2013; EPE Research Center, 2013; Porter et al., 2013; Kober & Renter, 2011) about what states and school districts in general are doing to prepare administrators and teachers to implement the new initiatives. These surveys only report responses in aggregates, with limited in-depth and detailed understandings on these responses reflect individual teachers and administrators' perspectives and experiences. In addition, no known study has looked into rural educators' transitional efforts to implement the Common Core. The findings of the study are critical because they show the current state of the public education field in rural communities, as the CCSS are actualized. The findings also allow stakeholders to learn about what professionals identify as critical areas in their own training for their success toward this movement. In addition, the findings of the study demonstrate what gaps exist that new professional development opportunities would fill. These gaps inform recommendations for further professional development relative to educators' administrative and instructional readiness, preparedness, and needs regarding the implementation of the new standards. The recommendations also inform ongoing discourse on the trajectories of rural educational research and policy frameworks for standards-based education.

Theoretical Framework

Following a nationwide support of the CCSS in 2009, participating states are undergoing the process of developing comprehensive implementation plans, with most states requiring their

school districts to implement the standards (Kober & Rentner, 2012). However, there is a widespread agreement that the implementation process would require educators, particularly teachers and principals, to build the necessary capacities for managing important changes to the curricula and instructions (Daggett & Gendron, 2010; Jenkins & Agamba, 2012). Researchers and practitioners' use of the concept "capacity-building" conveys a more systemic change that results from school-wide processes and sustained improvement practices, with the goal of improving student achievement outcomes (Fullan, 2006; Stoll, 1999; 2009; Cohen & Ball, 1999; Youngs & King, 2002; Hopkins et al., 2001; Mitchell & Sackney, 2000). Capacity-building is a complex process that encapsulates "…any strategy that increases the collective effectiveness of a group to raise the bar and close the gap of student learning…..It involves helping to develop individual and collective knowledge and competencies, resources, and motivation. " (Fullan, 2006, p.9) Seemingly generic though, Fullan's perspective conceptualizes capacity-building as an interactive process organized to guide educators' motivation, and curricula, and instructional choices toward improved educator effectiveness and students' achievement outcomes. With the implementation of the CCSS, one of the key conditions is the creation of opportunities for schools, districts, and states to share implementation strategies. With this perspective, capacity building is conceptualized as a form of community of learning which fits Mitchell and Sackney's (2000) model of "capacities for building a learning community." I considered Mitchell and Sackney's model as an exemplary one that offers a clear and a consistent theoretical understanding about how educators build and manage their capacities to influence the short and long-term achievement outcome of students.

The concept of learning community is built on the assumption that even though schools are supposed to facilitate continued learning of all individuals (Stoll, Bolam, McMahon,

Wallace, & Thomas, 2006), they should create conditions to sustain improved educational practice, change, and improvement in students' learning (Fullan, 2006; Hopkins, & Reynolds, 2001; Cohen & Ball, 1999). Based on these assumptions, Mitchell and Sackney proposed a model with which they specified three pivotal capacities that a school should mount if it is to function as a learning community: personal capacity, interpersonal capacity, and organizational capacity.

First, according to the proponents, personal capacity entails a deeper critical deconstruction and reconstruction of one's own professional knowledge. The extant body of literature on school improvement underscores the importance of educator learning opportunities in school improvement reform efforts (Cohen & Ball, 1999; Spillane & Louis, 2002; Argyris & Schon, 1978; Darling-Hammond, 1990; Sparks & Hirsch, 1997, Stoll, 2009). Educators' personal capacities are constructed on an array of individual experiences, values, assumptions, beliefs, and practical and professional knowledge (Cohen & Ball, 1999; Mitchell & Sackney, 2000). However, while these attitudes are assumed to be individually embedded, they are not fixed. School management and instructional changing requirements prompt cognitive challenge on educators' explicit and/or implicit structures of their personal narratives by signaling knowledge gap. According to the proponents, that particular narrative becomes a subject of deconstruction: a reflective process that naturally leads to the active phase of reconstruction. The deconstruction—construction facet of personal capacity relates to the evaluation of an individual competence as exercised in an achievement of a common goal (Youngs & King, 2002). However, Mitchell and Sackney (2000) do not consider that the reconstruction process should be based on observed personal flaws or weaknesses, but as embedded layers that inspire teachers to reconstruct their professional narrative in the face of challenges. The reconstruction

of the professional narrative can take the form of planned formal learning, embedded facilitation, action research, unplanned informal learning, or any other form of intervention that prompts the individual to renew practices, assumptions, and understandings about instruction. These create opportunities for educators to learn more about their students and the materials of instruction by grounding their own learning in improved student performance of particular content (Mitchell & Sackney, 2000; Cohen & Ball, 1999).

Second, with interpersonal capacity, the focus shifts from individuals to professional patterns of collegial relations and collective practices and engagement. Interpersonal capacity illuminates the culture of collaborative learning. The collective professional learning and engagement are informed by contested process of negotiation among different people with different sets of knowledge, histories, motivation, personal styles, emotions, and different desires and needs (Mitchell & Sackney, 2000). With the development of personal capacity, an individual educator's test occurs during the process of the deconstruction and reconstruction of professional narrative. However, the social test occurs as educators deconstruct their individual and group narratives as they also reflectively engage in genuine dialogue by critically examining old habits and practices in the emergence of new concepts and ideas (Mitchell & Sackney, 2000). In a learning community, where individual and collective learning are deeply embedded in one another, learning can naturally arise from the contention of the cultural, social, and cognitive climate that characterizes the school structure (Stoll, 1999; Mitchell & Sackney, 2000; Cohen & Ball, 1999). Building on the social constructivist perspective of learning as a process of negotiation among the individuals in a learning community, an effective collaborative culture should provide the foundation upon which to build a cognitive, social, and a professional climate that supports and encourages individual and collective learning. These are constructed on

individuals' level of participation and the extent to which their participation in general and their contributions to solutions to problems are valued by the culture embedded in the collective learning process.

Finally, with organizational capacity attention is drawn to how institutional structures and systems are constructed to support and value both individual and collaborative learning and growth. The type of structural arrangements schools operate on, from learning community perspective, can mount cognitive, social, cultural, and professional barriers among educators (Lambert, 2000). Engendered by standards, procedures, expectations, and power-relational hierarchies, these structural conditions serve to: "…isolate teachers and students, to minimize contact among educators, to reduce flexibility and professional discretion, and to engender defensiveness and resistance among the professional staff and among students." (Mitchell & Sackney (2000, p. 160) They propose that building organizational capacity requires mounting structural arrangements to confront and manage these barriers that exist in the forms of norms of privacy and individualism and other embedded socio-cultural norms entrenched in the school systems. To bring down these barriers, the theory suggests some interlocking ideas. First, I find the need for a persistent investment in professional development programs to provide opportunities for educators to continually engage in professional conversations and build a culture of inquiry (Mitchell & Sackney, 2000). These programs should be designed to offer collective reflection meetings, problem-solving think tanks, formal opportunities for collaboration, connections to educational research and development, and networking (Stoll, 2009; Lambert, 2000; Youngs & King, 2002). Also, the structure of the power relationships in the educational hierarchy embedded in the school system plays an important role in the process of mounting organizational capacity (Stoll, 2009; Lambert, 2000). Typically, the distinctive

traditional roles of administrators and teachers create defensiveness and self-protection rather than experimentation with practice or appeals to administrative support for new and unusual pedagogic ideas (Mitchell & Sackney, 2000). With a perspective that considers a school as a learning community, top-down or vertical hierarchical administrative structures are found by researchers as not being effective in building the required internal commitment and agency necessary to sustain improvement (Stoll, 2009). Along this line of understanding, the authors propose horizontal relational pattern of an administrative structure that reduces power and distributes leadership roles within the school. Leadership dynamics are considered as teams' collective responsibility to provide the conditions, environment, and the opportunities for collegial creativity and growth (Stoll, 1999; 2009; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). With this arrangement, administrators are considered more as instructional facilitators, with performance appraisal ensuing from a developmental perspective rather than evaluations (Mitchell & Sackney, 2000). This keeps administrators in touch with daily classroom practices, and it keeps teachers in touch with the decisions that affect the ways in which they work with their students.

In addition, the authors espouse the need for the institution of a data-based approach to professional discourse to keep the focus on collaborative teaching and learning. With this, teams collect data on multiple indicators, such as student retention, achievement, interest, and student perception measures through formal student assessment measures, in student satisfaction surveys, or in class clinics where educators talk about some of the issues that come up on a day-to-day basis or with individual students (Mitchell & Sackney, 2000). Also, data can be gathered from colleagues, parents, community members, other educators, or anyone else who might have a stake in a particular educational experience, in relation to educational, social, financial, and

political conditions. These data provide a solid foundation for critical reflection and deep analysis of the relationship between practice and the effects of practice (Mitchell & Sackney, 2000). They argue that without sufficient data, there is a danger of relying on past practices and assumptions that are separated from actual outcomes and that are unsupported by factual evidence.

Application of the theory to the Study

Capacity building constitutes efforts to link school improvement with changes that are facilitated by individual educators and their collective learning practices. Such changes are entrenched in patterns of relationships, interactions, and collegial learning opportunities that are created within and between the schools (Lambert, 2000). In efforts to sustain improvements, it is critical that schools build and maintain a culture "…that allows people, individually and collectively, routinely to learn from the world around them and to apply this learning to new situations so that they can continue on a path toward their goals in an ever-changing context." (Stroll, 2009, p. 125) The theoretical lens used in this study is based on Mitchell and Sackney's (2000) model which explains capacity-building process as a community of learning that allows individuals and groups of individuals to reconstruct their professional identities and practices. Based on this theory, the development of personal, interpersonal, and organizational capacities should remain central. The underlying interpretation of the capacity-building model is based on the conception that knowledge is both personally and socially negotiated, mediated, and constructed. Mitchell and Sackney maintain that the three sets of capacity should mutually influence and reinforce each other to allow a school to function as a community of learning.

The implementation of the Common Core State Standards required educators to make changes to the curriculum, assessment, and instructional contents. These changes would be

expected to bring improvement in students' learning and achievement outcomes. It was the purpose of this study to provide understandings on how rural schools in this study were mounting and directing individual, group, and institutional capacities toward implementing the requirements of the new standards. Using Mitchell and Sackney's (2000) model as a theoretical lens, I wanted to understand how individual and collective (interpersonal and organizational) capacities were significant in schools' implementation efforts. In addition, it was important to understand, based on participants' vignettes, how such capacities were entrenched in the process of implementing the Common Core.

Definition of Key Terms

Common Core State Standards: The Common Core State Standards (CCSS) represent a state-led effort to unify a set of educational standards for English-language arts and mathematics (NGA & CCSSO, 2010). Proponents expect that if the standards are implemented well by states and schools, students can be adequately prepared to achieve successes in college and in the world of work. In the text, the terms "new standards", "Common Core Initiative" interchange with Common Core Standards.

Rural schools: Based on census data, rural denotes population, housing, and territory not designated as urban, including open country with population densities less than 500 people per square mile and places with fewer than 2,500 people. However, additional criteria were considered in defining rurality in the study. For example, school districts with an average student enrollment of not more than 600 were considered.

Capacity building: Capacity building refers to "…any strategy that increases the collective effectiveness of a group to raise the bar and close the gap of student learning…..It involves

helping to develop individual and collective knowledge and competencies, resources, and motivation" (Fullan, 2006, p.9).

Deconstruction: Evaluation of one's own aptitudes through self-reflective activities to form new capabilities (reconstruction) in response to emerging challenges.

Standards-based reforms: The term is used to refer to schools' effort to align standards to what; students are expected to know and be able to do, measurement of student achievement of the standards, targets for performance based on the measurement criteria and a set of consequences for schools based on performance (Hamilton, Stecher, & Yuan, 2012).

Organization of the Study

The study is organized into five chapters. In Chapter I, I have provided a background to the study, including the problem statement of the study. In addition, the chapter provides a background to the context of the adoption of the Common Core state standards in the state of North Dakota. The purpose and significance of the study are included in this chapter. The chapter ends with the presentation of the theoretical framework of the study.

In Chapter II, I review relevant literature on how standards-based reforms have evolved and shape perspectives, principles, and policies on education and in the case for Common Core. Chapter III lays out the research methodology, the research paradigm, and the research procedure, including data collection procedures, data analysis, trust worthiness, ethical considerations and researcher reflexivity and the limitations of the study.

In Chapter IV, I present the findings, based on the proposed theory. Theoretical assertions, based on the categories that emerged from the data analysis are also presented in this chapter. Chapter V presents the discussion of the findings, based on the research questions of study. The chapter concludes with recommendations for professionals and further research.

CHAPTER II

LITERATURE REVIEW

Are K-12 education policies failing to address key educational needs of students? The alarming urban school dropout and low graduation rates (Heise, 1994), the racial achievement and equity gaps (Lee, 2002), the increasing number of underperforming students in terms of proficiency outcomes, and the average students' performance in such critical areas as mathematics and science, compared internationally (Lee, 2006) have all been critical national issues informing U.S. federal and state policy directions (Hoyle & Kutka, 2008; McDonnell, 2012, Shepard, Davidson, & Bowman, 2011). These issues hold serious repercussions for both present and future economic prosperity of the United States (Lockwood, 1998). Toward this end, standards-based reforms have remained the widespread national and statewide strategy to raise students' achievement through provision of high-quality education (Hamilton, Stecher, & Yuan, 2008; Spillane, 2004). This chapter explores the relevant literature on how standards-based reforms have evolved over the years to shape debates, perspectives, and policies and practices about K-12 education and the case for Common Core State Standards. The conceptual framework for standards implementation and implications for rural schools are discussed.

Historical Trends in Standards-Based Reforms (SBR)

Standards-based reforms (SBR) have often been instigated through legislature, common curriculum and textbooks, and entrance requirements with the purpose of correcting educational deficiencies (Goertz, 2007). Standards-based curriculum reforms often mark a shift from less intellectually rigorous to more rigorous instruction to create academically challenging learning

outcomes for all students (Spillane, 2004; Lockwood, 1998). Under the theory of standards-based reform, "…states establish challenging content and performance standards for all students and align key state policies affecting teaching and learning-curriculum and curriculum materials, preservice and inservice teacher training, and assessment to these standards." (Goertz, 2007, p. 25) Historically, these features have consistently marked standards-based reform efforts which date back in the late nineteenth century (Nichols & Berliner, 2007; Goertz, 2007). During this period, schools had common content and performance standards as determined by the use of similar curricular materials and grading systems for high schools, college admission requirements, and examinations (Ravitch, 1995). Even though the underlying principles for using common standards have not significantly changed historically, standards-based reforms have often been framed to address observed inadequacies in the practice of education.

In 1893, the Committee of Ten, constituted by college presidents and professors determined "….to bring some order to the hodge-podge of high school curriculum and to improve and standardize preparation for college, established high standards for all high school students, whether college or work-bound." (Goertz, 2007, p. 30) While they recommended what should be taught and how in each subject area, and how student knowledge should be assessed, only a few students were affected by the standards since only one in ten youth were enrolled in high school at the turn of the 20th century (Goertz, 2007). In the following decades, policymakers and educational leaders became preoccupied with education that was meant for individuals of different ability rather than the requisite education for all students (Greene, 1980). Thus, while schools had diverse programs for the achievement of standards (Britell, 1980), educators used intelligence test outcomes to group students and to provide individualized programs of instruction (Greene, 1980). By the end of the first half of the 20th century, program

and content standards for students had become a subject of differentiation (Goertz, 2007). However, upon evaluating the effect of the tests on overall learning outcomes of students, experts and educational researchers began to grow concerned that the tests were limited in measuring the "immutable abilities" of students (Britell, 1980). Intense discourse about school evaluation elucidated a new understanding of the limitations of the tests. As result, a new concept of education evaluation was developed in the early 1930s that sought to tie the assessment of student progress to the underlying educational objectives (Britell, 1980). This approach seemed well-suited for the expanding population of high school students who came from the working class and immigrant families (Goertz, 2007). However, rather than being a measure of students' learning outcomes, educational testing and statewide assessment programs had become more of social indicators meant to inform the policy process, while also alerting educational policymakers to educational problems (Baratz, 1980).

Although more students attended and completed high school, they did not experience a common curriculum (Goertz, 2007). Stakeholders realized that vast differences existed in the basic opportunity for all children (Britell, 1980). Traditional notions of equal opportunity were exposed as insufficient during the 1960s (Greene, 1980). Periodic attempts to increase the rigor of curriculum and instruction in selected subjects, such as mathematics and science in the 1950s and 1960s targeted primarily the high achieving students (Goertz, 2007). As indicated by Britell (1980), "…courts and civil rights groups questioned the use of certain selection devices; in essence, they asked whether the chosen measure and level were evidence of competence on group and individual performance." (p.54) Subsequently, other postwar conditions and pressures of the "Race to Space" with the Soviet Union, the economic and the political conditions began to

pull some strings on national priorities, with public education becoming a potent tool for social reforms at the federal level in the early 1960s (Kaestle & Smith, 1982).

The Elementary and Secondary Education Act (ESEA) 1965

In retrospect, standards-based reforms (SBR) in particular began to grow throughout the 1960s and 1970s following the implementation of the various educational programs and policies along with the various legislative instruments that were passed (Hamilton, Stecher, & Yuan, 2008; Cohen & Harey, 1980). By early 1960s, the level of educational opportunities available to students continued to differ by district urbanicity, size, wealth, and racial/ethnic composition (Goertz, 2007). The culmination of these conditions provided the impetus for the reconsiderations of the use of educational programs and assessment tools to leverage educational opportunities for all students (Britell, 1980). The development of national educational policies in the 1960s was generally remedial in nature, as it was designed to respond to the growing political power of racial and ethnic minorities and a new national social conscience (Britell, 1980). For instance, the passage of the Economic Opportunity Act (EPA) of 1964 as a major policy program of President Johnson's "war on poverty" proposed quality education for poor children (Murphy, 1982). On April 11, 1965, President Johnson signed the Elementary and Secondary Education Act (ESEA) into law which amended the "impact aid" law (P.L. 81-874) of 1950 (New York State Archives, 2009). Its first title, Title I, focused on the needs of the poorest students (New York State Archives, 2009).

The ESEA engendered new leaps into local control of schooling through federal registration and allocation of funds (Nichols & Berliner, 2007; Kaestle & Smith, 1982). With this, Title I became "flagship program" to improve education for low-income families (Jennings, 2012). The Act was underpinned by a fundamental principle that poor children would become

good adults if they were equally given opportunity to do well in school. It was, therefore, "…designed to stimulate innovation, to strengthen the states, to link research with the schools, and to make the problems of the poor the nation's number one education priority" (Murphy, 1982, pp. 35-36). To achieve this, federal government allocated extra funds to schools with high concentrations of poor families (Murphy, 1971). The passage of the Title I of the Elementary and Secondary education Act (ESEA) of 1965 not only marked the expansion of the role of the federal government in education, but also demonstrated the activism of the federal government to promote greater economic and social opportunity across identifiable groups in subsequent educational policies.

In retrospect, the authorization of the ESEA essentially marked a growing emphasis of using tests for making important decisions about students, teachers, and administrators in the elementary and secondary schools and also for evaluating the school systems (Nichols & Berliner, 2007). The passage of the ESEA was based on the observation that school administrators were less equipped to provide effective programs for the disadvantaged children who were at risk for failure (Shepard, 2008). The ESEA Act launched results-oriented policies in education through the development of as a specialty in research educational evaluation and the school accountability movement (Shepard, 2008).The Title I program of ESEA permitted states to use achievement "standards" for economically disadvantaged students that were different from, and less challenging than those for other students (New York State Education Department, 2006). The effect was that "universal attainment of excellence" was realistically considered challenging across students with varying individual capabilities (Greene, 1980). The preoccupation with "achievement relative to the highest level" led to inequities, inefficiencies, and widespread failures in public schools (Britell, 1980), with thousands falling below an

acceptable level of achievement (Greene, 1980). Therefore, years after the passage of ESEA, concern for American education increasingly grew with equity issues.

Minimum Competency Testing (MCT) 1970-1980

The equity movement of the late 1960s directed new attention to the allocation of school resources, particularly for schools in poor and minority communities with stakeholders demanding minimum standards (Britell, 1980). Increased state fiscal support of education and concerns about students' inability to read and compute informed many states to move to implementing testing and other policies in the 1970s (Goertz, 2007). During the early 1970s, the minimum competency testing (MCT) programs were implemented to improve academic achievement, especially of the disadvantaged (Cohen & Harey, 1980). Such movement not only sought to hold educators accountable for the operation and performance of their schools, but to also hold students accountable for the mastery of basic skills through high school graduation tests (Goertz, 2007). The central issue, therefore, shifted from whom schools teach to what schools test (Baratz, 1980). Teachers were preoccupied with the competencies and prepared students for the tests (Goertz, 2007). However, compared with earlier testing and assessment criteria which emphasized aptitude testing, the concern for minimum competence represented a shift from traditional commitments, that is from "standard of excellence" to "minimum competence" (Greene, 1980). Thus, the minimum competence movement and its assessment criteria sought to define minimum learning outcomes for students in a variety of academic areas, including reading and mathematics (Cohen & Harey, 1980).

Although with MCT, states were responsible to set minimum standards, its implementation, however, shifted the burden of satisfying minimums from the state to the individual (Cohen & Harey, 1980). Generally, state programs in competency-based graduation

were divided into three categories: statewide requirement with uniform state standards and measurement, statewide requirement with local standards and measurement, and statewide requirement with state standards and measurement, but with local option to participate (Baratz, 1980). Review of the implementation process indicated three critical areas that needed attention: "a shared definition of the standard to be set; a technology capable of measuring the standard; and an educational system capable of imparting the knowledge required to pass the standard." (Baratz, 1980, p.189) While there was widespread legitimacy that such skills as reading and mathematics were essential competencies (Cohen & Harey, 1980), greater disagreements existed regarding the specificity of the definition of a "minimum core of skills" expected to be acquired in reading and mathematics (Britell, 1980). States showed varying degrees of differences in the articulation of their respective competency requirements (Baratz, 1980). For instance, students could be denied a diploma if they did not pass these tests, but there were no consequences for teachers or schools (Nichols & Berliner, 2007). These differences also existed among specialists to the extent that they disagreed about how to define competency in reading (e.g., either for decoding or comprehension) (Cohen & Harey, 1980). In mathematics, for example, there was disagreement about the virtues of what was to be termed problem-solving ability as opposed to computational skills (Cohen & Harey, 1980).

Despite the widespread disagreements, minimum competency testing gained nationwide acceptance as a major instructional and an assessment strategy to influence students' academic competencies (Baratz, 1980; Cohen & Harey, 1980). By 1980, all states had a minimum competency testing program intended to improve the quality of schooling and put meaning back into the high school diploma (Shepard, 2008). However, increased demand for specific accountability, for the delineation of the schools' responsibility for results became the watch

word (Baratz, 1980; Britell, 1980). Although the minimum competency testing marked the beginning of serious consequences attached to the test results (Shepard, 2008), there was more evidence of educational failures than successes (Britell, 1980). Educators seemed to provide neither competence for everyone nor excellence for a few (Britell, 1980). The problem of students' performance standards had begun with the minimum competency testing program (Shepard, 2008), but then moved from questions of equity to issues of quality (Baratz, 1980). This was fueled, in part, by international data that purported to show that U.S. schools were not as good as those in other nations (Nichols & Berliner, 2007; Goertz, 2007). Concerns were that teachers narrowed the curriculum to the testing content, which was low-level mathematics and reading (Goertz, 2007). Eventually, the minimum competency tests were criticized for being relatively easy to pass since they were concerned with minimums to be learned: the achievement floor and not the achievement ceiling (Nichols & Berliner, 2007). The practice which reduced curriculum to drill and practice for the test was most pronounced in schools and districts that served large numbers of poor and minority students (Shepard, 2008).

Many politicians and citizens alike came to accept that students were not being stretched enough, that overall U.S. school performance was not improving, and that the growing achievement gap between white middle-class students and black, Hispanic, or poor students was not being reduced (Nichols & Berliner, 2007). In addition, high levels of student performance of accountability tests could not be replicated on independent measures of the same content, suggesting that drills and constant preparation for tests did not help students to grasp the meaning of concepts (Shepard, 2008). Minimum competency" examinations fell short of what was required and that "minimum" rather became the "maximum," thus lowering educational standards for all (The National Commission on Excellence in Education, 1985). Because of

pressure to improve test scores, teachers reduced or eliminated time for non-tested subjects, spent considerable amount of time practically test-taking skills and change their instructional materials and activities to mandated test formats (Darling-Hamilton & Wise, 1985). As discontent grew, the language of minimum competency changed to the language of standards-based achievement (Nichols & Berliner, 2007). This elicited another wave of education reform to focus on higher quality input standards and, increasingly, on more rigorous content and performance standards (Goertz, 2007).

A Nation at Risk 1983

By the end of the 1980s, discontent grew among stakeholders that "high-stakes" accountability tests were narrowing the curriculum and producing inflated tests scores gains (Shepard, 2008). These observations were extrapolated from the findings of a number of large-scale studies which examined the effects of testing on teaching and learning (Shepard, 2008). These observed conditions had already created nationwide frustrations that United States was losing its edge in vigorous economic competition with other industrialized countries because of the mediocre performance of its students (New York State Archives, 2009; Nichols & Berliner, 2007). The Council of Chief State School Officers had represented the United States in several international forums in the early 1980s and had argued that America's poor showing in international assessment comparisons indicated a need for federal action in the schools (New York State Archives, 2009). As widespread concern for quality education grew, the then secretary of education T. H. Bell, on August 26, 1981, created the National Commission on Excellence in Education to examine the quality of teaching and learning in elementary and secondary education (The National Commission on Excellence in Education, 1985; Policy Points, 2013). The result was a report on the strengths and weaknesses of the American

education system titled *A Nation at Risk: The Imperative for Educational Reform,* released in April 1983 (The National Commission on Excellence in Education, 1985).

The commission defined the state of education at that time and made series of recommendations for improving the overall quality of education in the country (Policy Points, 2013). In its report, the commission indicated;

> We report to the American people that while we can take justifiable pride in what our schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people. What was unimaginable a generation ago has begun to occur–others are matching and surpassing our educational attainments (The National Commission on Excellence in Education, 1985, p. 9).

The report alarmed the country with startling statistics showing a "drastic decline" in academic achievement in the U.S. (Policy Points, 2013). For instance, the commission reported that average achievement of high school students on most standardized tests was lower than in the past (The National Commission on Excellence in Education, 1985). The report blamed the purported mediocre performance of U.S. students and schools on neglect, low standards, and diluted curriculum (Shepard, 2008). In its description of the state of secondary school curricula, the commission stated; "…secondary school curricula have been homogenized, diluted, and diffused to the point that they no longer have a central purpose. In effect, we have a cafeteria style curriculum in which the appetizers and desserts can easily be mistaken for the main courses." (The National Commission on Excellence in Education, 1985, p.21)

Calling for a renewed commitment toward improved quality education nationwide, the report recommended an expanded reform towards "excellence movement" to instigate a new basis and rigorous academic curriculum for all students (New York State Archives, 2009; Shepard, 2008; The National Commission on Excellence in Education, 1985). The excellent movement launched by *A Nation at Risk* which sought to ratchet up expectations by reinstating course-based graduation requirements, extending time in the school day and school year, requiring more homework, and most importantly, requiring more testing (Shepard, 2008). Standardized tests of achievement as part of a nationwide system of state and local (but not federal) standardized tests were to be administered at major transition points from one level of schooling to another, particularly from high school to college (New York State Archives, 2009; The National Commission on Excellence in Education, 1985).

In sum, the publication of *A Nation at Risk* marked an important wave in the broad based effort toward standards-based reform movement in K-12 education (Marzano & Kendall, 1998). The report specifically responded to the demands to improve the "ailing" educational system following the failure of minimum competency examination system to promote large-scale gains in students' outcomes (Shepard, 2008). Among other things, the report cited standardized achievement scores from different sources and at different measurement points which informed comparisons with international benchmarks in similar content areas (Policy Points, 2013). The excellence movement launched by *A Nation at Risk* has since remained the most visible policy framework for driving standards-based and testing-focused education reform at the federal, state, and local levels (Schwartz & Robinson, 2000; Policy Points, 2013).

Goal 2000

Standards-based reform efforts in the late 1980's and the1990's were generally framed to address the inadequacies of the "input-driven" education that characterized previous reforms (Goertz, 2007). With the excellence movement and its aversion for low standards, experts became particularly concerned about the inconsistent effects of the existing high stakes testing programs and the kinds of tests that informed the reform measures (Shepard, 2008). Other researchers also challenged the logical and empirical validity of the assertion that American education was ailing (Nichols & Berliner, 2007). At the National Education Summit in 1989, President George H. W. Bush, in conjunction with the NGA, pushed for a national education reform movement called *Goals 2000* (Goertz, 2007; Schwartz & Robinson, 2000; New York State Archives, 2009). Building on the close links with the business community and its increasing focus on educational outcomes, President Bush advanced a "new accountability" based on standardized performance outcomes for all students (New York State Archives, 2009). The Act, *Goals 2000: The Educate America Act* eventually was passed and signed in February 1994, four and a half years after the education summit and a year into President Clinton's first term (Schwartz & Robinson, 2000; New York State Archives, 2009).

In all, the act outlined eight national goals to be achieved by the year 2000, categorized under eight broad themes: (1) school readiness, (2) school completion, (3) student achievement and citizenship, (4) teacher education and professional development, (5) mathematics and science, (6) adult literacy and lifelong learning, (7) safe, disciplined, and drug-free schools, and (8) school and home partnership (Goals 2000: Educate America Act, 1994). With each of these broad categories, several objectives are specified. For example, regarding student achievement and citizenship, the legislation specified that;

> By the year 2000, all students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's modern economy (Goals 2000: Educate America Act, 1994, p.108 STAT. 131).

Fundamentally, Goals 2000 was a grant program aimed at supporting the development and implementation of standards and assessment requirements of the standards-based reform both at the state and district levels (New York State Archives, 2009). Researchers demonstrate that Goals 2000 marked a different vision of educational reform because it allowed states a considerable level of independence, particularly in the selection of curricula and assessment criteria (Heise, 1994; Schwartz & Robinson, 2000). Thus, while there were national standards for achievement, states' curricula were not dictated by national test criteria (New York State Archives, 2009). However, because states developed their own assessments, standards, performance reporting, and consequences for performance, wide variations existed in terms of how states defined school success (Goertz & Duffy, 2001). In addition and quite distinctively, the policy did not target a particular group of students or subject areas. Instead, it supported a generic reform strategy that emphasized the development of state standards and the assessments needed to measure the extent of progress (New York State Archives, 2009).

Concurrent with Goals 2000 were also proposals for reauthorization and modification of the Elementary and Secondary Education Act (ESEA) called *Improving America's Schools Act* (IASA) (P.L. 103-382) (New York State Archives, 2009). The IASA incorporated the standards-

based reform principles of the Goals 2000 that aimed at providing a standards-based reform framework for the passage of subsequent federal educational reforms (Goals 2000; Educate America Act, 1994). It required states to develop challenging standards in at least reading and mathematics, create high quality assessments to measure performance against these standards, and have local districts identify low-performing schools for assistance (Goertz & Duffy, 2001). Prior to IASA, the Title I program of ESEA permitted states to use achievement "standards" for economically disadvantaged students that were different from, and less challenging than those for other students (New York State Archives, 2009). However, the IASA endorsed equal standards for both Title I and non-Title I students at the state level. The IASA and Goals 2000 legislations jointly provided funds for states and localities to advance the standards-based reforms and to build the capacity of local districts to implement those reforms (Goertz & Duffy, 2001; Goertz, 2007). In sum, unlike prior standards reforms which reaffirmed traditional curricula, the standards movement in 1990s called for the development of much more challenging curricula; focused on reasoning and processes of inquiry, students' content knowledge and engagement, as well as the application of students' knowledge in real-world contexts (Shepard, 2008).

The No Child Left Behind Act (NCLB) of 2001

The No Child Left Behind Act (NCLB) of 2001 was framed, in part, to address variability in state policies (Fuhrman, 2004) inherent in previous reforms. Thus, the "…NCLB built directly on the IASA requirements that standards and assessments in each state must be the same for all students, with accountability requirements that states and districts take corrective action on schools in need of improvement." (New York State Archives, 2009, p.73) The NCLB was broadly to "…ensure that all children have a fair, equal, and significant opportunity to obtain

a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments (NCLB Act of 2001, p. 115 STAT. 1439). The passage of the NCLB advanced federal vision of improving students' achievement through standards, assessments, and specific requirements of accountability. Three broad areas were central with the implementation of the NCLB. Thus;

> (1) By the year 2014, all students must be performing in reading, mathematics, and science at the "proficient" level; (2) in each school each year, student "adequate yearly progress" must increase at such a rate that 100% proficiency would be met by 2014; and (3) the annual rate of progress applies not only to the aggregate student enrollment of a school, district, or state but also to "disaggregated" groups of students according to income, race, gender, English language ability, and special education status. If any of the groups are below expected progress rates, the entire school is considered "failing" and in need of improvement to be realized through presidential sanctions (New York State Archives, 2009, p.74).

Although the NCLB policy did not mark the beginning of standards-based education in the K-12 education, researchers contend that it brought a significant change in the federal education policy landscape by emphasizing accountability for results and the demand for annual data on the students' achievement outcomes (Taylor et al., 2010; U.S. Department of Education, 2001). Some other researchers argue that the act marked a significant expansion of federal role in education by requiring states to test more and set more ambitious and uniform improvement goals for their schools and prescribing sanctions for schools that fail to meet these goals (Fuhrman, 2004; Mathis, 2010). Some of the key mandates of the of the act are related to; accountability requirements by which schools must demonstrate AYP and consequences for

falling (NCLB Act of 2001; Goertz, 2007; Superfine, 2011), the application of rigorous scientifically based research (SBR) standards to educational programs and practices for all students (Mills, 2008), and the "highly qualified" credentials that teachers and paraprofessionals must meet. The implementation of these requirements has had widespread implications on a range of educational decisions, including what should be taught in the K-12 classroom, how it should be taught, the quality of teaching staff, and how money and other educational resources should be allocated (Jennings, 2012).

A review of the implementation process of the NCLB reveals more critiques than commendations. On one hand, some researchers and policy analysts have applauded the federal funding programs for improving schools and the enforcement of the accountability mandates (Superfine, 2011). Others have also noted that the policy has influenced states to set clear targets for student achievement standards in critical areas such as mathematics and ELA (Jennings, 2009). On the other hand, others have indicated that the policy has yielded a number of unintended results which require attention. For instance, using NAEP data between 1990 and 2005 to examine the impact of the NCLB on students' reading and mathematics tests scores, Lee (2006) reported that while a few states reduced the achievement gaps, there was no systematic difference between strong-accountability states and weak accountability states in closing of achievement gaps for Blacks, Hispanics, or poor students. In instances where results have shown positive trend on NAEP mathematics, researchers have been inclined to assign the improvement as driven by standard-based reforms in general, rather than NCLB specifically (Shepard, 2008).

Under the provisions of the NCLB, states and local authorities are granted the flexibilities to set their own standards, adopt their own assessments, and determine what should constitute AYP (Superfine, 2011). Such flexibilities, according to researchers, have produced

inconsistencies in the implementation of key NCLB requirements across the United States (Superfine, 2011). Such inconsistencies have been linked with increasing variability in state standards, with most states' assessment criteria failing to adequately align with standards. Closely linked with these state-standards variations is the observed increasing variability between students' NAEP scores and that of the ones adopted by states (Linn, 2005; Taylor et al., 2010). For instance, Linn (2005) used large scale data to demonstrate large differences that existed between the percentage proficient report on NAEP for each state and the percentage proficient determined by states own assessment (Shepard, 2008). While NCLB has helped set priorities in specific crucial areas (Jennings, 2012), its prescribed accountability measures have made it a challenge for some districts and states to use standardized assessments as levers for good practices (Philip & Wong, 2010). In other instances, several states have lowered their proficiency levels to make it easier for schools to avoid sanctions under NCLB (Daggett & Gendron, 2010).

In addition, researchers contend that the accountability requirements of the No Child Left Behind Act have intensified pressure on school districts to raise test scores, close achievement gaps, and turn around low-performing schools (Shepard, Davidson, & Bowman, 2011). The determination of students' academic progress has been based on measures of how well schools are able to raise students' achievement and to close the achievement gaps (Jackson & Gaudet, 2010; Shepard, 2008). However, researchers and educators grow worried about the over–reliance on high-stakes testing outcomes to effect school improvement. Some argue that high-stakes testing requirements have rather narrowed the scope of curriculum and instruction, with teachers often focusing on tests' subjects and test-like formats toward meeting annual state targets for the percentage of their students who must score proficient on state tests (Shepard,

2008; Jennings, 2012; Shepard, Davidson, & Bowman, 2011). More critically, teachers are reported to be manipulating students' scores to prevent schools from being labeled as "failing" in respect to AYP requirements to avert potential sanctions (Jennings, 2012; Mathis, 2010). In addition, researchers observe that it appears more difficult and expensive for other states to develop and administer assessments that can yield valid inferences of higher-order thinking skills and that several states instead use assessment systems that focus on basic skills (Superfine, 2011).

In sum, many states have set relatively low performance standards, and current proficiency rates reported under No Child Left Behind do not adequately reflect what students need to know and be able to do (Phillips, 2010). In addition, "…current state proficiency rates under No Child Left Behind in many states inflate students' true level of mathematical understanding when measured against an international performance standard." (NCTM, 2013, p. 534) These and other nagging unintended effects of the NCLB mandates have informed a case for a new, more realistic baseline of student achievement.

The Common Core States Standards (CCSS) 2010

It appears stakeholders are increasingly concerned that the quality of U.S. K-12 education has not been rigorous enough to prepare graduates to meet the technological demands and the global job competiveness that have characterized the world of work (Daggett & Gendron, 2010). These and many other issues have influenced the other reforms to correct emerging educational deficiencies. While the National Governors Association (NGA) and CCSSO coordinated the state-led effort to create the CCSS, teachers, researchers, administrators, policymakers, higher education officials, and other state leaders have informed the development and implementation process of the CCSS (Policy Insights, 2011). In April 2009, representatives from 41 states met

with the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) representatives in Chicago and agreed to draft a set of common standards for education called, the Common Core State Standards Initiative: Preparing America's Students for College & Career (Mathis, 2010). This was after multiple rounds of feedback from states, researchers, teachers, higher education leaders, and the general public had been solicited (Policy Insights, 2011). In the spring of 2009, the Council of Chief State School Officers, a nonpartisan organization of the heads of departments of elementary and secondary education, in conjunction with the National Governors' Alliance, the bipartisan organization of the nation's Governors, and representatives from 48 participating states, the U.S. Virgin Islands, Puerto Rico, and the District of Columbia signed a memorandum of agreement committing to the development of the CCSSI (REL, 2011).

In June 2010, on behalf of the participating states, the NGA and the CCSSO released the final version of Common Core state standards for grades K-12 in ELA and mathematics (Daggett & Gendron, 2010). As of July 2013, 45 states and the District of Columbia have adopted the Common Core State Standards (CCSS) in ELA and mathematics (Kober, McIntosh, & Rentner, 2013).The development of these standards has not been a federal initiative but a state-led effort (Policy Insights, 2011). With this, parents, teachers, school administrators, the country's experts, state leaders, through their membership in the Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center) are leading the effort to develop the new standards (CCSSO & NGA, 2010).

The Common Core State Standards (CCSS) are a set of clear, high-quality academic expectations in English/Language Arts/ Literacy and Mathematics that define the knowledge and skills all students should master by the end of each grade level (NGA & CCSSO, 2010).

Purported to be informed by both national and international best practices (Kober & Rentner, 2011), CCSS seeks a clear and consistent framework to uniformly improve student readiness and success in K-12 and beyond, irrespective of where students live (Policy Insights, 2011). Specifically, the CCSS initiatives are have been designed based on the following curricular criteria;

1. aligned with college and work expectations
2. clear, understandable, and consistent
3. rigorous content and application of knowledge through higher–order skills
4. built upon strengths and lessons of current state standards
5. informed by other top-performing countries so that all students are prepared to succeed in the global economy and society (NGA & CCSSO, 2010, p.6).

There are three main sections of the Common Core: Grades K-5 cross-disciplinary; 6-12 English language arts; and 6-12 literacy in history/social studies, science, and technical subjects (Daggett & Gendron, 2010). The instructional and curriculum adjustment requirements, proponents argue, will provide students with an educational opportunity that not only leads to a high school diploma, but prepares them for college, career, and life after graduation (CCSSO & NGA, 2010). The new standards also provide a platform for innovation, a structure that can support creative strategies for teaching core content in mathematics and literacy (Philip & Wong, 2010). In addition, the common standards will provide a greater opportunity to share experiences and best practices within and across states (Mathis, 2010).

The CCSS has become the latest reform movement effort to promote national K-12 content standards (McDonnell, 2012). The content standards specify what is to be learned by students at the various levels (Mathis, 2010). Analysts assert that participating states should

have access to broad-based sharing of what works, while enjoying local flexibility to decide how best to teach the core (CCSSO & NGA, 2010). However, just like any reform, the implementation of the CCSS has statewide implications on how school administrators and teachers need to increase their knowledge in aligning school content with the new state standards. The CCSS requires teachers to go deeper into the content, in contrast to the breadth of the overcrowded curriculum (Daggett & Gendron, 2010). Many participating states and school districts are at the transitioning stage of building instructional capacity systems to ensure successful roll-out of the new standards, pedagogy, and appropriate assessment strategies (Jenkins & Agamba, 2012).

Conceptual Framework for the Implementation of the CCSS

A series of surveys conducted by Center on Education Policy (CEP) demonstrated that participating states perceive the new standards as more rigorous and that would hold all students to higher expectations and academic goals than previous standards (Jenkins & Agamba, 2012; Kober & Rentner, 2012). However, its implementation requires that states prioritize the need to strengthen the capacity of educators to drive the appropriate instructional and curriculum changes (Daggett & Gendron, 2010). A review of literature broadly shows four core elements that are centrally critical in ensuring successful implementation of the new standards. These include; development of curricula framework, alignment of state policies, teacher/administrator professional development, and development of accountability mechanisms (Kober & Rentner, 2011; Daggett & Gendron, 2010; Spillane, 2004; American Federation of Teachers, 1995).

Development of Curricula Framework

The CCSS are being adopted by schools to ensure that students, regardless of where they live, are adequately prepared for college or careers by the time they graduate from high school.

To accomplish these goals, there should be curricula frameworks to outline and define the essential knowledge and skills that all students should learn in each subject area at each grade level (American Federation of Teachers, 1995; Spillane, 2004). The framework generally informs curriculum development, guides instruction and assessment, provides clear goals for student achievement, and guides performance expectations (Troia & Olinghouse, 2013). Particularly, with the CCSS, the NGA and the CCSSO in consultation with teachers, administrators, parents, and experts have developed curricular framework (Mathis, 2010). The framework has set clear expectations of knowledge and skills that students in grades K-12 should be equipped with and be able to master in ELA and mathematics at each grade level (Daggett & Gendron, 2010; McMurrer & Frizzell, 2013; Kober & Rentner, 2011). Survey results on states adopting the CCSS have shown that the implementation of the new standards would require new or substantially revised curriculum materials in mathematics (64%) and English language arts (56%) (Kober & Rentner, 2012). The English/Language Arts/Literacy component applies to social studies, science, and technical subjects as well as English. With these disciplines, students are expected to learn more content–rich nonfiction and informational texts in addition to literature while reading and writing are grounded in evidence from texts, both literary and nonfiction (Daggett & Gendron, 2010). In mathematics, while emphases are placed on fewer topics at each grade level, instructions, however, are supposed to delve deeper in content, with concepts logically connected across grade levels (NGA & CCSSO, 2010). Specifically, the new standards are designed to help develop fluency in arithmetic, application of knowledge to real-world situations, and create a deeper understanding of Mathematical concepts among K-12 students (Daggett & Gendron, 2010).

Alignment of State Policies

The alignment of the state instructional policies includes student assessment, curricula materials, professional development, teacher education, and accountability measures for following the framework (Spillane, 2004). This may require a revision of teacher–evaluation systems so that they can be well aligned with the CCSS (Portal et al., 2013). This is to ensure that all students are being offered a challenging curriculum and that they are being judged according to consistently high expectations (American Federation of Teachers, 1995). Aligning state and local standards has become a major step in identifying what needs to be taught and the types of assessments with the CCSS (Daggett & Gendron, 2010). National surveys indicate that states are in the process of revising curriculum materials or creating entirely new assessment criteria to be aligned with the new standards (Kober & Rentner, 2012; Kober & Rentner, 2011). Participating states are also aligning rigorous curricula, assessment, and teacher policies with the new standards (Kober & Rentner, 2012).

The new standards represent college-and career-ready academic standards and as such, expectations for high school students should be closely aligned with the expectations of postsecondary institutions for their incoming students. Particularly, those that prepare future teachers and administrators are expected to revamp their curriculum to prepare their graduates to teach and lead in an environment shaped by the CCSS (McMurrer & Frizzell, 2013). However, aligning teacher preparation to the standards, developing curriculum materials tied to the standards, and implementing new assessments aligned with the standards have been considered by participating states as major implementation challenges (Kober & Rentner, 2011). In addition, many states are already working to restructure their teacher-evaluation systems to include annual evaluations for all educators on multiple measures of teacher effectiveness and

student learning growth gauged against academic standards and observations of teacher instructional practices (Porter et al., 2013).

Teacher and Administrator Professional Development Opportunities

In order for Common Core state standards be successfully implemented, there is not only the need for teachers and administrators to receive the essential training and the knowledge about what is included in the more rigorous standards, but also how they can ensure that their students meet the new expectations (Weldon, 2012). If effective instructional changes can occur on schedule and if students can master the new standards, timely, ongoing, and effective professional development for teachers and principals will be critical to aid them through this transition (Kober, McIntosh, & Rentner, 2013; Eilers & D'Amico, 2012).

For administrators, in particular, they need to fully understand the standards' development process in order to influence the required curricula, instructional, and assessments changes. With such an understanding, they are able to work with community members, parents, and all other stakeholders to build a community capacity for managing the required changes (Lockwood, 1998). The professional discourse requires that school leaders study and discuss all aspects of the initiative with teachers and ask the necessary questions (Eilers & D'Amico, 2012). For teachers, professional development is critical to the overall success of the Common Core (Porter et al., 2013; Kober, McIntosh, & Rentner, 2013).

The Center on Education Policy (CEP) at the George Washington University has conducted a series of surveys specifically related to participating states' experiences with the provision of CCSS-related professional development programs. Generally, the survey results have shown that CCSS-adopting states are conducting statewide professional development and designing materials to help teachers master the standards, and most are also changing their

teacher preparation programs and evaluation systems (Kober & Rentner, 2012; Kober, McIntosh, & Rentner, 2013). In more than half of the states surveyed, a majority of K-12 teachers of mathematics and English language arts have participated in at least some CCSS-related professional development (Kober, McIntosh, & Rentner, 2013). States, school districts, and other entities, including state education agencies (SEAs), institutions of higher education, and nonprofit and for-profit organizations have been providing CCSS-related professional development services for teachers and school principals (Kober, McIntosh, & Rentner, 2013).

Several states are offering training through conferences, institutes, annual symposia, and academies focused on the CCSS (Porter et al., 2013; Kober, McIntosh, & Rentner, 2013). States are reported relying on a "train the trainer" model and intend to disseminate CCSS related information by engaging teams of educators, such as network teams, school teams, coaches, and district implementation teams (Education First & EPE Research Center, 2013; Portal et al., 2013). Also, a majority of states have compiled professional learning activities and resources on their own CCSS websites, with others planning to use and make available teacher professional development modules and materials developed by other states and organizations (Porter et al., 2013). Most of the teacher professional development and training offered by states place a primary focus on awareness-building and close analysis of the new standards in both English/language arts and mathematics (Porter et al., 2013). Also, most state leaders are reported offering or planning to offer additional training focused on instructional shifts and developing teacher capacity to implement effective instructional practices around those shifts (e.g., text-dependent questions, effective teaching of non-fiction text, using evidence in reading and writing) (Porter et al., 2013). However, according to these survey reports, the providing all mathematics and ELA teachers in the state with state-sponsored professional development on the

Common Core has been cited as a major challenge for many participating states (Kober, McIntosh, & Rentner, 2013). Some of these challenges relate to difficulties in finding the funding for CCSS-related professional development (Porter et al., 2013).

Development of Accountability Mechanisms

Another important element in the implementation framework is the development and deployment of mechanisms that would hold schools accountable for students' mastery of the CCSS (McLauglin & Shepard, 1995; Smith & O'Day, 1991; Spillane, 2004). Part of the accountability framework is for state and district leaders to take active steps to: set high expectations for schools and students; establish the means to measure performance against those expectations; and create policies to identify and provide assistance to those schools and students that fail to meet high standards for performance (Lockwood, 1998). Improving and strengthening accountability also requires that states' assessment systems are designed to ensure that students are meeting challenging state academic achievement and content standards and are also increasing achievement overall (Portal et al., 2013). Even though several CCSS-participating states have indicated that their teachers would be held accountable for student performance on the Common Core as they transition to the new common assessment (Porter et al., 2013), it is not clear what sanctions teachers and schools are expected to face in a case of unexpected student outcomes.

Rural Schools and the Implementation of the CCSS

Defining Rurality

One of the key challenges that affect the quality of research in rural education is the absence of clear criteria to define rurality (Coladarci, 2007; Jordan & Jordan, 2004; Jamerson, Monk, 2007; Ayers, 2011). Most commonly used definitions of rurality are based on the formal classification schemes put up by the U.S. Bureau of the Census, the Office of Management and

Budget (OMB), the Economic Research Service (ERS) of the U.S. Department of Agriculture, and the National Center for Education Statistics (NCES) (Coladarci, 2007; Monk, 2007; Ayers, 2011). For instance, the U.S. Census Bureau (2010) defines rural area as an open country and a settlement with a fewer than 2,500 residents; and with a population density of not more than 999 per square mile or as low as one person per square mile. The NCES designates locales to school districts based on the census definition criteria of rural territory with a criterion range of more than 25 miles from an urbanized area and a more than 10 miles from an urban cluster, depending on whether it is rural fringe, rural distant, or rural remote (Chen, 2010).

Most often, the members of the rural research community characterize and describe the rurality of the communities they study based on these formal classification criteria. However, the adoption of such criteria undermines the complexities and the variations that characterize rural communities and school districts (Monk, 2007). While the focus is not to seek consensus on a single definition of rurality, the amount of contextual information that is lost in adopting these raw classifications is a source of concern (Monk, 2007; Coladarci, 2007). Researchers are encouraged to include a description of features and variables to broaden the definitional menu of rurality (Monk, 2007). By so doing, researchers are able to contextualize their study by explaining other features such as the economic dependencies, median household income, modal educational attainment, commuting patterns, and the characterization of the in-and out-migration trends in the community under study (Coladarci, 2007). Such clear description of the context provides readers and stakeholders with better understanding of researchers' import of the investigation.

Rural Schools and Rural School Teaching

The Common Core of Data (CCD) survey system for the 2009-2010 year reported by the State Education Agencies (SEAs) indicated that more schools (29,264) were in rural locations than in any other type of locale in the United States (Chen, 2010). Specifically, the report showed that out of the total number of 88,214 schools in the United States, 29,264 of them were located in the rural communities. The report further indicated that this number of rural schools served about 25% of regular public elementary and secondary school population nationwide. Rural community schools alone served 43%, close to half of the regular public elementary and secondary school population in the state (Chen, 2010). During the same period, out of the total number of 471 schools located in the state of North Dakota, 55 were located in cities, 15 were suburban schools, 62 were town schools, and 339 schools were located in rural communities

Rural schools exist in a unique environment compared to the schools in urban and suburban locales. Even though rural conditions can vary greatly across settings, schools designated as rural mostly share many common characteristics. Rural schools are relatively small in terms of population and therefore generally have small pupil-teacher ratios (Ayers, 2011; Jamerson, 2005; Jordan & Jordan, 2004). Rural schools in many states are situated in remote areas, with a strong tradition of local and communal control and ownership (Jamerson, 2005, Monk, 2007). In many locations, rural schools tend to be poor with relatively large populations of minority children who become vulnerable to the achievement gap (Jamerson, 2005). In addition, some rural schools experience a persistent decline enrollment of student population (Harmon, Gordanier, Henry, & George, 2007). Rural schools also face difficulties recruiting and retaining a qualified teacher workforce (Barley & Brigham, 2008; Jamerson, 2005; Malloy & Allen, 2007; Lowe, 2006). Reasons for high teacher turnover in rural schools have

been associated with conditions of limited resource capacity to compete for highly qualified teachers with urban and suburban districts (Barley & Brigham, 2008; Malloy & Allen, 2007; Jordan & Jordan, 2004). Other researchers have also reported geographical and collegial isolation (Jamerson, 2005; Barley & Brigham, 2008) and multiple grade or subject teaching assignments (Monk, 2007). In effect, not only can these conditions deter other potential teachers from accepting rural positions, but could also cause others to leave rural settings after teaching there for only a short period of time (Barley & Brigham, 2008).

Teaching in rural schools can be different from urban and sub-urban areas, given the unique conditions that are inherent in rural schools. Literature in rural education has noted a number of positive aspects of rural teaching. There is a reported small pupil teacher ratios which allow for intense individualized student attention and engagement with teachers (Barley & Brigham, 2008). Teaching in a rural school can also be rewarding especially with community and local support and participation in the vision and mission of the schools (Jordan & Jordan, 2004). Abel and Sewell (1999) reported that rural teachers experience less stress with working conditions and staff relations compared with urban teachers. Nonetheless, rural teachers face a number of challenging situations that tend to undermine their professional growth (Barley & Brigham, 2008).

Researchers report that because of the small size of rural districts and schools, teachers are often required to teach multiple subjects and multiple grades, sometimes in multi–grade, mixed-age classrooms (Barley & Brigham, 2008; Malloy & Allen, 2007; Lowe, 2006). Teachers in some rural schools are required to teach students with a wide array of skill levels in the same classroom, such as mainstreaming special education students and English language learners (Barley & Brigham, 2008). Because most local school districts lack the resource capacity to

create professional development opportunities for their staff, teachers tend to experience professional isolation in rural schools (Malloy & Allen, 2007). Where opportunities exist for professional development training programs, teachers may have to travel over long distances to attend these programs (Lowe, 2006).

Contextualizing Rurality in the State of North Dakota

North Dakota (ND) ranks amongst the least states in U.S. in population. U.S. Census (2010) estimates indicated that North Dakota's population was 672,591. A greater percentage of North Dakota's population lives in rural communities. According to U.S. Census (2010), rural population was 299,719 (40.1%), with rural population density (3.9 people per square mile), compared with the state population density of 9.30 per square mile, and 79.6 people per square mile nationally. Even though longitudinal indications show that the state's population is racially and ethnically becoming diverse, it largely remains homogeneous (Rieke, Safratowich, & Markland, 2009)**.** Census figures show White population as 87.35%, compared with national average of 62.6%. Racial minority groups with significant estimates below national averages include African American (1.8%; national average=13.2%), Asian (1.2%; national average =5.3%), and Hispanic or Latino (2.9%; national average=17.9%). Native Americans represent the largest racial minority (5.4%), compared with national average=1.2%). Longitudinal indicators suggest significant population losses in rural communities in the state (Johnson, Showalter, Klein, Lester, 2014).

Rural communities in North Dakota are set apart by large stretch of farm lands. Based on USDA-ERS estimates for 2013, poverty rate of 11.0% existed in rural North Dakota, compared to a 12.2% level in urban areas of the state (Coleman-Jensen, Gregory, & Singh, 2013). Nearly seven in ten schools in the state are located in rural communities (Johnson & Strange, 2009). The

Common Core of Data (CCD) survey system for the 2009-2010 showed that out of the 471 schools that were in the state of North Dakota, 55 were in cities, 15 were suburban schools, 62 were town schools, and 339 schools were in rural communities (Chen, 2010). Rural schools and districts in the state have low minority student population (17.9%) and mobility (9.0%) and poverty rates (36.5%) (Strange, Johnson, Showalter, & Klein, 2012). In addition, percentages of English Language Learners (4.4%) and Individualized Education Program (IEP) students (13.5%). Current available data show that one in seven rural students in the state is identified as non-White, one in 12 has moved residences in the past year, and one in 40 qualifies for English Language Learner services (Johnson, et al., 2014).

Implications for the implementation of the CCSS

Districts and schools from CCSS-adopting states are going through various formal planning and implementation stages to align the new standards with classroom instructions and assessment tools. Teachers and principals are receiving differing forms of training to help them develop the internal capacities to implement the changes required by the new standards. The implementation of the CCSS is broadly aligned with frameworks to improve the country's high school students' graduation rate, students' readiness for college education experience, and their world of work experience (NGA & CCSSO, 2010). Analyses of national data on students' graduation/dropout trends among states within the central region have suggested that rural students are more likely than students in large cities to graduate from the high school (Randel, Moore, & Blair, 2008). However, such conclusions have not been supported by consistent large scale evidence. This is partly because most analyses of students' graduation/dropout trends on nationally representative samples generally provide estimates based on gender, race/ethnicity, states, and region (Laird, DeBell, & Chapman, 2006; Chapman, Laird, & KewalRamani, 2010),

with limited focus on locale. However, available evidence suggests that high school graduation rates have indicated similar patterns for rural and urban locales during the 2000s, but 3% lower compared with the 1980s (Jordan, Kostandini, & Mykerezi, 2012).

With the implementation of curricula and instructional changes of the CCSS, stakeholders seek to connect instructional improvement with rural students' graduation outcomes, and the overall quality of rural education (Strange, Johnson, Showalter, & Klein, 2012; Jordan, Kostandini, & Mykerezi, 2012; Strange, 2011). However, analyses of the various conditions under which rural schools operate suggest that these conditions may pose serious ramifications on the ability of rural educators to implement the required curricula and instructional changes. A review of literature has suggested that a number of key structural arrangements are critical in the overall implementation framework. First, the need to build structures to allow for collaborative instructional planning workshops during which implementation strategies and resources are shared among states, districts, and schools (King, 2011). Secondly, timely and ongoing professional development programs for both teachers and principals are pivotal in facilitating the development of the required set of knowledge, attitudes and/or beliefs, and the motivation to implement the instructional changes (Weldon, 2012; Kober, McIntosh, & Rentner, 2013; Eilers & D'Amico, 2012). Also, the integration of the technological requirements of the new standards requires that teachers and principals to renew their technological knowledge and skills toward the full implementation stage (Kober, McIntosh, & Rentner, 2013). These and many other structures constitute important foundational framework for successful implementation of the new standards. However, due to the unfavorable funding formulas (Jamerson, 2005), many rural schools' professional development programs are underfunded (Barley & Brigham, 2008; Jordan & Jordan, 2004). These and other conditions

pose challenges of building a solid institutional capacity to mount and maintain a school improvement process for the CCSS implementation.

Summary

The review shows that the focus of K-12 education, in particular, has been driven by a number of policy initiatives, emphasizing increased demand for rigorous accountability requirements and standards-based expectations for students' outcomes (Daggett & Gendron, 2010). The standards-based education, in particular, has become a major reform effort to raise the quality of K-12 students' achievement through specific academic content standards and assessment criteria (Hamilton, Stecher, & Yuan, 2012). A broad analysis shows how the federal role in education has progressively expanded through the promotion of accountability measures and the holding of students to the same academic standards. While the implementation of the various policy frameworks has significantly influenced the educational landscape, a broad analysis on educational outcomes suggests that students' achievement outcomes continue to show variations among identifiable groups.

Additionally, a synthesis of literature shows that for many decades now, the overall quality of K-12 instruction has been less rigorous in preparing students for experiences beyond high school level. The CCSS has become the latest standardized reform movement within the K-12 education. Proponents argue that the CCSS is distinct because it provides a set of clear standards in the foundational subjects of ELA and mathematics designed to prepare high school graduates to succeed in college and in careers (King, 2011, NGA & CCSSO, 2010). However, its implementation has broad implications for rural educators in particular because of the unique conditions under which they operate. The current study examines these implications in terms of

how rural educators are building the capacity to implement the required changes embedded in the new initiative.

CHAPTER III

METHODOLOGY

The purpose of this study is to understand how teachers and administrators in the rural school districts in the state of North Dakota were building the capacity to implement the requirements of the Common Core standards. Specifically, the study draws on the perspectives of teachers and administrators to generate a theoretical proposition that will explain the curriculum development, instructional, and the professional learning processes that professionals are going through as the entire state transitions to implement the Common Core initiatives. Discussions ensued from this chapter include sections on research paradigm, research design, setting of the study, interviewees, research procedure, informed consent, confidentiality, data analyses, and a summary.

Research Paradigm

A research paradigm is the fundamental beliefs or assumptions that guide researchers' theoretical understanding about the nature of reality and how it could be known (Guba & Lincoln, 1994). Thus, researchers' paradigmatic orientations are embodied in their conceptions of knowledge, the place of human experience in the study, and interpretation of such knowledge (Annells, 1996). Several research paradigms (e.g., positivist, postpositivist, constructivist, interpretivist, transformative, emancipatory, critical, and pragmatic etc.) convey different theoretical propositions about the nature of reality (Mackenzie & Knipe, 2006). However, "[T]o ensure a strong research design, researchers must choose a research paradigm that is congruent with their beliefs about the nature of reality." (Mills, Bonner, & Francis, 2006, p. 2) The choice

of a particular paradigm in an inquiry should inform the purpose, motivation, and the general framework of the inquiry (Schwandt, 1994; Mackenzie & Knipe, 2006). More important, a representation of a specific paradigm in a particular inquiry should reflect researchers' ontological, epistemological, methodological (Guba & Lincoln, 1994), and axiological (Heron, & Reason, 1997) viewpoints that shape the sequence of the inquiry.

Ontological orientations represent researchers' beliefs about the form and the nature of reality and what researchers are able to learn about it (Guba & Lincoln, 1994). Epistemological thoughts tease out the nature of the relationship between the researcher and what can be known (Schwandt, 1994). Methodological considerations reflect how the researcher goes about finding out whatever he or she believes can be known (Guba & Lincoln, 1994). Axiological questions ask; "…what sort of knowledge, if any, is intrinsically valuable?" (Heron & Reason, 1997, p. 2) The representational appropriateness of a particular paradigm depends on the extent to which the theoretical and methodological assumptions that underpin the research trajectory are consistent with the form of method that the researcher uses (Crotty, 1998). For instance, positivists accept the existence of an objective reality driven by fixed natural laws (ontology) (Ponterotto, 2005). Congruent with such ontological position, the inquirer is assumed to be an objective and detached such that the object of investigation is independent of the researcher (epistemology) (Krauss, 2005). Thus, the researcher is expected to study the object without influencing it or being influenced by it. Consistent with such epistemological viewpoint, the researcher uses control experiments to verify hypotheses and predict phenomena (methodology) (Guba & Lincoln, 1994). This methodological strand reflects a positivist perspective that maintains that "Truth" exists and that prescriptive methods of inquiry can lead to accuracy and certainty of the knowledge of such "Truth" (Crotty, 1998). Consistent with this view, values are represented by

"confounding variables that cannot be allowed a role in a putatively objective inquiry" (axiology) (Guba & Lincoln, 1994, p. 114). The criteria for judging the quality of inquiries grounded in positivist traditions are based on "the conventional benchmarks of rigor—internal validity (isomorphism of findings with reality), external validity (generalizability), reliability (in the sense of stability), and objectivity (distanced and neutral observer)" (Guba & Lincoln, 1994, p. 114). The methodological strands embodied in the positivist paradigm shape the genre of quantitative research (Ponterotto, 2005). Considering the purpose of the study, the positivist paradigmatic strand was deemed inconsistent with the general framework. Rather, I considered that the interpretivist paradigm would provide a theoretical lens that would be more consistent with the framework of the inquiry. In the following session, I provide a brief theoretical overview of the interpretivist paradigm.

Interpretivist Paradigm

The interpretivist paradigm emerged as a critique against positivist tradition of the naturalistic interpretation of social reality (Schwandt, 1994). Positivist inquirers offer explanations based on cause-and-effect relationships that are found in the natural sciences (Crotty, 1998). Anchored by this stance, positivists, for centuries, have argued that the aims and methods of social sciences were not to be different from the natural sciences (Schwandt, 1994). However, interpretivist perspectives, including postmodern thoughts opposed such intellectual crusade by advancing a philosophical stance that rather focused on understanding human and social realities. The early precursors of interpretivism, including the thoughts of Max Weber (1854-1920) accentuated the idea that to understand a phenomenon, one must interpret it based on the cultural and historical contexts (Schwandt, 1994, Benoliel, 1996; Crotty, 1998).

Interpretivism embraces different paradigms that relate to the understanding of the meanings and experiences of human beings (Williamson, 2006). Interpretivists emphasize inductive reasoning shaped by subjective ontology (Levers, 2013). From such a standpoint, "knowledge is relative to particular circumstances—historical, temporal, cultural, subjective, and exists in multiple forms as representations of reality." (Benoliel, 1996, p. 407) In the pursuit of reality, interpretivists focus on actions and behaviors which their meanings are explored through multiple ways (Gage, 1989). Interpretivists operate on subjectivist epistemological assumptions, which mean that the object of investigation does not represent a separate entity (Levers, 2013). Rather, "the investigator and the object of investigation are assumed to be interactively linked so that the findings are literally created as the investigation proceeds." (Guba & Lincoln, 1994, p. 111) Consistent with this position, interpretivists reject the use of linear causal models to infer causal relations amongst human variables (Gage, 1989). However, they focus on details, complexities, and situated meanings of everyday life (Schwandt, 1994). Methodologically, interpretivists use naturalistic methods that are dialogical in nature to explore meanings that are embedded in the language and actions of social actors (Williamson, 2006). That is to say "…all interpretive inquirers watch, listen, ask, record, and examine." (Schwandt, 1994, p. 119) The quality of the process of the inquiry is examined in the contexts of the transferability, dependability, credibility, and conformability of the final product (Lincoln & Guba, 1985). The interpretivist methodological strands shape the genre of qualitative inquiries. In the discussions ensued from the following session, I describe the research design that I chose for the study and its congruence with the interpretivist perspectives.

Research Design

The general framework of the study was informed by the overarching question: How are teachers and administrators in rural school districts in the state of North Dakota developing the capacity to implement the curricula and instructional requirements of the CCSS? More specifically, the study attempted to propose a theory grounded in qualitative data to contribute to understanding the transitional processes and the instructional shifts that were necessary for the implementation of the Common Core standards in rural schools in the state of North Dakota. Consistent with this goal, the study was framed through grounded theory methodological lens underpinned by interpretivist perspectives. In the following session, I discuss grounded theory methodology, the version of the grounded theory that was adopted and the justification for adopting such methodological strand.

Grounded Theory

Grounded theory is "a general methodology for developing theory that is grounded in data systematically gathered and analyzed." (Strauss & Corbin, 1994, p. 273) Social inquirers adopt grounded theory methodology to generate a theory from data to explain how social, political, cultural, and economic processes of groups of individuals work (Strauss & Corbin, 1998). A theory is "a set of well-developed concepts related through statements of relationship, which together constitute an integrated framework that can be used to explain or predict phenomena." (Strauss & Corbin, 1998, p. 15) According to Clarke (2005), understanding human experiences, social processes, and actions lends itself well to the grounded theory methodology. Informed by such background understanding, I considered that the grounded theory would provide more appropriate and consistent methodological lens to study the processes of the Common Core implementation from participants' own perspectives. The grounded theory was

considered more appropriate methodology because the study aimed at exploring the meanings embodied in teachers and administrators' experiences, behaviors, emotions, actions, and feelings about the processes of the Common Core implementation. Also, the grounded theory methodology was chosen because it made the processes and procedures of the investigation more visible, understandable, and replicable (Bryant & Charmaz, 2007).

Since the development of grounded theory by Glaser and Strauss in 1967, several researchers have adopted and adapted grounded theory to fit with a variety of ontological and epistemological perspectives consistent with the methodological strands of the inquiry (Mills, Bonner, & Francis, 2006; Heath & Cowley, 2004; Charmaz, 2011). The methodological framework of the study design was informed by Corbin and Strauss's (1998; 2008) versions of grounded theory. Other versions of grounded theory, including constructivists (e.g., Charmaz, 2006, 2011; Bryant & Charmaz, 2007; Clarke, 2005, 2006) have labeled Strauss and Corbin's (1990, 1994) versions of exhibiting some postpositivist tendencies. For instance, the systematic data analysis emphasized by Strauss and Corbin (1990, 1994) is viewed as prescriptive, that is one that forces data into preconceived procedures (Charmaz, 2011). However, while Strauss and Corbin (1990, 1998) do not discuss in detail their paradigmatic thoughts underpinning their methodological position, they refuse to be labeled as postpositivists (Corbin & Strauss, 2008). Strauss and Corbin (1994) maintain that they do not believe in the existence of a "pre-existing reality out there. To think otherwise is to take a positivistic position that... we reject...Our position is that truth is enacted." (p. 279) Such a position reflects a relativist ontological perspective that leaves behind the traditional subscription to the discovery of truth that emerges from data representative of a reality (Mills, Bonner, & Francis, 2006). Corbin and Strauss (2008) recognize the interactive nature of the inquirer and participants fitting with the

interpretivist paradigm. They emphasize that the processes of data collection and analysis are to be the interplay between the researcher and participants (Strauss & Corbin, 1998). Their position that ‘‘… one should include as many different perspectives on the issue or topic as feasible….” (Corbin & Strauss, 2008, p. 273) reflects their belief in multiple realities. Corbin and Strauss’s version was chosen because it fit with the interpretivist paradigm. I considered that using Strauss and Corbin (1998, 2008) versions would provide useful analytical tools in the generation of the theory grounded in the participants’ narratives (Heath & Cowley, 2004). Drawing on interpretivist perspectives, the focus of the study was to understand how teachers and administrators in the rural school districts in the state of North Dakota were building the capacity to implement the Common Core standards.

Study Setting

A unique characteristic of qualitative research is that inquirers investigate phenomena in their natural settings (Hoepfl, 1997). Such considerations include the choice of appropriate sites, and participants who experience the phenomenon under investigation (Strauss & Corbin, 1998). Also, sites selected for qualitative inquiries should allow sufficient amount of time for prolonged observation and engagement with participants (Bitsch, 2005). Consistent with the purpose of this study, multiple sites of rural school settings were selected. The study was carried out in five different rural school districts in the state of North Dakota. According to the U.S. Census Bureau (2010), rural area is an open county with fewer than 2,500 residents and not more than a population density of 999 per square mile. Participating schools were located in small communities with an average population of 1,653 residents. The population density of these communities ranged between 425.91 and 2,216 people per square mile, much higher than the state (9.51 people per square mile) and national (1.32 people per square mile) average population

densities. Average population for females in these communities was (53%), compared to men (47%). Caucasian population (95%) represented the prevalent race in these communities, with two or more races, Asian, and Black, and Native American each representing less than 1.0% of the residents. The estimated median household income of the residents in 2012 for these communities ranged between $41,138 and $49,661, which was below the estimated median household income for the state of North Dakota ($53,585). Differences existed between residents in these communities regarding their commuting patterns. For instance, while on average, residents in one community spent 10.6 minutes per day commuting to work, residents in another community spent an average of 25.4 minutes per day commuting to work. It was observed that the pattern of commuting depended on the distance between the community and the nearest city. The average distance between these communities and a town, based on the U.S. census (2010) criteria, was between 25 and 40 miles. The average commuting time of people in these communities (18.5 minutes) was higher than the state average (15.8 minutes), but lower than the national average (25.4 minutes). Education achievement patterns were shown as high school or higher (88.5%), Bachelor's degree or higher (24.7%), and Graduate or professional degree (4.0%). However, these figures represented averages which were lower than the state average, but about the same as the national average. Residents in these communities engaged in diverse economic activities, including retail trade, agriculture, forestry, fishing and hunting, manufacturing, transportation and warehousing, educational services, construction, health care, and social assistance.

Participating Schools

Participating schools varied in size and configuration. The structure of each of the schools consisted of preschool, kindergarten, elementary, middle, and high school levels. These

schools had relatively small student enrollments, consistent with similar observations by other known researchers (Ayers, 2011; Jamerson, 2005; Jordan & Jordan, 2004). Thus, K-12 average enrollment ranged from as low as 212 and as high as 557 for 2013-2014 year, with students predominantly of Caucasians of European descent. Teacher population across these schools (K-12) varied, with the least being 20 and highest being 39 teachers. Student teacher ratio was between 1:9 and 1:14. Some teachers taught multiple subjects and multiple grade levels (Barley & Brigham, 2008; Malloy & Allen, 2007; Lowe, 2006). One common observation about these schools was that the grade levels, with the superintendents, principals, staff, and teachers all shared the same building. Also, all the five participating schools were members of a regional education association in the state North Dakota. The association offers programs and services, based on the needs of the region. Beginning 2011, the regional association offered programs and services in the areas of professional development, technology support, data systems support, school improvement support, and curriculum enrichment toward the implementation of the Common Core. Table one provides a summary of the information about the participating schools and the number of category of participants that were drawn from each of the schools.

Table 1 *Participating Schools and Category of Participants*

School District	Student Enrolment	Teacher population	Teacher participants	Principal participants	Superintendent Participants
A	557	39	5	1	–
B	190	20	2	2	1
C	238	24	3	–	–
D	432	36	2	1	–
E	212	21	3	1	1

Interviewees

Interviewees for the study were drawn from the population of teachers and administrators who worked in rural school districts in the state of North Dakota. The framework of the selection of the interviewees was guided by both the research design and literature. For instance, Charmaz (2011) recommends an average of 30 to 40 interviews for any detailed grounded theory analysis. However, Starks and Trinidad (2007) argue that while it is difficult to predetermine a sample size that could saturate a given theory, typical grounded theory studies report sample sizes ranging from 10 to 60 persons. The consideration of Charmaz and Starks and Trinidad's guidelines, along with the theoretical sampling techniques informed the selection of the interviewees. In all, 22 interviewees from four different categories participated in the study. They included teachers 14 (Female=13, Male=1), instructional coaches 2 (Female=2, Male=0), principals 5 (Female=3, Male=2), and superintendent(s) 1 (Male=1). Teacher interviewees came from all five school districts. They also represented different grade levels (kindergarten, elementary, middle, and high school). In the following discussions, I provide brief background information about of the interviewees. Names and true identifies of participants have been changed. All participants were Caucasians of European descent.

Category A: Teachers

Nicole

Nicole was a 27-year old female and a second grade teacher. It was during her fourth year in teaching that this study took place. She started teaching as a fulltime substitute at the first grade level, but was her second year of teaching a second grade. Nicole first heard about the Common Core in the 2011-2012 school year. Nicole felt that the Common Core standards was great check list for her as a teacher, as she pointed out "…I could check back and make sure that

I am following what I should be teaching and what my students should be learning." She considered the standards as guidelines to what she had to teach and assess in her classroom.

Deb

Deb was a 48-year old female high school English teacher. It was her 20th year in teaching during the study. In my meetings with Deb, she had the impression that her school was amongst the first in the area to jump aboard with the Common Core.

Lisa

Lisa taught both ninth grade mathematics and English at the time of this study. For nearly 15 years in her career, Lisa had been teaching different disciplines, including English writing, study skills, science, and social studies. The 45-year old female had spent her entire 15 years of teaching in the same school, but at different grade levels.

Lora

Lora was born into a family of teachers-both parents and her two sisters were teachers. Even though Lora did not want to be a teacher, deep down she knew that was what she was going to do and she became one which she loved it. She had always not wanted to give up the classroom challenges. Lora taught everything from kindergarten through seniors at some point in her career. At the time of the study, it was Lora's 18th year in teaching and she had taught everything from speech to PHED and to how to put the computers back together and how to take them apart. She had taught English language art for the seventh and eighth grades for the past seven years. Lora was believed to be in her early-forties.

May

May, a female middle-aged third grade teacher, started her profession later in life. However, she had been a teacher for nearly 12 years as at the time of my meetings with her.

May had taught in her current position for 8years and had also taught other grade levels in her previous experience, but all at the elementary school level. May was part of a committee of 50 teachers who were drawn from across the state to look into the Common Core before it was adopted at the state level.

Kate

Kate, a female was in her late-thirties at the time of the study. She started her career in the air force and then had some children before she came into teaching. She had been teaching at the kindergarten for nearly 11 years in the same school. To Kate, the Common Core Initiatives in the kindergarten classroom were quite significant in what she taught and assessed and the way she assessed them.

Ken

Ken**,** a 35-year old male had been teaching for nearly 13 years all in the same school. He had been teaching mathematics the whole time, mainly upper level calculus, advanced mathematics, trigonometry, problem statistics, and geometry.

Mira

Mira was a female and a high school mathematics teacher. At the time of the study, she taught algebra I and II, applied mathematics, geometry and trigonometry for the ninth through twelve grades. Mira had been doing remedial tutoring in mathematics for the previous two years. She had previously taught sixth grade mathematics and algebra, basic computer and keyboarding. This was her second year that she had been a fulltime in the classroom after many years of break from the classroom. Mira was believed to be in her mid-forties.

Emily

Emily, a female had been teaching for 12 years all in the same school. She taught 9-12 grades English language arts, speech, and core composition. Emily was in her mid-forties at the time of the study was being conducted.

Pat

Pat taught mathematics in the fifth and sixth grades. It was her 15th year in teaching at the time the study was conducted. To Pat, teaching was not new experience because she was born into a family of teachers. Her mom, uncle, and her sister all taught. This was her eighth year of teaching at her current school. Pat, a female was believed to be in her early-forties.

Jan

Jan, a female believed to be in her early-fifties, had been teaching since the past 28 years. She had mostly taught in rural school districts. Jan had been teaching for 12 years in her current school. In the last twenty years, she had taught mainly social studies classes for high school 9-12th grades. Jan had seen a lot of changes ranging from teaching without standards, from textbooks, and teaching from content standards.

Juanita

Juanita, a young female and a third grade teacher taught in a small school district. This was her seventh year in the same school district. Growing up, she went to the same school– kindergarten through graduation in a rural school just like the one she was teaching. Juanita was in her early thirties at the time this study was being conducted.

Agnes

Agnes taught seventh and eighth grade mathematics. This was her 24th year in teaching. She had worked through the hierarchy of being substitute teacher for couple of years before becoming a fulltime mathematics teacher at the middle school level. Agnes, a female was believed to be in her early-fifties.

Carol

Carol taught eighth grade English literature, grammar, and writing. She had previously taught at the elementary level before shifting to teach at the middle school. Carol, a female believed to be in her late forties had taught for 21 years during with my visit with her.

Category B: Instructional Coaches

Becky

Becky had taught for about 25 years at different levels in different schools, including kindergarten, fourth grade, and middle school. Becky was a behavior coach prior to becoming an instructional coach. As an instructional couch, even though she did not have direct contact with kids, she felt more like a teacher helper. She went into the classrooms to help find some strategies that might work for teachers. Teachers also came to her if they had questions about their classroom practices. She studied forms of school data to determine instructional, resource, and professional development needs of teachers. She provided instructional help for teachers in the development of implementation strategies for the Common Core. Becky, a female was believed to be in her mid-fifties.

Sarah

Sarah had been an instructional coach at an elementary school since the previous five years. Prior to becoming an instructional coach, she worked with Response to Intervention program in the special education department. She was a speech pathologist. As an instructional coach, she worked on the assessment data, the make-up of the classrooms and, instructional support for teachers to determine instructional strategies that could help students learn. Sarah indicated “I collaborate with teachers to look at the assessment to help guide their instruction.” She also visited classrooms from time-to-time and team-teach with teachers. As an instructional

coach, she provided a set of another eye that drew attention to what teachers needed to improve about their classroom instructions. Sarah was a female believed to be in the mid-forties.

Category C: Principals

Rose

Rose had been a principal for the previous three years. As a principal, she helped the teachers with their professional development and growth. She also did scheduling and worked in small groups for guided reading. In addition, she designed intervention programs for English language learners. Rose taught two classes in addition to her administrative duties. She was also in charge of the discipline issues in the school. Rose was in her late forties.

Mike

Mike was a high school principal for a small school district. This was his 19th year at the school, but his 11th year as a principal in the high school. Being a principal in a small school, he wore multiple hats. He pointed out:

> I do a lot of different things than a principal at a large school district will do and delegates other duties to associate principals. Like this morning you saw me checking the doors, so the main principal of a city school probably will not be doing this and you may even see me sweeping the hall or sweep the gym, you know and so it is kind of a shame, my duties probably run more like 80% managerial keeping everything in order throughout the day and 20% instructional leadership with my teachers. It would be nice if I could have it in other way round.

Mike worked with all teachers and closely with all of the students. In addition, he held meetings with teachers, parents, students, and the school counselor on weekly basis. Mike was a male believed to be in his late-fifties.

Rita

Rita was a principal for an elementary of the school district. She worked with teachers in professional learning community teams. Her responsibilities as a principal span between managerial and leading instruction to teaching. In addition, Rita was in charge with the behavior piece of the school. This was her second year of being principal at the elementary school. Before then she was an instructional coach in the school. She was also part of North Dakota curriculum prior to the adoption of the Common Core. Rita, a female was believed to be in her early-forties at the time of the study.

Brad

Brad was a male principal of a rural high school. He worked with a teaching staff of about 18. He was in charge with the students' behaviors and curriculum. Specifically, he provided guides for teachers to develop curriculum and assessments for the classroom. Brad also coached teachers while he learnt from them. His goal as a principal was to help create a better school and a learning environment for all students. Brad was about 48 years of age at the time the study was being conducted.

Ali

Ali had been an elementary principal for the previous 15 years. In such a small school district, Ali's primary concern was to help create effective curriculum and instruction through professional development activities. She worked with and supervised instructional activities of teachers. In addition, Ali performed other routine, such as the school schedules and also making sure that the doors were locked and unlocked when they were supposed to. Ali, a female was believed to be in her late–forties at the time of the study was conducted.

Joni

Joni was a male superintendent of two rural school districts. As a superintendent, Joni provided oversight responsibilities and worked closely and made recommendations to the school board.

Research Procedure

I started the inquiry process by negotiating entry into school districts (Maxwell, 2005). To get access to schools and informants, I used the services of a "gatekeeper." That is an individual whose permission and assistance allowed me access to participants (Farber, 2006; Devers & Frankel, 2000). The gatekeeper was the coordinator of the regional education association. With permission from the coordinator of the educational cooperation, I got the opportunity to attend a couple meetings of the school superintendents. The first meeting was held in the later part of Fall of 2013 and the second meeting during the early part of Spring of 2014. My attendance at these meetings gave me the chance to meet with superintendents of these schools to share my study purpose and sought their help in contacting prospective teacher and principal participants. Specifically, I used the meetings to seek approval from superintendents and to negotiate entries into their schools. Following these meetings, a letter of request (See APPENDIX B) was sent to all member school districts (17) of the RREVC to seek their approval to do the study in their respective schools. Of this number, three superintendents approved the study in their school districts. After three weeks, a reminder was sent and two more superintendents allowed their schools to participate in the study. While some superintendents suggested names of teachers and administrators to be contacted, others directed me to the building principals to help identify teacher participants. I engaged teachers and administrators whom were suggested in e-mail correspondence (see APPENDICES C and D) to seek their voluntary participation.

Sampling decisions evolved along with the phases of the research process. Grounded theorists refer to this sampling technique as theoretical sampling (Charmaz, 2011; Corbin & Strauss, 2008). Theoretical sampling at the onset was applied "…to fill out and check the properties of a tentative category" (Charmaz, 2011, p. 167). Three basic coding procedures, including open coding, axial coding, and selective coding informed the sampling process (Strauss & Corbin, 1998). Participants' recruitment at the initial phase (open coding phase) was opened to all categories of participants. Eight participants (6 teachers and 2 principals) initially volunteered to participate in the study. First interviews were immediately scheduled with each of the eight participants and constant comparative analytical process was applied to generate initial codes from participants' transcripts. I applied constant comparison to discern and explain patterns and variations (Bitsch, 2005). I relied on theoretical sampling techniques to recruit different categories of participants to explore multiple dimensions and perspectives on the implementation of the Common Core. Specifically, the theoretical concepts that were emerging from the analysis of the first set of interviews directed the recruitment of additional teachers (3), principals (2), and instructional couches (2). This was during the axial coding phase (Strauss & Corbin, 1998). Interviews were scheduled, in addition to the second interview sessions of the first category of participants. The constant comparative analysis further directed the data search in terms of concepts, properties, dimensions, and variations (Strauss & Corbin, 1990). I continued to explore dimensions of the emerging concepts and their relationships. The process further informed sampling in selective coding where I drew a sample that was necessary to advance the development of the theory (Stern, 2007). At this point, I chose classrooms for some observations, recruited additional participants (teachers 5, principal 1, and a superintendent) to be interviewed, and relevant documents to help me optimize opportunities for the comparative

analysis (Strauss & Corbin, 1998). Sampling and additional interviews (second and third sessions) continued until categories were saturated such that no new or significant data emerged (Strauss & Corbin, 1998). The research process, including negotiation of entry into participating schools and interview sessions started in May 2014 and ended in December 2014.

Data Collection

One significant feature that distinguishes grounded theory from other research designs and methodologies is that the processes of data collection and analyses are interwoven. However, for the purpose of clarity, I have attempted to explain how each of the processes was carried out under separate sections.

The study used multiple data sources (Bitsch, 2005; Ponterotto & Grieger, 2007). These included individual interviews, document analysis, and field notes from non-participant observations.

Individual Interviews

With individual interviews, I used both structured and semi-structured questions to gather data from participants. The first set of interviews were semistructured which were purposely used to establish contexts for participants' experiences and to cover general concepts. However, the concepts were further explored in depth with the use of more semi-structured questions during the subsequent sessions of the interviews (Wimpenny & Gass, 2000). While the base of interview questions was informed by literature and theory, additional interview questions were generated based on the concepts that were merging form the ongoing process of the data collection and analyses. Thus, theoretical sampling, based upon the emerging theory, directed subsequent interviews and also informed further questions that were generated. There were 22 interviewees (14 teachers, 2 instructional coaches, 5 principals, and 1 superintendent). Each of

the interviewees participated, in at least, two separate interview sessions at one month time interval periods. Interview sessions with each participant lasted approximately 40 minutes. There were 45 interview sessions in total and they were all audio-recorded, allowing the researcher to take notes and to guide participants into areas in more depth. Interview sessions were held in participants' respective schools. While some sessions were held after school hours, other sessions took place during participants' free time. Interview guides for teacher and administrator categories have been provided in the APPENDICES E and F respectively.

Field Notes

Unstructured and non-participant observations were conducted. These were used to gain contextual understandings and insights into classroom interactions and the influence of the physical environment (Mulhall, 2003). First, I made preliminary visits to gain access to the school environments. I also used those visits to familiarize myself with the structure and the culture of the participating schools (Shenton, 2004). During such visits, I met with the school superintendents, principals, and prospective teacher informants. With each of the visits, I tried to make a memo about my impressions about what I saw, heard, and the general structure of the schools. I used such visits to also arrange for classroom observations with teachers who had already consented to participate in the study. I observed four instructional sessions in different school and classroom settings. I observed a second grade reading class, seventh–grade English class, eighth grade Algebra II lesson, and sixth grade English class all in different days and different time periods. In each of these class sessions, I sat at the back and observed the classroom interactions, without actively participating in any class activity. However, I observed the classes and wrote memos in my notebook about what I saw and heard. In each case, I sat for the entire duration. I observed these classes with no predetermined notions or ideas about what

and how teachers taught and how students learned. My preliminary immersion into the setting helped me to ground the study in the context of the participants (Shenton, 2004). Field observation was done during the same period in which the interviews were conducted. My observer role supplemented my interviewer role (Bowen, 2005). Imports from the field observations informed some of the interview questions that were subsequently generated.

Document studies

A number of documents on the Common Core in specific and education reforms in general were collected and reviewed. These documents included the old and the new standards (the Common Core standards) which were retrieved from online sources of the department of North Dakota public instruction. I also reviewed archival documents, including books, journal articles, news stories, feature articles, newspaper reports, magazines, and radio and television discussions on the current and emerging issues on Common Core standards. Even though the reviewed documents were not coded for direct analyses per se, they were used to contextualize with the field notes and interview transcripts. I also reviewed samples of standards that I collected from teachers and administrators from these schools.

Data Analysis

Prior to all analyses, all audio tapes were transcribed verbatim. The analytical framework of developing the theoretical perspective grounded in the participants' narratives was guided by four main analytical processes. These included coding, constant comparative technique, memoing, and theoretical saturation. While these analytical tools are intertwined, I attempt to explain how each of them was applied to the development of the theory.

Coding

The process of coding involves the breaking down of data into units (Strauss & Corbin, 1998). I began the analysis by assigning codes to units of the data. I used line-by-line coding techniques to create labels that explained what a unit of data meant. Specifically, grounded theorists use codes to "…summarize, synthesize, and to sort data, and as conceptual tools to fragment the data, to define processes in the data, and make comparisons between data." (Charmaz, 2011, p. 165) Three main coding techniques were applied in the development of the theoretical perspective. These were open coding, axial coding, and selective coding. However, the application of each of the coding techniques paralleled the various phases of the theory development. For instance, the open coding was applied to the first set of the interview transcripts. During the process of open coding, the data were broken down into discrete parts and were closely examined. The open coding technique was used to generate categories and their properties and to determine how categories varied dimensionally. Also, comparison for similarities and differences, and critical questions were asked about the phenomena that reflected in the data. Search for additional and relevant data were informed by the open coding process. This led to the axial coding process which was applied to determine relationships among categories that related to the central phenomenon.

Grounded theorists use the term axial because "coding occurs around the axis of a category, linking categories at the level of properties and dimensions." (Strauss & Corbin, 1998, p. 123) I reorganized data that were set apart during open coding around the central category which had emerged from the set of the categories named (Strauss & Corbin, 1990). The axial coding was applied in the systematic development of categories as they became linked with other subcategories. Each of the categories that had emerged at this point represented a different

dimension of the central phenomenon. Together, these categories formed an explanatory framework. However, additional data were collected at this point to help refine and integrate the categories which became the building blocks of theory to form a larger theoretical frame (Strauss & Corbin, 1998). This stage of the analysis was marked by the selective coding. Specifically, with the selective coding process, all categories were unified around the central core category (Corbin & Strauss, 2008). The coding techniques appeared sequential and systematic towards theoretical perspective that was developed. In the following table I demonstrate a sample of how I applied open and intermediate coding techniques to generate categories.

Table 2 *A Sample of the Coding Process and the Emergence of the Categories*

Selective codes	**Axial codes**	**Open codes**	**Examples of participants' words**
The implementation of the CC put pressure on teachers' limited time	Planning time Time pressure	Time allocation problems	Problem has been the time Time is another issue Time is always an issue Period of time Time is the biggest issue Time the biggest resource
		Insufficient time for workload	Too much information to cover in a period Extra work into teaching time Difficult covering all the pieces with limited time
	Additional time requirements		No enough time to cover all stuff A lot to cover No time to do some of the stuff We don't have much time Our correcting time will go down It is hard to find time
		Extra time commitments	A lot of extra time It all takes so much time Have to put enormous amount of time into it Have to put in much time to make it work It is taking us time to get to where we are It takes a lot time to find quality

	materials Putting more time in now Time to spend It is time crunch Putting in more time preparing for classes

Constant Comparative Analysis

Theory development is a systematic process that starts with the coding of the transcripts from interviews and other textual information. The systematic nature of the data collection and analysis allowed me to expand the process to include all other potentially relevant information (Corbin & Strauss, 2008). Using the constant comparative analyses, incidents, codes, and categories were compared with other events and categories in terms of their dimensions and properties (Strauss & Corbin, 1990; Cutcliffe, 2000). Rather than imposing concepts or categories, I used the constant comparative analysis to allow the concepts or the categories to emerge (Charmaz, 2011).

Memo Writing

As pointed out by Stern (2007), "…if data are the building blocks of the theory developing process, memos are the mortar." (p. 119) Going through the hundreds of pages of transcripts, data files, and constantly comparing new data with already collected data and moving back and forth between data gathering and analysis was very cumbersome. With a lot of distractions interfering with the process, I could easily lose important theoretical details and key landmarks that could be critical in the analytical process. Against such possible mix-ups, I constantly wrote about my own thinking throughout the research process. I used memo writing techniques to connect my thinking to the processes of data gathering, data analysis, and the final write-up (Stern, 2007). Writing the memo provided me with the time and the space to pause and

think through the research process and to explore the various categories and gaps that were in the data collection and analysis (Charmaz, 2011). The process also informed additional data search that were needed to fill out the emerging categories. In addition, the memo writing process allowed me to map out possible sources to sample theoretically, while at the same time creating an important audit trail of the decision-making process for later use.

Theoretical Saturation

As grounded theorists become immersed in the data, their level of theoretical sensitivity to analytical possibilities may increase (Hall & Callery, 2001). Essentially, a point of theoretical saturation is reached when new data adds very little value, and that no new codes or categories are being identified. During theoretical sampling, it became apparent that more information was needed to saturate categories under development. This occurred when I wanted to find out more about the properties of a category. For instance, one of the concepts that merged during the constant comparative analysis was time. To explore the various dimensions of time as it related to the implementation process, additional data were collected and coded using selective coding techniques. The additional codes were generated and were analyzed to determine various dimensions and how they related to the main category. Refer to Table 2.

Informed Consent

In line with the requirements of federal laws and the Institutional Review Board (IRB) of the University of North Dakota, informed consent was obtained from each of the participants before they participated in the research project. The two-page document (see APPENDIX A) outlined all of the required aspects of the study set forth by the IRB, including description of the study, purpose, confidentiality, benefits, and contact information. The informed consent was obtained, based on participants' understanding of the nature and risks of participating in the

research. It was explained in detail to prospective participants that their participation was voluntary and that they could refuse participation or withdraw their consent at any time without penalty, prejudice of any kind, or loss of benefits to which they might be entitled. It was also explained to participants that their decision whether or not to participate would not affect their current or future relations with the University of North Dakota. Participants were not contacted more than twice to solicit an interview during the recruitment phase to ensure that they were not under coercion to participate in the study. Participants were provided with copies of the consent form at the time of initial e-mail contacts which possibly allowed them time to read and ask questions about the research process. Interviewees signed the informed consent to signify that they freely consented without any coercion. Informed consent was obtained from each participant at the beginning of the interview sessions. In all instances where digital audio recordings were used, participants gave their consent.

Confidentiality and Anonymity

Research standard procedures were followed to keep the identities of the participants confidential. Thus, any information from the study that could identify participants remained confidential to the extent permitted by law and that it could only by disclosed with participants' permission or as required by law. There were no linkage between participants' data sheets and their consent forms and that transcripts did not have participants' identifiers. No personal identifiers were used on any written document. In addition, signees had access to the data and reviewed their transcripts for accuracy and consistency. I further protected participants' confidentially by keeping all the recorded, transcribed, and printed interview data in a locked filing cabinet. To safeguard participants' anonymity, they either chose or were assigned pseudonyms. Excerpts and quotes that were extracted from participants' narratives were used in

reference to their pseudonyms. In addition, the descriptions of the study settings and participants were anonymous. Data were analyzed and presented in an aggregate which also ensured complete anonymity.

Rigor or Trustworthiness

In most quantitative inquiries, terminologies such as reliability, validity, generalizability, and objectivity remain important criteria used to evaluate the "goodness" of the process and product of the research. However, these quality criteria are tied with positivist and postpositivist research traditions which are generally inconsistent with interpretivist perspectives. Consistent with the research paradigm, design, and methodology, I referenced the term rigor or trustworthiness as a guide for judging the integrity of the research processes and product of the inquiry. The rigor or trustworthiness of a qualitative study reflects a measure of different criteria consistent with the paradigmatic underpinnings adopted by researchers in the inquiry process (Guba & Lincoln, 1994; Morrow, 2005). For instance, Lincoln and Guba (1985) use the terms credibility, dependability, transferability, and confirmability which reflect more postpositivist perspectives. However, regardless of the paradigmatic tradition referenced, the trustworthiness or rigor in a qualitative inquiry should be grounded in some key landmarks upon which readers of the research report are able to judge its quality (Rolfe, 2004). To ensure trustworthiness of the inquiry, I used different strategies that were drawn from the literature (e.g., Lincoln & Guba, 1985, Patton, 2002; Chiovitti & Piran, 2003). Each of these strategies paralleled different phases of the research process. In the following session, I discuss how I applied these strategies and the phase at which they were applied.

Paradigm-based Strategies

The paradigm-based strategy was significant in the general design and the framing the research process. Specifically, I explicated the research paradigm (interpretivist) and tied together the data, analytic processes, and findings in a way that readers would be able to discern the consistency and the dependability of the data and the findings. I specified how and why participants in the study were selected (Chiovitti & Piran, 2003).

Reflexive Memos

In qualitative research**,** the positionality of the inquirer is as important as the tools for data collection and analysis (Patton, 2002). To maintain credibility, I used reflexive memos from inception to the completion of the investigation that became part of the data corpus and were reviewed frequently for incorporation into the analysis (Shenton, 2004; Morrow, 2005). I reflected and laid out my own preconceptions and insights about the phenomenon (Chiovitti & Piran, 2003). I provided sufficient information about myself as an inquirer, the research participants, context, and the social processes. These might inform readers' decision about how the findings might be a true reflection of what was investigated and how implications drawn from the study may apply in environments with similar contexts.

Prolonged Engagement with Participants

My frequent visits with participants in the settings of the study provided opportunities for me to understand the context and culture of the school environments (Lincoln & Guba, 1985). My prolonged engagement with participants also facilitated the building of sufficient trust and rapport with participants, allowing the creation of a social space to engage participants in honest conversations (Shenton, 2005). The significance of such prolonged engagement also informed my understanding of participants' constructions of meaning based on contexts.

Triangulation

In qualitative research, the use of a single data source has limitations, particularly with breadth. To compensate for such limitations, researchers (e.g., Morrow, 2005; Shenton, 2005) recommend multiple data sources to triangulate data. In the study, I used individual interviews, non-participant observations, field notes, site documents, and other electronic data. A range of data from interviews, documents, and reflective memos were corroborated with each other. This improved the richness, breadth, and depth of the data which enhanced the interpretive status of the evidence (Morrow, 2005).

Frequent Debriefing Sessions

Throughout the process of the data collection and analysis, there were periodic meetings with the chair of my committee. The purpose was to use these sessions to discuss the data collection and the analytical developments with the initial codes and categories that were emerging from the data. I took data and the tentative interpretations to the chair of the committee who closely worked with me to verify the consistency and credibility with the data collection and analysis process. As a result of these sessional meetings, independent and useful feedbacks were constantly provided by the chair which further guided the ongoing research process of data collection and analysis. The sessions also facilitated the building of credibility into the research process (Morrow, 2005). The central purpose of the periodic meetings with an expert debriefer was to ensure that the findings were grounded in the data, rather than in my own expectations and dispositions.

Member Checking

To build transparency, credibility, and dependability in the research process and accuracy into the data, participants received interview transcripts to check for accuracy and verified if

their words matched what they intended (Shenton, 2004). I learned from the interviewees whether or not my interpretations reflected the intended meanings of their own words. Also, the themes and categories that emerged from the data analysis which formed the building blocks of the theories were verified by participants.

Presentation of Findings

In presenting the findings of the study, I cast my interpretations with supporting quotations from participants. The actual words of participants were essential to persuade the reader that the interpretations of the researcher were grounded in participants' experiences and perspectives (Shenton, 2004). In addition, I optimized the use of participants' actual words and meanings of the phenomenon (Chiovitti & Piran, 2003). Throughout the writing piece, ideas were clearly presented in headings and subheadings. In addition, tables and figures were used as needed to assist the reader in following the interpretation (Shenton, 2004).

Researcher Reflexivity

A significant hallmark of qualitative inquiries is that researchers remain inseparable from the research process. More specifically, the nature of the data qualitative inquirers collect and the analytic processes they engage in are grounded in subjectivity (Morrow, 2005). A consideration of such conditions draws attention to the ways researchers' own assumptions, beliefs, values, and preconceptions are managed such that their effects are minimized on the process and product of the inquiry (Hall, & Callery, 2001; Watt, 2007). Such an approach is especially important for grounded theorists who are expected to be aware and reflect on all potential and existing biases, beliefs, preconceptions, while remaining open with codes that emerge as a result of interaction with the data (Charmaz, 2011). One of the strategies that is widespread, based on the syntheses of literature on qualitative research methodology (e.g., Ellis

& Bochner, 2000; Kreting, 1990; Finlay, 2002; Watt, 2007) is the use of researcher reflexivity. With this strategy, researchers engage in explicit self-awareness by explicating their background, qualifications, experiences and worldviews and how they might impact the research process (Morrow, 2005). In the section below, I acknowledge and describe in brief my personality as an interviewer—background, qualifications, experiences, and possible biases and how their influence on the research process was managed. In addition, approaching the inquiry from an interpretivist stance, I attempt to reference my own assumptions and perspectives that provided the justification for positioning the study in the interpretivist worldview.

Interviewer

I am a black male and a native of Ghana in the western part of Africa where I studied and earned a bachelor's degree in social science education. At the time of the study, I had earned a master's degree in elementary education and was completing doctoral degree in Educational Foundations and Research at the University of North Dakota. I had completed previous studies in both introductory and advanced research methodologies in qualitative as a doctoral-level student. The completion of these courses had offered me a considerable breadth and depth in a range of qualitative research designs and methodologies. I had had the privilege to co-present a grounded theory methodology to our colleague doctoral students in one of the qualitative research advanced classes. As a result, my interest in grounded theory, specifically, grew and it became one of my favorite methodologies, even as a novice researcher. I had also completed research certification modules as required by the Institutional Review Board of the University of North Dakota.

Professionally, I had taught at the junior and senior high school levels for 6 years in his native country. My 15 years of studying education, including six years in the United States had

provided me with opportunities to examine practices and principles of education in different contexts. My previous experience of teaching in rural settings in my native country reminded me of the opportunities and the challenges in such settings. The sense of belongingness in a rural community, the extraordinary school-community relationships, the exceptional active teacher participation in community activities marked my previous experiences with working in a rural setting. Also, very significant in my experience was teaching relatively small class sizes, different levels, multiple subjects, but with limited teaching and learning resources. Since such settings were also located in farming communities, parents used their children for farming activities, resulting to the problem of poor student attendance. While these flashbacks remained significant in my past experiences, I was guided by understanding the socioeconomic and the cultural contexts within which such experiences occurred.

My previous scholarship and readings in both areas of foundations of education and research which span a range of educational issues and in different contexts were significant in framing the study. Specifically, my growing understanding of qualitative research had propelled a book chapter on international students' learning experiences and a peer reviewed publication on middle level students' goal orientations and motivation which I had coauthored with other doctoral students. My previous experience in qualitative research and perspectives about education reforms grounded my enthusiasm in issues of foundations of education which inspired me to investigate the topic. Prior to engaging participants in the study, I made sure I was well informed about the emerging issues with the implementation of the Common Core across several states. As a result, I had read nearly all relevant survey reports, local and national news reports, and other online resources about the implementation of the Common Core. In addition, I had studied and reviewed the history and emerging trends on education reforms in the U.S. from

several sources, including books, journal articles, and other online sources. These resources were to help me stay current with emerging and current trends concerning the implementation of the Common Core across states.

I approached the study with the belief that multiple realities were contextually situated and that the voices of all participants were important in the exploration of the meanings embodied in their experiences and the social actions that were taken by the schools. I believed that participants had diverse opinions, beliefs, and perspectives that could be influenced by the unique social, political, cultural, and economic circumstances. That is to say that the effects of the participants' actions embodied in the interpretations of their world informed my understanding that they could differ in their responses to the same or similar situations. I viewed the differences in viewpoints as unique and rich in my quest to explore multiple perspectives of participants and the extent of the differences in interpreting such perspectives. As participants opened up to share their experiences and feelings in their own voices, I considered that my role was to re-construct the constructions of the meanings of what I saw and heard from them (Stake, 2010; Schwandt, 1994). I aimed at exploring understandings about the implementation of the Common Core from participants' own perspectives rather than imposing my own understandings from readings and other sources. Throughout the inquiry process, I actively interacted with teachers and administrators for a relatively long period of time. My prolonged engagement with participants made me more active rather than an objective observer. This allowed me to build the necessary trust and the rapport with participants. Being aware that my assumptions, personal views about reality, preconceptions, and prior experiences could have informed a selective attention to details and interpretation of data, I remained open throughout the research process (Guba & Lincoln, 1989; Stratton, 1997). Also, I continually engaged in frequent reviews of the

data and tentative interpretations with the chair of my committee to minimize my prior expectations as a possible source of biases.

Limitations

While this study illuminates understandings on rural educators' Common Core implementation efforts, the interpretations and transferability of the findings are limited to contexts with similar defining characteristics. One limitation of this study relates to the demographic disproportionality of participants. From an interpretivist point view, the over representation of White female teacher participants limits the inclusion of multiplicity of perspectives. This situation can be a potential bias to the perspectives about the Common Core and how such perspectives may shape instructional and assessment practices. The other limitation of this study relates to context. States in the Mid-west are known for their value for local control in education (REL, 2011). Such a traditional understanding can be significant in shaping educators' perspectives in the way they conceptualize and delineate federal mandates from state mandates. In the current study, federal government's role in allocation of resources and other federal programs were perceived as threat to local control. However, the study was limited in providing understandings on how educators' sense of local flexibilities in curriculum development, instructions, and assessments may have influenced their perspectives.

Summary

The study was designed to provide an understanding of the processes of the Common Core implementation in the rural school districts in the state of North Dakota. The framework of the study was grounded in the interpretivist perspective. Because limited in-depth understanding existed on the Common Core implementation in the state, grounded theory methodology was employed to develop a theoretical proposition to explain the processes that educators were

engaged in. Theoretical sampling techniques were used to recruit participants. A total of 14 teachers, five principals, two instructional coaches, and one superintendent participated in at least two sessions of interviews. Non-participant observation was used to contextualize the interview data. Constant comparative analyses were applied to data develop a theoretical model that explained the processes of the implementation of the Common Core. Measures such as paradigm design, prolonged engagement with participants, member checking, frequent debriefing, memo-ing, and using participants' own words as the building blocks of the theory were referenced to support trustworthiness of the research process and the product. In Chapter IV, I present the findings, based the theoretical perspective that was developed from the data.

CHAPTER IV

FINDINGS

The purpose of the study was to generate understanding about how teachers and administrators in rural school districts in the state of North Dakota were developing the capacity to implement the Common Core initiatives. Specifically, the study used the grounded theory methodical lens to draw on the perspectives of teachers and administrators about the implementation of Common Core initiatives to generate a theoretical proposition to explain the processes involved in the curriculum development, instructional, and the professional learning shifts. Twenty–two interviewees (14 teachers, 2 instructional coaches, 5 principals, and 1 superintendent) participated in at least two sessions of interviews. Table two provides basic demographic information about the participants. All interviewees were assigned pseudonyms. Non-participant observation was conducted to corroborate the interview data.

Constant comparative analyses were applied to the interview transcripts and field notes. The analytical framework of the data was informed by Strauss and Corbin's (1998) systematic approach to concept and category development**.** With this approach**,** open coding techniques were applied to the data to generate and name concepts (Strauss & Corbin, 1998). Based on the dimensions and properties discerned, the concepts were studied and grouped under categories. Data were then more closely examined for both differences and similarities among categories. Additional interview data were gathered and personal memos which reflected my thoughts about the data and process were written. I applied axial and selective coding techniques to reorganize

and rename categories based on the nature of relationships that were discerned among the various categories and subcategories.

Table 3 *Demographic information of Interviewees*

Participant Pseudonym		Gender	Ethnicity/ Race	Current position	Years at current position	Content area(s)
1	Nicole	Female	Caucasian	Teacher	4 years	Elementary
2	Deb	Female	Caucasian	Teacher	20 years	ELA
3	Lisa	Female	Caucasian	Teacher	15 years	ELA/Mathematics
4	Lora	Female	Caucasian	Teacher	18 years	ELA
5	May	Female	Caucasian	Teacher	12 years	ELA/Mathematics
6	Kate	Female	Caucasian	Teacher	11 years	Elementary
7	Ken	Male	Caucasian	Teacher	13 years	Mathematics
8	Mira	Female	Caucasian	Teacher	2 years	Mathematics
9	Emily	Female	Caucasian	Teacher	12 years	ELA
10	Pat	Female	Caucasian	Teacher	15 years	General
11	Jan	Female	Caucasian	Teacher	28 years	Social studies
12	Juanita	Female	Caucasian	Teacher	7 years	Elementary
13	Agnes	Female	Caucasian	Teacher	24 years	Mathematics
14	Carol	Female	Caucasian	Teacher	21 years	ELA
15	Becky	Female	Caucasian	Instructional coach	3 years	General
16	Sarah	Female	Caucasian	Instructional coach	5 years	General
17	Rose	Female	Caucasian	Principal	3 years	N/A
18	Mike	Male	Caucasian	Principal	11 years	N/A
19	Rita	Female	Caucasian	Principal	3 years	N/A
20	Brad	Male	Caucasian	Principal	10 years	N/A
21	Ali	Female	Caucasian	Principal	15 years	N/A
22	Joni	Male	Caucasian	Superintendent	10years	N/A

A close study of the properties and dimensions of the categories led to the discovery of the central phenomenon from the data. The constant comparative nature of the data analyses allowed other categories and their dimensions to emerge, along with the discernment of the relationships among the categories. The constituents formed the building blocks of the theory.

Chapter IV presents the findings, based on the categories of the theoretical proposition framework (figure 1). The framework shows the relationships and linkages amongst categories. In the following section, the central phenomenon or the core category that emerged from the data analysis is explained. Consistent with the study framework, conditions (causal, intervening, and contextual), actions or interactions, and consequences are presented. Each of the categories and other subcategories are explained and supported with direct codes from interviewees' vignettes. The concluding part of this chapter presents theoretical assertions based on the findings of the study. Before I present findings based on the categories, I provide a brief excerpt of field notes based on one of my classrooms observations. I include it here to demonstrate the contrast between the immediacy of the pedagogical moment and the goals of the CCSS, which were posted on the walls of this room filled with 8 years olds.

A Second Grade Tier II Reading Lesson: An Observational Vignette

Nicole, a second grade teacher was waiting for her Tier II reading group to arrive. They had varying levels of difficulties in reading.

Nicole's classroom displayed a collection of children's work, pictures, and posters on a clip chart the bulletin board. Her desk was positioned at the corner of the room with students' furniture arranged such that they faced the whiteboard with wide spaces between them. At the back of the room were containers with crayons and two other plastic cups for markers and pencils. A collection of kids' books were placed on the table on the side of the room and on the wall was a display of the Common Core standards. Nicole explained, "…we are providing the kids with visuals about their Common Core learning targets for that day or for the week."

For this particular class the 5 students all sit around one big rectangular table. The focus for the day is sound spelling. Each student is given a sheet containing words with varying number of

syllabi and they pronounce words after teacher. Students identify words on the sheet with their fingers: “label”, “plan”, “avoid”, and “cause”.

Next students use punctuations in sentences. One of them is an exclamation mark. They learn about what it means and how it is used in a sentence. Nicole reads a number of words on cards and asks students to demonstrate when tone of voice is supposed to go down or up by giving thumps up and down. One girl is smiling, she feels excited about playing with it. One boy, from time to time, loses focus. He is playing with his sheet on her table. Nicole keeps prompting him about what he supposed to do.

It is about 20 minutes into the lesson and students turn to the use letters to form words for the day. The words, Nicole tells me later after the class, were from a collection of words based on the *I can statements* for the day.

Students practice fluency and vocabulary usage as they read a picture story about Alley and Allor. They all read the story together outloud after teacher reads it.

The lesson ends with students answering questions based on the story.

> Teacher: How are dogs different from people?
> Student A: People talk but dogs can’t talk like people.
> Teacher: Very good!
> Student B: People have two legs but dogs have four legs.
> Teacher: I like it, good job!
> Student A: Dogs run faster
> Teacher: Yeap! dogs can run faster
> Teacher: How are dogs similar to people? Teacher calls a student who does not raise her hand?
> Student C: She is thinking, dogs and people they all have names.
> Teacher: yes, good!
> Student B: dogs and people, they all eat.
> Teacher: Good! you guys are awesome!

This class lasted 30 minutes.

While I thought two of the students were not paying a close attention to what they were doing, I was impressed with the way they thought about the questions. I did not see students struggle much in terms of the pronunciations of the words. If anything resonated with my understanding of the Common Core, it was that part of the lesson that students had to think about the differences between human beings and dogs!

As in the case of other memos that I wrote, based on the various visits to the schools and classroom observations, I did not code them. I however, I used them to contextualize the interview data that were coded to generate categories for the theory. The following is a proposed theory explaining the processes that rural educators were navigating to implement the CCSS. Categories and subcategories leading to the development of the theory are explained in the next pages.

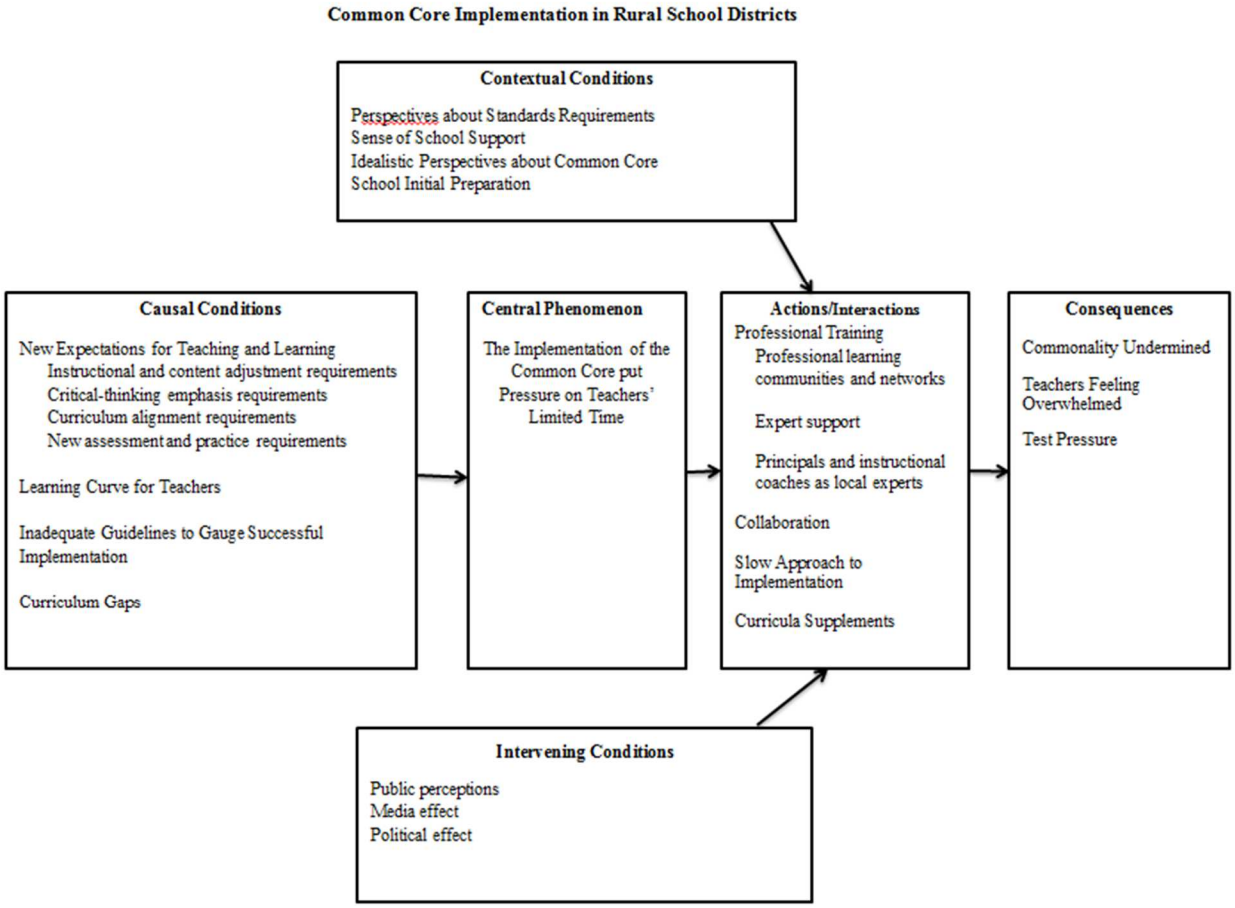

Figure 1 *Grounded Theory Map*

Central Phenomenon

According to Strauss and Corbin **(**1998), the central phenomenon explores the question *what is going on here*? It is the representation of repeated patterns of happenings, events, and/or actions that people do or say in response to the problems and situations in which they find themselves. This means that the central phenomenon, otherwise known as the core category should appear frequently in the data (Strauss & Corbin**,** 1998). Drawing upon Strauss & Corbin's framework, time requirements to implement the Common Core appeared central and a common pattern that was grounded in the perspectives of teachers and administrators. The

pressure on the teachers' limited time was central to the processes that teachers and administrators engaged in as schools transitioned to implement the Common Core.

The Implementation of the CC put Pressure on Teachers' Limited Time

The fundamental issue that emerged from the selective coding of the data analysis was that time available for teachers to implement the requirements of the Common Core generally seemed inadequate. In reference to the grounded theory map, the concept of time is linked to all ongoing activities, actions, and interactions amongst teachers and administrators. Teachers were committing tremendous amount of time in order to implement the Common Core standards in their classrooms. They invested more time in the area of mastering new teaching techniques to integrate the new standards. Teachers also committed more time to learn the content of the new standards. In the area of review of the standards and instructions, professional training, the development and use of additional materials, paperwork, classroom assessment, and collaboration all required teachers to put in an extra amount of time.

Becky, an instructional coach had been working with teachers on the implementation of the common for the past three years. She had been privy to most of the sentiments and the frustrations that teachers had been going through by trading off their own private hours just to allow them enough time to bring the necessary pieces of the new standards together. She indicated:

> The biggest thing is time. Maybe it is in every profession but it is time crunch. Teachers need to get their lessons ready and it is a lot more intense now. They put a lot of work into their presentations. If we truly do it right and still have our rubrics, our correcting time will go down. When I taught I corrected everything and spent hours correcting. With our rubrics in place, it should be faster, but I do think teachers who truly have grasped it

> are really doing a nice job, but they are putting endless hours into it. I think they are here on Saturdays and Sundays working nights and it is exhausting profession and sometimes it sounds as good things because we are here for the kids and so we better be refreshing ready for the kids. And they are willing to do it.

Similarly, May has been committed in making sure that she brings all the pieces together to make the Common Core work in her third grade classroom. However, she had come to believe that making such strides would require time trade-offs. She explained to me how she was enduring the trade-offs against other important things in her life. She disclosed:

> I feel that in my own personal case I am giving it my all and I am able to teach the Common Core. I have had to put an enormous amount of time into it. I wish I did not have to do and I don't want to continue doing that and not every teacher can do that, you know, my children are grown and gone and I don't have children at home, my family, that I have to take care of. Not every teacher in the building can stay till 6:00 o'clock at night like some of us do so you could get a little bit about that when you have to put so much of your time into it to make it work in your classroom.

Sarah is an instructional leader who worked with teachers trying to put the instructional and the curricula pieces of the Common Core together in elementary classrooms. She understood how difficult it was, particularly for teachers, to attend to all the important pieces of the new standards, while ensuring that instructional hours are just enough to allow for meaningful class activities and practices as required by the new standards;

> The hardest thing is time. There are a lot of things that we are expected to do and kids are also expected to do their part. It is something new, it so different that if you want quality lesson to map it out because there is so much and it takes time to develop a very good

lesson and plan to do those kinds of things. You are changing the whole teaching style that you are used to and there is no a single curriculum out there that does everything that you need to. You have to take a lot of your own time to lay things out and move from there.

Nicole shared her experiences with the requirements of the Common Core as creating additional work in classroom assessment, which required more time. She stressed;

> The record keeping is very different and it is very time consuming. We are asked to take several formative assessments and then also summative assessment of the students and so there is more assessment being done on each of the students throughout the year and with that assessment comes paperwork and recordkeeping. And so that has been a huge issue. The other issue is that there is more rigor in the Common Core. What I am asked to teach third graders today is something that forth, five, and sixth graders were once taught so the younger they are they are being taught more and so that makes it a little more challenging...

Deb considered that making the new standards work in her classroom was driving her to explore a range of assessment techniques to track students' progress over time. However, this was compelling Deb to expend instructional time to address multiple needs of instruction. She revealed:

> Time is the biggest issue. I am putting more time in now as a trained teacher preparing for my classes. There are just so many components to it and technology adds to it and just to make sure that I am hitting those standards, I am tracking them. I do use, "mastery connect" to help track those standards and measure proficiency so that helps, but it all takes so much time to input that stuff into the computer to look at the results and to track.

> I am putting together a new lesson now with Halloween being this week and I am looking at standards and kind of literature into play, but it is just so time-consuming. like I said, I am committing more time now than I did probably when I first started teaching and just constantly revamping it. And it could be though too because I constantly revise my work to make sure that it is fitting.

Lisa teaches both ELA and mathematics and to her the amount of work that needed to be done and the time available for her to address those needs were a mismatch. According to her, teachers were putting in much more time to make the standards work in their classrooms.

> I think we are doing quite a bit because I talk to other schools and they are doing some of the things we are trying to do so it is not everybody that is doing that. Is it really going to work? Well, I don't know, but that is where we are really putting in a lot of time to make this work. The paperwork we have to do is another a little bit of frustration, I have all my classes …..papers and I have a lot of work to do so taking time to document that has been a headache for some teachers. It is one of those things that sometimes it is like, ok, this is what I am trying to reach and I want to have my time with the students, but yet I hope you do have standards that somebody is trying to reach so I am kind of in–between.
>
> There are some things that I see that are hard and are some things that are good about it.

Kate has been teaching the Common Core standards in her kindergarten classroom. However, according her, the additional time requirement with the implementation of the Common Core takes something important from her as a reflective teacher:

> You know, it is not like you just say we are having the time to take coffee break, I mean that is never, that will be a bonus but just that time to just think or as we say "reflect." They say, "teacher to reflect", there is no time to actually reflect. It is like, maybe it was

with this group, maybe it is the make–up of this group and whether or not that is how I presented in my lesson or even just get time to prepare for a lesson all comes out difficult.

Similarly, Lora shared with me the amount of time she had had to commit into research new strategies about how she could make the Common Core work in her seventh and eighth English language classrooms. She was one of the few teachers who had the privilege to attend conferences and professional training before the state moved to adopt the Common Core initiatives. She had become a resource to several teachers in her school as other teachers in her school came and observed her model lessons. However, what had been drawing her back in implementing the Common Core was the limited time for her to address all the instructional needs as required by the Common Core. She indicated;

> The problem has been with the time. We are a small school, we all teach full load throughout the day, the time to collaborate with people and do all those things is kind of a hit or miss and to me it is the biggest obstacle to me as a teacher. I can't use the whole class period to prepare with my peers if we want to do those types of things. I know the Common Core very well now by doing all that research and now putting things in the papers all over in this classroom. And this is the standards and here is what I need to ask and building things up which is very beneficial. But the problem is most people don't want to do that. And I totally understand that. Who has the time to really want to do that?

Time tradeoffs appeared a fundamental phenomenon as showed by the data. Time affected an array of teachers' activities, including lesson preparation and presentation, assessment, collaboration, and the mastering and application of new strategies. From the data, the time element pertained to a set of conditions. In the following sections, these conditions (causal, intervening, and contextual) and their relationship with the central phenomenon are explained.

Causal Conditions

According to Strauss and Corbin (1998), causal conditions represent a set of events that influence phenomena. From the data, the causal conditions were embodied in the events that undergirded teachers' hard-pressed for time to implement the Common Core. Three categories emerged as causal conditions from the data analysis: new expectations for teaching and learning; inadequate guidelines for successful implementation; and curriculum-gaps. These categories not only reflected a level of concern for both teacher and principal participants, they also presented some drawbacks to both individual and group efforts toward effective implementation of the new standards. In the following section, I have explained these categories and other subcategories that emerged along with the main categories as grounded in the data.

New Expectations for Teaching and Learning

The state of North Dakota adopted the Common Core initiatives in the year 2011. Since its adoption, school districts, in the last three years, have moved to implement the Common Core and to possibly achieve full implementation. However, teachers and principals' perspectives of their experiences with the Common Core showed that the implementation process had presented new expectations for teaching and learning. Sarah explained how the changes associated with the Common Core affected students' learning and teachers' instruction.

> It is difficult for our students. It is different and the time to think differently used to be where you just shot back and forth answers, now we are trying to use different strategies in things to get kids to do more writing. We do more oral presentations and things like that. So that is totally different teaching style too to do and not just to lecture to kids, but just facilitate and get kids to be thinkers on their own.

A similar perspective was provided by Brad, a high school principal. Brad elaborated on some of the new things that teachers were dealing with and how they were working as a team to break down the standards into teachable units. He explained:

> Here we have our PLCs so our mathematics teachers meet once a week for an hour and that is the discussion right now and what they are working on right now is they are breaking down the Common Core and looking at the essential questions and the stuff that they want to pull out of the Common Core that it is going to be important for the students. There are stuff that are important with the Common Core and there are stuff that are nice to know, we call it *need to know* and *nice to know* so they are digging out all the *need to know* information and the *nice to know* to see and how they fit in. They probably could do that every day for a half a year to a year. And on top of that developing how they are going to assess, how they are going to set up the classroom working learning goals to those standards.

Becky, an instructional coach particularized one of the visible new things that had come along with the implementation of the Common Core and the rationale behind it. She indicated:

> Teachers have to have the Common Core standards displayed somewhere in the classroom and so they are teaching and they keep referring back to it and it gives us a purpose. I think before the Common Core, kids just thought information is coming and coming and coming and where is it all ends? Well, now they know this is what we have to know. We have like 20 essential things students have to know before we move on and they get it because they all are kind of built into that so I like that we tell kids now they know what to expect and no surprises and we assess just according to that.

Similarly, Nicole shared her experiences about new instructional techniques that she had been using as a result of the changes informed by the Common Core. She also individualized her techniques about how she approached the Common Core Standards in her classroom. Nicole went on to explain:

> At this grade level we are providing them with visuals each day, each week about what their learning goal is or Common Core learning targets are so that the kids will see specifically what are objectives for the day or for the week, but I feel like I don't use the words Common Core with my kids so not to overwhelm them. Throw at them everything that we need to learn, but we will take piece by piece so at this level I feel like, yes there is a lot of content that we need to cover, but not necessarily overwhelming to the kids.

Ken had been integrating the Common Core Standards into his Algebra I and II lessons. One of the new requirements that he had to meet was to display the standards in his classroom so that students could refer to and know what they were expected to do for the day or for the week. The display of the standards was expected to guide students to align their mastery levels with the "I can statements" extracted from the Common Core Standards. To Ken the idea of displaying the Common Core Standards in the classroom was something that he had to endure. He disclosed:

> It was a more of a push in last couple years with the stuff that we have done and professional development that and it is a good idea to know, these are our goals for the year, each lesson we have goals but, it is good idea and I never did it before, it has been kind of a push that we do have in our rooms at least. And here we do. So it is a push and it is a good thing to have.

Not only did teachers have to display these standards on the walls in the classroom, they also kept the guide which came handy so that teachers could easily refer to the "I can statements" while they taught the standards. Juanita shared her experiences:

> We have these little charts. So we have these little, they got these for all of us as teachers, kind of like a page for each of the standards. We make a quick reference like we know if we are teaching that, like one of these examples of questions that you can ask the kids help them learn. Trying to see which is a kind of newer and tougher for third graders. Kind of pretty early at the school year! I have only hit about 5-6 of these acts and they really pile ….newer concepts. And we spend a year reviewing and strengthening just the basic things subtracting. Time! Just at the beginning of the year!

Teachers discussed other changes that were manifest in the way skills were being moved around as a result of the mandate of the new standards. Teachers and administrators cited the rigor of the Common Core as the underlying factor that pushed skills a grade or two grades lower.

To Brad, the other instructional changes that necessarily became important with the implementation of the Common Core was the need for teachers teaching other content disciplines to offer a helping hand in the teaching of the new standards. He expatiated:

> There are some stuff that have been added and we just have to adjust. The biggest difference to me is the reading and writing standards and social studies and science have to incorporate, they are not only dealing with science and social studies content, but they also have to implement the reading and the writing into their content area too! So to me that was probably the biggest as far as the English, the verbs, nouns. Things like that and that none of that really changed the reading and the writing piece.

Deb considered that her approach to teaching was on a different path with the implementation of the common. She thought her approach to instruction had been adjusted to match the demand of teaching the right skills and core units of the lesson:

> When I first started teaching 25-years ago I think most of the emphasis was on what happens in the story, what is the setting and it touched upon some of the skills. I think with Common Core, we start with our standards, we look at the skills that the standards cover and we find the literature pieces or the activities to match that standards, where in the past before we would just start in the beginning of the book, pick our pieces, we would basically look at a lot of the setting, character, touch upon maybe, illusions and things like that. I really like to put my emphasis on the skills and bringing in the pieces to match the standards….

With some of the specific changes with English Language Arts, teachers talked about the shift in emphasis from fiction to non-fiction. For teacher participants, reading emphasized more informational texts. This shift had become necessary of the skill development emphasized by the Common Core. Emily explained:

> I guess there is a shift in nonfiction. That is probably what has changed a little bit. There is more emphasis on the nonfiction readings that is the bigger part of reading than the literature, but is really throughout the whole day so they get a lot of nonfiction readings so I try to put in more articles more factual staff. I am trying to push them to read nonfiction for pleasure and that kind of stuff. That is the only one I can really think of. But we focus on argumentative writings, informative writings, narrative writings which has always been like this. There is more focus on argumentative writing which is totally

supporting the, probably one that they are going to do throughout their life, I mean I don't know…

The adoption and the implementation of the Common Core created conditions that expected teachers to adjust their teaching techniques to push students to master the new standards. The implementation framework emphasized key shifts that were meant to align the local content materials to the new standards. With the implementation of the new standards shaping the expectations for teaching and learning, four subcategories (content and instructions emphasize depth instead of breadth; critical thinking emphasis; curriculum alignment process, and assessment practices) emerged from the data analysis. These categories represented areas where teachers and administrators were making key shifts in the transitional and implementation processes.

Instructional and content adjustment requirements. One major change that teachers and administrators I interviewed made reference to was the extent of the depth the new standards was supposed to be taught. Having compared the state standards for ELA and mathematics and the Common Core Standards, teachers and administrators had observed that there had been a shift in emphasis from the volume of readings in specific content areas to in-depth understanding of the standards by students. May, perhaps, in her understanding found that some of the required shifts were insensitive to the cognitive development of her third grade students. She indicated:

I have to teach 8 year olds what an obtuse angle is. Does the 8 year old need to know that? Probably! But in Common Core, they need to know it in order to be successful in fourth grade because in fourth grade they take what I have taught and move forward from there. They are assuming I have taught certain things and so we do the best that we can,

> we try to teach deeply instead of too many subjects, we try to go deeper into what we are doing.

A similar perspective was shared by Kate who thought the content was heavily demanding, compared to her previous teaching experience regarding what she taught her kindergarten children.

> Before the Common Core, it was all the letters, all the sounds to get them for the first grade, but now before Christmas they are expected to read, they are expected to write with a capital, with a period, with spaces between their words. There is just so much and it is not allowing for…some kids will be able to do that but not all of them. And between 4 and 8 years old I mean girls fall within anywhere of the spectrum and about the time they hit 8 and 9, they kind of level out. As research shows by second and third grade, they start to level out even though. But there is huge variable in there. You can't push it. But there is really that push on us too!

With the new standards, many teachers and administrators I interviewed perceived that some of the standards had been bumped down grade levels. Rita, an elementary principal recounted her experiences with teachers about such perspective; "…there were a lot of concerns that skills were being moved around, so there would be gaps." When asked how she had conceptualized such changes, she indicated "…a second grade student is now learning almost fifth grade material and they are all moving going across…" Such conclusions had created conditions that required teachers to modify their instructional and content emphases. Perhaps, that is not the only change Pat had to adjust to, but she also found a significant shift away from memorization of facts to asking students to demonstrate their thinking about their work.

> Now the stuff I used to do in the sixth grade is probably being done in the fourth or fifth, maybe in the third grade. A lot more real life practical, like mathematics. It is like, what is the first the foundation? it is not just memorizing how to do a problem, but understanding the problem, relating it to a real life and that kind of stuff. Real world situations. It is a big change. It is challenging, not only for the teachers. Like I said I am now doing stuff that I should be doing in seventh and eighth grades. But are sixth graders ready for that? Some of the rigor, it is almost scary to know that your kids are ready but, like, are they ALL ready for that?

Deb found that with the implementation of the new standards, students had to contend with complex vocabulary structure in the upper grade level language arts. As a department they had developed new strategy of helping students to learn the passages and the vocabularies. She explained:

> I am a little bit concerned about vocabulary. You know my colleagues and I have had this conversation too where you know the kids are getting the skills, they give them more difficult passages and the vocabulary in it they can't do it anymore, because they are not understanding the vocabulary. So I think we need to put more focus on vocabulary. In fact, we have addressed that in the last two years. We found something called *Video Vocabs* and so in grades 9-12 we try to teach our freshmen through seniors: 20 new vocabulary words every each period. And so they watch the videos, they interact with the words by using them in sentences, learning the part of speech, learning synonyms. They do cross puzzles with them, they do online quizzes with them and in tend we try to encourage their usage in their writing and speech in daily conversation and that is, I guess concern about the vocabulary because, if you set them down right now, they can tell you

what……..identify some of them. You give them more complex language, they are going to struggle.

The comparative rigor that supposedly characterized the new standards seemed to require teachers to make significant changes, not only to contents, but also to their instructional practices. However, shifting away from the breadth to the depth did not seem to be a fluid transitional practice. This was because the requirements of the new contents and the instructional practices marked a significant adjustment in teachers' own pedagogical beliefs and the perceived insensitivity of the requirements to the students' cognitive development and abilities.

Critical-thinking emphasis requirements. According to teachers and principals in the study, the adoption and the implementation of the Common Core Initiatives had not only introduced a change in the actual content of what students should learn, but more important, how students should learn and apply the skills that they acquire in real-life situations. With the Common Core, interviewees believed that students were being pushed to master higher-level material and critical thinking skills rather than just memorizing facts. The "reading standards are skilled level. It is no more can you answer these questions? Or fill in the blanks! But they have to make inferences…" said Emily. Lora explained her role and confidence levels in creating classroom experiences to inspire students to master critical thinking abilities:

> I want them to take that information and sort of give it back to me in a higher level thinking question and to me that is very difficult to get them to that. Those level before vocabulary is at level two. So can they tell me definition of something? They need to know that they have to have that background and the level three is, can you talk about it? And the level four is, can you apply in a way? And I feel very confident in level two

because I can teach that, because that is what we have been doing forever. Level three, I am getting pretty good at. Level four is tough for me to figure it out. How can I get them assignments that are going to bring out that knowledge to be sure that they have that skill so basically it is the assessment piece? How do I assess that higher level piece? And that is where my struggle has been. But like I said, I really believe that is where we need to be that is what I want my kids to be able to do, I don't want them to be 2+2 we all know that but can you tell me two chicken, two cows. And really processing the information?

With this move, students were expected to be more analytical. However, Ken, a high school mathematics teacher believed that teaching students to be critical thinkers had always remained part of their teaching. He acknowledged that in the era of Common Core, teachers were being pushed to emphasize that aspect of student learning much more than before:

I think when you look at the writing piece and stuff it is maybe making them think differently that probably they have before, and for most part we give them a set of 20 problems and they do them. And there was not a lot of hey! Write how I do this, explain how you did this, just show me how you did it. And that is the explanation piece. You know, write down your process. How would you do this anytime you do that number? It is that explanation writing piece I think, the critical thinking piece but it was there. But we may not have put much emphasis on it–the critical thinking part of it anyways. And I think the books have written questions differently. Now, we use a little more critical thinking than maybe than older books. Older books are maybe more just drill problems. Here is 20 questions and just drill all of them, more word problems and, they may have done more of that [before].

Ironically, she had found no significant difference in terms of the concepts Juanita taught. However, she identifies and pointed out that with the Common Core, students were required to explain the numbers and figures that were arrived at in mathematics and what they meant in real-world scenarios.

> ….but a lot of multiplication and division which is not anything new for third grade, but they only want them to really understand them more like not just learning or memorize the facts but be able to break apart number and apply in areas in different ways. Just more in-depth because we have always done multiplication and division. But they have to be able to explain their thinking more. It is a lot more like writing in mathematics to be able to explain them. So……..

To Becky, the Common Core had rather provided opportunities for academic freedom. She found that the emphasis was no more about whether the answers students provided were right or wrong, but it was about how students were able to explain their thinking and how they would apply such skills in similar or in different contexts.

> We have always taught like, in mathematics, find the answer. You still find the answer, but now you explain why and then we do the, what if? And so really people who are saying Common Core is taking away freedom. We are kind of giving freedom! Because we are now saying to the kids, even if it is not that right answer, you can talk your way into the right answer! Because the next will say what if? And then we give them a scenario and if they can use that thought process they can get that right because they understand how to talk through it…….

A reflection of the development of students' critical thinking skills paralleled the development of high level cognitive abilities which teachers and principals considered as a push factor of the

Common Core standards. Sarah, a principal shared a perspective that rationalized the expectations for students to move to a higher level beyond the foundational content-based knowledge. Sarah said; **"**One thing that has made us look at our teaching styles is getting students to think and to assess the problem solving rather than just rote memorization of things. Kids have to express themselves. They have to be able to explain what they are doing." With the Common Core movement, what teachers were teaching and students were learning appeared more guided according to teacher and administrator perspectives. Teacher and administrator participants underscored that classroom instructions emphasized more critical-thinking over rote memorization. According participants, the shift had also marked a significant change for students' learning.

Curriculum alignment requirements. Curriculum alignment referred to the changes that focused on the content materials and the whole spectrum of curriculum materials that teachers needed to be able to develop high quality instruction. With the implementation of the Common Core, teachers and administrators engaged in the process of aligning the old state standards with new state standards also known as the Common Core standards. The process also involved aligning the existing curriculum materials with the new standards. Brad specify, "we had to review our old standards and look at how well they still fit into the Common Core and if there were some stuffs that we needed to take out what we had worked on it and the new stuff, so a little bit of work that way."

Nicole shared similar experiences of the processes that her school was going through; "We look at those standards and align the Common Core Standards to what curriculum we are teaching from, such as our science and mathematics or our reading series that we are using…"

May perceived the Common Core as a state mandate, yet teachers were not provided with new content materials to align the standards:

> It is being mandated that we teach it but we are not given the materials to teach it with. They are not up to research-based, good quality manual to teach from. So schools are hesitating to buy a new reading series, because it is not ready yet. Personally, in our school district, I feel that our administration wants us to teach the Common Core. They want to help us, but there are not quality resources out there for them to engage in helping us. I do feel like that. They are willing and ready to [help]. I mean they will take suggestions from any of the teachers. If I were to come to them and say! "I just found that there is a very good web on something they will send to all of us, try this!, try this! Because there is just nothing there right now. A good solid something, anything out there that they can provide for us. So they are willing but, like, I said, we are all waiting for this magic bullet.

Carol still used the old textbooks that her school acquired years ago:

> Our textbooks are not aligned with the new standards because they are too old right now. I guess the textbook companies are really scrambling right now to have those textbooks aligned to the Common Core. I have one textbook, but it is just trying to match activity. There is a lot of things there that I don't have to teach. They should know them and it is part of what I teach to get them do to the next level. It is very sequential. You need to know this in order to do that. So, you kind of, know your standards for grade below and the grade above. The textbooks should be aligned and sequenced, it should be there.

While the shift focused on the new standards-based contents, schools' intent to acquire new curriculum materials that were Common Core aligned was happening slowly.

> Rita:

> I don't even know the reading series they have come up with. Some claim they have come with a Common Core alignment kit… But I am guessing they will come out and say they are, but purchasing something that says it is aligned may be misleading, because they have not done anything to change it…we adopted the new ELA from 7th through 12th. It was all new and not aligned to the standards…So we will see. We are not quick to jump to something.

Rose indicated that her school had acquired new reading series that contained areas that the Common Core emphasized, however, she did not think there was anything like perfect alignment:

> We have received some [materials] that.. kind of say, our product means Common Core. But we have purchased more non-fiction reading because that was one of the things that came out about it. And so [it is] more of a mix of fiction and non-fiction. It has been just all fiction stories, but as [far as being] perfectly aligned? I don't think so.

In contrast, Ken found that the new books that his school had purchased contained contents that were consistent with the new standards:

> They are still aligned with the standards. They are all updated to the Common Core which helps a lot. They have included a lot of writing stuff which were not in the older books. But more critical thinking and problem set which makes our job easier that they keep on doing and we don't have to spend more and more time trying to basically rework everything.

Similarly, Mira showed how the replacement of her old books with Common Core aligned books had facilitated the alignment process in her lessons.

> I have got almost all the new textbooks. All my textbooks used to be old and deplorable, but all my lessons are aligned to the Common Core, so that makes it easy. I have been able to write my "I can" statements and my goals. And they have written these instructional strategies in there that I can use.

While it became necessary for schools to shift from the old to new curriculum materials, a number of teachers and principals revealed that they were still using the old curriculum materials which according to them were less aligned to the current standards. However, with a few selected schools that claimed to have acquired new curriculum materials, teachers and administrators did perceive that the alignment process was devoid of major challenges.

New assessment and practice requirements. With the adoption of the Common Core, schools in the state had moved to join the Smarter Balanced Consortium. What this meant was that beginning 2014-2015 school year, the annual state assessment for schools in the state was going to be based on smarter balanced assessment system which, according participants, would require demonstration of rigor by students. Brad explained how the shift was informing instruction in the school:

> It is supposed to be a lot different than the regional state assessment. So the first test coming up, we are kind of preparing the students to say "Your score is probably going to drop a little bit, because of the difficulty of the test." How the test is written and what they want the students to do during the test. So, "it is not that you have not learned anything." It is an adjustment to the test and the Common Core because Common Core is critical thinking and not memorization stuff anymore. We have given them sample questions of the state assessment from a "smarter, balanced [approach]. So we are trying. But, is there going to be time to teach a junior a critical thinking in a way that the

"smarter, balanced" wants to do it? When they have been kind of memorizing things like kindergarten? It is a kind of hard to break**.**

Consistent with the shift, teachers seemed to be adjusting their assessment techniques to align the requirements of the new assessment, but not without a challenge. Lisa explained:

> Well, to me, it is a mind shift for them. The students know what they are going to do, what to start with, and we started three years ago. And there were only two of us who decided we were going to jump into this. It was a lot of growing pains. It was difficult because students only bucked the system. They said, "Give us grades! What is that? Give me a grade!" And we do the four point scales instead of, well, "you don't have a grade" And it was really difficult. Now the third year into it, more of those students understand what it is. There are still teachers here that use the grades which is fine. And there are a few of us that are using the four scale: "You know it! and how well do you know it? So we are gradually making the shift in the school.

Ken explained how the emphasis of the new assessment had informed his approach to teaching mathematics.

> [I] see writing is going to be more important than it has been in the past, especially for mathematics. Explain rather than solve the equation which I am probably going to get better at. It is not something that we are used to doing. It is going to change things. I have, maybe, not put emphasis on, "ok we are going to specifically look at this." But it is something I have to change to a point because it is going to be difficult. I mean, the biggest thing is the writing emphasis in mathematics.

The adoption of the Smarter Balanced test introduced a different test format. According to participants, students were shifting from paper-based to web-based test format. Mike indicated;

"all the tests, up till now, have been papers and pencil. They get a booklet, page by page and circle the knots. Starting this spring, they are going to be all web-based on the computer." The shift required schools to adjust their assessment formats to fit the new format. Sarah indicated:

> I think the hardest part for us is going to be testing aspect. It is moving everything to a computer. We are not ready with that. I don't feel that is where we are with our kids. For us, right now, they are going to be taking high stake tests on the computer. We don't test on a daily basis on the computer. I mean it is like going to take your divers' test for the first time without having being behind the car wheel. It is a something that we have looked at as a district though. We need to do more things on the computer. We have added our test skills in. And we are trying to do things. We are trying to test kids, if they are taught that way, they should test that way. I am not saying the kids don't have the ability for technology, but for us in the elementary level, it is, kind of hard to expect a third grader to do keyboarding, typing the answers that they want…

Juanita discussed the change and the new assessment system and what it meant to them as a school.

> The test over the last 2 years has changed to fit more with the Common Core standards. So that is something that we are really looking deeply into. We analyze year-by-year, student-by-student and check their growth. So the differences in that test, I have seen, is trying to make it more interactive for the kids, like where they get to drag the comma in a sentence or like they get to click to circle a word that is misspelled or something. So that is a kind of a nice change. [A] positive thing to go with it. And it is a kind of a test that self-levels, [such] that when students keep getting questions right, it gives them harder questions. The test is trying to find where they are on this.

Similarly, Lora indicated:

> You have a lot to cover anyhow, but I mean, just try to make sure. And we, kind of, specialize in English and reading. And, kind of, a big one now, because we are getting the kids in our school ready for the state test which leads to state funding, so that we focus on that area more. When we meet anyhow, each class, we focus on those things. We take a little extra time as reading time. We want them to work on their reading and then we get together as teachers and look at their test scores to see if it helping them to improve.

The shift to new state summative assessment, otherwise known as the Common Core required teachers to adjust their summative and other school-based assessment formats to be consistent with the framework of the Common Core. Since the Common Core was a new assessment framework, schools had taken sample questions of the smarter balanced. The time for try test seemed to conflict with instructional and evaluation times. Ali indicated "I am kind of those, I am not going to spend my evaluation and instruction time teaching kids how to test. I will not allow teachers to spend all the time teaching students how to do [test]. It is worth it."

Learning Curve for Teachers

The implementation of the Common Core not only required teachers to use new sets of instructional strategies, but in some cases, teachers necessarily needed to master the content of the new standards. With some of the specific changes that teachers had to make in the classroom as required by the implementation of the Common Core, it emerged from the data that teachers needed to vary, master new teaching techniques, and adapt to new curricula and curricula formats. Some of the teachers interviewed explained how they had to endure and sometimes succumb to the changes to make the Common Core work in their classrooms. Deb was still

struggling to come to terms with the reading volumes that she had to give up in order to address the skill-based needs of students:

> Instead of reading, we don't read much volumes anymore, and that was really hard for me to let go [of] because we used to read in a semester, probably 5 or 6 novels plus non-fiction, plus short stories. Whereas now, because there is such a concentration on skills, I think I have gone to three larger pieces. Three novels instead of 5-6. So it is really hard for me to let it go of volume and that is something I struggled with for a long time. And I know my colleagues struggle with it too**.** And it is just the mastery and proficiency that I am really trying to make sure each of the students is getting, that deeper level of thinking… That is what takes so long sometimes, but I think it is good for them because they get that deeper level of understanding.

In other respects, teachers had to learn the content of the new standards in order to teach certain content areas to a considerable depth. This condition presented a situation where it not only became a concern for teachers, but compelled them to learn several new materials and techniques about their teaching. Pat**,** a middle school teacher was one of the teachers who shared such perspectives with me.

> I think the hard thing is, especially for me as a sixth grade teacher is I am teaching things that I have not done before. Like I am doing statistics like interquartile range, those are some of the things I have not done since my high school so it is a learning experience for me so I went back and took classes. First of all, I remember what it was but it is that jump that I think is a big concern. Probably more so because I was a sixth grade teacher. I think a lot of sixth, seventh, and eighth grade teachers have their masters in mathematics where a sixth grade teacher does not need one. I feel like I have a strong mathematics

> background and I enjoy mathematics and probably it is a strong area for me, but there is lot of sixth grade teachers who don't feel that way. So we are expecting teachers who might not have that [strength]. Now they are expected to teach it and teach it well. Honestly, interquartile range, mean standard deviation? I have not done them since high school… I needed to learn it all over by myself before I could think about teaching it to my kids!

Pat experiences reflected the expectation that students' grade-level literacy development-grounded by the Common Core was considered a shared responsibility among teachers who taught in other content areas. To the teachers and administrators that I interviewed, it appeared to be a great shift, particularly for social studies and science teachers. Jan, a social studies teacher shared her perspective:

> When you teach out of the three areas of Common Core. So right now the literacy standards are my standards but no one has ever trained me on it. And there is a reason I am not an English teacher. I am a social studies teacher. I don't like that [literacy] stuff but I understand the need for my kids to read, write, and understand. I think at the secondary level especially, we need to have better professional development for non-English, non-mathematics, and science teachers.

With such expectation, there seemed to be a gap between the adoption and implementation in terms of how the content area teachers should incorporate the informational texts and align literacy standards with their content-based standards. To Nicole, even though she was required to incorporate literacy standards into her social studies standards, she did not feel adequately trained to implement such changes in her social studies lessons.

Inadequate Guidelines to Gauge Successful Implementation

The development and the use of effective assessment tools to assess students' learning of the standards lacked models. Also, it appeared that there were no clear guidelines for teachers to align the content of the curriculum with the Common Core standards. According to Lora, the implementation of the Common Core in her classroom could have been more streamlined and focused if clear guidelines had been provided for teachers from the beginning:

> I think it is so hard. And I really don't know if anybody has the answer. I think everyone is trying to figure things out. And the thing is, I don't have it here, but in the other classroom we have the reading and writing vocabulary (basically the Common Core pieces) and we pick our essential pieces out of that. I can teach possibly everything in the main pieces that we feel are essential to our content. Well, to me, if we are having this Common Core why can't they just tell us what those are and those can be different in many areas? I get that but I just feel that somebody ought to have done this already. Why do we always have to go back and we redo that piece? And that is what a lot of colleagues are saying. "And I did all that work and I went through the Common Core and looked at what everybody else was doing and I pulled out what I did and it was very intense"…That took three years for the rest of the people to get to the point where I was muddling through those types of things. And maybe as we get closer it will be clear. But right now it is just like highway down in the end with foggy city, we-are-not-sure-how-it-is-going-to-be-type thing. The problem is I don't know if anybody knows what it looks like.

Emily's perspective reflected an understanding that the Common Core did little to provide clear purpose and direction for her teaching:

> I think it is, sometimes it is some kind of crazy that it does not tell us how to teach anything. It just tells you what not even what they should know, like a skill set. And I don't know how English teachers are going to be able to tell how they should teach [the skill of] "argument."

The difficult part of implementing the Common Core Standards in Juanita's class was how to she could be sure that she was teaching all the required standards. Even though Juanita had a teachers' guide to refer to, it did not provide adequate measures to determine excellent teaching of the standards:

> Well, I just have to sit down and looking at them and making sure I am hitting everything, I think that will be like burdensome part is just to make sure that I am hitting them all. It is easier as a teacher to follow a teacher's guide and just kind of teach from week to week and follow a routine. But every once a while you have to take a step back and look at the bigger picture. [Ask yourself] am I teaching everything I am supposed to? That will be the biggest part of it, the pressure to make sure that you get everything taught.

Brad recounted his school's efforts of going through a lot of time trade-offs and pains just to figure things out with the implementation of the Common Core. He acknowledged the twists and turns his school had gone through but he believed that it was critical for all schools to go through it:

> I think each school has to go through the change because, if we just give our stuff to another school and say this is how we did it and they just try to do it, I think it is not going to be successful. I think each school has to go through the growing pains and I think it will be nice to have people out there explaining that you are going to go through

> your own pain. You have one or two years of conflict amongst staff and amongst administration, and school board and staff. So explaining some of the steps that the people took but also telling the schools that you have to take the same steps. But by no means [saying] we have a final product! For us to say here is our final product and another school to say we are going to use your product starting tomorrow, without going through those pains? … they ought to go through the pains to get to that product.

Rita agreed that the final product should look [unfinished]. She however, underscored how much teachers were sacrificing for such inadequacies with their extra time:

> It is hard to say right now [but] if no one has prepared…I don't know exactly what it looks like, just buy-in into sending somebody to Common Core training? I don't know if there is magic sort of answers, sort of training, make us proficient in implementing the Common Core. I think it is the teachers themselves delving and spending the time with it and searching for the resources [that works]. It seems to me better than something just being handed to you.

Lora seemed to approach the common with sheer determination to make it work in her classroom, but in her mind, there were not clear guidelines.

> It is just educating yourself on what you want your students to know. Like I said digging through all those pieces was a difficult part but to me that was crucial step of what you needed to do to be able to have a clearer idea in your head and what you want. And it is still not super clear. But I always know that I want them to know this topic. They need to know these skills…In the past you would teach units and to me now it is more, I wanna to teach a skill. I don't care if they can answer a question on *Romeo and Juliet.*

Teachers and administrators seemed committed in making the instructional and curricula changes that had become necessary as a result of the implementation of the Common Core. However, the implementation process had been a subject of several twists and turns because there was no clear-cut gauge for successful implementation. This affected the way local assessment tools were designed and used to determine whether the Common Core initiative was achieving its educational goals.

Curriculum Gaps

The implementation of the Common Core necessarily required a review of curriculum. From teacher and principal participants' perspectives, a need for schools to get new curriculum materials that were Common Core-aligned was critical if schools could adequately teach to the new standards. However, there seemed to be gaps that marked a curriculum need of teachers. The gap seemed to have been created because most schools were still using the old curricula which were not adequately aligned to the new standards. The extent of the gap, however, depended on how much teachers were able supplement in addition to the current curriculum materials that teachers were using. Becky explained her understanding about this situation.

> We need a Common Core book. Right now our truly great teachers here are pulling stuff from everywhere. And that takes tremendous amount of work. You have to be really dedicated and if you are not dedicated, you are really not teaching Common Core. Because then you are still looking at each chapter and some chapters are not even in the Common Core, they are not as important as those 20 super essential things. We maybe get them done, master them, by March then you go to less important things. So by May you should not be doing the essentials anymore. You should be doing those less essential things.

Pat similarly cited lack of quality curriculum alignment with the standards as a major drawback to the Common Core:

> So the hard thing about implementing the Common Core is there is no curriculum. Making sure that the curriculum needs are addressed. The current textbooks we have and even the textbooks are said to be Common Core aligned, are not probably doing a great job of truly being aligned to the Common Core. So it is a lot of supplementing and a lot of outside the textbook, both in mathematics and language arts. I know some schools went out and bought the textbooks that they say are Common Core aligned. We did not, because we know they weren't! If it came out fast that we probably would not know the best quality. So we are waiting. We decided to do supplemental stuff until the right resources came out so. Hopefully they come out soon.

May underscored the uncertainties that the curricula gap had created in their expectations of students' final assessment outcomes.

> When the common assessment comes to us, we are all going like this: We are crossing our fingers. We are hoping that we taught it right! Because we are pulling it off [the web] what some other teachers taught. It worked for us. And we are desperate! We need to find materials to teach with! Right now school seasons have started and we have nothing. Schools are hesitating to buy new curriculum because the curriculum companies don't have the materials yet. They don't just want to throw money out to a company that says we are Common Core ready and they are really not. We are all kind of waiting for this magic bullet to come. It is being mandated that we teach it but we are not given the materials to teach it with. They are not up to a research-based, good quality manual to teach from.

> So schools are hesitating to buy a new reading series, for example, because it is not ready yet. In our school district, I feel that our administration wants us to teach the Common Core. They want to help us, but there are not quality resources out there for them to engage in helping us. I do feel like that they are willing and ready to, I mean they will take suggestions from any of the teachers. If I were to come to them and say I just found that there is a very good web on something they will send [it] to all of us; "Try this, try this." Because there is just nothing there right now. A good solid something, anything out there that they can provide for us. They are willing, but we are all waiting for this magic bullet.

Sarah**,** a principal explained other means that her school had worked out to avert a possible adverse effects of the curricula gap until such a time that Common Core aligned curricula would be in supply.

> We have not purchased a new curriculum now since Common Core. We are looking at the standards itself and what materials we currently have and what strategies we can use to meet that standards. That is part of the reason that we have our curriculum companion where we map out the standards we are looking at to say, "If I brought this in and they have already met those standards, so how can I do with what I currently have"? We need to teach children to be able to read the curriculum, skills and strategies and those foundational skills. We have the finest programs but we are using trade books for reading along with our old curriculum. I don't think there is a curriculum right now that is truthfully aligned with the Common Core.

The curriculum needs of teachers from the data was a source of concern to both administrator and teacher participants. Teachers could only attempt to fill this gap by exploring multiple and

other sources to supplement instructional materials. However, according to teacher and administrator participants, the gap had created a condition that required teachers to invest more time and energy than their normal hours would allow in order for them to provide adequate supplemental materials to teach and assess their students.

Actions/Interactions

With the framework of Strauss and Corbin's (1998) theory development, actions refer to the deliberate acts that are taken to resolve a problem which also shape the phenomenon. From the data, actions reflected specific strategies either at the local, district, or state level that were adopted to ensure that teachers were adequately prepared and ready to implement the Common Core. The constant comparative analysis of the data led to the emergence of categories: professional training, collaboration, slow approach to implementation, and curricula supplements. Refer to the grounded theory.

Professional Training

Between the time that the state of North Dakota adopted the Common Core and when schools were expected to achieve full implementation, professionals had a window to receive the necessary training on how to implement the new requirements. The constant comparative analysis of the data showed a myriad of opportunities that were created for teachers to learn about the new standards and instructional strategies that were important to facilitate the necessary instructional changes. The subcategories included; professional learning communities and networks, expert support, and principals and instructional coaches as local experts.

Professional learning communities and networks. Both teacher and principal interviewees seemed to rely on the professional learning communities and networks within and across districts and the state to share implementation strategies. Discussions about the availability of such opportunities demonstrated the extent to which teachers felt that they were

being professionally supported to implement the Common Core in their classrooms. Brad explained how his school district garnered local support for teacher training.

> Our school system is built and we have our "early out" where our students leave very early. And we have 2 hours of professional development, once a month. I do believe we have 7 days that are built into our professional development calendar days. Besides that, we have our professional learning communities, the mathematics teachers meet on Tuesdays from 3pm to 4pm. English teachers meet Friday morning from 7:30am to 8:30 am and then social studies sciences and teachers meet on Wednesday from 3:00pm to 4:00pm. And they all meet together so they have that opportunity to talk together every week and then once a month we are going to come together as a staff and have the communication as a staff also what we are seeing and what everybody is doing and hopefully that gets the dialogue going.

Juanita shared a similar experience about how she got to learn about other online resources from her colleagues. With most of the rural elementary schools that I visited, they had only one section of each grade levels. Juanita pointed out that information sharing was more vertical (across different grade levels) rather than horizontal (involving same grade levels):

> Well, every other week, our 3th, 4th, and 5th grade teachers we sit down together and share information, if you found something that helped. That is how we kind of learned about sites that have the practice for each of the standards. So, they have scheduled every other week time for us to sit down. Just today we have an Early Release Day: the kids go home a little early and teachers will have time to sit down, work together, and look at NWEA scores for our kids from the test they took. So once a month we have our early-out day where the teachers get time to have an extra support.

Lora believed that the implementation of the Common Core had not only helped to intensify their professional community meetings, but they had also incorporated a sense of purpose and direction into their meetings.

> And now as we go through the year we are working with our PLCs. And the English department meets which is nice. This is the first year we have done that. We meet every week for half an hour which is nice. Every week you get the chance to meet. Before it was once a month, here and there type thing. We did not really know what to do! The elementary is also doing the same thing, grade-wide, foster meeting: Tier up and Tier down. We are not quite to that point yet. With me and the elementary we are on course, 7-12, but we are not quite there.

Other learning opportunities that teachers talked about related to online sources. From such sources, teachers accessed the work of other teachers from other schools and how they could adapt from such sources to improve their own classroom instructions. Teachers had access to an array of online sources but most of them were not official sources. Emily talked about her experiences with online learning communities.

> I just read a lot, and it is like, this one fits what we are doing. And in that case I do a lot on some of the communities online. People make a lot of, Oh! This story works well with this." And I try to find something that is both interesting to kids and which they can do something with. The reading standards are at a skilled level. It is just, "Can you answer these questions? Fill in the blanks. Can they make inferences?"

School-based professional communities existed for teachers to upgrade their knowledge about the Common Core and its implementation process. The local school learning communities provided support for teachers where teachers met at given times and shared implementation

strategies. Teacher participants also accessed a collection of other online learning communities to tap from the exemplary works of other educators to improve their own instructional practices.

Expert support. Participating schools drew expertise from standards and curricula experts to build the capacity to implement the Common Core. From the data, two major consortia that provided expert advice to schools were the Marzano West Lab from Colorado and the Red River Valley Educational Consortium (RRVEC) based in Grand Forks. These experts provided technical and training assistance to schools at both the school and regional levels to help schools navigate how to integrate and implement the Common Core. The experts also provided direction to the meetings of the local professional learning communities. Lora described how she as an individual teacher and her school benefited from the expertise of the people at the Marzano West Lab through their professional development training programs.

> It is the people from Marzano West Lab in Colorado there, one of the leading research groups. One of the associate professors came from there so he was pretty higher person and he knew what he was doing and I have heard him speak before, very knowledgeable on it. But normally, we have been very lucky we get pretty top-notched people that have come in to give our professional development which we are fortunate like I have said my family have all been in education in the state they know those type of people.

May highlighted how her school found Marzano teaching philosophy consistent with the Common Core Standards and how it was shaping their teaching strategies. She explained:

> Our professional development over the past, I will say, almost two years now has solely focused on Marzano teachings. Marzano has been around for years before Common Core was thought-of, so Marzano did not necessarily become popular because of the Common Core but our administration saw how Marzano teaches and what their philosophies are

and it fit well with Common Core. So now the past couple of years we are being taught Marzano philosophies, the Marzano ways of teaching because they feel that those methods will help us get through Common Core. Other than that, we don't really have a lot of training [showing us] this is what you are actually going to do in the classroom.

Brad believed that as a school they had stepped up their game by making outside expertise accessible to teachers. He talked about how he had become a resource to teachers from the training that he had been receiving at the Marzano lab.

I think we have done a really nice job here in the school bringing people to talk to them and we had a guy come in just this Fall about four weeks ago from Marzano Lab down at Denver and he came in and he tied everything that we are doing together for us so now so our teachers had that piece of professional development to help guide them breaking down the Common Core and implementing them. We have picked the Marzano Lab, we have picked them because they help and guide us. I went to a lot of their training. I have flown to Las Vegas attending trainings there and I have been to Denver to attend training there. They have been training me and I have been coming back and trying to train the staff. It was nice in August when one professor came out from Denver just kind of to tie everything in, but a lot of it has been reading [on our own].

Schools also drew expertise from the RREVC consortium in Grand Forks. However, according to participants, other constraints, including time and funding for rural schools, had not allowed teachers and principals to access the consortium's expertise frequently. Lora gave her perspectives.

The Red River Valley Consortium? We have been going to those kinds of meetings too, going through ND state standards. But now that we are in Common Core State Standards,

> we have NOT been able to go. We don't get together like we used to. So we don't have those meetings. I know funding has been an issue for the rural schools. [So] we don't go and meet in person in the building and get together and learn about Common Core as much.

Other teacher and principal participants spoke about the difficulty of using instructional hours to attend training at the RRVEC in Grand Forks. As a result, member schools were exploring other alternatives of building virtual learning community.

Emily explained:

> We used to meet with the other English teachers about twice a year, English teachers within the area, the RRVEC, Regional education cooperative in Grand Forks. But it is all little pieces of a class. [We] need to cooperate together. We are getting together once in the fall, once in the spring. And they stopped doing that. The idea was to set virtual ones up, but we haven't, we did not do it last year. The RRVEC, I think, is trying to get us set up. We were meeting in teams, but that was hard-to leave the classroom so much. I think they are thinking about doing that virtually, like the Google Hangout, that way you don't worry about travel time.

Other schools felt they were ahead of the training that they were receiving from the RRVEC consortium. This might due to the fact that schools had their own internal means of drawing from expertise from outside the state. Schools appeared to be at different stages of the implementation of the common, and as such, not all teachers may necessarily have found the training at the RRVEC useful. Deb indicated:

> We have not been outside the school since…There is something called RRVEC. When common was first coming out, we went to a few of those meetings. But it seemed like our

> school, we were so much ahead of a lot of the other schools! I don't know if that is the case anymore, but it just seemed like we were ahead of the game in that. So we have not met with RRVEC since last two years. But we have brought trainers, speakers and trainers into the school.

Schools were drawing their professional training from experts, both in the region and outside the state. The Mazarno lab provided schools with instructional models and professional training at the local level, based on the internal arrangements with schools. However, with the training at the RREVC since all participating schools were members of the regional education consortium, almost all teachers had received training there. Teachers attended these training once in the fall and in the spring. The training at the RRVEC was intense only at the beginning of the Common Core which targeted early implementation efforts of member schools.

Principals and instructional coaches as local experts. Principals and instructional coaches provided leadership for using new instructional strategies and curriculum materials. Sarah, an instructional coach co-taught and reviewed classes with teachers.

> What we need to do to change our instructions in our classrooms and in our teachings. I go to the classroom, at times, and team teach with teachers. Or we will do a lesson and we look at different things that we could be doing and instructional strategies that will help students learn. Sometimes, it is just a set of another eyes that says, "we need to think about this! Just different things to help them, so that is part of it. Teachers use different strategies for the various levels of students we have. That is one of the things. Sometimes, when I go to the classroom-not that I am an expert-but I go in and may observe another grade level or the same grade level.

Becky had been playing similar roles of provide instructional support by helping teachers to identify need areas and to strategize instructions to meet those needs.

> I feel more like a teacher helper. I go into the classrooms and help find some strategies that might work. They come to me if they have questions about things. I do a lot of data and that is what I am working on right here. And I do assessment and I do that type of things. As I came in, the data person was eliminated. So I picked up both positions-which is fine, because we use that data every week. We have team meetings and we look at the data and find where the kids are and how to move them up. I help teachers with strategies and Common Core and Mazarno and all of that kind of things.

Principals discussed their expectations of what teachers should be teaching and doing in their classroom. They viewed their own roles as sharing, deliberating, and reviewing lessons with teachers in identifying areas that needed attention. Rita explained:

> We discuss it and let them know the things that I am looking for in the classroom. It is very transparent, that we are reading this, or we are doing this. These are things that I want to implement in the classroom. And what I am looking for, as we have adopted [the Common Core is] we focus on certain elements and [do it] as a whole school. So again: transparent to everybody. But then I also have teachers write their own goals for what they will like to improve. And so everybody's evaluation looks different because we have chosen something different to focus on…I am a big part of the behavior piece of the school …And kind of looking at our data and we need to focus on doing teaching, the hallways and the playgrounds, two areas. I am getting the message out to teachers, they are really the ones who do the instructing.

Rose shared:

> When I go to other schools and get together as principals from other schools. And they start talking about what some of their teachers are doing. And you inquire and you, kind of, pass that information along and just try to create a better school environment, a better learning environment for students.

For principal Brad, it was more of sharing resources and instructional techniques with the teachers on how to integrate the Common Core:

> When I read stuff, I pass along the information to teachers and if I find a book, we have book studies, I have to do that. The support encourages them and gives them ideas, loads their toolbox. [I give them] things that they can use to help them implement the CC, like assessment. When we have our staff meetings, once in a while, I throw out videos for the formative assessment, like, "Here is a picture of how this person is doing formative assessment; here is another video of how this person is doing formative assessment." Another piece that we are doing is teachers are videotaping themselves. They need to reflect on their own practices. And they come and sit down with me and we watch the video together. I can give them feedback and dialogue too on areas that [they] can implement this year.

Principals and instructional coaches provided local expertise to advance effective instructional practices. To achieve that, they served as guides for teachers to draw knowledge and understanding about the implementation of the Common Core in their lessons. As local instructional experts, principals and instructional coaches also provided support for instructional frameworks that schools had adopted to implement the Common Core.

Collaboration

Teacher collaboration, based on the data, focused on the range of opportunities that allowed teachers to work with colleague teachers as a team to examine specific standards and to integrate them in their lessons. The analysis of the data showed that teacher collaboration opportunities varied with grade-level structure, the professional needs of teachers, and time availability. Nicole considered that team-meeting times presented opportunities for teacher dialogue and the sharing of implementation strategies.

> Our school district has been very good about that. Once a month, we leave school out one day so that we can collaborate and work on curriculum and a lot on alignment and how we are going to assess students and things like that and pull out data of our students. So once a month we are given that, once a week, we have team meetings with our co-teachers so we are able to meet with all other fourth grade teachers so those teachers get together once a week, so yes they have got that in place very nice. So we are constantly sharing information like team wise. We have our weekly team meetings once a week so we are able to meet once a week and share, especially during our team planning time. We collaborate and share and we look at specific things that we are teaching and we need to focus on and what we can introduce and bring in.

Lora explained how collaboration had become a key to her implementation efforts:

> The last few years I have tried doing all of that and it is impossible, there is no way I can hit all of my standards trying to cover all those pieces. So what we are doing in our English department is we are teaching them the concept of how to read informational texts and then gradually, slowly the sciences, and the social studies. And other content areas are trying to pull some of those in. The biggest focus probably is on the actual

> reading material; [it] is a shift from literature which we still need to cover. And that is a problem that the English department has: we know we need to cover this literature pieces! But now we have this huge emphasis on informational texts, which we also agree it is important. And what we are trying in our school now is: can we take the load of informational texts and push into our sciences and social studies [courses]? And have them cover some of our standards? And that has been a really big shift for teachers. Well I have this stuff to cover, yet it is still reading and it is still writing.

Sarah underscored the usefulness of teacher collaboration in analyzing some early challenges that they faced as a school:

> We bring in our training throughout the year. We bring up those things where we look at and say what is the area that you find it hard in your classroom? Is it the writing? Like 2 years ago, we had difficult time with writing and grading students. So we came together as a district and teachers from each grade level looked at it and said. "Ok! This is what we need to cover for the year. How are we going to do this? How are we going to grade it?" So we came up with what we expected, our targets with the students, but then we also came up with grading scale that we used…So what we need to do would vary: our instructional strategies, it might require certain types of graphic organizers.

Other teacher participants felt they did not have the time and the opportunity to work enough as a team. Elementary level teachers were less likely to indicate that they had spent a considerable amount of time with a team to examine specific standards. May would have liked to collaborate enough to share ideas with other third grade teachers, but she explained:

> Within our school district I don't think information is shared. I think each classroom has been trying to survive on their own because of the sheer nature of the time restrictions

> and things like that, unless someone asks me. And we are small school district and there is only two sections of each grade. I am certain that probably the sixth grade teachers do share with each other, seventh graders share with each other.

Emily, found that not enough formal collaborative opportunities existed in her school. She rather sought to use virtual communities to collaborate with other teachers to learn about other implementation strategies:

> I am the only teacher. There is seventh and eighth grade English teacher. I know a lot of English teachers so like, informally, we talk about things. There is a couple different communities online [such as] the website on English language where you can go and talk to other people and show assignments that you have been using, go to conferences. There is not really like a formal program to help us do that.

Similarly, Deb talked about a school-based virtual environment where all the major stakeholders were able to communicate ideas on a local level.

> Google Classroom is something we use with our students and our principal is using it with teachers to communicate questions to us. I have a classroom set up for each of my different classes. It is a kind of Facebook where I can post assignments, they can do their assignments online and submit them back to me. It is free and it seems to be working well this year. For English department, we all have our conference hour periods so we are able to get together when we find something, all of us are very good friends. When I find something, I zip an email to all the two of them to say check this out. And the do the same thing! So now we do a lot of collaboration.

The data showed that a range of opportunities existed for teachers to collaborate. However, time and structure of schools impose limitations on the best collaborative opportunities for teachers.

Based on such conditions, schools seemed to be shifting towards collaboration in the virtual environment. This, according to participants, would save a lot of teachers' instructional time.

Slow Approach to Implementation

It appeared that schools in general were adopting slow approach to implementing the provisions of the Common Core. The data suggested that teachers needed much time and effort to work out best instructional practices to teach the new standards. Teachers in the study appeared guided in taking gradual steps toward the implementation of the Common Core Standards.

Brad believed in the step-by-step approach to examining the pieces of the standards:

> [At our school] we have our PLCs so our mathematics teachers meet once a week for an hour. And what they are working on right now is, they are breaking down the Common Core and looking at the essential questions. And [looking at] the stuff that they want to pull out of the Common Core that it is going to be important for the students. There are stuff that are important with the Common Core and there are stuff that are nice to know, we call it *need to know* and *nice to know*. *So* they are digging out all the *need to know* information and the *nice to know* to see if it fits in. They probably could do that every day for a half a year to a year! And on top of that [they are] developing how they are going to assess, how they are going to set up the classroom - working learning goals to those standards.

For Mike and May, the instructional shifts that teachers were required to make as a result of the Common Core were happening unhurriedly. Principal Mike perceived that the changes might take more time to manifest.

> Changes in schools is really slow. Teachers are little stand-offish for change because they have seen it happens so many times. They say," Here it comes again!" I think this stuff is here to stay, this is not going any place, but it is still a little slow. We have been working some things for 10 years and I struggle getting my teachers to do it. So maybe, in 20 years, we will see things really happen.

May felt more guided about how to implement the Common Core in her classroom.

> There has been a slow change towards it. However, I think if you were to poll most teachers who do not know as deeply as some of us do, we still feel very guided about whether they want to change their curriculum because unfortunately the teachers were being told to teach this but we are not being given the resources to teach with and so that is where the negativity comes from.

Ali's school district saw a need to allow teachers ample time to think through the process of the Common Core. To Ali, her school considered the Common Core as a new initiative that demanded a collective thinking approach to navigate the process:

> When we first heard about the Common Core we were taking little baby steps. It was like: this is all the new information at one time. I mean it was, this is what it says and this is what we are going to do and we are going to try. And, you know, throughout our professional development or our faculty meetings or professional learning communities, at other times, teachers would come out, "Oh wait a minute. This is not the way it is going to work like I thought." I mean it is a kind of process. You can't take a new person and put him through that process after they have lived through [a different] process. Last year would probably be our official year, that we have probably been slow in switching over. Like teachers we are going through the common: "I am going to try this", [Or]

"Well, this is not going to be happening; I am not gonna make this". That kind of gradual changes.

Pat echoed a perspective that indicated similar gradual steps that her school sanctioned:

> I think our school did a good job kind of baby-stepping us to it. So before common was truly implemented this year, we have been working with it for couple of years and we took baby steps. Two years ago we did some new things that were not in the Common Core even though we were not tested [on them.] We said, "Let's try them". And we are tracking our standards so we know it is all being taught. Our administration does a good job of tracking to make sure we are teaching to the Common Core. I will say, "initially overwhelmed" will be a good word.

School appeared to choose a slow start to the implementation of the Common Core. This observation was a reflection of how teachers and principals engaged in continuing processes of examining the standards to felicitate a smooth transition to the Common Core. Both teachers and principals appeared to have found the approach useful, given time and other resource constraints.

Curricula Supplements

Schools were implementing the Common Core standards with the old curriculum which, according to participants, was not adequately aligned with the standards. With such growing situation across schools, teachers resorted to exploring multiple sources to supplement the current curricula to be able to teach the new standards. Deb explained what sources she used as supplemental.

> I don't use books, I pick them apart. I go online, for instance, Standards 5: I will take it off the internet and kind of devise my own lesson that way…We have been looking at like the resolution of conflict. So yeah, I pull [things from the web]. There is just not

> nearly enough curriculum out there to help us. What is really sad, we have these wonderful reading kits, they come with our series, but when I start looking at them and then I started comparing them with the 9th grade: they are the same thing! And this is for 11th grade! They don't just have the rigor in the curriculum materials. I have searched and searched online trying to find passages with practice questions on them and the rigor is not just there for the upper levels for grades 9 through 12.

Other teachers used online supplemental materials as assessment gauges to track students' progress and mastery of specific skills emphasized by the Common Core. Juanita discussed how she had been using such resources as assessment tool in her class.

> For online materials we have this thing called *Mastery Connect*. You can look for mathematics every 20 lessons that I have bench marked, testing how they call it review the last 20 of the lesson skills. And I have tried those standards, question by question, to figure out what Common Core question are they assessing? And then you input all of their courses on their computer on this website and it really quickly grades it and lets me know right away which standards, like student-by-student, as a whole class, they might be struggling with, [or] having success with. That is for mathematics. And then for mathematics and language arts there is website ISL and that is by standard too and. [You] search [the web] by Common Core standards. And it is kind of, "look through", and they can practice just that one skill. So that is more practice-based not assessment [-based], where if I just taught all plural nouns they can just practice those.

Even though supplementing curriculum with online materials was a common practice by teachers to teach the standards, there were concerns about the quality of such materials. Sarah queried:

> We caution them when they go online, "Please we want to look for things that have a research base behind them." Most often the strategies have a research base behind them, it is not something that you are going to find online… When it says it is Common Core related, we find out [later] it is definitely not! And it is not as rigorous that we would expect…

With the range of virtual learning communities accessible to teachers, how could they determine their validity and authenticity? Mary:

> There are list serves that I can get on if I want to know what other third grade teachers are doing in the state. I can get on the computer and say I am really having trouble finding materials to teach whatever, you know, and they will send me information. My question is do I have to sit and look through these things that are being sent to me? Are they research-based? What is the quality of them? Are they really assessing what I am trying to assess in here? …I wish there were resources out there that I don't have to go through that stuff. I can trust that what is online is research-based, it is valid, rather than me making that judgment call on every [thing that comes] across my table.

The analysis of the data showed that teachers supplemented the current curriculum with a range of online materials. However, there were concerns about the over-use of online resources. First, it appeared that teachers spent tremendous amount of time searching for quality resources and second, the quality and rigor with of the supplemental materials raised suspicions.

Contextual Conditions

Contextual conditions, based on Strauss and Corbin's (1998) framework, pertain to the patterns that shape the processes of actions and the interactions. These conditions are more specific to individual participants, given the context under which they have such experiences. Based on the data, contextual conditions explored the question why did participants respond to

the questions in diverse ways? What unique conditions may have accounted for variations in participants' responses to the implementation of the Common Core? Four categories of conditions particular to this region's Common Core efforts emerged: 1) perspectives about standards requirements; 2) school support; 3) idealistic perspectives; and 4) schools' initial preparations. (See the grounded theory map).

Perspectives about Standards Requirements

The adoption and the implementation of the Common Core Standards stirred diverse perspectives amongst teachers and administrators in the way they viewed the magnitude of the adjustments required (instruction, curriculum, assessment, professional learning, and resources) to implement the standards. These perspectives framed educators' understanding about the extent of time and professional commitment required of them. Also significant were teachers' sense of adequacy in terms of new training that they needed.

Teachers and principals in the study demonstrated a range of perspectives about the Common Core Standards and how they might shape teachers' instructional strategies. May and Ken perceived that the Common Core was going to be short-lived because to them the Common Core followed a pattern of reform in education that from time to time are sanctioned by authorities.

May:

> I think teachers who have been teaching for several years have had to change every couple of years because there is new something out there. They feel like, "Oh here is a new regulation...We will do this for 6 months and then they will change their mind and they will make us teach it in different ways." [Teachers] are very guarded because they are thinking oh great Common Core is coming, we do for few months and then policy

will change and we will have to change again. So we are being asked to jump through a lot of hoops all the time. I think that is where a lot of negativity comes from.

Ken's perspective:

> For me personally, I don't think it has changed much so when everybody gets up and puffed up with Common Core, whatever, they are going to give us new standards in five years anyways and things like that. So [my advice is] just keep on rolling with it and make sure the kids are getting problem solving and stuff like that. They are all updated to the Common Core which helps… They have included a lot of writing stuff which were not in the older books, but [now we see] more critical thinking and problem set which makes our job easier…Overall there is not a change for me. I don't really think it is.

Other teachers viewed the changes as cyclical and that the changes teachers were required to make with the implementation of the Common Core were not necessarily new. Pat:

> With education in general, it seems like everything is cyclical and we change every so many years and you try to do something different and it seems like some things come back and some don't. When Common Core came out I did not get too excited. For the most part, mathematics is still mathematics and it does not change. Have I emphasized a few more things that I did not? Oh, maybe. Let us try to include a little more writing in mathematics sometimes. Have I been good about it? Not necessarily. But it has been things like that and maybe it stresses stuff that I did not stress more. I maybe I did not do a lot of proofs but maybe I do more [now]. But overall I don't think it really drives my instruction. Yeah, we have standards and that is the kind of what we are aiming for. But it is what the kids need that drives me more than standards per se! Yes it gives the layout of where we want to be. And I don't know why people get so upset!

Other teachers and principals did not find much of a change compared to the states own standards. Emily perceived that the changes that the Common Core brought to the classroom would not require significant adjustments in her classroom instructions. She explained:

> I still felt like I was pretty new teacher I have heard a lot of concepts of standards not new to me anyways. It was not a huge change really. The standards we had in place in North Dakota compared there were not much difference for English so there were few things that changed, but compared to the mathematics standards these were [minimal]. I don't think it was a big of a difference. There were some differences we spent some time [on] as a big consortium like the English Language Arts in this area, looking at out old standards and looking at our new standards and trying to bridge the gap.

Other teachers viewed the Common Core as the most significant change in education. For example, Nicole wondered how they were expected to be teaching uniform set of standards to all students:

> When I first started teaching there were no standards. You were handed a textbook and that is what you taught. Then came "content standards." They have been around for probably twenty years or so. I have served on a couple of state boards so I heard about CC maybe 8 years ago. It is something new. There have never been any common standards between states before. I don't think they thought it out really well. It is kind of like all the stuff in education: it has some good ideas but they [proponents] forgot to research a little bit on how it was going to be implemented.

While some participants found no significant changes with the Common Core, others found the need for instructional adjustments as a result of the implementation of the Common Core.

Sense of School Support

When the Common Core was first adopted, schools demonstrated different levels of response in helping teachers to receive the required training and support to implement the standards. Teachers' perceptions about how they felt supported by the administration were significant in the ways teachers also perceived their own preparedness in the implementation of the Common Core. Becky, an instructional coach, explained how the administration had remained supportive in providing resources for teachers to implement the Common Core. She, however, was conscious of the resource constraints of her school district:

> We have always changed textbooks in the last 7 years. Since I have been here anything that the teachers need, the teachers get. Our curriculum funding is very large and everybody who turned in something got it. They feel that if teachers requested the resources they need them. They match the Common Core; There is no need that is NOT met and that is really nice. We have a superintendent that is proactive. But you do need a big source of resources, you need huge amount of resources to do this, because we can no longer lean on the textbook. You can lean on the textbook a little bit. It is just that we cannot follow page by page. I don't think every school is that fortunate, but they put a huge priority on giving us what we need.

Similarly, Deb recounted how her school was proactive by exploring all the possible learning communities to train teachers:

> Our school has been one of the first schools in the area that jumped aboard the Common Core. We received training about almost immediately right from the beginning. We have had training, gosh! Every single year. We normally have in-service days before school and then during the school year, we had one full day and early hour and then last year, I

> think it was a 3-day Common Core Boot Camp. [Or] four days, I don't remember exactly how many days it was. Our superintendent has been making sure that we are very abreast. We have had several book studies, right now we are doing the science of teaching by Robert Mazarno and we use Google Classroom to respond to various writing prompts.

Nicole shared a similar perspective of the district's support:

> It has been nice, as a district, to have time for professional development to go and look at those standards and to align the Common Core standards to what curriculum we are teaching from, such as our science and mathematics or our reading series. As a whole, our district has been great and they have been able to provide us with the time and that professional development to focus on aligning the Common Core standards to what we are teaching.

Lora had in-depth knowledge about some instructional strategies that her colleagues teachers did not have. She recounted the growing support from district.

> The training is getting better year after year and I like that our school is doing that. They bring in people that know what is going on, I mean professionals, some Marzano people to actually show us the research. So I think the people buy into it because they are seeing that. And now after the in-services that we have had, that are hands-on, that we are actually doing instead of doing this piece here and doing motivational piece there, it seems to me it is a lot more structured. And now they are instructing us how to get there which is appreciated. And the same thing goes with the professional development in our school. When I was starting off with that there was training in Minneapolis that I found that this would be beneficial to what I am doing right now…I know a lot of schools don't

do that for you which has helped me get to where I am. So we are trying to individualize our professional development as well.

Sarah considered that the administration in her school district had always been at the forefront:

> They pretty much spearheaded what we are doing, they finance our support. Our administration is with us in all our professional development, going through it first, providing some of the working with it. They are also working with teachers and myself in the classrooms, helping to explain to parents and community what it is. They are also there with the students which is very important. So I think we are lucky we have got very good administration.

The extent of which teachers viewed their schools as being supportive was significant in both individual teacher and collective commitments. Participants' viewpoints suggested that school districts were being proactive in supporting teachers to implement the Common Core in order to help students successfully reach the standards.

Idealistic Perspectives about Common Core

Administrators and teachers in the study appeared enthusiastic about the way they understood the whole concept of the Common Core. Educators' initial idealistic perspectives are based on the fact that state-wide there would be a commonality to the curriculum.

The interwoven perceptions of participants in the study indicated that the commonality of the Common Core presented an idealistic perspective that appealed to participants' humanistic approach to education. More specifically, the ideals of strong educational support for mobile students and standards of measurement to compare students' achievement across settings appealed to them. The claim that students, regardless of wherever they were, would be held to the same high expectations moved participants to be enthusiastic about the Common Core.

May's initial understanding of the "commonality" of the Common Core appealed to her:

> Initially, I thought it was an excellent idea: that any student coming into my classroom at any given time of the year will be learning the same things that I am teaching. Because the word common meant that all of the state would be teaching what was given to us for our curriculum for that grade level. Because [in the past] they did not [always] come in knowing something that I [had] taught. I have had students come in not even seeing what we are teaching in our school! The commonality, the concept of it being common sold me.

Juanita was motivated by supposedly the uniformity and coherence of the Common Core standards:

> There have been times before where I would have a student come in halfway through the school year. And for example, we learn multiplication in the third grade. They would come in never having seen multiplication before-because their school did not teach multiplication. So that child comes in disadvantaged from day one. And on the flipside of it, I have had students come in halfway through the school year that is way ahead of the class because their school taught something different in third grade than what we taught. So it is just nice to know with this system-if it works the way it is supposed to. Students are being taught a certain curriculum each grade level and it should flow from one grade to the next and it looks good on paper. If it works the way it is supposed to work, I am excited about it.

Participants related to how the central goal of the Common Core might help their local schools to better serve transient families than before. Sarah:

> What I do like is, as a school system, they are nationwide standards that all states follow. And use to a certain extent. We have a lot of students that move to ND from Texas, a lot of migrant students. I know what WE expect in our third grade. And what Texas also expects in their third grade - we should be expecting the same thing and instead of a [different thing].

Kate agreed:

> I understand the need to have commonality. We do have very fluid, very transient population. We do have migrant population. They may go to Texas and come back. We do also have the air force base so we have kids coming. But just, you know, a student from Alaska, and then they come here, ND has been higher [in standards]. So, it is a kind of a rough awakening for some parents…

Lora questioned the Common Core's practicality:

> That sounded like, a really great idea! But how are we going to that? As soon as I heard that I really felt deep down that this is what teaching should be. I wished we could do that for every single student that came in our room…I don't feel like when I started education that was what it was. You just taught and moved on. When they don't get it: too bad! Move on! Now, I just feel that when I am teaching I can reach all those [students] and find out where they are…I know my students a way better than I did before the Common Core.

Nicole felt that the standards became reference point which guided her lessons:

> To me, when I first heard about Common Core and was I working with the Common Core, I was not afraid. And I did not view it as a bad thing happening. I thought it was something useful for us because we know what we are supposed to be teaching. I was not, initially, afraid of it.

Schools' Initial Preparations

Since the inception of Common Core, schools had been gearing up for its implementation. Participants' perspectives indicated that some schools had been proactive in pre-arranging training programs for teachers to get them ready for the Common Core implementation. However, schools' preparation ranged over a period which suggested that educators' preparedness towards the implementation of the Common Core varied across schools. Teacher and principal participants described how schools, upon the adoption of the Common Core, moved to provide teachers with foundational knowledge support about the standards and implementation strategies. The initial teacher learning opportunities were sanctioned by schools through both inter-school and intra-school learning communities and collaborative opportunities for teachers. Kate explained how long her school had been preparing them:

> I guess some of my background about the Common Core is, we have been exposed to it for a while now. So it was one of those things that we prepared towards what was happening. So we have watched it coming and we have been working with it … for 4 or 5 years now…

Schools spearheaded efforts to provide opportunities for initial training and implementation strategies for teachers to integrate the standards into their classroom instructions. Brad shared, "we have been working towards this for about four years. So we have already laid the foundation here in the school, so I don't know if that has helped us. The community and the teachers and standards, this is where we are going." Lisa explained how she spent time with other groups learning about the new standards.

> About four years ago, the mathematics department really got involved into it. We went to the [city] and went to a lot of workshops…it was a whole of ND working on or our group, a group of schools in this area and region. We got together and we broke down all the standards, what they meant, the wording and everything. And we got a new group that came up with the new core standards. And then decided how these would fit together with the old ones - and we ended up with more standards.

Juanita's school provided initial training:

> We would go to meetings in Grand Forks with other area teachers and look at these standards…We spent about 2-3 years in analyzing them and reading them and coming up with ways to assess it in the ways that we were teaching all of these standards. And then we really started to use them at our school probably about 3 years ago. So we are probably in our third year of using them in our teaching.

For Sarah, the Common Core tied into the changes that they considered as important:

> We were already moving towards the Common Core. We were changing our teaching philosophy and style where we were looking at a certain curriculum to drive our instruction. But we were already going through our ND standards saying, "What has to be taught at that great level?" So it was not something new. We were already looking and teaching. We were using the standards as a guide for what we should be teaching for kids to succeed.

Agnes's motivation to focus on the Common Core was increased by her schools' approach:

There were a lot of hype about the Common Core…I did not honestly pay too much attention until our professional development started focusing on that. Three years ago, they started to send us three times a year to UND to do professional learning communities, with the people within

our area consortium, with the other mathematics teachers. And that is when we really started talking about the Common Core and assessment.

Intervening Conditions

Using the framework of Strauss and Corbin (1998), intervening conditions are those conditions which are broadly societal, less dependent on the specific district's or school building's context. They are conditions that explain variations of the reaction to, or actions taken in response to the phenomenon. Grounded in the data, intervening conditions external to their particular district conditions and that shaped participants' perspectives on the Common Core fell into three categories; 1) public perceptions; 2) media effect; 3) political effect. Refer to the grounded theory map.

Public Perceptions

Participants' conceptions of the Common Core was affected by how much of understanding the public, particularly parents, had about whole concept of the Common Core and what it meant to the kids and education in general. They appeared concerned about the public perceptions surrounding the Common Core and how such level of understanding could contribute to a growing myth about this reform.

Mike stated "…parents are concerned that it is overwhelming for their children. Although I do believe that youngsters, as long as they are treated appropriately for their age and what not, they are ready to tackle that stuff. " Most of the teacher and principal participants acknowledged that the public, particularly parents, were not well informed about the whole idea of the Common Core. Brad highlighted a need for improved public education to clear most of the misconceptions surrounding the Common Core:

> Common Core will be a good thing as soon as it gets ironed out and worked out… there has not been enough education to the public…When standards came out, early 90s, there was not much said about standards and they also throw this common in front of them and even here we don't call it Common Core standards anymore, we just refer to them as standards. They did not do a very good job in educating the public in this and then causing all this uproar right now.

On her part, May agreed:

> I have sent a lot of information home and I almost feel I am sending too much home. No, they don't understand Common Core and I think that the public perception about the Common Core is probably more negative than teachers' perception. [They think it means] "Teach to the tests." And that has a negative connotation to many people.

Ali gave an instant about how there seemed to be conflicting ideas and objectives of the Common Core:

> Right now, we have a local person who is very anti-Common Core. And she has been very vocal, showing up in different places, really talking against the Common Core. And that makes it difficult too. As educators, we work hard and we do what is good for kids. And then you have a random person, kind of slamming you. They don't really know the whole story [yet they are] coming in, talking to us. What we have done as a school is educate our parents a little bit about the Common Core. We write in our newsletters a little about it. And teachers may talk about it in conferences. Parents really have not heard a whole lot about it from the school, because we have always had standards. It has never been something we make a big deal out of. We just continue to do what we have always done. But because there has been little resistance, parents are getting more

> information about [Common Core] from other sources and not always, in my opinion, accurate. Sometimes very accurate sources, sometimes some more of some extreme. They might not be critical in condemning it, but [they] ask few more questions about it.

Pat also shared:

> I think there are a lot of things out there for and against Common Core. I think the facts need to be out there. They are very one sided. I think all the facts need to be out there and there should be honest conversations with parents and community members and I think they have the right to understand what is going on.

Schools appeared to face relatively little resistance to implementing the CCSS from parents, and other community members. Notwithstanding, participants' perspectives drew attention to a need for improved public and parent education on the Common Core so that as major stakeholders in education, they should understand the reform trajectory of education in the country and how it was going to shape teaching and learning.

Media Effect

Based on the data, participants seemed concerned about how the media had put a spin on the Common Core. This, according to participants, was shaping emerging issues in education. Ken stated:

> I think there is pressure almost from the media and even the state. I guess the media pushes the state's agenda in some ways. I don't just think is the right way to go about it. Yes, the years are rolling towards new era and you see gradual changes and it comes and you go with it and you teach that way. I don't see it has changed a lot, people just make a big deal out of nothing because the media gets hold of it and they just hold things up and government officials are not necessarily the best people tell people what to do either.

Brad perceived that they had done a good job laying the right foundational structures to address misconceptions and to make teachers prepared to implement the Common Core. Brad had not experienced any form of resistance from teachers, but the media effect could be significant:

> Definitely the media and how they are hammering, really putting down Common Core. And the public is really putting down Common Core…We have been working towards this for about four years so we have already laid the foundation here in the school. So I don't know if that has helped us, the community and the teachers…We have been able to say this is a good thing for us. Our students ACT and state assessments have all improved in the last four years since we have been working on the stuff, so I think it has helped us. So I personally don't hear negativity from the teaching staff about the Common Core in this building. But if I go to the other buildings, there is something there.

Becky observed that most of the misunderstanding surrounding the Common Core had been perpetuated by the media:

> …I think the people that are against it are putting misery into it. I see some things on Facebook that, like, "those teachers, that teaching, is crazy." And "teaching mathematics is crazy!" And that is not the way it is.

Political Effect

According the proponents of the Common Core, a significant difference, compared to previous reforms, was that it was state-led initiative without direct involvement of the federal government. The political debate seemed to have gotten in the way of the implementation of the new standards. Administrator and teacher participants' shared perspectives suggested that they were concerned about what they considered as the influence of federal mandate and how the whole concept of the Common Core had been caught in middle of political considerations. Ken

described how he disliked the underlying political influence of the Common Core. He felt that the federal control of the Common Core initiative was much visible.

> Remove the government out of the Common Core. I don't know, but the government should stay out of it, because I am really disturbed by the political piece. The politics, I can't stand. I don't want to do politics. Just let me teach my kids and do the best I can to and push them the best that I can, but I don't want to think about the politics. I hate politics. It is still political in nature. It was 40 plus states, and now some states are pulling out. In the end it is still political in nature.

Joni expressed similar point of view that there was a significant federal influence:

> When the current administration picked it up and tied it to the Race to the Top—which the current administration should have left alone. There are things that I think... are the problems of NCLB. They are not common and if people are willing to sit down and say, "Let us put all this stuff aside. There is not really Common Core and let us focus only on the standards, forget the testing." Forget about all these government people who are trying to do this with it, just focus on the standards. When people are ready to have that discussions, then I think there are very valuable discussions to have. Are we pushing some of these things too fast?

Pat noted that the politics of the Common Core had blurred a better understanding of how kids at lower grade levels or age might not benefit from it:

> Common Core is a way more than Common Core, how do I say that? A lot political, there is a lot of political backing behind it. I do always feel that the Common Core was not truly written by educators. It was by more of professionals and college professors to get career and college ready. I do have hard time feeling that the goal for kindergarteners

> is to get them career and college ready even though that is the "commonality" of that too. Our high school kids yeah, either they are getting ready for college or they are getting ready for career, not for five, six, and seven year olds.

Ali acknowledged that teachers had their own political and individual biases about the Common Core. However, as a school they try to focus on the collective responsibility of meeting the requirements of the Common Core rather than allowing those biases to shape their practices:

> I think with teacher in this building, there is a good morale and they do as expected of them. But I know teachers have personal and political views that might be different so there is that little thing too to avoid, those kinds of conversation in the school. We do a little bit, [but] I don't want to hang up on the vocabulary of the Common Core. Or the political background always brings us back to what is practical here for what we want to do for our kids.

Rose perceived that the political environment was pervasive and that it could affect teachers in the way they practice their profession. She appeared concerned that politics remained inseparable from education.

> I don't think everybody is going to be satisfied because education is political. It is so political that you can have these groups of teachers, but they all have different agendas and have different reasons for being there. It will certainly be the governors getting together and saying because, what is the agenda? The agenda is something other than what really we need. That is one part that I hate about education that it is so political. It is tied to funding.

Kate's observations about the politics of the Common Core were linked with her understanding about less teachers' involvement in the framing of the standards and how it might affect teacher evaluations:

> …but the way that it was developed and the way it has been pushed on us by non-educators, it is kind of coming from educational reformers. Then you get the whole political aspect of all that. It all ties into our evaluations. There are a lot of districts out there that the evaluation is tied to a number of things, they will rate you as a teacher based on a 20 minute observation and a 10 paged form. I don't need that for what you pay me. This is a lot [of work]! And it is just adding more. It is hard because we are kind of in a hot spot because again you can't totally scrap that without talking about the politics that have been involved and implementing and getting. It was Bush's NCLB, and Obama's Race to the Top and I did not like the NCLB and I did not like the RTT, but I do the standards. It is just that they are doing this and how they did it and who developed it. And now we can look back because these guys have said to us, teachers developed this, teachers made this? No! It is a bunch of think tanks and they sat around and even some of the people that were involved? They are backing off and saying this is not what we intended. So it will not be easy**.**

Participants' perception about the Common Core seemed to have been shaped by the extent to which they found federal control in its implementation. Such perceptions appeared significant in the way participants anticipated how the students' outcome could influence teacher evaluations.

Consequences

In the framework, consequences refer to the outcomes based on the different response and strategies applied to the implementation of the Common Core. It answered the question

what are the effects emanating from the various actions or inactions taken by schools to implement the Common Core? The data analysis yielded four categories: 1) Core values undermined; 2) Slow approach to implementation; 3) Teachers feeling overwhelmed; and 4) Curriculum supplements. (See grounded theory map)

Commonality Undermined

The expectation that students, regardless of where they were, would be receiving quality instructions from the same set of standards appeared weakened from the analysis of my participants' experiences and perspectives. Teachers and principals had some suspicions about the likelihood of the achievement of the commonality of the Common Core. Because schools and teachers were employing a range of different implementation strategies and had no clear guidelines to determine the output, the Common Core's core values were endangered. Also, participants cited the fact that other states did not join and others were withdrawing could undermine the commonest of the Common Core. For May, the commonality of the Common Core could be undermined because she found that teachers were exploring a range of supplemental materials and other online resources to teach the standards.

> We have no resources. That, to me, has been the most difficult mountain to get over. I understand the Common Core inside and out and I know what I have to teach now. But I don't have the materials to teach it with, and I am forced to go online and find materials. So is neighbor next to my classroom. They are going online looking for things. Now how common are we now? Because I find something to teach a concept, they may have found something that is not research-based to teach that concept. Are we teaching the same concept? We don't know! It is not common anymore.

The other dimension of the threat to the commonality of the Common Core that participants cited was the observation that some states were pulling out of the Common Core initiative. In addition

to the observation that teachers were resorting to using different curricula and supplemental materials, Pat perceived that commonality was hard to achieve because not all states had adopted the initiative.

> I do feel that the idea behind Common Core as a nation we are all in the same page. I believe in that. I think that is a good idea. But I don't think that way. Some have opted out not to be part of that, so it is not really a Common Core anymore. And I think when other people are pulling out, it makes people ask why is it an option that we are doing this? Is it the money? It is a big part of it! It supposed to be Common Core but it is not common anymore because some states are opting out and people are doing things different.

Juanita and Rita gave similar perspectives about how the refusal of other states to adopt the Common Core could affect their own students' learning.

Juanita contextualized the significance of the commonality of the Common Core in her classroom, but how its achievement might be undermined. She explicated:

> We have a lot of kids who move to [state A] in the middle of the year. And move back and the idea of the Common Core is that as a nation they will be getting the same education and learn the same thing in third grade here and there. But the only problem is that [state A] did not adopt the Common Core so that does not help our students. But I suppose it would help others so that is good thing. I think because that helps as teachers, like, my third graders who come from [state A] when they come back from spring they have not done any multiplication, when I have already taught that. So they come so far behind so l like that idea but it is not going to work with everybody.

Rita similarly shared views about how the commonality of the Common Core might benefit mobile students who constituted an important segment of the student population. She indicated:

> I like the Common Core. The idea was that it was a nationwide so we have large transient population here. And so that excited me that we will have a better idea that students come and go they will still gain the same concepts and skills. But the, of course, some states did not and [state A] is one and so that has not been what they initially thought. You always have different scope and sequence too.

Participants seemed to resonate with the understanding that the Common Core, as implied in the name, could unify and leverage students' educational achievements, irrespective of the setting. However, participants seemed to doubt the achievability of the core value of the Common Core, due to the range of the instructional strategies being adopted across schools and classrooms and also the fact that other states did not adopt the new standards.

Teachers Feeling Overwhelmed

Teachers' emotional reactions to the volume of work and time demands of the Common Core was significant. Teachers appeared overwhelmed by the sheer volume of work that they had to accomplish in a small amount of given time.

Brad worked with teachers on the Common Core and he disclosed to me the impressions he had gathered from teachers regarding the implementation of the Common Core.

> On the teacher level, they think of the core is, it is too much. There is too much information that they have to cover in a period of time. I think when the professor came in the August, what he told us was that if you do everything of the Common Core, if you follow it and follow every standard and teach every standard to fidelity and depth, you have to have somebody in school for 22 years. And so, that is what I always hear from

> the teachers. Going back to the negative piece. There is a negative that comes out here. How am I going to get all these done with the amount of time I have? So that is why we started breaking down the standards and what we are going to teach. That is how they see it: the teachers feel overwhelmed and [have] too much to teach and in the small amount of that they have students.

Ali was frustrated:

> You know there is always something new coming to kind of get educators overwhelmed. Because there is always something new. So I think people in this building and myself sometimes we get a little bit overwhelmed with, "ok this is a big undertaking." …but we have to keep forging ahead.. I would not anticipate some of the resistance too in our community… so it really caused to us to be a little concerned.

For Pat, her frustrations stemmed from multiple aspects of the Common Core ranging from its newness to its bigness. More significant was not having other grade-level colleagues to share her concerns and frustrations with.

> Initially, [I was] overwhelmed, I mean the newness and the bigness of it all, things changed and things had to change and especially in a small school where I am the only sixth grade teacher. It is like I have a team of sixth grade teachers to help make these decisions, it was on me for sixth grade Common Core. So very overwhelming!

Sarah a principal, shared teachers' frustrations with what they had to go through to make the changes happen in their classrooms:

> Teachers are so worried about it and I don't blame them for this. They are wondering if this is the phase that they are going to go through everything. Is it just going to be around for 6 years and we are going to move on to something else or something else is going to

take place? Because a lot of it is hard work. It is hard work. And if we are not going to continue to do it (like the No Child Left Behind and the Race to the Top that came before the Common Core), but it is going to be something else that will replace [it]? So I don't know. It is quite frustrating.

The effect of schools' failure to meet implementation timelines for the new standards could be carried over to the teachers. Brad:

> We have moved over four years. It is taking us time to get to where we are right now. If a school is just looking at the Common Core right now and state of North Dakota says we want it implemented by 2014 and you have not started yet, it is going to be overwhelming. So time is another issue and the professional development from the state, other entities. I would say, now here is a good way to implement it.

The analysis of the data revealed that educators' frustrations regarding the implementation of the new standards reflected; (1) the process that they had to go through, (2) time, and (3) the lack of adequate resource support for its implementation.

Test Pressure

The Common Core seemed to have put test pressure on schools and educators. As the smart balanced, the common-core-aligned test was approaching, teachers seemed to feel the pressure to cover as much standards as they could to get their students ready for spring tests. Emily:

> I think there is a big group of people that are terrified by that. And I can't speak for the mathematics people, but as far as ELA, I don't find them to be all that troublesome. I am personally worried about the high-stakes testing and the idea that all testing have to

happen all the time, I think that is much more troublesome than teachers having to teach the standards.

Ken appeared concerned about education reforms that place too much emphasis on testing. He viewed the Common Core as adding another layer of test pressure on teachers which, according to him, makes teachers teach to the test:

> One thing that still bugs me is that there is so much emphasis on those tests, state testing, ACT and stuff. I think sometimes they are pushed hard to drive our instruction. And I don't know if that is the right way to go about it. I think it is more about students' thinking and problem solving than it is to teach to a test. I think sometimes we get caught up in a little bit that let us teach to tests so that is what they have to do well. Since I have been here, our kids have generally done pretty well on state test stuff. That it is working, so we need to make common changes. We will make a little here and little there, but nothing too much.

Even though schools seemed to be aligning their assessment framework to fit with new assessment format and requirements, both teacher and principal participants seemed concerned about the format, "the newness" and uncertainty about how well students would do.

Becky shared her perspectives about the prospects of the students as teachers prepared students for the test:

> We piloted the smarter balanced test last year. And are we going to do well? NO! Because the kids are not ready, as we have not gotten far enough. Someday, writing is going to hurt us and it is going to hurt everybody in the state, and it is going to hurt everybody in the nation. Our writing skills are not what they need to be. I believe we would get them there. We are going to start low and hopefully every year it gets better

and better. We are trying to get them write in every subject. ..So Common Core makes you go above it, but we are just asking them to be creative. And for a long time we have not been creative. It has been, "do what I say". And now we are saying, "here is how you do it". But what would you do? So that part, I like. Well, right now, the schools are getting them ready the best they can. It is going to be a learning curve, switching to this test. And we have had to sit down and go through the text. I guess I have just been teaching out of this. I have not looked at the test yet, due to again, it [takes] a lot of time. I will look at it here shortly. We have to see and hope for the best.

Similarly, Juanita wondered about the students' outcome in the Smarter Balanced assessment and the implications it might have for her teaching techniques.

The only worry I have about the test is, this spring, we are switching from the regular ND test they have always taken to the Smarter Balanced—a computer one. We just don't know what is going to look like. We have never seen it before. They have sample questions and when I looked at those I thought they were pretty tough for third grade students. And the one we took in the fall had really like long stories for the kids to read and that was kind of overwhelming. [For] some of them, it is hard to read on the computer. A long story that they [are] used to, like reading a book, showed an amount of text on each page. So we had to do things like, I will give them a piece of paper to try cover some of the easier parts for them to read. That was different because then they will have multiple questions to go with that ones rather than a short story with one question. So that is more for the Common Core. So I guess it is just the unknown right now. Once we get pass this spring [and] we have all done it once, we would not be so [worried]. But I am worried that, oh my gosh! what if they all, like, do

very bad? It reflects on me! The first one is the starting point. They want to see growth. After that I am sure it is going to be fine.

Ali shared the frustrations that students might go through as they get ready to write their first Smarter Balanced test in spring.

> I really feel sorry for the kids because some of the kids are going to be, based on the sample question, frustrated. We have a technology integration specialist and she does keyboard with all levels… All teachers are required to incorporate technology into their in their instruction. I want my kids to have those hands-on. My teachers are helping them how to drag and drop. They will get a little bit of that in their tech class. I know that for the first couple of years our scores are going to be low and they know [it]. It is different and I have to only hope that they are going to iron something out to make it is more realistic. We are going to do the best we can. We are doing a good job. Our kids are doing a good job. And those kids that are having the hard time …those ones that are doing pretty well, we are not going to hang on to the tech part.

Jan was concerned about the implications the outcome of the Smarter Balanced might have on teacher and principal evaluation.

> I just find it very troubling with all these test stuff it is going to be based on. I mean it is all going to be based on reading and understanding, but there is just too much weight put on testing kids to large extent. I am not for that. So the kids are going to test and if they come out horrendously, what is that [going] to say? Ten years ago, our kids were at the top of the nation and now you have the Smarter Balanced tests through the Common Core. Because, again all that is going to come back to teacher or principal evaluation. And, you know, ND does not want test scores of the students to impact teacher

> evaluation. I was on that committee too. I have quite worked at the state level like that. And it is, like, all that the people see is the test scores. So the tests cores in ND are lower than the test scores in [school A] but they have more teachers than [in school B]. Do we take into consideration the kids in there and everything else?

Ali shared similar perspectives about how the schools' scores might be significant in teacher evaluations:

> I think teachers have a little bit of a fear that all this is going to come down to and we are going to be evaluated by test scores. And they are going to be paid according to test scores…I have no interest in that, but those are the little things teachers can log onto: here is something and here is bad thing that can come from it. And they worry about such things rather than the good things they are doing.

With the introduction of the Smarter Balanced assessment, teachers and administrators seemed to be getting their students ready for the test. This seemed to have put pressure on teachers to cover the standards. Based on the newness, format, and rigor with the new assessment system, teachers and administrators would expect a drop in the measure of students' outcome. However, teachers were anxious about how students' outcome might impact their evaluation patterns.

Summary

The theoretical proposition in figure 1 presents categories that emerged from the constant comparative analytical processes and the relationships amongst them. From the analysis, the repeated pattern of events that reflected participants' perspectives showed that time availability was a key factor in schools' transitioning efforts to implement the Common Core. Thus, teachers committed tremendous amount of time to implement it. The Common Core, from participants' perspectives**,** presented new expectations for teaching and learning. The new

expectations were related to shifts in content and instructions, curriculum alignment process, and assessment practices. The Common Core implementation also seemed to have presented a steep learning curve for teachers. Teachers needed to learn to understand the new standards and to master new strategies to teach students skills-based and to a considerable depth of content. Mastering of the standards and teaching to the new requirements all required a substantial amount of time. Also, with the adoption and the implementation of the Common Core, it was gathered from participants that curriculum materials were not adequately aligned with the Common Core. This situation presented curriculum gaps, which required a significant amount of time to fill. In addition, participants' perspectives suggested that there were no clear guidelines to successful implementation and that educators' understanding about how the final product or full implementation supposed to look like was unclear.

Schools were taking different actions to respond to the central issue. The actions aimed at offering professional learning opportunities for teachers to understand and be able to mount implementation strategies and techniques. A range of professional training opportunities were created for teachers through their professional learning communities and networks to share implementation strategies. Teachers and administrators in the study also drew on external expertise to garner local efforts to implement the Common Core. Opportunities were created for grade-level and subject-based teachers to collaborate. However, such opportunities were more in the schools than across schools. Because time to leave the classroom to collaborate was an issue, schools were moving to explore the virtual environment for collaboration opportunities. In addition, in order for educators to close the curriculum gaps, teachers explored multiple sources to supplement the current curriculum materials that schools were using.

There were other sets of conditions, including specific and general ones that impacted the teachers' sense of readiness for the implementing the Common Core. Specific conditions included how teachers conceived and responded to the changes that were supposedly ushered in by the new initiatives. Teachers' beliefs about the changes and the consideration of these beliefs were significant in their individual and collective efforts to implement the Common Core. Also, teachers' sense of school support was significant in their effort to implement the Common Core. Other societal conditions that seemed to have impacted teachers' overall perceptions of the Common Core included how the community, including parents, understood this reform. Media and political effects also played a significant role in shaping educators' general perspectives of the Common Core.

The data analysis yielded some consequences that resulted from the actions or lack of actions that were taken by schools to respond to the underlying factor of the time resource. It appeared that because teachers had resorted to exploring and using different and multiple resources to teach the standards, the commonality of the Common Core appeared weakened. While schools appeared to be at different stages of the implementation process, educators generally seemed unhurried in the implementation of the Common Core. Also, teachers felt overwhelmed with the small amount of time to perform a number of instructional and other professional duties. The degree of uncertainty expressed by participants in their expectations of the likely outcome of the new state assessment, otherwise known as the Smarter Balanced assessment, seemed to have mounted pressure on teachers. Drawing upon the categories that represented the building blocks of the theoretical proposition, chapter four concludes with some theoretical assertions, based on the relationships of the categories that were generated.

Theoretical Assertions

Drawing inferences on the categories that emerged from the analysis, three theoretical assertions are suggested here. First, the implementation of the Common Core was slow to manifest in the classrooms. Considering the fact that the focus of Common Core implementation was more on the "process" than on the "product." The process required schools to make significant amount of adjustments. Schools engaged in breaking down the standards into small units and managing the necessary shifts that were necessary. However, it was gathered from participants that the process was being slow because of the "newness" and the lack of specific guidelines for successful implementation. Teachers and administrators seemed engaged in a nebulous process, with no clear guidelines detailing out implementation strategies. As a result, educators appeared to have slowed down the process of implementing the initiatives. In addition, not all teachers in the study had made significant changes in their instructions. Even though, teachers understood how the changes that they were required to make in their instructions, inadequate Common Core-aligned curricular and other resource constraints did not allow for smooth transition.

The second theoretical assertion drawn from the proposition was that the outcome of the first Smarter Balanced assessment was expected to direct the implementation trajectory. Following the adoption and transitioning to implement the Common Core, the state of North Dakota selected the Smarter Balanced to develop state assessments. The new Smarter Balanced test was considered more Common Core-aligned and that it would be expected to provide educators with meaningful feedback and actionable information. In the spring of 2014-2015 school year, the first Common Core state assessment for ELA/literacy and mathematics, grades 3-8 and high school were to be administered across schools in the state. As teachers and

administrators seemed uncertain about how full implementation supposed to look like, they appeared expectant to seeing how students would perform in their first Smarter Balanced test. Teachers and administrators referenced the Smarter Balanced as a check point to diagnose the inadequacies in their instructional strategies and to determine appropriate courses of instruction in subsequent implementation strategies.

Third, current school time schedules seemed unfavorable for prompt collaboration, teacher self-reflective activities, and the sharing of implementation strategies. Everything from teacher training to the mastering of the new standards and supplementing curriculum materials to collaborating with other teachers required significant amount of time. As a result, schools had adopted strategies, like Early Release Day and virtual collaboration to make extra time available for teacher professional learning efforts.

CHAPTER V

DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to understand the response of rural school educators who are in the process of using instructional strategies and curriculum resources to implement the educational reform known as the Common Core. A qualitative methodology, using interviews, on-site observations, and document reviews produced data for analysis. A theory grounded in that data describes their perceptions during that process.

The participants in this study included 14 teachers, two instructional coaches, five principals, and a superintendent who worked in rural school districts. Each participated in at least two separate sessions of interviews. Non-participant observation was used to contextualize the interview data. Both interview transcripts and observation field notes were coded. In chapter III, I explained how I used the constant comparative analysis and open, axial, and selective coding techniques to refine the building blocks for the theory proposed. The analytical framework was informed by Strauss and Corbin's (1998) systematic approach to concept and category development. In chapter IV, I presented the findings based on the analytical framework the study, with theoretical proposition and the relationships amongst the various categories demonstrated by a grounded theory map. In this final chapter, I discuss the key findings, based on the research questions. In addition, I present contribution to theory, summary, and recommendations for research and practice. Conclusions drawn from this study address the following research question:

What are the perspectives of teachers and administrators on their preparedness to implement the changes required by the new standards?

1. What curricula and instructional adjustments are educators in rural schools making to align the instructional contents to the new state standards?
2. How are administrators and teachers increasing their knowledge in the implementation of the new standards?
3. How are rural small schools sharing implementation strategies?
4. What are the challenges facing rural small educators in the implementation of the CCSS?

The following is a discussion of the major findings related to the research questions.

Teacher and Administrator Sense of Preparedness to Implement the Common Core

The Common Core initiative constitutes the latest widespread effort to standardize and transform education in the country. The initiative seeks to provide a clear and consistent framework to uniformly bolster student readiness and successes through K-12 experience and beyond (Porter et al., 2013). Given the continuing importance of educators' role in translating the new content standards into curricula and instructional practices, it is useful to understand how rural administrators and teachers' sense of preparedness shapes their individual and collective efforts to implement the Common Core.

The state of North Dakota joined forty-five other states in 2011 to adopt the Common Core initiative. Prior to the adoption of the initiative, the education authority pulled together teams of teachers and administrators across the state to study the new standards in the contexts of the existing standards and to determine what changes might be necessary (REL, 2011). Moving forward with the implementation after a statewide adoption of the new standards, transition timelines to guide implementation decisions and processes were put forth by the education

authority in the state. For instance, it was established that by July, 2013 (three years after adoption), all public school districts in the state would have achieved full implementation. This meant that all classroom instructions would be based on the new content standards by that period. It also followed that all local school districts and the state's assessment systems would fully be aligned to the new standards by 2014-15 school year. As educators worked to meet the state timeline for implementation, it was the purpose of this study to offer understandings of administrators and teachers' sense of readiness grounded in both their individual and collective commitments and efforts to navigate the process of change.

The study found that as of the academic year 2013-2014 (the year of this study) educators were gearing up to implement the requirements of the Common Core. Administrators and teachers had initiated changes that reflected the requirements of the new standards. Participants' sense of readiness were consistent with their understandings of the whole concept of the Common Core. Administrators and teachers appeared to have internalized strong idealistic perspectives about the Common Core. These perspectives seemed to anchor their self-constructions of the fundamental beliefs about the Common Core. One of the reasons why Common Core was enacted is to find leverage in states' instructional and assessment standards to ensure that students do not suffer knowledge deficits because of where they receive education (Daggett & Gendron, 2010). The view that the new reforms would allow all students, regardless of where they live, or move, to have access to high-quality education and to prepare them for successes in their college and career pursuits (NGA & CCSSO, 2010) resonated with participants' fundamental ideals for improvement. What appeared to be participants' humanistic approach to understanding change, as applied to the reforms, was based on a strong support for their transient and rural students. Such understandings illuminated participants' emotional and

affective attachments as reflections of their beliefs and norms about what constitutes "good education." Huitt (2009) observed that the development of such perspectives can connect feelings and knowledge to actions.

Participants' perspectives reinforced the significance of educators' sense-making and embodiment in the process of change, as applied to education reforms (Fullan, 1998; Huitt, 2009; Kelchtermans, 2005). Teachers and administrators' sense of relatedness with the essential values embedded in the changes required by the Common Core was significant in grounding their individual and collective interests and transitional efforts. The dynamic interplay of the personal and interpersonal sense-making in the process of change reflects the significance of making the fundamental ideals of reforms meaningful to educators. In other words, if an educator' values and beliefs are validated by the principles in the reform's goals, it enhances their capacity to work as active agents of that change (Fullan, 1998). The study extends understandings on the view that the embodiment of educators' assent in education reforms not only shapes the way they relate to the required changes embedded in such reforms, but also their actions and teaching practices (Kelchtermans, 2005). A strong caveat, however, is that while such perspectives can provide a strong foundation for change, their continuing effects on educational change can be undermined in the context of limited resource support and training opportunities for educators.

It is significant to find educators who subscribe to the agenda of a new initiative. However, such subscription might not be enough to sustain individual and collective beliefs and values about the need for change within the context of educational reform. Even though schools were involved in creating professional training opportunities and providing resource support for teachers, participants felt inadequate in some key aspects of the implementation process. Quite significant in teachers' preparedness to commit to the implementation requirements of the

Common Core was their sense of school and leadership support. Thus, the more teachers felt adequate in terms their professional roles and resource support, the more they felt prepared and ready to steer the implementation process. Put another way, an experienced professional educator with moral and material support would be more proactive and eventually more successful in his or her contribution to the reform.

Instructional Contents and Alignment Process

Central to the whole spectrum of the Common Core implementation process is the ability of educators to translate the requirements of the new standards into achievable targets. Literature establishes the importance of the interconnectivity between standards and curriculum reform efforts (Troia & Olinghouse, 2013; King, 2011; Lauer et al., 2005). Thus, the adoption of new standards in itself is not enough to influence practice, but making the necessary adjustments to instructional strategies and curriculum contents can result in significant changes (Lauer et al., 2005). The implementation of the Common Core Initiatives demands ongoing revisions of the trajectory of students' academic successes. Different outcome expectations for students and different forms of instruction and assessment for learning, reinforced by administrators and teachers, are expected to shape students' college and career success paths (Killion, 2012). Given the central role of administrators and teachers in this trajectory, the study illuminates changes that participants were making as they navigated the implementation process.

The study found that educators were making key shifts in broad areas of curriculum, instruction, and assessment to anchor permanent changes in students' learning. The shifts signified profound changes in the way students were supposed to learn and be assessed, in the way teachers expected to teach, and in the way instructional leaders led (MetLife, 2011). Along with these shifts, mathematics teachers indicated that they were digging deeper into the contents

of the new standards to allow students master the mathematics concepts. With ELA teachers, teaching students to read and understand more complex nonfiction and informational texts was a significant concern. Consistent with the changes required by the new standards, teachers demonstrated that they were designing classroom instructions in a way that de-emphasized the memorization of facts by focusing on the development of high cognitive abilities of students (Kober, & Rentner, 2013; MetLife, 2011). Content teachers, including social studies and science teachers were also called on to teach students to read, understand, and analyze nonfiction passages in history and social studies, as well as scientific and technical texts (Center on Education Policy, 2013). Such required adjustments presented challenges for content teachers, because according to them, they had not received training in how to make those changes in their lessons. Administrators and teachers were engaged in the process of adjusting the local assessment formats to align with the new state assessment system. The changes were meant to create learning experiences that would challenge students to meet the expectations of the standards.

The adjustment process presented curriculum gaps and instructional challenges which appeared to have slowed down the transitional process. The adjustment process was more daunting for teachers who taught multiple subjects and grade levels, having to interlace with multiple and different concepts and strategies. As a result of the statewide adoption of the Smarter Balanced assessment system, schools were required to tailor their classroom instructions and assessment tools to focus on skills consistent with new assessment criteria. However, teaching and assessing students' high-level cognitive functioning, as alignment requirements of the new state assessment system, marked an area of significant concern for teachers in their transitional efforts.

While the adjustment process challenged administrators and teachers in their efforts to motivate students to master the content of the new standards, it presented opportunities for administrators and teachers to be self-reflective of their own professional practices. It also reflected the importance of teachers taking on the role of a learner by learning the new contents and new techniques of teaching and assessing students' outcome. While most principals performed multiple roles (managerial, administrative, and teaching), their perspectives were more administrative. They sounded more realistic, compared to teachers, in their expectations as related to the role of the districts to provide teachers with adequate assistance and professional development support to work for and achieve change.

Educators' Knowledge and the Implementation of the Common Core

The implementation of the Common Core is expected to change classroom instructional and assessment practices of teachers and students' way of learning. Administrators' and teachers' acquisition of in-depth knowledge and understanding of how these changes are supposed to work can help schools make effective transitions to implementing the new set of standards (EPE Research Center, 2013). It is important for teachers to gain deeper understanding not only of the standards, but also how to apply a set of specific knowledge and strategies to transform classroom instructions and assessments. An important measure in this effort is the conscious integration of teacher learning in the districts' professional activities. By this, the professional development needs of administrators and teachers who are actively involved in the change process should be of a critical concern in schools' efforts (EPE Research Center, 2013).

The findings of this study provide insights into understanding the professional development efforts of the rural school districts. The perspectives of participants showed that teachers explored multiple sources to gain understanding of the Common Core and its

implementation processes. The findings reflect similar results by the Center on Education Policy that showed that 28 out of 40 states that responded to a survey were using a combination of state-level training, regional service agencies, and "train-the-trainers" programs for principals (Kober, McIntosh, & Rentner, 2013). Administrators and teachers in the current study participated in a range of team meetings and professional learning community (PLC) programs to learn about the new standards. These learning opportunities were created at the school, district, regional, and state levels. However, the focus, intensity, and frequency of such training programs varied, depending on the level at which they were offered. For instance, it was gathered from participants that both the state and the regional level professional training programs were not only regular, but primarily focused on the analysis of the new standards and building awareness amongst educators. The finding was consistent with what has been reported in several states (Porter et al., 2013).

Teachers explored a range of online instructional models to guide their implementation efforts. Selected districts committed resources to arrange for "outside" instructional and curriculum experts to guide teachers and administrators in their implementation efforts. Such avenues, along with the state and the regional professional training programs, and search for online models presented a range of opportunities for teachers to gain understanding about the Common Core. However, teachers seemed to master new strategies with less contextual understandings. Making specific changes in the classroom may not only require the integration of individuals' understandings and beliefs about the change, but also the dynamics of the school culture. Literature underscores the need to account for the specific contexts and conditions as applied to education reforms (Fullan, 2006; Hattam & McInerney, 2000). The imports of the local contexts and conditions to reform standards, assessment, curriculum, and professional

development need to reflect the actual changes that occur in the classrooms (Fullan, 2006). Drawing from participants' perspectives, I was unable to see how the uniqueness of rurality's defining characteristics and the differences in school organizational structure and culture had been considered in the teachers' professional development and learning programs. However, the consideration of specific (political, socio-economic and demographic) contexts, the school culture, leadership, vision , and planning can make significant impact in teachers' contextual understanding of school reform (Hattam & McInerney, 2000). At the school level, principals and instructional coaches assumed the role of local experts who reviewed lessons and provided feedbacks on teachers' instructional and assessment practices. The dynamic interplay between meeting the requirements of the standards and trying to make the changes in a way that is meaningful in the classroom contexts is complex. However, school-level efforts need to include both reform requirements and consideration of a school's context in determining strategies for achieving change (Fullan, 2006).

The Sharing of Implementation Strategies

Teachers, in their individual and collective efforts, explored multiple sources in search for exemplary lessons and guides to implementing the CCSS. The complexities involved in the process of change make it compelling to allow collective efforts to drive the implementation process. Increasing opportunities to allow educators to continually share implementation strategies should be absolutely fundamental in schools' efforts to meet the high expectations of the new standards. From participants' perspectives, districts mostly used school-based professional learning communities (PLCs) to share implementation strategies. Using "train-the-trainers" models, administrators shared examples and instructional strategies with teachers. Teachers used team meetings to share with colleagues their progress, successes, frustrations, and

challenges, going through the implementation. Instructional coaches co-taught and modeled the teaching of certain lessons. They also regularly engaged individual teachers, teams, and whole-school meetings to review instructions and student learning.

While the PLCS provided opportunities for teachers and school leaders to work together toward a shared responsibly, not many opportunities were created for inter-school collaboration. According to Fullan (2006), a system of change can occur when schools and districts learn from each other. The practice of shifting ongoing teacher professional learning responsibilities away from national and state and onto individual schools might have appealed to rural schools, perhaps due to their geographical and collegial isolation (Jamerson, 2005; Barley & Brigham, 2008). It could be inferred from participants' perspectives that school districts faced resource limitations and limited funding for Common Core professional development programs. Arguing from such viewpoint, it is compelling for rural schools to broaden their perspectives of PLCs toward engendering collaborative cultures across schools and districts for continuous improvement (Hattam & McInerney, 2000). Drawing upon Mitchell and Sackney's (2000) model, such community should integrate a set of personal, interpersonal, and organizational capacities upon which educators could rely as they seek to change educational practices to support profound improvements in students' achievement.

Rural School Educators and the Challenges for Implementing the CCSS

While schools had made significant progress in their implementation efforts over the last couple of years, it appeared that teachers were wrestling with the realities of how to make the instructional and curriculum changes work in their classrooms. Participants' perspectives suggested some challenges that diluted individual and collective efforts, as school districts moved forward with the implementation. These challenges related to guidelines for

implementation (too broad), curriculum materials (too scarce), time for implementation (too short), and test pressure as relate to accountability measures (affecting instructional choices normally reserved for a teacher's judgment). The following section discusses how these observations affected participants' implementation efforts.

Inadequate guidelines for successful implementation. Meeting the requirements of the instructional shifts presented implementation challenges, as teachers seemed to struggle to find clear guidelines and examples for their instructions and assessment practices. Teachers navigated the implementation process with inadequate guidelines. The process appeared to have slowed down their efforts in making the necessary changes in their teaching and assessment techniques to accommodate the new standards. The findings here reflect a nationwide implementation concern, according to a report by the Center for Education Policy. The report indicated that about two-thirds of school districts across states cited inadequate or unclear state guidance on the CCSS as a major challenge (Kober & Renter, 2011).

Teachers and administrators appeared to be looking forward to using students' test scores under the new Smarter Balanced assessment system to diagnose their own strengths and weaknesses in their individual and collective implementation efforts. However, relying on outcomes of the Smarter Balanced to correct the observed dysfunctional elements of the implementation process could also result to some unintended consequences. Using this strategy could draw a significant attention to the testing outcomes rather than how the standards might have reflected on students' achievement outcomes. In this case, test outcomes rather than the standards, would shape expectations and teaching practices (Hamilton, Stecher, & Yuan, 2012), which may undermine the rigor, equity, and consistency across states that the Common Core is intended to achieve.

Inadequate curriculum materials. Literature shows that a successfully implementation of the CCSS would require teachers to have access to textbooks and other curricular resources that are aligned to the new frameworks (EPE Research Center, 2013; CCSSO & NGA, 2010). However, it was a source of frustration to teachers because they perceived they did not have adequate Common Core-aligned curriculum and other relevant resources to meet the requirements. Schools seemed to be caught in a time lag between their intention to acquire new Common Core-related curriculum materials and their estimation of how that might reflect on students' test outcomes. However, considering the bigger picture, teachers were faced with increased expectations in the context of fewer resources.

While teachers seemed to be actively navigating the processes of making the curricula and instructional shifts, it is significant to understand the conditions under which they were expected to meet full implementation. Because schools had not acquired new curriculum materials consistent with the new standards, teachers resorted to exploring online materials to supplement the current curriculum materials. Teachers adopted such approach to meet their curriculum needs towards achieving full implementation. The curriculum gaps and other assessment requirement gaps appeared to have elicited negative emotions amongst teachers (Kelchtermans, 2005; Geijsel, Sleegers, Leithwood, & Nicoletzi, 2002). While school districts may have found teachers exploring online resources as most cost-effective, the validity of the sources and the quality of the materials could not be guaranteed. This study found these as inconsistent in schools' efforts to provide the right resource and training for teachers to meet the requirements of the new standards.

Pressure on teachers' limited time. The implementation processes of the Common Core were based on wide spectra of professional choices in the broad area of curriculum development

and content, instructional, and assessment alignments. Teacher professional learning and collegial activities also required significant attention. Teachers spent a significant amount of time trying to meet the requirements, both inside the classroom with their students and outside the classroom with their colleagues, instructional coaches, and administrators. In the classroom, teachers needed to provide real opportunities for students to master the higher-level new contents and learn in new and more in-depth ways that required more time than they would typically need. Teachers needed tremendous amount of time to master the new content, plan for and reflect on lessons, and refine their instructional methods.

Schools used local programs, like Early Release Day where students were allowed to go home early enough to allow teachers some additional time to engage in professional training and collaborative activities. Virtual collaboration was also encouraged to reduce pressure on teachers' time. Consistent with a large–scale survey by EPE Research Center (2013), teachers' ongoing engagement in the instructional and curriculum activities and having time to work through them with colleagues has been found critical in successful implementation. The report indicated that about 70 percent of respondents cited more planning time, access to aligned curricular resources, access to aligned assessments, and more time to collaborate with colleagues as the key challenges facing states in their transitional efforts. Other researchers (e.g., Killion, 2012; Farbman, Goldberg, & Miller, 2014) have emphasized the need for states, districts, and schools to consider the benefits of expanding school calendar year to support the time needs of teachers and students. Similar conclusions could be inferred from the study findings, taking into account school culture and time allocation contexts.

Test pressure. One central issue that amplified a nationwide consideration of the Common Core was that under NCLB mandates, several states were purported to have lowered

their proficiency criteria, allowing schools to avoid sanctions (Daggett & Gendron, 2010). These inconsistencies had created significant variations in states' benchmarks, making it difficult to compare test scores across states. With the consideration of the Common Core initiatives, proponents argue that all students, regardless of where they live, would be expected to meet the same high academic standards, (NGA & CCSSO, 2010). Along with these expectations, the newly adopted Smarter Balanced assessment system holds different expectations for students' proficiency. The comparative rigor emphasized by the new standards and assessment criteria seemed to have created a general impression amongst participants that students' scores were going to drop.

Other researchers note that the interpretation and the evaluation of students' test outcomes may have significant accountability implications for teacher and administrator evaluations (Larson & Leinwand, 2013). Participants appeared to be gripped with some degree of uncertainty about how the consequences for schools, administrators, and teachers. Teachers seemed felt the pressure to use assessment criteria consistent with the CCSS and to also ensure that students master the new standards. Hamilton, Stecher, and Yuan (2012) noted that "[w]hen tests have high stakes, standards may take a back seat…" (p.162) The continuing emphasis on students' tests scores, as related to measures of accountability, can instigate a growing negative pressure to weaken the capacity building efforts of schools (Fullan, 2006). Emergent evidence indicates that high stake test pressure serves as an incentive for teachers to reallocate instructional time away from non-tested subjects in order to provide more instruction in tested subjects (Hamilton, Stecher, & Yuan, 2012; Koretz & Hamilton, 2006; Darling-Hamilton & Wise, 1985). Darling-Hammond and Adamson (2010) argued that;

> a successful education can no longer be organized by dividing a set of facts into the 12 years of schooling to be doled out bit by bit each year. Instead, schools must teach disciplinary knowledge in ways that also help students learn how to learn, so that they can use knowledge in new situations and manage the demands of changing information, technologies, jobs, and social conditions. (p. 2).

Such observations validate reasons for supporting the development of students' independent thinking, creativity, self-motivation, and self-direction. However, with the teaching-to-the-test syndrome already attaching high stakes to test and test outcomes, teachers' ability to provide skill-based learning experiences could be jeopardized.

Contribution to Theory

Situating the study in Mitchell and Sackney's (2000) model of capacity-building explains how individual and group learning activities were entrenched in schools' transitional efforts. The model actualizes the interdependent functioning of personal, interpersonal, and organizational capacities as a foundation in school reform efforts. However, drawing upon study findings, the interconnectivity amongst these capacities is influenced by the professional learning contexts and culture of a particular school.

In this study, personal capacity efforts were contextualized as individuals' commitment to continually reflect on their professional practices—examine and question their own practices to seek out and experiment with new methods and instructional alternatives. Interpersonal capacity efforts, on the other hand, were understood as schools' responsiveness to creating opportunities for teachers and other instructional leaders to collaborate and work together on shared purposes to generate effective group processes, expectations, and outcomes. Organizational capacity-building efforts were also contextualized as schools' efforts to bring groups of professionals together, both within and outside the schools, and to provide appropriate resources, motivation,

and incentives for them to learn, experiment, and grow. Understanding how this model works, organizational capacity efforts are the anchor for both personal and interpersonal capacity efforts. Put differently, "…building organizational capacity without building interpersonal and personal capacity breeds frustration." (Mitchell & Sackney, 2009; p.31)

Schools' commitment and proactivity in drawing both local and outside expert knowledge to guide implementation frameworks provided a strong foundation for organizational capacity-building efforts. While such initial commitments fostered a foundation for teacher learning and understanding of the requirements of the Common Core, there seemed to be a disconnect in a way organizational capacity-building efforts of schools influenced personal and interpersonal capacity development efforts of schools. First, time commitments and other contextual and school factors, including less opportunities for collaborative activities and grade configuration did not allow for prompt collective reflections and professional conversations amongst teachers. Second, teachers' professional training seemed less contextual in terms of how they were expected to apply new instructional and assessment techniques to the new standards in their respective classrooms. And third, teachers received training without adequate curriculum resources to solidify their understanding about how to change their teaching practices to accommodate the new standards. The effect was that individual teachers felt isolated and that they seemed to have been left on their own to navigate the changes with little or no guidelines. Teachers committed considerable effort into making changes with relatively little resource support which made them frustrated and exhausted. Thus, individual efforts, rather than group efforts, drove schools' transitional efforts.

In sum, the study accentuates the significant role of school culture and a supportive learning environment, and local and national political forces in providing contexts for achieving change.

Summary

The Common Core State Standards mark the latest standardized movement to sweep the nation. The implementation in the K-12 classrooms is expected to inspire students to develop strong foundational knowledge, deep conceptual understanding, and skills considered critical for shaping college and career readiness. Across school districts educators are leading the way to make the curricula and instructional changes required by the initiative. The implementation of the new standards not only has significant implications for teaching and learning, but also for the professional development activities of teachers and administrative roles of school leaders. Given the significant role played by teachers and administrators in this initiative, it is important for stakeholders to understand how teachers and administrators in rural school districts in the state of North Dakota are developing the local capacity to navigate the changes.

My findings indicate that rural administrators and teachers' fundamental beliefs and idealistic perspectives of the Common Core were significant in their sense of preparedness for and commitments to implement the new initiatives. Participants' support for meeting the educational needs of mobile and rural students resonates with their core values of the Common Core. However, the paucity of professional training programs and resource support seemed to undercut educators' efforts to endure implementation challenges.

My findings also show that the alignment process signified a profound shift for teachers. Administrators and teachers were actively involved in the process of initiating the necessary changes as required by the new reforms. They made instructional shifts to reflect changes required in the ELA and mathematics. Administrators and instructional coaches worked with

teachers to revise assessment formats to fit with the newly adopted Smarter Balanced assessment. These shifts presented both instructional and curriculum challenges for teachers. Teachers engaged in the instructional and assessment adjustments with minimal guidelines. Learning opportunities for educators were offered at the state, district, regional, and school levels. However, there seemed to be gaps in the provisions of specific and contextual examples and models for implementation. Teachers were also faced with the problem of non-aligned curriculum materials. In their effort to fill in the gaps, teachers explored multiple sources for content, but many were anecdotal only (i.e., not research-based) and lacked assessment materials to supplement the already existing materials.

The implementation of the Common Core marked a significant responsibility, particularly for teachers, both in and outside the classrooms. Thus, having to learn and to have an in-depth understanding of the requirements of new standards; honing new instructional and assessment strategies, allowing students sufficient time in the classroom to master the content of the new standards, and having to attend professional training programs, team meetings, and collaborating with peers were a challenge. All these undertakings required significant amount of time which put pressure on teachers' planning time, at the very time when they needed more time-not less-for thinking about instruction. In addition, both administrators and teachers seemed to feel the pressure from the expected drop in students' test scores, based on the comparative rigor emphasized by the new state assessment criteria.

Conclusion

Based on the findings, the study concludes that while schools appeared to prioritize adequate training and resource support for teachers, inadequate common-core aligned curriculum materials and guidelines constituted a major drawback on rural educators' implementation

efforts. Although teachers have the foundational knowledge and understanding of the new standards, gaps exist in the provision of specific guidelines and concrete examples. Thus, teachers need more than just understanding the requirements to be able to make significant changes in the classroom. Again, a successful integration of the new standards requires both individual and collective commitments that connect to their contextual understandings of the standards. Teachers need more opportunities to engage in more teamwork to continually share implementation ideas and strategies within and across school districts. In addition, while it is important for teachers to be able to explore multiple sources to validate instructional resources, schools' inconsistencies in addressing curriculum gaps can undermine local capacity development efforts. As educators seek to change educational practices to support profound improvements in students' achievement though the integration of the new standards, expected changes reflecting students' outcomes could take years to manifest. With the comparative rigor marking the new Smarter Balanced assessment, students' test outcomes can shape ongoing implementation strategies. Schools need to be innovative in using local programs to make additional time available for teachers.

Recommendations

Based on the findings of the study, I put forth the following recommendations for the state, school districts, and higher education.

Recommendations for the State

1. The state needs to intensify efforts to educate all stakeholders, including parents and the general public in order for them to have clear and realistic understandings and expectations about the new standards. Such education should target increasing

stakeholders' understanding on how the new standards can impact students' learning and how long such changes can manifest in students' overall achievement outcomes.

2. The state needs to consider other accountability mechanisms (e.g., Value-Added Models) that can be adopted by teachers to diagnose their own strengths and weaknesses and using outcomes to inform professional development programs**.**

Recommendations for School Districts

1. Schools should consider restructuring local programs to favor the provision of additional time for teacher training and collaboration.
2. School districts should intensify and direct inter and intra-school collaborative efforts to target individual and collective needs of teachers.
3. Schools should consider directing ongoing and additional training programs to address local contents and providing real and concrete examples of CCSS-aligned practices.
4. Schools to decide on providing Common Core-aligned curriculum materials to help teachers' implement the required changes of the new standards.
5. Students take the Smarter Balanced test for the first time in spring 2015, based on new standards. However, because of comparative rigor that supposedly marking the Common Core, teachers and administrators anticipate a drop in proficiency rates, compared to previous years. It would be important for schools and other interest groups to consider the potential effects of these and other contextual factors in the interpretation of students' test outcomes.

Recommendations for Further Studies

The study findings show the significance of educators' perspectives and beliefs in their commitment to implement the new initiatives. The Common Core movement is supposed to be a

state-initiative that should come with some local flexibilities; however, participants' perspectives suggest that the federal government's role in terms of allocation of resources is constraining resulting, in a perceived threat to local control. As schools move forward with Common Core, future research may consider providing understandings, based on the following questions:

1. How are rural educators' conceptions of local vs. federal control shaping their perspectives about local flexibility in deciding what to teach and how to teach them?
2. In what ways does the implementation of the Common Core initiative reinforce the local control and contextual understandings of community-based education?

As teachers and administrators shared their perspectives with me, I wondered about how higher education could partner with districts and structure their teacher education programs in responding to emerging trends. Future studies could focus on the following research questions:

1. What is the state of a collaborative culture between higher education and rural small school districts that would address the content knowledge and instructional needs of beginning teachers?
2. How can higher education restructure their teacher education programs to align their pedagogical models with the basic areas of Common Core to adequately prepare the next generation of teachers?

Self-Reflections

Nearly a year ago, I brought this research project before my chair and the rest of the dissertation committee to determine the "do-ability" of the study, and more importantly, what gaps the findings of the study might fill. Fortunately, I got the nod to embark on this study. At first, it appeared an exciting moment, at least, to have had one of the major hurdles cleared. However, it marked an important beginning of a journey to the "unknown", a journey full of

bumps, but ultimately leading to a success. Writing to superintendents, principals, and individual teachers whom I had never met before, yet seeking their consent to volunteer in my study was an "icebreaker." But it was gratifying experience having to have people respond to my request, expressing willingness to volunteer in my study when they could just say No!

Throughout the process of making trips to these communities, there were a lot of learnable moments for me. To recount an experience I had with one of my trips, as I was driving to visit one of the participating schools, my GPS showed that my destination was a cemetery and I thought about how complex human understanding and discoveries could become if they should unconditionally depend on technology. I have been pleased with the positive reception each of my participants gave me in my interactions with them. Out of their busy schedules, they were still able to make time with me. Schools welcomed and accepted me into their environments, and teachers welcomed me into their classrooms. And just getting the opportunity to have lunch in the school, building rapport with teaching and non-teaching staff, and sitting in class with second grade students were fun and exciting moments. I was particularly intrigued by my participants' openness to share their perspectives and to have honest conversations with me. Throughout the study process, the passion to understand and the pursuit of knowledge drew my ears and eyes closer to be a "good" listener and an observer than probably before. I appreciate how much I have been able to learn using this particular qualitative design to analyze tons of data and to make meaning out of them. But more importantly how much I have leant from participants and how their perspectives have also shaped my understanding about education reforms in general.

As I reflect on these experiences and perspectives, one thing that remains significant is that changes in education are immanent. I can appreciate how schools are increasingly coming

under pressure in search of new pedagogies to teach and assess students in a way that provides students with opportunities to apply concepts to real world situations and also to develop high-order thinking skills. I find that the whole process of the Common Core and its successful implementation is based on how effective schools are able to align all the important components (teacher training and professional development, content, Common Core-aligned curriculum and resources, instructional activities, and assessment, and accountability measures). From my own observations, any inadequacies within one or two or more of these critical areas will undermine the whole alignment process. The greatest risk, I imagine, schools can ever make is to pay less attention to the teacher development in this effort. In schools' efforts, I find that the greatest resource is the teacher. Put a good teacher in the classroom and he/she will find the material, they will adapt the materials and the resources to support instruction.

REFERENCES

Abel, M. H., & Sewell, J. (1999). Stress and burnout in rural and urban secondary school teachers. *The Journal of Educational Research, 92*(5), 287–293.

American Federation of Teachers (1995). *Making standards matter: A fifty-state progress report on efforts to raise academic standards*. Washington, DC: Author.

Annells, M. (1996). Grounded theory method: Philosophical perspectives, paradigm of inquiry, and postmodernism. *Qualitative Health Research*, 6, 379-393.

Argyris, C., & Schon, D. (1978). *Organizational learning: A theory of action perspective*. Reading, MA: Addison-Wesley.

Arnold, M. L., Newman, J. H., Gaddy, B. B., & Dean, C. B. (2005). A look at the condition of rural education research: Setting a difference for future research. *Journal of Research in Rural Education*, *20* (6).

Ayers, J. (2011). Make rural schools a priority: Considerations for reauthorizing the Elementary and Secondary Education Act. Washington, DC: Center for American Progress. Retrieved from http://files.eric.ed.gov/fulltext/ED535987.pdf

Baratz, J. C. (1980). Policy implications of minimum competency testing. In R. Jaeger & C. Tittle (Eds.), *Minimum competency achievement testing: Motives, measures, and consequences* (pp. 49-68). Berkely, CA: McCutchan.

Barley, Z. A. (2009). Preparing teachers for rural appointments: Lessons from the mid-continent. *The Rural Educator*, *30*(3), 10–15.

Barley, Z. A., & Brigham, N. (2008). *Preparing teachers to teach in rural schools* (Issues & Answers Report, REL 2008-No. 045). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. Retrieved from http://ies.ed.gov/ncee/edlabs.

Becker, P. H. (1993). Common pitfalls in published grounded theory. *Qualitative Health Research, 3*(2), 254–256.

Benoliel, J. Q. (1996). Grounded theory and nursing knowledge. *Qualitative Health Research, 6*(3), 406-428.

Bitsch, V. (2005). Qualitative research: A grounded theory example and evaluation criteria. *Journal of Agribusiness, 23* (1), 75–9.

Britell, J. K. (1980). Competence and excellence: The search for an egalitarian standard, the demand for a universal guarantee. In R. Jaeger & C. Tittle (Eds.), *Minimum competency achievement testing: Motives, measures, and consequences* (pp. 23-40). Berkely, CA: McCutchan.

Bryant, A., & Charmaz, K. (2007). *Grounded theory*. Sage: Los Angeles.

Carmichael, S. B., Martino, G., Porter-Magee, K., & Wilson, W. S. (2010). The State of state standards-and the Common Core-In 2010. Retrieved from http://edexcellence.net/sites/default/files/publication/pdfs/SOSSandCC2010_FullReportINAL_8.pdf.

Center on Education Policy (2013, December). A Research Agenda for the Common Core State Standards. Retrieved from http://www.cep-dc.org/displayDocument.cfm?DocumentID=430.

Chapman, C., Laird, J., & KewalRamani, A. (2010). Trends in high school dropout and completion rates in the United States*: 1972-2008* (NCES 2011-012). National Center for Education Statistics,

Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved December 2013 from http://nces.ed.gov/pubsearch

Charmaz, K. (2006). Constructing grounded theory: A *practical guide through qualitative analysis*. London: Sage.

Charmaz, K. (2011). Constructivist grounded theory analysis of losing and regaining a valued self. In Wertz, F. J., Charmaz, K., McMullen, L. J., Josselson, R., Anderson, R., and McSpadden, E., (eds) *Five ways of doing qualitative analysis: Phenomenological psychology* (pp.165-2000). New York, NY: The Guilford Press.

Chen, C. (2010). Numbers and types of public elementary and secondary schools from the Common Core of Data: School year 2009-10 (NCES 2011-345). U. S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubsearch

Chiovitti R. F., & Piran, N. (2003). *Rigor and grounded theory research. Journal of Advanced Nursing, 44*(4), 427-435.

Clarke, A. E. (2005). *Situational analysis: Grounded theory after the postmodern turn*. Thousand Oaks, CA: Sage.

Clarke, A. E. (2006). Feminism, grounded theory, and situational analysis. In S. Hess-Biber and D. Leckenby (eds.), *Handbook of feminist research methods*. Thousand Oaks, CA: Sage.

Cohen, D. K., & Ball, D. L. (1999). Instruction, capacity, and improvement. CPRE Research Report Series RR-43. Philadelphia, PA: Consortium for Policy Research in Education, University of Pennsylvania.

Cohen, D. K., & Harey, W. (1980). Minimums, competency testing, and social policy. In R. Jaeger & C. Tittle (Eds.), *Minimum competency achievement testing: Motives, measures, and consequences* (pp. 5-22). Berkely, CA: McCutchan.

Coladarci, T. (2007). Improving the yield of rural education research: An editor's swan song. *Journal of Research in Rural Education, 22*(3). Retrieved [date] from http://jrre.psu.edu/articles/22–3.pdf Arnold, Newman.

Coleman-Jensen, A., Gregory, C., & Singh, A. (2013). Household food security in the United States in 2013. ERR-173, U.S. Department of Agriculture, Economic Research Service, September 2014. Retrieved from http://www.ers.usda.gov/media/1565415/err173.pdf.

Corbin, J., & Strauss, A. (2008). *The basics of qualitative research* (3rd ed.) Los Angeles, CA: Sage.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process.* London: Sage.

Cutcliffe, J. R. (2000). Methodological issues in grounded theory. *Journal of Advanced Nursing*, *31* (6), 1476–1488.

Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling: Merging or clear boundaries? *Journal of Advanced Nursing, 26*, 623-630.

Daggett, E. R., & Gendron, S. (2010). Common Core State Standards initiative: Classroom implications for 2014. Rexford, NY: International Center for leadership in Education. Retrieved from http://www.leadered.com/pdf/Common%20Core%20Standards%20Paper%20FINAL.pdf

Darling-Hammond, L. (1990). *Teacher professionalism: Why and how? Schools as collaborative cultures: Creating the future now.* Bristol, PA: The Falmer Press.

Darling-Hammond, L., & Adamson, F. (2010). Beyond basic skills: The role of performance assessment in achieving 21st century standards of learning. Stanford, CA: Stanford University, Stanford Center for Opportunity Policy in Education.

Darling-Harmmond, L., & Wise, A. E. (1985). Beyond standardization: State standards and school improvement. *The Elementary School Journal*, *85*(3), 315-36.

Devers, K. J., & Frankel, R. M. (2000). Study design in qualitative research: Sampling and data collection strategies. *Education for Health, 13*(2), 263-271.

Dingman, S., Teuscher, D., Newton, J. A., & Kasmer, L. (2013). Common mathematics standards in the United States: A comparison of K-8 state and Common Core Standards. *The Elementary School Journal, 113*(4), 541-564.

Education First & EPE Research Center (2013). Moving forward: A national perspective on states' progress in Common Core state standards implementation planning http://www.edweek.org/media/movingforward_ef_epe_020413.pdf

Eilers, L. H., & D'Amico, M. (2012). Essential leadership elements in implementing Common Core State Standards. *Delta Kappa Gamma Bulletin*, *78*(4), 46-50.

Ellis, C., & Bochner, A. P. (2000). Autoethnography, personal narrative, reflexivity: Researcher as subject. In N. K. Denzin & Y. S. Lincoln (Eds.) *The handbook of qualitative research* (2nd ed., pp. 733-768). Newbury Park, CA: Sage.

Farber, N. K. (2006). Conducting qualitative research: A practical guide for school counselors. *Professional School Counseling, 9,* 367-375.

Farbman, D., Goldberg, D., & Miller, T. (2014). Redesigning and expanding school time to support Common Core implementation. Washington, DC: Center for American Progress.

Farmer, T. W., Leung, M. C., Banks, J. B., Schaefer, V., Andrews, B., & Murray, R. A. (2006). Adequate yearly progress in rural schools and rural low-income schools. *Rural Educator*, 1–7.

Finlay, L. (2002). Negotiating the swamp: the opportunity and challenge of reflexivity in research practice. *Qualitative Research, 2*(2), 209-230.

Fuhrman, S. H. (2004). Less than meets the eye: Standards, testing and fear of federal control. In N. Epstein (Ed.) *Who's in charge here? The tangled web of school governance and policy* (pp.131-163). Washington, DC: Brookings Institution.

Fullan, M. (2006). Change theory. A force for school improvement. The Centre for Strategic Education (CSE). Seminar Series Paper No. 157. Retrieved from http://www.catalyst–chicago.org/sites/catalystchicago.org/files/michael_fullen_change_theory.pdf.

Gage, L. N. (1989). The paradigm wars and their aftermath: A historical sketch of research on teaching since. *Educational Researcher*, *18* (7), 4-10.

Gamson, D. A., Lu, X., & Eckert, S. A. (2013). Challenging the research base of the Common Core State Standards: A historical reanalysis of text complexity. *Educational Researcher, 42*(7), 381-391.

Glaser, B. (1978). *Theoretical sensitivity*. Sociology Press: Mill Valley, CA.

Goals 2000: Educate America Act, Pub. L. No. 103-227, 108 Stat. 125 (1994).

Goertz, M. E., & Duffy, M. C. (2001). Assessment and accountability systems in the 50 states: 1999-2000 RR-046. Philadelphia: University of Pennsylvania, Consortium for Policy Research in Education.

Goertz, M. E. (2007, June). Standards-based reform: Lessons from the past, directions for the future. Paper presented at Clio at the Table: A Conference on the Uses of History to Inform and Improve Education Policy, Brown University.

Greene, M. (1980). Response to competence and excellence: The search for an Egalitarian standard, the demand for a universal guarantee. In R. Jaeger & C. Tittle (Eds.), *Minimum competency achievement testing: Motives, measures, and consequences* (pp. 40–48). Berkely, CA: McCutchan.

Grossman, T., Reyna, R., & Shipton, S. (2011). Realizing the potential: How governors can lead effective implementation of the Common Core State Standards. National Governors Association. Retrieved from http://www.nga.org/files/live/sites/NGA/files/pdf/1110CCSSIIMPLEMENTATIONGUDE.PDF.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.

Haar, J. M. (2009). Retaining experienced, qualified teachers: The principal's role. *The Rural Educator*, 28-34.

Hall, W. A. & Callery, P. (2001). Enhancing the rigor of grounded theory: Incorporating reflexivity and relationality. *Qualitative Health Research, 11*(2), 257-272.

Hamilton, L, S., Stecher, B, M., & Yuan, K. (December 2008). Standards-Based Reform in the United States: History, Research, and Future Directions. Paper commissioned by the Center on Education Policy, Washington, D.C. Retrieved from http://www.rand.org/content/dam/rand/pubs/reprints/2009/RAND_RP1384.pdf

Hamilton, L. S., Stecher, B. M., & Yuan, K. (2012). Standards-based accountability in the United States: Lessons learned and future directions, *Education Inquiry*, 3, 149-170.

Hardré, P. L., Sullivan, D. W., & Roberts, N. (2008). Rural teachers' best motivating strategies: A blending of teachers' and students' perspectives. *The Rural Educator*, 19-31.

Harmon, H. L., Gordanier, J., Henry, L., & George, A. (2007). Changing teaching practices in rural schools. *The Rural Educator*, 8–11.

Hamilton, L. S., Stecher, B. M., & Yuan, K. (2012). Standards–based accountability in the United States: Lessons learned and future directions. *Education Inquiry, 3* (2), 149–170.

Heath, H. & Cowley, S. (2004). Developing a grounded theory approach: A comparison of Glaser and Strauss. *International Journal of Nursing Studies*, *41*, 141-150.

Heise, M. M. (1994). Goals 2000: Educate America Act: The Federalization and Legalization of Educational Policy, 63 Fordham L. Rev. 345. Retrieved from http://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=3133&context=flr

Heron, J., & Reason, P. (1997). A participatory inquiry paradigm. *Qualitative Inquiry, 3*(3), 274.

Hoepfl, M. C. (1997). Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education, 9*(1), 47-63.

Hopkins, D., & Reynolds, D. (2001). The past, present, and future of school improvement. Towards the third age. *British Educational Journal, 27*(4), 459-475.

Hoyle J. R., & Kutka, T. M. (2008). Maintaining America's egalitarian edge in the 21st century: Unifying K-12 and postsecondary education for the success of all students. *Theory Into Practice, 47*, 353-362.

Huitt, W. (2009). Humanism and open education: Educational psychology Interactive. Valdosta, GA: Valdosta State University. Retrieved from http://www.edpsycinteractive.org/topics/affect/humed.html

Jackson, A., & Gaudet, L. (2010). Factories: Getting rid of learning. *American Journal of Business Education, 3*(1), 61-64.

Jimerson, L. (2005). Special challenges of the "No Child Left Behind" Act for rural schools and districts. *Rural Research Brief*, 1-4.

Jenkins, S., & Agamba, J. J. (2012). The Common Core State Standards: From national initiative to instructional practice. *Proceedings of the Academy of Educational Leadership International Conference, 17*(1), 23-26.

Jennings, J. (2009, September). Calls for common education standards have failed in the past. Is the time right to consider them again? *American School Board Journal*, 46-47.

Jennings, J. (2012). Reflections on a half century of school reform: Why have we fallen short and where do we go from here? Washington D. C: Center of Education Policy. Retrieved from http://files.eric.ed.gov/fulltext/ED528905.pdf

Johnson, J., & Strange, M. (November 2009). *Why rural matters 2009: State and regional challenges and opportunities.* A report of the Rural School and Community Trust Policy Program. Washington, D.C. Retrieved from http://files.eric.ed.gov/fulltext/ED516650.pdf.

Jordan, T. S., & Jordan, F. K. (Fall 2004). Rural schools under scrutiny. *Rural Research Brief.* Retrieved from http://www.ruraleducator.net/archive/26–1/26–1_Brief.pdf.

Jordan, J. L., Kostandini, G., & Mykerezi, E. (2012). Rural and urban high school dropout rates: Are they different? *Journal of Research in Rural Education, 27*(12), 1-21.

Johnson, J., Showalter, D., Klein, R., & Lester , C. (2014). *Why rural matters 2013-2014: The condition of rural education in the 50 states.* Washington, DC: Rural School and Community Trust. Retrieved from http://www.ruraledu.org/user_uploads/file/2013-14-Why-Rural-Matters.pdf.

Kaestle, C. F., & Smith, M. S. (1982). The federal role in Elementary and Secondary Education, 1940-1980. *Harvard Educational Review*, *52*(4), 384-408.

Kelchtermans, G. (2005). Teachers' emotions in educational reforms: Self-understanding, vulnerable commitment and micropolitical literacy. *Teaching and Teacher Education, 21*(8), 995-1006.

Killion, J. (2012). *Establishing time for professional learning*. Oxford, OH: Learning Forward.

King, J. E. (2011). Implementing the Common Core State Standards: An action agenda for higher education. American Council on Education, Leadership and Advocacy. Retrieved from http://www.acenet.edu/news–room/Documents/Implementing–the Common Core–StateStandards–2011.pdf

Kober, N., & Rentner, D. S. (2011). States' progress and challenges in implementing Common Core Standards. Washington, DC: Center on Education Policy. Retrieved from KoberRentnerCommonCoreDistrict_Report_091411.pdf.

Kober, N., & Rentner, D. S. (2012).Year two of implementing the Common Core State Standards: States' progress and challenges. Washington, DC: Center on Education Policy. Retrieved from http://www.cep–dc.org/displayDocument.cfm?DocumentID=391

Kober, N., McIntosh, S., & Rentner, D. S. (2013).Year 3 of Implementing the Common Core State Standards. Professional Development for Teachers and Principals. Washington, DC: Center on Education Policy. Retrieved from http://www.cepdc.org/displayDocument.cfm?DocumentID=422.

Krauss, E. S. (2005). Research paradigms and meaning making: A primer. The *Qualitative Report, 10* (4), 758-770.

Krefting, L. (1990). Rigor in qualitative research: The assessment of trustworthiness. *American Journal Occupational Therapy, 45*(3), 214-222.

Laird, J., DeBell, M., & Chapman, C. (2006). *Dropout rates in the United States: 2004 (NCES* Publication No. 2007-024). Retrieved from National Center for Education Statistics website: http://nces.ed.gov/pubs2007/2007024.pdf

Lambert, L. (200). Building leadership capacity in schools. Australian Council for Educational Research. ACEReSearch, APC Monographs. Retrieved from http://research.acer.edu.au/cgi/viewcontent.cgi?article=1000&context=apc_monographs

Larson, M. R., & Leinwand, S. (2013). Prepare for more realistic. *Mathematics Teacher*, *106* (9), 656-659.

Lee, J. (2002). Racial and ethnic achievement gap trends: Reversing the progress toward equity? *Educational Researcher*, *31*(1), 3-12.

Lee, J. (2006). Tracking achievement gaps and assessing the impact of NCLB on the gaps: An in-depth look into national and state reading and mathematics outcome trends. Cambridge, MA: The Civil Rights Project at Harvard University. Retrieved from http://civilrightsproject.ucla.edu/research/k–12–education/integration anddiversity/tracking-achievement-gaps-and-assessing-the-impact-of-nclb-on-the gaps/lee tracking-achievement-gaps-2006.pdf.

Levers, M. D. (2013). Philosophical paradigms, Grounded theory, and perspectives on emergence. SAGE Open, 1-6. DOI: 10.1177/2158244013517243.

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.

Linn, R. L. (April 2005). Test–based educational accountability in the era of No Child Left Behind (CSE Report 65). Los Angeles: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Retrieved from http://files.eric.ed.gov/fulltext/ED488732.pdf

Lockwood, A. (1998). *Standards: Policy to practice*. Menlo Park, CA: Corwin Press.

Lowe, J. M. (2006). Rural education: Attracting and retaining teachers in small schools. The *Rural Educator*, 28-32.

Mackenzie, N. M., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, *16*(2).

Malloy, W. W., & Allen, T. (2007).Teacher retention in a teacher resiliency-building rural school. *The Rural Educator*, *28*(2), 19-27.

Marzano, R. J., & Kendall, J. S. (1998).*Implementing standards–based education: A guide for the classroom teacher*. Washington, DC: National Education Association.

Mathis, W. J. (2010). The "Common Core" Standards Initiative: An Effective Reform Tool? Boulder and Tempe: Education and the Public Interest Center & Education Policy Research Unit. Retrieved from http://epicpolicy.org/publication/common–corestandards

Maxwell, J.A. (2005). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage.

Maxwell, J. A. (2008). Designing a qualitative study. In L. Bickman and D. J. Rog (Eds.), *The Handbook of Applied Social Research Methods*, second edition. Thousand Oaks CA: Sage Publications.

McDonnell, L. M. (2012). Educational accountability and policy feedback. *Educational Policy, 27*(2) 170-189.

McLaughlin, M. W., Shepard, L. A, & O'Day, J. A. (1995). Improving education through standards-based reform, Report by the National Academy of Education panel on standards-based education reform. National Academy of Education. Retrieved from http://www.reading.org/Publish.aspx?page=bk889

introduction.html&mode=retrieve&D=10.1598/0814146767.intro&F=bk889 introduction.html&key=F19C180D–D3D5–4B46–A565F04117B76F92.

McMurrer, M., & Frizzell, M. (September 2013). Year 3 of implementing the Common Core State Standards: State education agencies' views on postsecondary involvement. Washington, DC: Center on Education Policy. Retrieved from http://www.cepdc.org/displayDocument.cfm?DocumentID=425.

MetLife (2011, May). The MetLife Survey of the American Teacher: Preparing Students for College and Careers. Retrieved from www.metlife.com/assets/cao/contributions/foundation/americanteacher/MetLife_Teache_Survey_2010.pdf.

Mills, J. I. (2008). A legislative overview of No Child Left Behind. In T. Berry & R. M. Eddy (Eds.), *Consequences of No Child Left Behind for educational evaluation*. *New Directions for Evaluation, 117*, 9-20.

Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, *5*(1).

Mitchell, C., & Sackney, L. (2000). *Profound improvement: Building capacity for a learning community*. Lisse, NL: Swets & Zeitlinger.

Mitchell, C., & Sackney, L. (2008). *Sustainable Improvement: Building Learning Communities that Endure.* Rotterdam, Taipei: Sense Publishers,

Monk, D. (2007). Recruiting and retaining high-quality teachers in rural areas. *Future of Children*, *17*(1), 155-174.

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology, 52*, 250-260.

Mulhall, A. (2003). In the field: notes on observation in qualitative research. *Journal of Advanced Nursing, 41*(3), 306-313.

Murphy, J. T. (1971). Title I of ESEA: The politics of implementing federal education reform. *Harvard Educational Review*, *41*(1), 35-78.

National Council of Teachers of Mathematics (2013). Prepare for more realistic results. *Teaching Children Mathematics, 19*(9), 533-537.

National Governors Association & Council of Chief State School Officers, (2010). Common Core State Standards initiative: Frequently asked questions. National Governors Association Center for Best Practices, Council of Chief State School Officers. Washington; D.C. Retrieved from http://www.corestandards.org/assets/CoreFAQ.pdf

National Governors Association, Council of Chief State School Officers, & Achieve, Inc (2008). Benchmarking for success: Ensuring U.S. students receive a world-class education. Washington, DC: Author. Retrieved from http://www.corestandards.org/assets/0812BENCHMARKING.pdf

New York State Archives (2009, November). Federal education policy and the states, 1945-2009: A brief synopsis. States' Impact on Federal Education Policy Project. New York State Archives; Albany. Retrieved from http://www.archives.nysed.gov/edpolicy/altformats/ed_background_overview_essay.pdf

Nichols, S., & Berliner. D. C. (2007). *Collateral damage: How high–stakes testing corrupts America's schools*. Cambridge, MA: Harvard Education Press.

No Child Left Behind Act of 2001, Pub. L. No. 107–110. Retrieved from http://www2.ed.gov/policy/elsec/leg/esea02/107–110.pdf

North Dakota Department of Public Instruction. State superintendent approves new standards. Press release on Monday, June 20, 2011. Retrieved from http://www.dpi.state.nd.us/news/2011/press_release6_20_2011.pdf

Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Phillips, V., & Wong, C. (2010).Tying together the Common Core of standards, instruction and assessment. *Phi Delta Kappan, 91*(5), 37-42.

Policy Insights (2011). The Common Core State Standards: Implications for higher education in the west. Western Interstate Commission for Higher Education. Retrieved from http://www.wiche.edu/info/publications/PI–CommonCoreStateStandards.pdf

Policy Points (2013). A nation at risk? ASCD Educator Advocates. Retrieved from http://www.ascd.org/ASCD/pdf/siteASCD/publications/policypoints/PolicyPoints_Common_Core_State_Standards.pdf.

Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology, 52*,126-136.

Ponterotto, J. G. & Grieger, I. (2007). Effectively communicating qualitative research. *The Counseling Psychologist. 35,* 404-430.

Porter, W., Riley, R., Towne, L., Chalk S. M., Hightower, A. M., Lloyd, S. C., Mathematicsews, C. A., & Swanson, C. B. (February 2013). Moving forward: A national perspective on states' progress in Common Core State Standards implementation planning (Education Retrieved from http://www.edweek.org/media/movingforward_ef_epe_020413.pdf.

Powell, D., Higgins, H. J., Aran, R., & Freed, A. (2009). Impact of No Child Left Behind on curriculum and instruction in rural schools. *The Rural Educator, 31*(1), 19-28.

Randel, B., Moore, L., & Blair, P. (2008). *High school dropout and graduation rates in the Central Region* (Issues & Answers Report, REL 2008-No. 040). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Central. Retrieved from December 2013 from http://ies.ed.gov/ncee/edlabs.

Ravitch, D. (1995). *National standards in American education: A citizen's guide*. Washington, DC: Brookings.

Reeves, C. (2003). Implementing the No Child Left Behind Act: Implications for rural schools and districts. Naperville (IL): North Central Regional Educational Laboratory. Retrieved from http://www.NCLB_RuralPolicyBrief.pdf

Regional Educational Laboratory (2011, December). Assessing teacher readiness in the central. Denver: McREL retrieved from http://www.dpi.state.nd.us/standard/problematic_standards.pdf

Rieke, J. L., Safratowich, M., & Markland, M. J. (2009). Discover health services near you! The North Dakota story: Part I. *Consum Health Internet*, *13*(2), 143–155.

Sandelowski, M., Holditch–Davis, D., & Harris, B. G. (1992). Using qualitative and quantitative methods: The transition to parenthood of infertile couples. In J. F. Gilgun, K. Daly, & G. Handel (Eds.), *Qualitative methods in family research* (pp.301-322). Newbury Park, CA: Sage.

Schuster, B. S. (2012). Highly qualified teachers: Moving forward from Renee v. Duncan. *Harvard Journal of Registration*, *48*, 152–173.

Schwandt, T. A. (1994). Constructivist, interpretivist approaches to human inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 118-137). Thousand Oaks, CA: Sage.

Schwartz, R. B., & Robinson, R. A. (2000). Goals 2000 and the standards movement. In D. Ravitch (Ed). *Brookings papers on education policy*. Washington, D.C.: Brookings Institution Press.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, *22*, 63-75.

Shepard, L. A. (2008).A brief history of accountability testing, 1965-2007. In K. R. Ryan & A. Shepard (Eds), *The future of test-based educational accountability* (pp.25-46). New York: Routledge.

Shepard, L., Davidson, K., & Bowman, R. (2011). How middle-school mathematics teachers use interim and benchmark assessment data. (CRESST Report 807). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).

Smith, M. S., & O'Day, J. (1991). *Putting the pieces together: Systemic school reform* (CPRE Policy Brief, RB-06-4/91). New Brunswick, NJ: Consortium for Policy Research in Education.

Sparks, D., & Hirsh, S. (1997). *A new vision for staff development*. Alexandria, VA: Association for Supervision and Curriculum Development.

Spillane, J. P., & Louis, K. S. (2002). School improvement process and practices: Professional learning for building instructional capacity. In J. Murphy (Ed).*The educational leadership challenge: Redefining leadership for the 21st century* (pp. 85-104).Chicago: University of Chicago Press.

Spillane, J. P. (2004). *Standards deviation: how schools misunderstand education policy. Harvard University Press*: Massachusetts.

Stake, R. E. (2010). *Qualitative research: Studying how things work*. The Guilford Press: New York, London.

Starks, H., & Trinidad, S. B. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research*. *17* (10), 1372-1380.

Stern, P. N. (2007). On solid ground: Essential properties for growing grounded theory. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 114-126). London: Sage.

Stoll, L. (1999). Realizing our potential: Building capacity for lasting improvement. *School Effectiveness and School Improvement, 10* (4), 503–532.

Stoll, L. (2009). Capacity building for school improvement or creating capacity for learning? A changing landscape. *J Educ Change,* 10, 115-127.

Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change, 7*(4), 221-258.

Strange, M. (2011). Finding fairness for rural students. *Kappan Magazine*, *92*(6), 8-15.

Strange, M., Johnson, J., Showalter, D., & Klein, R. (2012). *Why rural matters 2011-12: The Condition of Rural Education in the 50 States*. A Report of the Rural School and Community Trust Policy Program. Washington, D.C. Retrieved from http://files.ruraledu.org/wrm2011–12/WRM2011–12.pdf

Stratton, P. (1997). Attributional coding of interview data: Meeting the needs of long-haul passengers. In N. Hayes (Ed.), *Doing qualitative analysis in psychology* (pp.115-141). Hove, UK: Psychology Press.

Strauss, A., & Corbin, J., (1994). Grounded theory methodology: an overview. In: Denzin, N.K., Lincoln, Y.S. (Eds.), Handbook of Qualitative Research. Sage, Thousand Oaks, pp. 273-285.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for Developing Grounded Theory* (2nd edition).Thousand Oaks, CA, USA: Sage.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage.

Superfine, B. M. (Winter 2011). Stimulating school reform: The American Recovery and Reinvestment Act and the shifting federal role in education. *Missouri Law Review, 76*(1),1–84.

Supovitz, J., Daly, A., & Del Fresno, M. (2015, Feb 23). #commoncore Project. Retrieved from http://www.hashtagcommoncore.com.

Taylor, J., Stecher, B., O'Day, J., Naftel, S., & Le Floch, K. C. (2010). State and local implementation of the No Child Left Behind Act (Volume IX-Accountability under NCLB: Final Report). Washington, DC: U.S. Department of Education. Retrieved from http://www2.ed.gov/rschstat/eval/disadv/nclb–accountability/nclb–accountability_final.pdf

The Bismark Trubune (February 2015). Committee rejects bill to eliminate Common Core. Retrieved from http://bismarcktribune.com/news/local/education/committee-rejects-bill-to-eliminate-common-core/article_93eb8668-a4df-5f48-9a10-7d1437812ff3.html.

The National Commission on Excellence in Education. (1985). A nation at risk: The imperative for educational reform. Washington, DC: National Commission on Excellence in Education. Retrieved December 18, 2013, from http://datacenter.spps.org/uploads/SOTW_A_Nation_at_Risk_1985.pdf

Thompson, T. G., & Barnes, R. E. (2007). Beyond NCLB: Fulfilling the promise to our nation's children. The Commission on No Child Left Behind. Washington, DC: The Aspen Institute.

Troia, G. A., & Olinghouse, N. G. (2013). The Common Core State Standards and evidence based educational practices: The case of writing. *School Psychology Review, 42* (3), 343-357.

U.S. Census Bureau (2010). 2010 census data**.** Online access at http://www.census.gov/2010census/popmap/ipmtext.php?fl=38

U.S. Department of Education (2001).The condition of education 2001. Office of Educational Research and Improvement, NCES 2001-072. Retrieved from http://nces.ed.gov/pubs2001/2001072.pdf

Watt, D. (2007). On becoming a qualitative researcher: The value of reflexivity. *The Qualitative Report, 12* (1), 82-101.

Webb, N. L. (2006). Identifying content for student achievement tests. In S. M. Downing & T. M. Haladyna (Eds.), *Handbook of test development*, pp. 155-180. Mahwah, NJ: Lawrence Erlbaum Associates.

Weldon, T. (2012). States making early steps in journey toward Common Core State Standards implementation. *The Council of State Governments,* 485-485.

Wimpenny, P., & Gass, J. (2000). Interviewing in phenomenology and grounded theory: Is there a difference? *Journal of Advanced Nursing*, *31*(6), 1485-1492.

Wuest, J. (1995). Feminist grounded theory: An exploration of the congruency and tensions between two traditions in knowledge discovery. *Qualitative Health Research, 5*(1), 125-137.

Youngs, P., & King, M. (2002). Principal leadership for professional development to build school capacity. *Educational Administration Quarterly*, *5*, 643–670.

APPENDICES

Appendix A
Informed Consent

PROJECT TITLE: Listservs, Learning Communities, and Baby Steps: North Dakotan Rural Educators and the Implementation of the Common Core State Standards

PRINCIPAL INVESTIGATOR: Emmanuel Mensah, Graduate Student, UND

PHONE NUMBER: 7015784351

DEPARTMENT: Educational Foundations and Research

A person who is to participate in the research must give his or her informed consent to such participation. This consent must be based on an understanding of the nature and risks of the research. This document provides information that is important for this understanding. Research projects include only subjects who choose to take part. Please take your time in making your decision as to whether to participate. If you have questions at any time, please ask.

Project Description

The state of North Dakota is among the 45 states that have adopted the CCSS for both English language arts/literacy and mathematics. By April 2015 school year, the state assessment system will be based on the new standards. However, it is not clear how the implications for meeting these conditions will affect instructions in small/rural school districts, given other conditions which do not allow for prompt and continuing professional collaboration efforts and the sharing of essential knowledge and resources. The purpose of this study will be to understand how teachers and administrators in small /rural school districts in the state of ND are building the capacity in implementing the Common Core standards. You are being invited to participate in the research as a subject. If you agree to participate, you will be engaged in at least two different sessions of one-on-one interview with each approximately lasting 45 minutes. Interview sessions will be held in a month interval.

What will happen during this study?

If you choose to participate you will be contacted to set up the interview dates and the time at your own convenience. Interview sessions will be audio-recorded. You are free to not answer any question during the interview. The audio recordings will be transcribed and if you choose to, they will be returned to you to ensure accuracy of the written document. No personal identification will be used on any written document and all descriptions of persons or places will be anonymous. Data shall be analyzed and presented in an aggregate description to ensure your anonymity.

Benefits

Your participation in the study offers no direct benefit to you. Neither will you be paid for being in this study, nor will you incur any costs for being in this research study However, knowledge gained from the study may contribute to our understanding how on the current state of the public education field in small or rural communities is and how it will inform the research community about what professionals identify as critical areas in their own training for their success in the implementation of the CCSS.

Risks
There are no known or foreseeable risks involved in participating in this study.

Confidentiality
The University of North Dakota and the principal investigator are receiving no payments from other agencies, organizations, or companies to conduct this research study. Any information from this study that can identify you will remain confidential to the extent permitted by law and will be disclosed only with your permission or as required by law. In any report about this study that might be published, you will not be identified and that results will be summarized such that you cannot be identified. Interview transcripts will be kept anonymous. You will have the right to review and edit all transcripts. All data and consent forms will be kept in separate locked cabinets for a minimum of 3 years after the completion of the study and will only be accessible to the principal investigator and his advisory committee.

Subject's Rights
Your participation in this research project is voluntary. You have the right to ask questions at any time. You may also refuse to participate or withdraw your consent at any time without penalty, prejudice of any kind, or loss of benefits to which you may be entitled. Your decision whether or not to participate will not affect your current or future relations with the University of North Dakota.

If you have any questions about the research project, please feel free to ask or call the Principal Investigator, Emmanuel Mensah, at (701) 5784351 or e-mail him at emmanuel.mensah@my.und.edu or call the Principal Investigator's advisor, Kathleen W. Gershman (Prof.) at (701) 777-3157 or email her at kathleen.gershman@email.und.edu. If you have questions regarding your rights as a research subject, or if you have any concerns or complaints about the research, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279. Please call this number if you cannot reach research staff, or you wish to talk with someone else.

Documentation of Subject Consent
Federal laws require that your informed consent is obtained before participating in a research project as a subject. What you are being asked to sign below is a confirmation that the nature and purpose of the research outlined above has been explained to you, and that all your questions have been answered in a satisfactory manner. Also, you understand that your participation is voluntary. You hereby freely consent to take part in this research project. You will receive a copy of this form.

_____	_____	_____
Subject's Name	Signature	Date

Appendix B
Letter of Request

Dear Sir/Madam,

My name is Emmanuel Mensah and I am a doctoral student in the Department of Educational Foundations and Research at the University of North Dakota. I am writing to request your permission to conduct research in your school district to learn how administrators and teachers in small or rural schools are implementing the Common Core State Standards (CCSS).

As you know, North Dakota has adopted the Common Core standards for both English language arts/literacy and mathematics. As the state and school districts prepare educators to align local instruction and curriculum with the new standards, it is not clear how the instructional and the curricula changes affect small or rural schools. For example, are there conditions which might affect collaboration efforts within and across rural school districts? To find answers to this and other related questions, I would like to interview both administrators and teachers charged with this responsibility.

I hope to do this study from June, 2014 through December, 2014. If you grant me the permission, I will arrange to hold interviews with teachers and administrators on the days and times that will not interfere with their normal class activities. Interview sessions will be expected to last approximately 45 minutes. I hope to secure your assistance in identifying schools and participants for me to contact.

Throughout the study process, the name of the schools, administrators, and teachers will be changed to preserve the anonymity of the schools and the participants. I will tape-record discussions to preserve the exactness of participants' thoughts and opinions for data analysis, however, any information that will be obtained from participants will be reported in the aggregate. Responses will not be linked to participants' names or positions or the name of the school in any report of this study.

If you have any questions and concerns about this study, please feel free to contact me at (701) 5784351 or e-mail me at emmanuel.mensah@my.und.edu. You may also contact my advisor, Dr. Kathleen W. Gershman at (701) 777-3157 or kathleen.gershman@email.und.edu. If you have questions regarding participants' rights as research subjects, or if you have any concerns about the research, you may contact the University of North Dakota Institutional Review Board (IRB) at (701) 777-4279.

I would be very grateful to have your permission to conduct my study in your school district, and I would be happy to share a copy of my final dissertation with you.

I would need a letter of support from your office, as required by the IRB, permitting me to undertake the study in your school district.

Thank you.

Sincerely,

…….

Emmanuel Mensah

Appendix C
Teacher Recruitment Letter

Dear Sir/Madam,

My name is Emmanuel Mensah and I am a doctoral student studying Educational Foundations and Research at the University of North Dakota. l am interested in researching how administrators and teachers in small or rural schools are developing the capacity to implement the Common Core State Standards (CCSS).

North Dakota adopted the Common Core standards in English and Mathematics in June, 2010. As the school districts prepare educators for this new initiative, I am interested in understanding how the curriculum and instructional changes affect collaboration efforts within and across rural school districts. For example, are there conditions which might affect collaboration efforts in the implementation of the new standards? As a teacher, your experiences and perspectives about the capacity to implement the new standards would be very valuable to me.

If you choose to participate in my study, I will contact you to set up an interview. I hope to do two interviews approximately a month apart.

If you have any questions and concerns about this study, please feel free to contact Emmanuel Mensah at (701) 5784351 or e-mail him at emmanuel.mensah@my.und.edu or call the Principal Investigator's advisor, Kathleen W. Gershman (Prof.) at (701) 777-3157 or email her at kathleen.gershman@email.und.edu. If you have questions regarding participants' rights as research subjects, or if you have any concerns or complaints about the research, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279. Please call this number if you cannot reach research staff, or you wish to talk with someone else.

Please confirm your willingness to participate in this study by replying to this email.

I count on your co-operation.

Thank you.

Emmanuel Mensah

…….

Appendix D
Principal Recruitment Letter

Dear Sir/Madam,

My name is Emmanuel Mensah and I am a doctoral student studying Educational Foundations and Research at the University of North Dakota in Grand Forks. l am interested in researching how administrators and teachers in small or rural schools are developing the capacity to implement the Common Core.

North Dakota adopted the Common Core standards in English and Mathematics in June, 2010. As the school districts prepare educators for this new initiative, I am interested in understanding how the curriculum and instructional changes affect collaboration efforts within and across rural school districts. For example, are there conditions which might affect collaboration efforts within and across rural school districts? As an administrator your experiences and perspectives about the capacity to implement the new standards would be very valuable to me.

If you choose to participate in my study, I will contact you to set up an interview. I hope to do two interviews approximately a month apart.

If you have any questions and concerns about this study, please feel free to contact Emmanuel Mensah at (701) 5784351 or e-mail him at emmanuel.mensah@my.und.edu or call the Principal Investigator's advisor, Kathleen W. Gershman (Prof.) at (701) 777-3157 or email her at kathleen.gershman@email.und.edu. If you have questions regarding participants' rights as research subjects, or if you have any concerns or complaints about the research, you may contact the University of North Dakota Institutional Review Board at (701) 777-4279. Please call this number if you cannot reach research staff, or you wish to talk with someone else.

Please confirm your willingness to participate in this study by replying to this email.

I count on your co-operation.

Thank you.

Emmanuel Mensah

…….

Appendix E
Teacher Interview Guide

1. Tell me about what you teach?
2. As a teacher, what do the Common Core Standards mean to you?
3. Have you started teaching the new standards?
4. How are the requirements of the new standards similar or different from previous standards?
5. What kinds of instructional and curricular changes do you have to make to teach students the new standards?
6. How prepared are you in the implementation of these curriculum and instructional changes?
7. How are you making these changes?
8. Tell me about the training that you are receiving to help you teach the new standards.
9. How are these professional training being organized for you?
10. You think you are receiving enough training in aligning instructional and curriculum contents with the new standards?
    a. In which areas of the curriculum and instruction that you think you have been adequately prepared?
    b. How about areas that you think you need more training?
11. What resources and support are available to you as you begin teaching the new standards?
12. What other resources and support do you think you need to implement these changes in your teaching?
13. What challenges are you facing in the teaching of the new standards in your school?
14. How do you think these challenges can be addressed?

Appendix F
Teacher Interview Guide

The following questions guided the administrator interview sessions:

1. Tell me about what you do as an administrator?
2. As an administrator, what do the Common Core Standards mean to you?
3. Have you started implementing the changes in the instructional and curriculum decisions?
4. How are the requirements of the new standards similar or different from previous standards?
5. What kinds of instructional and curriculum changes do you expect teachers to make in order to teach students the new standards?
6. What role do you play in making these instructional and curriculum changes?
7. Tell me about the training you are receiving about the new standards.
8. How are you sharing these implementation strategies with teachers in your school?
9. Who provides these training? How are they being organized for you?
10. You think the amount of training you have received or receiving in the implementation of the new standards is adequate?
    c. In which areas of curricular and instruction that you think you have adequately been prepared?
    d. How about areas that you think you need more training?
11. What resources and support are available to you as your school begins teaching the new standards?
12. What other resources and support do you think you need to implement these changes in your teachings
13. What challenges are you facing in the implementation of the new standards in your school?
14. How do you think these challenges can be addressed?

Appendix G

Follow-up questions

A need for additional training has been established,

a. What is missing in these forms of training?
b. At this point of the implementation of the standards what form should training take?
c. What specific areas should these additional trainings target?
d. Are opportunities to network with other educators important at the state level?

Resources and Curriculum

a. Resource-gap, how is it affecting implementation strategies?
b. What can be done as schools await standards-aligned curriculum?

Implementation strategies

a. How best could implementation strategies be shared? (e.g., between classrooms, schools, districts, and across state-level)

Student Assessment

a. How are the demands of the Common Core standards shaping student assessment format? (formative and summative)
b. Is there a shift in meaning of proficiency with the smarter balanced test?
c. What would be the significance of students' outcome in the smarter balanced? (e.g., teacher & Administrator evaluation, funding)