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THE IMPACT OF COMMON CORE STATE STANDARDS ON
CROSS-CURRICULUM INSTRUCTION AND ON FORMAL ASSESSMENT

by

Sherrie L. Birts

Dissertation

Submitted to the Faculty of

Olivet Nazarene University

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the Degree of

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in

Ethical Leadership

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THE IMPACT OF COMMON CORE STATE STANDARDS ON
CROSS-CURRICULUM INSTRUCTION AND ON FORMAL ASSESSMENT

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Dissertation

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DEDICATION

This dissertation is dedicated to my beloved mother, Maude Birts, whose sacrifice, love, support, and understanding were at the heart of my success; to my brother, Owen Birts, III and my best friend, Kim Echols, who were my left hand at all time. This dissertation is also dedicated to my aunt and uncle, Marguerite and James Simmons, for their continuous encouragement. This accomplishment was made possible because of their steadfast confidence and belief in me.

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ABSTRACT

This study investigated how the implementation of the Common Core State Standards (CCSS) affected cross-curriculum instruction, student achievement and the learning environment within an urban high school. The researcher compared performance data based on State Standards with performance data based on the CCSS and examined teachers' perceptions regarding the educational influence of CCSS. A mixed method design was utilized to conduct this study. Data was collected using PSAT test scores and academic grades earned by the Classes of 2010 and 2014 and a semi-structured survey with a 5-point Likert scale and an open-ended short answer format. The results of comparing the performance of the Class of 2010 according to IL State Standards with the Class of 2014 performance data based on Adequate Yearly Progress (AYP) under the CCSS did not yield a significant change in student's achievement. Also, the teachers' perceptions learned through the administration of the survey indicated an environment of educators that were not in full support of CCSS. Based on responses to several open-ended questions, there was a significant measure of resistance that indicated concern over the additional content that teachers were required to cover under CCSS, which forced educators to increase the pace of teaching, and thus, decrease the time allotted for individual instruction.

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CHAPTER I

INTRODUCTION

As a result of the continued emphasis on education reform, today's educators were faced with a myriad of challenges involving high-stakes testing, assessment systems, school improvement and accountability standards in order to improve educational outcomes for students. The growing debate on how to improve these outcomes and improve student achievement was largely rooted in the No Child Left Behind (NCLB) Act, introduced in 2001 by President George W. Bush and reauthorized in 2010 by President Barack Obama. The NCLB Act mandated that schools meet certain state-specific testing measurements and called for "increased standardized testing to ensure accountability" (Zimmerman & Dibenedetto, 2008, p. 206) for grades three through 12.

However, according to Pinkus (2009), the measurement tools to evaluate performance like the Annual Yearly Progress (AYP) report can often distort the potential of a student body and unfairly define a school district based on those test results. Unfortunately, "AYP has been fundamentally flawed at the high school level because of weak and inconsistent definitions of proficiency and graduation rates that are not aligned to the goal of every student graduating ready for college and a career" (p. 4). Pinkus found that improving these bottom line indicators – through the establishment of common graduation rate calculations, common college- and career-ready standards and assessments were critical steps in helping policymakers and education leaders hold the

system accountable for the outcomes of every student and identify low-performing schools. In response to the need, Conley (2011) stated

that the National Governors Association and the Council of Chief State School Officers introduced the Common Core State Standards (CCSS) as a way of transforming education through a uniform system of accountability that did not vary from state to state. If educators translated CCSS into new curriculum and instruction, these standards would prepare students for college and career. (p. 17)

Kober and Stark Rentner (2011) indicated that 48 states and the District of Columbia have adopted the Common Core State Standards for reading/English, language arts and mathematics. These standards created a sweeping reform, unique to the American education system.

Twenty years ago, states were allowed to develop their own set of learning standards. The lack of uniformity related to the state-specific standards system prompted the nation's governors and state school superintendents to write the CCSS for English, language arts and mathematics that all states could voluntarily adopt (Common Core State Standards Initiative, 2010a). Incorporating the CCSS into the state curriculum for Illinois meant that students in Illinois would learn the same skills in reading and math as students in Ohio (Common Core State Standards Initiative, 2010b). According to a survey issued by Common Core State Standards Initiative (2012), three-fifths of each state's school districts that adopted the CCSS viewed those standards as more rigorous than those they were replacing. This is a viewpoint that signaled a pivotal change in American education.

This research provided a detailed review and analysis of the impact of CCSS on

student performance and classroom instruction since its adoption in 48 states and more specifically, since its implementation at one particular urban public high school in the state of Illinois.

Statement of the Problem

Due to the recent nature of the Common Core State Standards' introduction and implementation, a limited amount of data exists regarding its effectiveness. Although several articles, journals, scholars, and the Federal government, there has not been a wealth of information amassed thus far regarding the ultimate impact of CCSS on student performance and classroom instruction. An electronic search in ERIC and Dissertation Abstracts did not identify any studies regarding teachers' perceptions of CCSS and how those perceptions affect the learning environment for students.

The researcher provided an evaluation of the existing, but limited, literature related to CCSS. The purpose of this evaluation was to identify the parameters of the current initiative and to assess prevailing perceptions by teachers and educational experts concerning CCSS. This was done to determine the impact of CCSS on the learning environment. In developing the objectives regarding the impact of the CCSS, the researcher (a) compared student performance data based on State Standards with student performance data according to the CCSS, (b) examined teachers' perceptions of CCSS, and (c) evaluated the impact of CCSS on the learning environment and cross-curriculum instruction.

This research was vitally important, in order to fill a void within the literature related to evaluating the impact of CCSS on student performance. The results of this research yielded a significant amount of information to help assess the effectiveness of

the uniform-based standards system and to better address or anticipate student and teacher needs according to CCSS. Three research questions and a definition of terms was presented to assist the reader in evaluating the study, examining possible benefits of CCSS, and assessing the role of the CCSS in student performance. Ultimately, this research was designed to determine if the impact of CCSS has a positive effect on student performance.

Background

Standards-based School Reform Movement

According to Pinkus (2009), the leading educators have suggested that American school reform has not been effective in improving public education. Pinkus stated that “there is near-universal consensus that the current federal accountability and school improvement systems need to be reinvented, infused with more and better data and tailored to meet the individual needs of schools and students” (p. 2). Now, educators, policymakers and the public are eager for indicators that better reflect the national goal of graduating all students ready for college and careers, assist educators plan, and implement strategies post graduation.

However, the purpose of the standards-based reform movement was to improve public education through the development of a uniform measurement tool to assess student performance and competency. Standards-based reform is designed to assess what students should know and what students should be able to do at specific grade levels (Carbonaro & Covay, 2010). As the reform movement developed however; Carbonaro and Covay noted that an additional component attached consequences to schools whose students did not show the required academic achievement. This transformed the

standards-based movement into a test-driven accountability movement.

In 2002, the enactment of NCLB signaled a turning point for the standards-based reform movement with a greater emphasis on the quality of instruction and test accountability, rather than previous academic standards (No Child Left Behind Act of 2001, 2002). School districts and teachers understood that if their students did not pass the annual state accountability assessment, their schools would be labeled as failing based on NCLB guidelines that mandated: (a) extensive grade-level assessments, (b) proficiency standards in English language arts and mathematics by 2014, and (c) specific actions required by schools if they did not reach AYP for student achievement.

Kober, Stark Rentner, Jennings, and Haslem (2011) reported that nearly half of U.S. schools did not meet their state targets or AYP for student proficiency in 2011, a fact that led many educators to believe that NCLB had been largely ineffective in improving student achievement. In 2011, President Obama spoke on the future of the United States education system at Kenmore Middle School in Virginia. He stated:

Over the next 10 years, nearly half of all new jobs will require education that goes beyond a high school education. And yet, as many as a quarter of our students aren't even finishing high school. The quality of our math and science education lags behind many other nations. America has fallen to ninth in the proportion of young people with a college degree. And so the question is whether all of us—as citizens, and as parents—are willing to do what's necessary to give every child a chance to succeed. Why have our efforts fallen short? (Obama, 2011)

According to Obara (2011), standards-based reform originated in the late 1980s when the National Council of Teachers of Mathematics wrote a set of national standards

for mathematics. The George H. W. Bush Administration, educators, and others within the political arena then adopted that framework for other subject areas and further proposed the adoption of national academic standards and testing to measure student achievement (O'Donnell & White, 2005).

In the mid-90's, the Clinton administration advocated for the basic approach of using standards and tests to reform education. According to O'Donnell and White (2005), the Clinton administration advised states to develop their own learning standards and assessments to measure student achievement rather than promoting national standards and assessment. Clinton later enacted legislation giving states the discretion to develop these standards but did not require states to provide the educational criteria for students to reach those standards.

The educational reform introduced by the NCLB Act and the movements toward CCSS are both efforts to promote excellence and equity in the American school system. Many groups, such as the Commission on No Child Left Behind, the United States Department of Education, the Gates Foundation, and the American Federation of Teachers have advocated for the adoption of new approaches to national learning standards (Common Core State Standards Initiative, 2010a).

The CCSS that replaced state-standards was a response to the need for a system of learning and accountability that does not vary from state-to-state nor hinge on test scores alone. The National Governors Association (NGA) and the Council of Chief State School Officers released the CCSS in 2010. The CCSS are state-led standards in English language arts and mathematics that were intended to set clear and expectations for learning for grades K-12 that are consistent from state to state (Kober et al., 2011). These

standards are designed to ensure that high school graduates possess the knowledge and skills needed for college and a globally competitive workforce (Common Core State Standards Initiative, 2010b).

Common Core State Standards

Prior to the implementation of the CCSS, many states created, implemented and operated according to state-adopted curriculum standards. While the autonomy to develop educational standards without federal oversight afforded a measure of latitude for state educational agencies, it also resulted in a lack of uniformity among states related to curriculum standards and instruction. Recognizing this lack of uniformity and in an effort to better prepare students for success in college and careers, while helping parents to support those students, the NGA and the Council of Chief State School Officers (CCSSO) developed a mission statement for the Common Core State Standards Initiative (CCSSI) that stated:

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

According to the researchers, Coleman and McCallum in 2009, the NGA Center and CCSSO initiated the CCSSI project with the signed memorandum of agreement by 48 states, two U.S. territories, and the District of Columbia in a collaborative venture to

jointly develop the CCSS (Common Core State Standards Initiatives, 2010b). The primary objectives were to develop standards for English language arts and mathematics, with plans for developing standards for science and history into the CCSS at a later date.

The NGA Center and CCSSO also created an advisory group, including experts from Achieve, Inc., American College Test (ACT), the College Board, the National Association of State Boards of Education (NASBE), and the State Higher Education Executive Officers to provide advice and guidance to shape the initiative (Common Core State Standards Initiatives, 2010b). ACT aligned the Educational Planning & Assessment System (EPAS) to the Common Core State Standards. According to ACT (2012e), these standards were based on empirical data and reflected the shared goal of preparing students for readiness in credit-bearing college courses and in careers. Accordingly, ACT's Course Standards and College Readiness Standards were successfully aligned with the Common Core State Standards (ACT).

In January 2010, the draft K-12 standards were released to states for public comment in March 2010 (Common Core State Standards Initiatives, 2010b). The final version of the standards, released on June 2, 2010 was further shaped by public comments, incorporating college and career-readiness criteria into the K-12 standards.

Research Questions

The research was focused on the following questions:

1. As measured by Annual Yearly Progress (AYP), what is the difference in student performance based on the application of the Illinois State Standards for the Class of 2010, compared with the application of the CCSS for the Class of 2014, in a public high school?

2. As measured by student performance data based on grades earned in core classes, what is the difference in student performance for the Class of 2010 under the Illinois State Standards in core classes compared to student performance for the Class of 2014 in core classes under the Common Core State Standards?
3. Pertaining to the mandatory integration of literacy and numeracy across all curriculum areas as required under CCSS, what is the difference in perception of CCSS, between teachers of core classes and teachers of non-core classes?

Description of Terms

The following definitions provided clarity to the unique terms used in this dissertation.

ACT (American College Test). The ACT test assesses high school students' general educational development and their ability to complete college-level work (ACT, 2012a).

Adequate Yearly Progress (AYP). Adequate Yearly Progress was defines as the minimum level of improvement that states, school districts and schools must achieve each year (Usher, 2011).

Assessment. The process of obtaining information used to make educational decision about students, to give feedback to the student about his or her progress, strengths, and weaknesses, to judge instructional effectiveness and curriculum adequacy, and to inform policy (Kellaghan & Greaney, 2001).

Classroom walk-through. The process of classroom observation as a walk-through, a process intended to be separate from the formal teacher evaluation process. The walk-through was designed to engage teachers in the development of successful teaching practices and implementing school-wide goals (Downey, Steffy, English, Frase, & Poston 2004).

Common Core State Standards (CCSS). A new state-led initiative intended to set clear expectations for learning for grades K – 12 that are consistent from to state (Kober, et al., 2011).

Core courses/classes. A set of school courses in subjects considered essential to a suitable education, as in providing skill or common cultural knowledge. These core courses are mathematic, English, social studies, and science (ACT, 2012e).

Discovery Educational Assessment (DEA). An assessment that provides educators with the tools needed to inform instruction and drive student achievement (Discovery Education, 2012).

Educational Planning and Assessment System (EPAS). The three programs in EPAS – EXPLORE, PLAN, and the ACT provide an assessment system that measures student readiness along a continuum of College Readiness Benchmarks. The EPAS system provides a longitudinal, systemic approach to educational and career planning, assessment, instructional support, and evaluation (ACT, 2012b).

Explore. The EXPLORE program is designed to help eighth and ninth graders explore a broad range of options for their future. The test prepares students not only for their high school coursework but also for their post-high school choices (ACT, 2012c).

No Child Left Behind (NCLB). The NCLB act stipulates that each child in the state must score at or above the proficient level in reading and mathematics in grades three through five, six through nine, and 10 through 12 by 2014 (Cailler, 2007).

Non-core classes. A set of non-core discipline courses such as physical education, fine arts (art and music), Career and Technical Education (CTE) – business, applied technical, and family consumer science (Conrad & Watkins, 2011).

Plans. The PLANS program assists 10th graders to build a solid foundation for future academic and career success and provides information needed to address school districts' high-priority issues. PLAN serves as the midpoint measure of academic progress in ACT's College and Career Readiness System (ACT, 2012d).

Student Achievement. The percentage of students scoring at or above proficient was contingent upon the state's performance standard stringency; performance standard-based analysis of student growth will also reflect each state's performance standards (Betebenner & Linn, 2009).

Significance of the Study

The NCLB Act requires all public schools in the United States to meet mandatory state education standards for American students. This comprehensive school reform that has significantly impacted American schools, includes a greater emphasis on school accountability, state assessments, national learning standards and corrective measures.

The researcher compared the state standards to the new CCSS that were developed through the school reform movement. The study evaluated the effectiveness of the CCSS compared to student achievement through AYP mandates. The demographics

of the school in which the study occurred are similar to many schools where student-testing scores are low and schools are not successfully reaching state mandates for AYP.

This research can assist educational practitioners in implementing the new CCSS to enhance their curriculum and instruction, and in doing so, increase student achievement as measured by AYP. Unlike current research, this study examined an urban public high school population that historically has lower than average test scores to access how CCSS impacted their performance. Although the research sample is taken from an urban public high school setting, the research was designed to assess overall effectiveness of CCSS and thus, would have an impact and would benefit to a population beyond the urban setting. The use of teachers' surveys is unique to this study because it has helped elicit instructional structures and feedback to support the use of these findings in a global setting.

Process to Accomplish

The researcher evaluated the effect of the implementation of the CCSS. The data collected was examined to determine the impact of CCSS on student achievement and cross-curriculum instruction. The methodology centered on quantitative analysis research question one, two, and part of three. Qualitative analysis was used for research question three. This methodology centered primarily on a quantitative analysis rather than a qualitative analysis of data (Creswell, 1994). According to Robson (2002), this research could be a relational fixed design that “measures the relationship between two or more variables” (p. 155).

Participants

Participants in the study were 112 full-time teachers employed at an urban high school, located in southern suburb of a mid-western city. This school is one of the three high schools that comprise the high school district. The high school had a total enrollment of 1,187 students. For the purposes of this study, the assessment scores related to the Class of 2010 (297 students), prior to the implementation of the Common Core State Standards were compared to the assessment scores for the Class of 2014 (286 students) following the implementation of the CCSS.

Students in both groups were tested according to the Explore Plan Assessment System (EPAS). The EPAS system consists of a particular set of tests, administered each year, according to the students' grade level including: (a) the Explore test which is administered freshmen year (9th grade), (b) the Plan test which is administered sophomore year (10th grade), (c) the Practice ACT test which is administered early junior year (11th grade), and (d) both the Prairie State Achievement Exam (PSAE) and the state American College Test (ACT) which are normally administered during the second semester of the junior year.

The research was focused on the following questions:

1. As measured by Annual Yearly Progress (AYP), what is the difference in student performance based on the application of the Illinois State Standards for the Class of 2010, compared with the application of the CCSS for the Class of 2014, in a public high school?

The researcher examined student test scores earned by the Class of 2010 on the PSAE exams, based on the Illinois State Standards, prior to the implementation of

Common Core State Standards. The researcher compared this information with student test scores earned by the Class of 2014, on the PSAE exams, following the implementation of the CCSS. The analysis of these two sets of test scores will help to determine the effect of the implementation of CCSS on student achievement.

The score-related information for the Classes of 2010 and 2014 was retrieved from the archival data base assembled for the school district. Results represented by these test scores were presumed to be indicators of student knowledge, student competency and student potential for secondary education. It is important to note however, that other factors not related to the implementation of the CCSS can have some bearing on student test scores. The researcher of the study did not presume to know or define what those factors were, if any, and thus, primarily focused on the implementation of the CCSS and their resulting role in student performance.

A parametric test called analysis of variance (ANOVA) was used to compare the PSAE scores of the Class of 2010, according to the Illinois State Standards, with the PSAE scores for the Class of 2014, according to the CCSS. Gay, Mills, and Airasian (2006) stated,

... analysis of variance (ANOVA) is a parametric test of significance used to determine whether a significant difference exists between two or more means as a selected probability level. Thus, for a study involving three groups, ANOVA is the appropriate analysis technique. (p. 359)

The purpose of this study was to examine the difference in student performance based on the Illinois State Standards in 2010 with student performance based on the CCSS in 2014, as measured by the PSAE for these two classes. ANOVA provided a

suitable analysis for discussing the effects of the two standards in order to address the first research question.

The second question of the study stated:

2. As measured by student performance data based on grades earned in core classes, what is the difference in student performance for the Class of 2010 under the Illinois State Standards in core classes compared to student performance for the Class of 2014 in core classes under the Common Core State Standards?

The researcher addressed the second question of the study by comparing the Class of 2010 archival performance data in core classes under the Illinois State Standards with the Class of 2014 performance data in core classes according to the CCSS. The researcher analyzed the information to determine how the implementation of CCSS impacted cross-curriculum, instruction, and student achievement.

Prior to implementing the CCSS, each core and non-core discipline created its own standard by which to implement lessons. Now, core and non-core disciplines must incorporate CCSS (numeracy and literacy) into their lesson plans. School records provided data that was used for the analysis required to answer the third question. The researcher of the study used the data derived from Power School, the student information system that includes grades from core classes (English, mathematics, social studies, and science) issued by teachers who taught core and non-core courses and informal assessment. A series of mixed-model ANOVAs were used to compare grades, informal assessments, gender information, learning standards, and student performance in core

subject areas prior to the implementation of CCSS for the Class of 2010 and after the implementation of the CCSS for the Class of 2014.

All archival quantitative data obtained prior to the implementation of CCSS, was used to compare the data obtained following the implementation of CCSS within the high school. The official data on academic performance collected and analyzed in order to determine the impact of the CCSS on student achievement and cross-curriculum instruction, related to the impact on student achievement in core class data in 2010 before CCSS and comparing with the core class data in 2014, after the implementation of CCSS.

The CCSS were designed to address and support student literacy (reading) and student numeracy (mathematics). Thus, the researcher analyzed teachers' perceptions of the CCSS related to these primary goals and their impact on student performance and classroom instruction.

The third question of the study stated:

3. Pertaining to the mandatory integration of literacy and numeracy across all curriculum areas as required under CCSS, what is the difference in perception of CCSS, between teachers of core classes and teachers of non-core classes?

The researcher answered the third question through the application of a teachers' survey that identified the core teacher (English, science, math and social studies) or a non-core teacher (fine arts, physical education, Career and Technical Education (CTE – business, family & consumer science, and applied technology). The survey was used to determine the teachers' perception of the impact of CCSS on student achievement and to elicit additional data that was used in the analysis of question three.

All 112 teachers were emailed an anonymous survey via Survey Monkey® that utilizes both quantitative and qualitative data. Survey Monkey® is an online assessment tool that allows users to create surveys and distribute them via email to recipients. Using a Likert-type scale, the survey was composed of 53 questions that used a range between strongly agree, agree, neutral, disagree, and strongly disagree as well as two open-ended questions. The researcher received permission to use the survey developed by Wiggins (2010).

The researcher asked participants to complete the survey within 10 days of receipt of the email. Survey Monkey® allowed the researcher to track the number of respondents, the type of respondents and the frequency of certain responses. The survey's introduction included a brief summary of the purpose of the research, followed by an informed consent form that asked for the survey participant's consent.

Surveys were coded, through information provided by the survey participants, according to department and did not require the name of the participant. The survey was numerically coded to ensure participant confidentiality. A reminder email was sent to potential survey participants who had not yet completed the survey 14 days after the initial email. Two additional email reminders were sent to teachers who had not yet responded; one at 20 days after the initial email and the last at 30 days after the initial email.

To analyze the quantitative data derived from the surveys, a variety of statistical tests were used based on the question type. The participants (core and non-core teachers) selected answers on the survey from a Likert-type scale. The means and standard

deviations from the numerical values on the Likert-type scale were identified and reported in a table format.

The teachers' survey response options constructed using a five-point Likert scale. The scale breakdown was: 1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, and 5 – strongly agree. The Likert scale items are grouped into five categories. The first 26 items addressed the personal perceptions about CCSS and their influence on teaching styles and standards, six related to the influence of the CCSS on teachers and 20 questions related to the CCSS influence on teaching. The next 27 questions addressed the perceptions of the Common Core State Standards on education, with eight questions related to data and assessment, 10 related to student performance, and nine questions related to perceptions about building school administrators' roles and job satisfaction for a total of 53 items.

Information obtained through the surveys from core teachers and non-core teachers provided both quantitative and qualitative data for the research study. A series of between-subjects ANOVAs were used to evaluate how core teacher participants answered compared to how the non-core teacher participants answered the questions on the teachers' survey. ANOVAs were administered for each of the five categories: Teacher Morals, Curriculum & Instruction, Data and Assessment, Students Achievement, and Building Administration on the Teachers' Perception on the CCSS. Salkind (2008) advocated using between-subjects ANOVA when data between various groups was compared. Survey answers provided additional data used for analysis of the three research questions.

To analyze the qualitative data derived from the two open-ended questions on the survey, Leedy and Ormrod (2005) suggested a 4-step plan. The first step was to perform open coding where “data are divided into segments and then scrutinized for commonalities that reflect categories or themes” (p.141). The second step known as axial coding provided a means to make interconnections among categories and subcategories. These first two steps were followed by selective coding, the third step containing a description of what happened in the phenomenon being studied, and the fourth step development of a theory to explain to what extent the two state standards (Illinois State Learning Standards and Common Core State Standards) impacted the assessment scores and resulting performance of the student participants.

Analysis.

The researcher used the Statistical Package for the Social Science (SPSS) to analyze the teacher survey results, scores earned on the PSAE exams, and the grades in the core for the Class of 2010 and Class of 2014. The researcher analyzed the survey data to determine the difference in teachers’ perceptions of CCSS based on whether they teach core or non - core classes.

Summary

The goal of this mixed-method study was twofold, first to evaluate the impact of the Common Core State Standards on student achievement and cross-curriculum instruction in an urban public high school. Second, to provide the school district and teachers of this high school district with strategies and recommendations for increasing student achievement. In order to answer the three research questions, the researcher used archival data, current assessment data and teacher questionnaire survey to provide

qualitative and quantitative data. The researcher determined if there was a difference in student achievement when the Illinois State Standards are applied as opposed to when CCSS are applied in an urban public high school district.

The compiled data offered insight as to whether or not CCCS should be implemented by a high school district as a tool to increase student achievement to instructional leaders across the country to improve educational outcomes for students. Finally, given the apparent gap in literature, this study has contributed to the empirical body of knowledge regarding CCSS, cross-curriculum instruction, formative assessment and the associated roles, responsibilities and perceptions of teachers.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The mission is simple; every child should be prepared for college. That is the goal of the CCSS. This study explored the impact of CCSS on student performance, classroom instruction and explored high school teachers' perspectives regarding implementation of the standards. In addition, the study explored the differences between teacher gender, age, years of experience, level of education, and student achievement as reflected by their Illinois state assessment scores based on core and non-core teachers. The literature review in this chapter was organized into four sections: (a) history of educational reform on teaching standards, (b) components of Common Core Standards and implementation processes, (c) impact of Common Core State Standards on the teaching process, and (d) review of other standards-based reform practice.

The first section explained and defined the necessity of reform, the causes of reform, and the various approaches to reform. In addition, the history of educational teaching standards, current educational teaching standards, and the implications and influence of those standards on the American educational system and all stakeholders (teachers, administrators, students, and parents) is also reviewed.

The second section discussed the implementation process for CCSS within the 48 states. The third section reviewed the affect of Common Core State Standards on the teaching process. The final section summarized the literature reviewed as part of the framework for the findings within this research.

History of Educational Reform on Teaching Standards

“American education has a long history of standard-setting activities, sometimes overt and purposeful, and other times, implicit and haphazard” (Ravitch, 1995, p. 33). In American schools, the implementation of standardized testing commenced when the Boston Survey was administered in 1845 (Mathison, 2008). Horace Mann, the secretary of the Massachusetts State Board of Education, viewed the common school as an opportunity for poor and rich children to both acquire an education with the same values and language. Mann and his colleagues were the first to establish the mass education of American students. This new system, which no other country at that time had adopted, carried great educational promise, introducing the world to what became the basic tenants of learning, or the three Rs’ – reading, writing and arithmetic (Leinward, 1992). To this foundational academic structure, Mann outlined a list of educational goals that included moral, political, health and physical education and also created a written examination to assess skills learned in arithmetic, geography, history, grammar and science, among other subjects (Mathison). Given the rising immigrant population, such examinations were used to evaluate skills to ensure that all students received the same quality of education.

However, testing data alone should not be used to determine effectiveness of teaching or adequacy of student performance (Mirel & Angus, 1994). In large part, testing cannot be the sole indicator of achievement because so many varying methods

comprise teaching standards from state to state. What one student knows and can adequately be assessed on in one state, may be drastically different for the same grade-level student in another state. Mirel and Angus reported that this disparity has resulted in severe consequences for American schools, and stiff penalties for American educators. A recent study involving a Massachusetts school district, conducted by Owings and Kaplan (2001) found that 40% of students failed standardized testing exams. As a result of those testing results, the school board fired the superintendent and abandoned the testing program.

To address this disparity, and the mounting consequences for educators, the Committee of Ten on Secondary School Subjects was appointed under the chairmanship of President Charles William Eliot of Harvard University (Butts, 1995). The committee was composed of a commissioner, five college presidents, a professor, a high school administrator and two headmasters. However, secondary teachers were not invited to participate on the committee; a surprising fact considering that the committee was designed to develop a curriculum plan for the very subjects and students they taught. As a result, secondary administrators searched for a national uniform curriculum and concluded that curricular standards must be high and they must be the same for all students regardless of whether these students drop out of school after only a few years, graduate from high school but do not seek further education, or go on to college (Mirel & Angus, 1994). Every subject that is taught in secondary schools should be taught in the same way and to the same extent to every pupil so long as he/she pursues an education. The Committee of Ten identified primary areas that required resolution in order to develop an effective uniformed curriculum. These areas included: (a) how to resolve the

antagonism between the classical curriculum and the modern academic subjects such as science, history, and modern foreign languages, (b) how to promote uniformity in preparing students for college, (c) how to respond to the demands by educators to include practical vocational courses such as a manual training, and (d) whether high schools should offer different curricula to students who were college bound and students who were not (Ravitch, 2000).

One of the most significant results of the Committee Ten was the establishment of the College Entrance Examination Board in 1900. This board was created to offer a common examination for entrance into many different colleges. Ravitch (2000) explained the College Board relied on President Eliot's personal vision of uniformity of standards and flexibility of program.

In 1918, the Commission of the Reorganization of Secondary Education, and the National Education Association (NEA) group, published the Cardinal Principles of Secondary Education (CPSE). These principles were a statement of broad policy goals for American public high schools and served as a guide for academic and vocational education curriculum. However, the goals did not fill the void for educational philosophy. The CPSE goals included: "health, command of fundamental processes, worthy home membership, vocational guidance, citizenship, worthy use of leisure, and ethical character" (Pulliam, 1987, p. 102). For example, the health goal listed physical activity for students, instruction in personal hygiene, and instruction in public health. The worthy use of leisure goal emphasized student appreciation of literature, art, and music.

When the progressive educational movement was introduced in the 1920, it became the model for American schools. Progressive educators believed that learning

should have hands on experience and should be active rather than passive, and should be cooperatively planned by pupils and teachers. Leinwand (1992) stated:

Progressive educators did not believe that training one-subject areas could be automatically transferred to another. For example, they believed that teaching mathematics was not also necessarily ‘training the mind’ to think logically, it was merely teaching mathematics. According to progressive educators, all subject matters were equally valid in contributing to mental development. With this conviction, progressive educators denied that some subjects were better than others. Once students learned the basic skills, no subject needed to be required of all students. (p. 84)

Later, in the early 1940s, educational reform escalated as a result of the growing awareness of the nation’s reading problems, in large part, due to the number of draftees who were barred from enlisting. Their rejections were due to their inability to read. The number of Americans who were barred from enlisting was approximately 135,000.

As a measure to assess ability and competency, both in reading and in math, standardized tests were implemented. This was the beginning of a strong movement towards testing. During this time, negative protesters and consistent criticism of the testing system continued. The testing movement intensified as both ability and achievement tests were being used to sort and classify students, affirming education’s growing elitism, as well as educators’ failure to address the problems of low achievers. In 1923, the Stanford Achievement Test was the first assessment test published, followed by the Iowa Test of Basic Skills (ITBS) in 1929 (Haladyna, Hass, & Allison, 1998). These assessments became widely used in schools as a national academic measurement. The

focus shifted from achievement testing, to ability testing, for the purpose of sorting and classifying students (Haladyna et al.). Schools wanted to identify and weed out students who were not going to succeed academically. Consequently, many ethnic groups new to the United States faced discrimination on the basis of intelligence tests, such as the Binet Intelligence Scale.

America's perceived position of international leadership on the educational landscape was challenged on October 4, 1957 when Sputnik, the first space satellite, was launched by the Soviet Union. The press treated Sputnik not only as a national security threat for the United States, but also as a major humiliation for the United States. Webb, Metha, and Jordan (2000) expressed that, "Few times in history has a single event had such an impact on education as the launching of Sputnik" (p. 220). The progressive movement that had collapsed two years prior to the Sputnik launch was subsequently blamed for low school academics. Sputnik revealed concerns about American education. As Bunting (1999) commented:

The schools were blamed for having failed to sufficiently teach students basic academic knowledge-especially math and sciences. The appearance, prior to Sputnik, of Rudolph Fleach's *Why Johnny Can't Read* and the formation of the Council for Basic Education helped define the reform movement fueled. (p. 213)

This was the catalyst to the standards-based reform movement in the American education system. It was evidence that unless change occurred there would be greater deficit areas in academic instruction and curriculum. Thus, causing students to continue to fall behind.

Pressure from the public resulted in the federal government passing the National Defense Education Act (NDEA). The NDEA was the first governmental attempt to

influence elementary and secondary education curricula. Federal funding was designated to specific curricular areas that included science, mathematics, foreign languages, and other critical subjects. Bunting (1999) reported that to ensure proper funding, Congress appropriated \$1 billion in laboratories, scientific equipment and student loans to gain more scientists, engineers, and science teachers.

In 1963, President Kennedy launched a war on poverty. President Johnson followed in 1964, because studies showed that poor children consistently failed to achieve; a problem that could be eliminated with a quality education for all children. Then, in 1965, President Johnson initiated, and Congress enacted, the Elementary and Secondary Education Act (ESEA), the most far-reaching piece of federal education legislation to date that provided over \$1 billion in federal funds to education (Webb et al., 2000). These federal funds were designated to improve and equalize educational opportunities. At the same time, opposition grew over fears of a federal takeover of the American school system and concerns over rising costs. In response, various provisions were added into the ESEA to address these areas of concern (Webb et al.).

On October 17, 1979, President Carter created the United States Department of Education (DOE) by signing the Department of Education Organizational Act into law. The focus of the DOE was to enact policies dealing with primary, secondary and higher education systems. Also, President Carter appointed a new cabinet member, Shirley Hufstedler, to serve as the first United States Secretary of Education (Finn, 2008). During her initial six months, Hufstedler established three goals in her quest to make education important to the nation. The three goals were: (a) streamline and strengthen the political working of the federal/state relationship; (b) reinforce the notion that the department

would not supersede local control by attempting to impose restrictive regulations; and (c) focus on the issues of educational equity.

In 1983, the National Commission of Excellence (NCEE) presented its report titled, *A Nation at Risk: The Imperative for Educational Reform*. In it, the report outlined thirteen risk indicators with dramatic language written by Harvard physicist Gerald Holton. Holton stated (as cited in Finn, 2008):

Our nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and competition throughout the world overtake technological innovations. This report is concerned only with one of the many cases and dimensions of security and civility. 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. (p. 98)

The purpose of the report was to identify and define the problems threatening the nation's educational system and to provide recommendations for reform. The thirteen risk indicators involved weak and often declining achievement (Finn). The Commission provided recommendations in the areas of content in reference to graduation requirements, more rigorous standards and higher expectation, longer instructional time, teacher preparation, and leadership to achieve reforms with citizens providing fiscal support. The content recommendation described by Borsk (2008), Hewitt (2008), and the

National Commission on Excellence in Education (NCEE) (1983) indicated that the state and local high school graduation requirement be strengthened and that, at a minimum, all students seeking a diploma be required to lay the foundations in the five New Basics by taking the following curriculum during their 4 years of high schools. The recommended courses were (a) 4 years of English, (b) 3 years of mathematics, (c) 3 years of science, (d) 3 years of social studies, and (e) one-half year of computer science. For the college-bound, 2 years of foreign language in high school are strongly recommended in addition to those taken earlier.

In 2008, the NCEE's (1983) report had significant influence, unlike any effort thus far. In the coming years, several states acknowledged curricular changes designed to meet these graduation requirements as outlined in the report. Subsequent reports that addressed mathematics and science were soon developed including: (a) Curriculum and Evaluation Standards for Mathematics, published by the National Council of Teachers of Mathematics, (b) Science for all Americans, published by the American Association for the Advancement in Science, and (c) Everybody Counts: A report on the Future of Mathematics Education, published by the National Research Council (Pendergast, 1989). The NCEE's report also provided aid to other subject areas for the development of standards such as: foreign language, technical education, physical education, arts, health, geography, economics, language arts, civics, and history.

Prompted by the *A Nation at Risk Report*, a significant push towards national standards was implemented by President George H. W. Bush to increase the quality of education through Goals 2000: Educate America Act (Finn, 2008). As the desired goal of increased student achievement continued to escalate, President Bush called the nation's

50 governors together for an educational summit, deemed as the “first educational partnership between the president and governors’ signaling that education was too important for major decisions about such momentous matters to be left to educators” (p. 151). Today, these meetings continue to play a major role in the educational decision-making process. Educators consider these meetings to be an obstruction to this educational decision-making process because educating students should not be left to platform politicians. Far too often, the students and educators get lost when political grandstanding occurs.

In 1990, the National Educational Goal Panel (NEGP) was formed as a result of the partnership between the state house and the White House. National goals were created, but there was no way to track the country’s progress. Therefore, the panel (consisting of members from Congress, the executive branch, and governors) was formed to track goals. The function of the panel was to review and certify educational standards, assessments, and coordinate their work with the National Education Standards and Improvement Council (Finn, 2008). The NEGP was assigned to (a) assemble panels of experts to develop objective measures of progress for goals and track the nation’s progress toward achieving the National Educational Goals; (b) provide progress reports on achievement of goals and monitor national, state, and local reform progress; (c) collaborate, provide guidance, and support to organizations representing key reform constituencies as NEGP assisted the states and localities in identifying influences of reform, (d) identify effective studies implementing reform strategies, and (e) provide recommendations for goal achievement to all levels of government (Finn).

In keeping with the partnership of the panel, President Clinton's administration and Congress designed an ambitious path for education reform by signing into law the Improving America's Schools Act of 1994 (IASA). This act reauthorized the Elementary and Secondary Act (ESEA), and the Goals 2000: Educate America Act. According to the U.S. Department of Education (1999), these laws established clear expectation that all children would be held to challenging academic standards and lowered expectations for poor or disadvantaged students would no longer be tolerated. This research showed that these efforts have catalyzed education reform nationwide and begun to raise education achievement, particularly among disadvantaged children.

The IASA supported and encouraged comprehensive reform at the state and local levels to meet the national goals. The IASA was the eleventh title of the three-decade-old ESEA. The IASA oversaw improvement plans that were submitted from states that identified challenging academic content and performance standards for all students. Also, the IASA determined the yearly performance of schools by utilizing high-quality student assessments, including at least mathematics and reading, or language arts, in one grade in each school. The U.S. Department of Education (1999) presented these reports that forced Title 1 schools to participate in the Goals 2000 Act.

President Clinton and Congress added two more goals to Goals 2000 and renamed the Goals 2000 to Educate America Act (EAA). Goals 2000 provided the states with guidelines for providing a high-class education for all students. States created and implemented challenging content and performance standards to satisfy their individual needs (Finn, 2008). Assessments that aligned to these standards were developed to measure student achievement against the standards that provided the key for improving

instruction and providing accountability systems. Following the prescribed plan for implementation provided the nation with an opportunity to develop systems for all students to learn and achieve a quality education.

According to Finn (2008), the U. S. Department of Education provided grants to educational groups to develop voluntary national standards in seven subjects (foreign languages, science, the arts, history, civics, geography, and English); the mathematic council had previously articulated standards. These voluntary national standards were supposed to describe what children should be expected to learn in different grades in every major academic subject. The school district, that received federal awards that were designed to identify clearly and succinctly what students should know and be able to do. When the federal grants were made, it was widely anticipated that Congress would create a sort of national board to evaluate the voluntary national standards and that the board would oversee a repeated process to review and revise the draft national standards (Finn). Unfortunately, due to federal funding, the board never completely materialized; therefore, standards were not empowered. Accordingly, the National Education Standards and Improvement Council (NESIC) developed model standards for the subjects and included curriculum, content standards, student performance standards, and opportunity-to-learn standards (Webb, et al., 2000).

President George W. Bush enacted the No Child Be Left Behind Act (NCLB), in 2001. This act was enacted to ensure that no child should be allowed to drift through school unable to read. No child should have an unqualified teacher and no child should have to go to a failing school. The NCLB Act's guiding principles were to include high academic standards, top-quality teachers in smaller classes, safe schools and strengthened

accountability. The NCLB Act was centered on high expectations, academic standards upheld by well-prepared teachers in classrooms, and strengthened accountability to ensure a reform.

The NCEE's submission of, *A Nation at Risk to the No Child Left Behind Act*, ensured the continuous progressive reauthorizations of ESEA. However, the numerous acts established and legislated to date, have not achieved the educational goals as expected through American educational reform (Berube & Berude, 2007). The standards movement has been in the forefront of educational concerns for over a century. As a result, today's teachers and administrators are on a mission to produce proficient student scores on standards-based state assessments. However, the arguments concerning standard-based reforms continue to divide opponents and supporters.

Standards Reform Movement of Today – No Child Left Behind

American public education, "has been in the ear of national standards" for the past 20 years (Berube & Berude, 2007, p. 37). On January 8, 2002, President Bush signed into law the No Child Left Behind (NCLB) Act of 2001. This legislation was an additional reform of the Elementary and Secondary Education Act (ESEA) that was originally enacted in 1965 by President Johnson. The No Child Left Behind of 2001 (NCLB) is a landmark in education reform designed to improve student achievement and close the achievement gap. The NCLB was overwhelmingly supported by the Congress and was signed into law by President Bush on January 8, 2002. Also, Congress reauthorized the Elementary and Secondary Education Act of 1965 (ESEA) a principal federal guideline that affected education from kindergarten through high school. In amending the ESEA, the new law represented a sweeping overhaul of federal efforts to support elementary and

secondary education in the United States (No Child Left Behind, 2002). This act was built on four common-sense pillars: (a) accountability for results, (b) an emphasis on doing what works based on scientific research, (c) expanded parental options and expanded local control and (d) flexibility.

One of the goals of the NCLB Act of 2002 was to have every student attain a proficient or better rating on state-defined tests in mathematics and reading/language arts by the end of the 2014 school year. In order for this goal to be attained, every state had to develop benchmarks to measure progress and ensure that every child was learning. Also, Title I funding was utilized to develop and disseminate annual report cards that included the following: (a) disaggregated achievement information by subgroups, (b) percentage of students not tested, disaggregated by student groups, (c) most recent two-year trend data in areas where assessment are required, (d) graduation rates for high school students and an elementary school indicator of the state's choice, (e) information about performance of districts meeting Annual Yearly Progress (AYP) requirements, and (f) teacher qualifications/credentials and percentage of classes not taught (No Child Left Behind, 2002). These annual report cards can be found on the state and district websites that reveal schools AYP according to the state and federal guidelines.

Serim and Salpeter (2003) stated that there were serious consequences attached to the legislative requirements if schools did not meet targeted level growth. Various supplemental services have to be provided for schools failing to meet AYP. Schools that failed to meet AYP for three and or more consecutive years must offer students from low-income families supplemental services. According to the U. S. Department of Education (1999), supplemental educational services may include academic assistance

such as tutoring, remediation, and other educational intervention. These services must be provided outside of the regular school day and must be high quality, research-based and specifically designed to increase academic achievement.

Under NCLB, schools that failed to meet the expected results were susceptible to replacement of administrative/instructional staff and ultimately face closure (Serim & Salpeter, 2003). Schools that were classified in need of improvement were to reevaluate their school improvement plan and/or professional development for teachers and make the necessary changes to raise student achievement.

The NCLB Act of 2001 required the establishment of high achievement standards in math and reading/language arts in every state (No Child Left Behind, 2002). Math and reading/language arts were identified as the foundation for success in all other subjects. NCLB required every child in grades three through eight to be tested in math, reading, and language usage. The student's test data was used to assess AYP as determined by each state's cut-off scores.

In 2010, the Obama administration addressed the reauthorization of ESEA and amended the No Child Left Behind Act 2001. The Obama-Biden Education Plan (Obama, 2009) includes four target areas – (a) early childhood education, (b) K-12, (c) higher education, (d) supports students with disabilities, and (e) lists of 18 goals. In accordance, Secretary of Education Arne Duncan and President Obama have pledged federal money to three central areas of reform that they believe will drive school improvement. The three central areas are (a) adopt internationally benchmarked standards and assessments that prepare students for success in college and the workplace; (b) recruit, develop, retain,

and reward effective teachers and principals; and (c) turn around the lower-performing school.

On February 1, 2009, President Obama signed into law the American Recovery and Reinvestment Act of 2009 (ARRA), known as the economic stimulus package. This package will ensure that public school in the next few years will benefit from the largest infusion of federal dollars in history. The U.S Department of Education received \$100 billion, which double the \$45 billion from the previous appropriation, to prevent teacher layoffs due to the economic downturn and “to encourage changes in schooling that will improve student achievement” (Jenning, 2009, p. 17). This action of President Obama was the first steps for the U. S. Department of Education revitalize the America’s education system to improve student achievement.

Today’s educational system is the result of teaching standards and assessment accountability. Teachers’ instructional duties, on average, require 150+ hours per week, classroom size consists of 21-28 students, and to meet the students’ needs, the schools spends approximately \$443-\$498 of their own funds annually (Pytel, 2006).

Approximately, 73% of teachers chose teaching because of their desire to work with impressionable youth. Fortunately, the majority of teachers are highly skilled, hold one or more advanced degrees and have 15 or more years of experience (Pytel). Teachers are regularly learning new skills and presenting technology-enhanced lessons. Sadly, teachers are citing low salaries and working conditions as reasons for leaving the profession.

The educational standards are overloaded; confusing and the level of incoherence typify the plight of educators and society in general these days (Conzemius, 2010). Due

to the possible sanctions, punishments for low student performance, rewards, and recognitions for high student performance, there have been cases of teachers and schools cheating on high-stakes testing (Henningfeld, 2008). In California, teachers in low-performing schools whose students showed highest test achievement were offered a \$25,000 bonus. Unfortunately, due to cheating, the state was forced to retract the offer. Two low-performing schools in Texas, for example, showed extreme score fluctuations that placed some of their students on par with students from the best schools in the state in just one year. These extreme sudden fluctuations, led to an investigation that revealed evidence of organized cheating at both schools. Cala (2008) stated that, “out of desperation to succeed in the reform process, teachers are cheating for the purpose of raising test scores, maintaining their jobs and preventing children from being labeled as failures” (p. 152). As a result of the dominant theme effectiveness based solely on testing and test results; fraud and cheating to meet those standards, has become increasingly common.

According to Bridgeland, Dilulio, and Balfanz (2009), a survey conducted by Civic Enterprises of high school teachers’ and principals’ revealed that 76% of principals and 59% of teachers viewed dropouts to be a major problem. National and state indicators report a large percentage of students who are dropping out of school; more than 1.2 million every year – roughly 7,000 each school day. Warren and Grodsky (2009) acknowledged that students had been denied diplomas due to failing exit exams and others decided to drop out of school without opportunities for academic improvement. The NCLB Act affirmed that every child deserves a high-quality education and that receiving a minimal education should victimize no child. This presents a challenge for

schools, districts and especially the educators that have been assigned the responsibility of educating every child to a proficiency level. With this in mind, it is important to view the implications of teaching standards that are placing upon the educational community.

Implementation Process of Common Core State Standards

In recent years, teaching standards have undergone radical changes at nearly all level because educators and policy makers have initiated reforms aimed at raising academic achievement in the United States. There is no other country that has had such dramatic changes with K–12 academic standards. In 2009, 48 states, two territories, and the District of Columbia signed a memorandum of agreement with the NGA and CCSSO, committing to a state-led process—the CCSS Initiative (King, 2011). This initiative produced a set of K–12 standards in the foundational subjects of language arts and mathematics designed to prepare high school graduates to succeed in college and careers. On June 2, 2010, the CCSS were released. According to King, the standards are grounded in evidence, that included: the best work of states and high-performing nations, frameworks developed for the National Assessment of Educational Progress (NAEP), the Benchmarks of the American Diploma Project, academic research, curriculum surveys, assessment data on college and career-readiness performance, and input from educators at all levels on a variety of subjects. Recent reports based on research by Achieve, ACT, and others revealed that core knowledge and skill in mathematics and language arts is necessary for success in college and employment. As a result, the CCSS makes no distinction between college and career readiness. King reported that on December 2010, 41 states and the District of Columbia had formally adopted the CCSS. Most states began implementing the standards in schools in 2011–2012. To develop the standards, CCSSO

and NGA worked with representatives from participating states, as well as a wide range of educators, content experts, researchers, national organizations, and community groups.

The developers, NGA and CCSSO developed the standard to achieve the following outcomes: (a) to align with college and work expectations, (b) to include rigorous content and application of knowledge through higher-order skills, (c) to build upon strengths and lessons of current state standards, (d) reflect expectations of top-performing countries so that all U.S. students are prepared to succeed in our global economy, and (e) to be evidence and/or research-based (Kobe & Stark Renter, 2011). In order to ensure cohesiveness with the standards, a panel of postsecondary faculty, convened by leading scholarly societies in partnership with the American Council on Education, helped review and shape the standards (Kobe & Stark Renter). Within the states, college and university faculty were typically called upon to review the standards. Because the CCSS are anchored in college and career-readiness expectations these standards will ensure that students graduate from high school ready to enter and succeed in entry-level, credit-bearing college courses without the need for remediation. Improved academic preparation in high schools is expected to contribute to increase college completion.

For positive outcomes to occur with CCSS, states needed a plan for implementing the standards that include the development of integrated and aligned K–12 and post-secondary policies and practices. It is imperative that the higher education community must not only be informed about the CCSS, but also engage as full partners in the implementation of the new standards. Kobe and Stark Renter (2011) described the key areas that would require active participation from higher education leaders and faculty

from a broad array of disciplines, in the following areas: (a) defining college readiness and aligning key policies for the school-to-college transition, (b) developing K–12 assessments and aligning college placement policies with these assessments, (c) aligning K–12 and higher education curricula, and (d) teacher preparation and in-service professional development (p. 57). Kobe and Stark Renter suggested that the structures at the state and local levels could help facilitate collaboration between K–12 and higher education. These structures concluded with links to detailed information about the standards and related assessments.

While the CCSS represented an important step, they are only one part of a broader agenda to align key policies for the school-to-college transition. For example, students and schools also need to understand college expectations in key academic areas beyond mathematics and language arts, such as science, social studies, and foreign language (King, 2011). To fill gap left by CCSS, public higher education collaboratively developed a more holistic definition of college readiness, including but not limited to, mastery of the common standards. For example, a definition included establishing a model college-preparatory curriculum, defining standards in other academic areas, and specifying the other key skills students must develop to be college-ready. The development of statewide agreements on various definitions helped frame subsequent discussions about key policies for the school-to-college transition. These policies included: high school graduation requirements, course requirements for college admission, and college-level course placement standards, all of which send clear signals about expectations for college readiness (Kobe & Stark Rentner, 2011).

The CCSS defined skills that students must possess in mathematics and language arts in order to be ready for college-level work. The CCSS do not set—nor even suggest—minimum standards for college or university admission. Even if students are eventually unable to earn a high school diploma without meeting the CCSS benchmarks, there will still be considerable variation in student performance above that minimum standard (King, 2011). It will be up to higher education leaders and faculty to determine the standards of performance that are necessary for admission, separate from placement requirements.

The CCSS will not result in appreciable learning gains unless state-of-the-art assessments, schools accountable, and aligned curricula and instruction accompany these standards. To achieve this goal, the U.S. Department of Education’s Race to the Top grant competition included \$362 million to fund a new generation of common assessments tied to the CCSS. In order for these assessments to have credibility as a measure of college readiness, “they must be developed with the participation of, and have significant buy-in from, the higher education community” (Kobe & Stark Rentner, 2011, p. 63). To ensure the importance of having higher education involved in the implementation of the CCSS, the DOE made an agreement with colleges and universities to participate in the design and development of the new assessments, with the goal of using the new tests to measure students’ readiness for credit-bearing coursework, a major criterion for the Race to the Top assessment competition.

CCSS Increasing Students’ Achievement

States were becoming increasingly aware that the school systems were not producing the 21st century graduates that were needed to compete and succeed after high

school in an increasingly complex and interconnected world. Academic states standards were to serve as the foundation of state and school district education systems. These standards needed to communicate to teachers, parents, and students, the knowledge and skills that students are expected to master in each grade and subject.

But, these standards were not improving student achievement, readiness for college or careers in a global economy. Based on this assertion, NGA and CCSSO stated that the new CCSS were developed to positively affect and improve student achievement. These organizations claimed that the CCSS represented a major advancement in standards for mathematics and English-language arts. The new standards are based on evidence that support that the belief that CCSS would improve student achievement, thereby allowing high school graduates to be ready for college and careers.

The developers, NGA and CCSSO, reiterated that the CCSS provided a clear and focused progression of learning from kindergarten to high school graduation that would give teachers, administrators, parents and students the information needed to increase student achievement and success (Common Core State Standards Initiative, 2010a). The CCSS mathematics standards emphasized the need for students to develop a conceptual understanding of mathematics topics, as well as skills and fluency in mathematical procedures, the ability to apply knowledge, and skills in solving mathematics problems. The CCSS English language arts standards focused on students' ability to read complex texts, write effectively, conduct and report on research, and speak and listen in addition to measuring their knowledge of vocabulary, grammar, and punctuation (Young, 2013).

Due to the claim by NGA and CCSSO that CCSS would increase student achievement, 44 states and the District of Columbia (DC) adopted and implemented the

CCSS. These states and DC are working to develop common assessment for grades three through high school that are aligned to the new CCSS in English and mathematics (Cohen, 2011). The first assessment based on CCSS will be administered in 2014-2015 school year.

Schmidt and Houang (2012) concluded a content analysis of the CCSS in mathematics in order to compare them to mathematics standards in high-performing nations. The researchers concluded that the CCSS mathematics standards are both focused and coherent. Schmidt and Houang also stated that the CCSS in mathematics are rigorous as indicated by the consistency in topic coverage between these standards and the mathematics standards in high-performing nations especially at the eighth grade level. In conclusion, there is some evidence to indicate that the CCSS provides the necessary components to significantly increase student achievement. However, additional evaluations of student performance based on CCSS is required to determine the overall and long-term benefits, if any, of the CCSS on college and career readiness. These additional evaluations will help determine the true effectiveness of CCSS.

Opposing Arguments on CCSS Increasing Student Achievement

The CCSS are designed to increase student achievement for all students and to prepare students for success in college and their careers. However, some analysts question the purpose behind the CCSS. Porter (2011) compared the CCSS to existing state standards and international standards from other countries and concluded that the CCSS do not represent significant improvement. The scholars, Stotsky and Wurman (2010) are opponents of the CCSS who criticized the quality of the proposed standards for English-language arts and mathematics as inferior to existing state standards,

especially in the states of Massachusetts and California.

A major criticism of the CCSS is that the proposed common standards would undermine the decentralized, federalist principles on which education had been governed since America's founding. Critics have stated that a "one-size-fits-all, centrally controlled curriculum," does not make sense given that only weak evidence supports the push for national standards. International test data is not significant evidence since most countries have national standards and the few that do not, including Canada and Germany, have both impressive and non-impressive scores (Stotsky & Wurman 2010).

Another concern of the opponents of the CCSS is that the issue of interstate student mobility is overblown, because few students move between states. Most student mobility is primarily within the state and was addressed by standards within the NCLB Act. Since 2003, every state has established curriculum standards for public schools within its borders (Tienken, 2011). Further, critics site that there is no empirical evidence to support the main points that the CCSS will improve the student achievement. The NGA and the CCSSO stated that CCSS are standards founded on evidence derived from scientific experiments and discoveries as written in two documents: *Myths v. Facts About the Common Core Standards* and *Benchmarking for Success* (Tienken). After examining these documents provided by the NGA and CCSSO to prove that CCSS will increase student achievement, Tienken found that there was no large body of evidence to support the NGA and CCSSO claim that CCSS will increase student achievement. He also stated that the claim of the organizations was primary built on one document, *Benchmarking for Success* that was created by the same groups that developed the CCSS. In addition, the evidence utilized for the CCSS seems unethical and uninformed. Therefore, the evidence

was unable to support such a massive social experiment, in which students have no voice and thus no choice but to go along.

Most CCSS arguments are based on philosophical rhetoric concerning the CCSS improving student achievement. Those who believe that the CCSS enumerate what schools should be teaching and what students should be learning, support the implementation of these proposed standards. Proponents also believe that a greater degree of standardization would produce common educational outcomes and that common outcomes are desirable to support proposed standards (Tienken, 2011).

The CCSS were implemented to address two characteristics that define success in education which are student achievement and teacher instruction. However, some scholars have argued that the lack of common academic standards may lead to unequal coverage of core subject matter across classrooms and schools resulting in unequal educational opportunities (Porter, 2011). This can lead to unprepared post-secondary students and can add to teachers' frustration. Therefore, more time is needed in order to determine the effectiveness and true impact of the CCSS.

Impact of CCSS for Teachers in the Classroom

The goal of the CCSS is to align diverse state curriculum in order to improve educational outcomes in grades K–12. All students should engage in mathematical problem solving, reading and writing complex text through the application of a rigorous and uniformed set of academic standards. The CCSS standards establish uniformed guidelines for what students need to learn, however; they do not dictate how teachers should teach. Therefore, to ensure the implementation of the CCSS, teachers should

continue to devise and create lesson plans and instruction catered to the individual needs of the students in their classrooms.

Since the release of the CCSS and the corresponding adoption by 46 states, it is also necessary to implement professional development for teachers that is specifically designed to help teachers implement CCSS, and in so doing, promote improved student achievement. To do so effectively, several key issues must be addressed (Cohen, 2011). First, professional development must be well designed with the initial goal of creating a motivation to change, including knowledge, attitudes and/or beliefs. This teacher change must, in turn, drive instructional practice. It is clear therefore, that professional development can have an immediate and lasting impact on student achievement, and thus, professional development is critical to the successful implementation of CCSS (Cohen).

In order to for the CCSS to influence classroom instruction in the United States in a positive way, schools and districts need to provide opportunities for teachers to participate in high-quality, comprehensive professional development that: a) is content-focused, b) engages teachers as active learners, c) is of sufficient duration, and d) involves participation with colleagues (Desimone, 2009). The scholar, Desimone indicated that school district professional development and university educational programs must develop instruments that help teachers acquire both content knowledge and pedagogical content knowledge. These instruments should have the ability to make productive use of student thinking and facilitate processes to decrease student misunderstandings within the new CCSS framework. Many advocates of the CCSS argue that teachers will need strong pedagogical content knowledge in order to enact the instructional practices needed to fully implement the CCSS (Desimone).

In addition, many advocates of the CCSS stated that for these standards to have a significant impact on instruction, principals needed to set and maintain high expectations for teachers' practices and regularly visit their classrooms (Cohen, 2011). This action would require all school leaders to be knowledgeable about both subject matter and instruction, while being able to communicate with teachers about the evidence of effective teaching. Young (2013) reported that for many principals, it would be necessary to participate in high-quality, comprehensive professional development to acquire new knowledge that prepares them to take on new roles as instructional leaders able to successfully implement and support the CCSS.

Skeptics have argued however, that the standards-based reform and other improvement efforts faltered, in large part, because teacher evaluation systems failed to assess instruction or promote teacher knowledge acquisition (Porter, 2011). Porter noted that past teacher evaluation systems focused on a narrow range of teaching practices during classroom observations with nearly all teachers receiving satisfaction rating. Many researchers stated that, in order to increase student achievement, new approaches to teacher evaluation must focus on instruction, subject matter, and/or teachers' effects on student learning. Young (2013) affirmed that states and school districts must implement new approaches to teacher evaluation systems in order to foster the type of rigorous instructional practices needed for improved student achievement within the CCSS.

Proponents of CCSS continue to advocate for the benefits of this uniformed standards-based system. Advocates contend that new teacher evaluation and assessment modules, along with comprehensive professional development for teachers and principals, will support the successful implementation of the new system and its

increased rigor and focus on improved student achievement. Porter (2011) indicated that the scholars, who are in support of the CCSS recommend new teacher performance assessments that will promote increase student achievement. Porter outlined the recommendations as: (a) utilizing school-based instructional coaches in English language and mathematics to provide ongoing professional learning opportunities to teachers related to the CCSS and assessments; (b) ensuring the validity and reliability of classroom observation by implementing a standardized approach to training principals and other evaluators; (c) providing training to principals to ensure that instruction is administrated in a uniform way across schools, classrooms, and creating specific procedures for administering instruction to students with disabilities and (d) using data to evaluate teachers to make high-stakes decisions such as dismissal, promotion, or merit pay determinations.

In conclusion, the CCSS will significantly affect, and improve, student achievement if additional measures are included regarding teacher evaluations, professional development and data-driven content focus. CCSS needs to be part of a comprehensive approach to raising expectations and increasing rigor throughout the K–12 educational systems. The classroom teachers are the most important group in the successful implementation of CCSS, and in doing so, transforming high-quality instruction into increased student achievement.

Impact of CCSS on the Teaching Process

The study explored high school teachers' perceptions about the educational influence of CCSS in reading and mathematics. One of the research questions that guided this study asked: Pertaining to literacy and numeracy, what is the difference in teachers'

perceptions regarding the impact of CCSS between teachers of core classes and teachers of non-core classes? The survey that was used for the teachers was designed to determine how the CCSS influenced education in terms of teacher job satisfaction, teacher training and instructional practice (i.e., curriculum and pedagogical standardization and teacher collaboration). The CCSS implementation process is predicted to be the change process that influenced teacher's job satisfaction, professional development, and instructional practice. King (2011) suggested that successfully implement CCSS into instructional practice, administrators, educators, policymakers, and all stakeholders should be aware of the change theory and operate in a manner that implement change strategies utilizing best practices.

Strategy for Educational Changes

According to Fullan (1993a), "Change force is a deliberate double entendre. Change is ubiquitous and relentless, forcing itself on us at every turn" (p. 5). He also noted that the secret of growth and development is learning how to contend with the force of change and turning positive forces to our benefit, while diminishing the negative ones. The study of educational change has greatly progressed over the last 30 years. Today, teachers have been equipped with the tools necessary to deal with change, assist students with change, and are capable of learning from change. These factors are critical for the future development of societies.

Fullan (1991) developed an educational change model that introduced four phases in the change process. The four phases are initiation, implementation, continuation, and outcome. The factors that affected the initiation phase are: (a) existence and quality of innovations (b) access to innovation, (c) advocacy from central administration, (d)

teacher advocacy, and (e) external change agents. However, there were three major issues affecting implementation of the change model: characteristics of change, local characteristics, and external factors (government and other agencies). The organizers identified different stakeholders at the local and federal governmental levels. They also identified characterizations of change of each stakeholder as well as concerns that the stakeholders should consider before committing to, or rejecting, a change effort.

Fullan (1993b) stated that, “the continuation process was a decision about institutionalization of an innovation based on the reaction to the change, which may be negative or positive” (p. 7). The continuation process depends on whether or not: (a) the change gets embedded/built into the structure (through policy/budget/ timetable); (b) the change has generated a critical mass of administrators or teachers, who are skilled and committed; and (c) the change has established procedures for continuing assistance. In addition, the perspectives of the change process may support the achievement of a positive or successful change outcome: (a) active initiation and participation, (b) pressure, support, and negotiation, (c) changes in skills, thinking, and committed actions, and (d) overriding problems of ownership.

Another educational change was developed in 1996. The Effective School Mode (ESM) has seven correlates that are critical to an effective school. These correlates represent the leading organizational and contextual indicators that have been shown to influence student performance and classroom instruction (Lezotte, 1996). These correlates are not independent of one another; rather, they are interdependent to each other. The model that further defined the correlates, demonstrated a way of achieving high and equitable levels of student achievement. It is expected that all children will learn

at least the essential knowledge, concepts, and skills needed so that they can be successful at the next level next year.

The correlates are a set of research-based characteristics of the school's climate associated with improved students' outcomes. Fullan (1991) noted that these sets of research-based correlates are the only identified constructs that are used to analyze a complex social organization such as a school in order for the institutions to change and improve.

Change Theory

The change theory explained that the understanding of human resistance is necessary because change often brings a degree of frustration, stress, and fear - both emotionally and financially (Recklies, 2001). Change generates resistance, stress, fear, and denial when individuals perceive that such change will lower their status and/or affect their job description, or disrupt established work routines. Specifically, when teachers were afraid of losing their jobs because they have incomplete information on how the change processes will affect their careers, assigned tasks, duties, or responsibilities; extreme anxiety may result.

Oakley and Krug (2007) presented guidelines developed that were crucial to developing the commitment necessary for successful organizational change. The authors stated in the transitional state, "people respond to change at different intellectual and emotional rates" (p.16). Therefore, as the individuals adjust to the organizational change, the typical order would be: (a) to observe a change has occurred, (b) develop an opinion about the change, (c) decide to support or resist the change, and (d) take action on the decision (Oakley & Krug, p. 16).

Lewin (1958) introduced the forced field theory which stated that change takes time and persistence because it occurs in three phases: (a) present state, (b) transition state, and (c) desired state. Oakley and Krug (2007) identified the three specific stages in the commitment process as preparation, acceptance, and commitment. The authors stated that there are evolutionary processes associated with developing commitment and the stages leading to commitment were sequential in nature.

Impact to CCSS on the Teaching Process Summary

Understanding best practices in educational change strategies are important to this study because they contributed to understanding the findings in terms of teacher perceptions that reveal obstacles and/or barriers to implementing the CCSS. Change can be difficult and stressful for individuals and organizations. Standards-based curricula and teaching, especially when attached to high-stakes testing, may place an extreme burden on students, teachers and schools to perform.

Accordingly, a foundational understanding of change processes will assist the researcher in the findings analysis and interpretation; and may ultimately be useful in informing educational leadership practice. The following reviews the literature on the CCSS implementation process that brought educational changes to the 48 states including Illinois.

Review of a Standards-based Reform Practice

Education in the United States has been transformed by the most current surge of education reform. Standards-based reform has captivated the nation's schools, influenced the federal law such as the NCLB, state accountability system as well new federal standard based reform. All of these changes were a result of the CCSS. The goals of

CCSS policies were clear, high academic standards were set, the development of tools and assessments to measure students' acquisition of those standards, and school accountability were established for improving student achievement. Even though, the goals of CCSS were clear, information on the school system on student achievement and the impact schools in the 48 states is virtually non-existent.

Wiggins (2010) research was found to be significant due to the survey that provided teacher-respondents with the opportunity to express their perceptions about the influence of the Idaho State Achievement Standards (ISAS) and Idaho Standards Achievement Test (ISAT) in language usage, reading and math. This study allowed the teachers' an opportunity to share their perceptions and express concerns regarding these issues, which was a valuable tool for the researcher to prepare the survey instrument this study.

Wiggins (2010) findings revealed issues and concerns associated with standards-based education that was used to provide direction for workshops, classroom instruction, and enhanced communication with and between teachers and administrators. Wiggins also shared that teachers of today appeared to be more neutral about the standards because they may have a better understanding of the requirements proposed in implementing state standards and assessments compared to teachers five years ago. She proposed that most teachers have accepted the fact that standards-based education was here to stay and were seeking educational opportunities in order to increase their skills and better prepare instruction, disaggregate data, and evaluate their educational programs. Wiggins' study also revealed specific areas of need, direction, training, and support to address issues associated with educator morale, stress, time-pressures, and

disparate student demographics and their potential influence on student achievement of the ISAT using the ISAS. Based on Wiggins' studies, the researcher was able to obtain and modify a survey from an existing measure instrument.

The researcher found the study to be beneficial because the comparative analysis had significant differences between demographic subgroups in terms of teaching experience and teacher/teaching influence, and language usage, reading, and math proficiency and student influence based on the state's learning standards and formal state assessment. This study was proven to be useful and when shared with the educational community, stakeholders could move forward with the implementation of achievement standards and associated assessment.

Conclusion

The literature suggested that historically, American educators have contended with numerous ideas and educational practices concerning standards and assessments. American schools had implemented standards and assessments for over a century. The NCLB Act of 2001 increased standardized testing and accountability for public schools, leaving stakeholders with mixed reactions about the movement. Educators have been challenged by the state and school district mandates, as their classroom course of study and instruction have been prescribed. As the instructional benchmarks and objectives were defined, teachers not only surrendered their desire to create and explore topics of interest, but also were required to implement personal and organizational change.

Understanding change and the processes of change were important to this study because the changes in education that have been mandated through the No Child Left Behind Act of 2001 placed pressure on the United States Department of Education and

the 50 states Board of Education to develop and implement the CCSS in all school districts. This implementation required teachers, administrators, students and parents to reevaluate instruction, testing, and to make continuous instructional changes to successfully obtain student proficiency on the national and state assessments. The manner in which the change took place influenced teachers' perceptions toward the CCSS.

The pressure for students to perform at a proficient level or better on state assessments and the frustration toward the standards were expected to continue to increase. The supporters and opponents expressed that implementing state achievement standards and assessments have increased the difficulties that teachers confront daily, as they are accountable for student achievement. However, the manner by which teachers were addressing student learning and student pressures and their own perceptions about the influence of the CCSS have not been well documented. This study proposed to address this void regarding the impact of the CCSS on cross-curriculum instruction and formal assessment.

CHAPTER III

METHODOLOGY

Introduction

Across the United States, an alarming number of students are graduating from high school without the skills and knowledge necessary to succeed in postsecondary education and 21st century careers. In order to address poor college readiness skills among high school students, 45 states, including Illinois, have replaced the State Content Standards with the CCSS.

The purpose of this study was to evaluate how the implementation of the CCSS affected cross-curriculum instruction, student achievement and learning environment in urban high schools. In order to accomplish this task, a comprehensive evaluation of the CCSS literature was conducted. This evaluation was designed to identify the parameters of the current CCSS initiative, to assess the prevailing perceptions by teachers and educational experts, and to determine the impact, if any, of CCSS on the learning environment. Ultimately, the purpose of this research was to determine the impact of CCSS on student performance. The researcher evaluated the effects of the implementation of the CCSS on formal assessment. The resulting data examined the impact of CCSS on student achievement and cross-curriculum instruction. In addition, this study was to explore high school teachers' perceptions regarding the educational influence of CCSS in reading and math. The researcher explored differences between

subgroups based on various teacher demographics, specifically; teachers' gender and age, years of teaching experience, degree achieved, level and type of certification, courses taught (i.e. core or non-core), and student achievement as reflected by the percentage of students who met state proficiency in reading and math. The assembled data examined the impact of CCSS on student achievement and cross-curriculum instruction through the application of a quasi-researched design. The following research questions guided this study.

Research Questions

1. As measured by Annual Yearly Progress (AYP), what is the difference in student performance based on the application of the Illinois State Standards for the Class of 2010, compared with the application of the CCSS for the Class of 2014, in a public high school?
2. As measured by student performance data based on grades earned in core classes, what is the difference in student performance for the Class of 2010 under the Illinois State Standards in core classes compared to student performance for the Class of 2014 in core classes under the Common Core State Standards?
3. Pertaining to the mandatory integration of literacy and numeracy across all curriculum areas as required under CCSS, what is the difference in perception of CCSS, between teachers of core classes and teachers of non-core classes?

The methodology chapter reviewed: (a) research design, (b) population, (c) data collection, (d) analytical methods, and (e) limitations, concluding with a summary.

Research Design

The primary purpose of this study was to evaluate how the implementation of the

(CCSS) affected cross-curriculum instruction, student achievement and learning environment, in urban high schools. The second part of the study assessed high school teachers' perceptions about the educational influence of the CCSS in reading and mathematics. The researcher used a quasi-experimental methodology because the study design lacked random assignment of the population studied. Therefore, teachers and students received an opportunity to participate by taking the survey or assessment. The statistical procedure utilized to accomplish the task was the analysis of variance (ANOVA). ANOVA analyzed data obtained in response to the research questions.

For the purpose of this study to answer question one, both student groups were tested according to the Explore Plan Assessment System (EPAS). The EPAS (Explore test, Plan test, America College Test (ACT), and Prairie State Achievement Exam (PSAE) system consisted of various tests administered yearly according to the students' grade level. The Explore test is administered during freshmen year (9th grade), (b) the Plan test is administered during sophomore year (10th grade), (c) the Practice ACT test is administered during the first semester of junior year (11th grade), and (d) the PSAE and the state ACT administered during the second semester of the junior year.

The researcher examined the Class of 2010's test scores from the EPAS system, based on the Illinois State Standards, prior to the implementation of the CCSS to answer question one of the study. This information was compared with test scores earned by the Class of 2014, on the EPAS, following the implementation of the CCSS. The Class of 2014 took all of the assessments (Explore, Plan, ACT and PSAE) by April of 2013. The analysis of test scores helped determine the effect of the implementation of CCSS on student achievement.

The researcher addressed the second question of the study by comparing the Class of 2010 archival performance data in core classes under the Illinois State Standards with the Class of 2014 performance data in core classes according to the CCSS. All archival quantitative data obtained prior to the implementation of CCSS, was compared to data obtained following the implementation of CCSS within the high school. The official data on academic performance was collected and analyzed in order to determine the impact of the CCSS on student achievement and cross-curriculum instruction, related to the impact on student achievement in core classes for the Class of 2010 before CCSS, against the core class data for the Class of 2014, after the implementation of CCSS.

The researcher answered the third question through the application of a teacher survey that identified core teacher (English, science, math and social studies) or non-core teachers (fine arts, physical education, and CTE – business, family & consumer science, and applied technology). The survey also determined the teachers' perception of the impact of CCSS on student achievement. The first part of the survey queried teachers' perceptions in terms of: teachers' gender and age, years of teaching experience, degree achieved, level and type of certification, courses taught (i.e. core or non-core) and, student achievement as reflected by the percentage of students who met state proficiency in reading and math as noted above. The remainder of the survey consisted of Likert scale items used to survey teacher perceptions. The participants checked their level of agreement with various statements (i.e., strongly agree, agree, neutral, disagree, or strongly disagree).

According to Gall, Gall, and Borg (2003), surveys have been used extensively to collect data in educational research on non-directly observable events. "These data-

collection methods typically inquired about the feelings, motivations, attitudes, accomplishments, and experiences of the individuals” (p. 288). Gall et al. indicated that survey questionnaires were defined as documents that asked the same questions of all individuals in the sample. Therefore, the survey was emailed to the teachers with the instruction that they had 15 days to complete it. Respondents recorded a written response to each questionnaire by answering the items in any order, making comments, or giving various types of responses.

The survey items were constructed using a five-point Likert scale. The scale was: 1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, and 5 – strongly agree. The scale items were grouped into five categories. The survey had 53 multiple-choice questions and two open-ended questions. The first 26 items addressed perceptions about the CCSS influence on teachers. The items are personal influence on teachers (6 items) and influence on teaching (20 items). The next 18 items addressed perceptions about the CCSS influence on education (8 items) and student performance (10 items). The last nine items addressed teachers’ perceptions regarding school administrators’ roles and job satisfaction of the administrators. The two open-ended questions addressed the teachers’ perception on professional development related to the CCSS. The survey appears in Appendix B.

Content validity

The survey content was initially derived based upon a review of the literature and modified from an existing measure instrument designed by Wiggins (2010). During survey development, a content alignment matrix was created, with the research questions across the top – horizontal row of the matrix and the survey items along the vertical row.

Next, an X was placed into matrix boxes to indicate which survey items aligned with which research questions.

A panel of 10 core and non-core teachers reviewed the survey on teachers' perception of the implementation of CCSS. These teachers were not included in the full study sample. After an explanation of the study purpose and survey, teachers were asked to respond to the survey and provide feedback as to the clarity and appropriateness of each item. According to Gall et al. (2003), "content validity refers to the degree to which the scores yielded by a test adequately represent the content or conceptual domain that these scores purport to measure" (p. 250). Modifications to survey content were made as needed and appropriate based on teacher review and feedback.

Reliability Analysis of the Survey Instrument

The researcher reviewed the reliability analysis of the survey instrument. The Cronbach's alpha was used to compute a survey item reliability analysis for each subscale of the instrument. Cronbach's alpha measures internal consistency on survey where the respondents used a Likert scale (Gall et al., 2003). Reliability analysis is performed on a set of related questions, often called a scale or measurement scale. Reliability referred to the extent to which a measuring instrument (or scale) or that a method is consistent in measuring what it measures. This is important in that reliability implies to the extent, which the results of a study are replicable and are actually the products of the tools being used. Reliability may be thought of in terms of consistency in what is being measured by an instrument or tool (Shannon & Davenport, 2001).

Cronbach's alpha is a measure of homogeneity often used to assess inter-item reliability or consistency for a set of related questions. More consistent items will result

in a higher coefficient alpha, therefore, indicating a higher level of reliability (Shannon & Davenport, 2001). The researchers, Leedy (1997) and Pemberton (2008) reported that an alpha coefficient of .60 or higher is considered an adequate demonstration of inter-item reliability and thereby allows for the creation of total variables from sets of scales of items (questions). When total variables are created from reliable sets of common items, they can be used to calculate statistically significant differences between the mean values of the data obtained by using the particular scale that was defined as a set of related and reliable questions.

Population

The participants in the study included full-time public high school teachers and 11th grade students in a mid-western state. This mid-western state targeted the 11th grade level test results to use as indicators of students' academic performance in the secondary school setting. Academic standards were developed for this specific population and the PSAT and ACT were used as assessment tools. The high school teachers were selected for this study because the subjects they teach are the focus for core and non-core classes in high schools throughout this school district. In addition, the issue of nationally driven educational standards directly affected their subject areas. This high school is one of the three high schools within a large township high school district that was invited to participate in this study. This resulted in 90 full-time high school teachers (61 core class teachers and 27 non-core class teachers) participating in the study as shown in table 1. These specific teachers were identified because this high school was the only school in the district selected for this study. The two groups of students whose assessment scores

were examined for the study was Class of 2010 (231 students) and Class of 2014 (222 students) as shown as in table 2 (Illinois State Board of Education, 2010, 2013a).

Table 1

Number of Participants Teaching Core and Non-core Classes

Participants	Number of Full-time Teachers
Core Teachers	60
Non-Core Teachers	28
Total	88

Note. Core teachers teach the following classes: English, math, science, and social studies and non-core teachers teach: fine arts, physical education, Career Technical Education (CTE) that consist of: Applied Technical, Business, Family & Consumer Science, and Health Science.

Table 2

Demographics Characteristics for the Students' Participant Sample

Participants	Enrollment	Gender		Racial/Ethnic Background			
	11th Grade	M	F	White	Black	Hispanic	Multi/racial
Class of 2010	231	110	121	27	190	8	6
Class of 2014	222	112	110	14	185	12	11

Note. Enrollment as reported during the testing windows for grade 11. Adapted from Illinois State Board of Education, 2010 and 2013 Illinois School Report Card, Copyright 2010 and 2013 by the Illinois State Board of Education.

Data Collection

The researcher examined the Class of 2010's test scores from the EPAS system, based on the Illinois State Standards, prior to the implementation of the CCSS to answer question one of the study. The researcher compared this information with test scores earned by the Class of 2014, on the EPAS, following the implementation of the CCSS. Analysis of test scores helped determine the effect of the implementation of CCSS on student achievement as illustrated in table 3.

Table 3

Data Collection Chart for State Assessment Tests

Testing Year	Class of 2010 Assessment Data Based on Illinois State Standards	Class of 2014 Assessment Data Based on Common Core State Standards
9 th Grade	Explore Test – Nov. 2006	Explore Test – Nov. 2010
10 th Grade	Plan Test – Nov. 2007	Plan Test – Nov. 2011
11 th Grade	Practice ACT Test – Nov. 2008 State Formative Assessments April 2009 – Two Day Test <ul style="list-style-type: none">• State ACT – Day 1• PSAE – Day 2	Practice ACT Test – Nov. 2012 State Formative Assessments April 2013 – Two Day Test <ul style="list-style-type: none">• State ACT – Day 1• PSAE – Day 2

The score-related information from 2010 and 2014 was obtained from the archival data assembled for the school district. Scores represented by these test scores were presumed to be indicators of student knowledge, student competency and student potential for secondary education. It is important to note however, that other factors not related to the implementation of the CCSS could have had some bearing on student test scores. The researcher of the study did not presume to know or define what those factors

were, if any, and thus, primarily focused on the implementation of the CCSS and their resulting role in student performance.

The researcher addressed the second question of the study by comparing the Class of 2010 archival performance data for the core classes under the Illinois State Standards with the Class of 2014 performance data for the core classes according to the CCSS. The researcher analyzed the information to determine how the implementation of CCSS will impact cross-curriculum, instruction, and student achievement.

All archival quantitative data obtained prior to the implementation of CCSS, was compared to data obtained following the implementation of CCSS within the high school. The official data on academic performance was collected and analyzed in order to determine the impact of the CCSS on student achievement and cross-curriculum instruction, related to the impact on student achievement for the core classes. Also, the comparison-included data relate to core class data for the Class of 2010 before CCSS, against the core class data for Class of 2014 after the implementation of CCSS.

The researcher employed a mixed design to respond to research question three. Data was gathered through a survey. The information sent to the teachers included: (a) a brief cover letter explaining the purpose of the study, (b) the consent form assuring confidentiality and soliciting informed consent, the instructions for completing the survey (see Appendix A), and (c) the survey instrument (see Appendix B). One hundred twelve high school teachers were emailed an anonymous survey via Survey Monkey®. This survey engine utilized both quantitative and qualitative data. Survey Monkey® is an online assessment tool that allows users to create surveys and distribute them via email to recipients. Using a Likert-type scale, the survey posed 53 multiple-choice questions that

used a range between strongly agree, agree, neutral, disagree, and strongly disagree as well as two open-ended questions. The researcher received permission to use the Wiggins' survey (see Appendix C).

The researcher asked survey participants to complete the survey within 15 days of receipt of the email. Survey Monkey® allowed the researcher to track the number of respondents, the type of respondents and the frequency of certain responses. The survey's introduction included a brief summary of the purpose of the research, followed by an informed consent form that asked for the survey participant's consent.

Surveys were coded through information provided by the survey participants, according to department and did not require the name of the participant. The survey was developed as described and numerically coded to ensure participant confidentiality. A reminder email was sent to potential survey participants who had not yet completed the survey 10 days after the initial email. Two additional email reminders were sent to teachers who did not respond; one at 20 days after the initial email and the last at 30 days after the initial email. Seventy-three surveys were returned. After the surveys were returned, the results were entered into SPSS (Statistical Package for the Social Sciences) for data analysis for each of the research questions. Data was stored in hard-copy form in a locked file cabinet and electronically in the SPSS database on a personal computer with accessibility given only to the primary researcher and her advisor. Following the completion of the study and publication, the data will be stored for seven years. After the required period to store the data, the researcher will shred and destroy the hard copy data and the computer data will be deleted.

Analytical Methods

Analysis of research question one examined the difference in student performance of the Class of 2010 based on the Illinois State Standards with student performance of the Class of 2014 based on the CCSS, as measured by the EPAS testing system. The researcher used a quasi-experimental design to determine how the two variables are different. This methodology allowed the researcher to examine test scores earned by the Class of 2010 on the ACT and PSAE exams (*independent variable*), based on the Illinois State Standards, prior to the implementation of CCSS. The researcher compared this information with test scores earned by the Class of 2014, on the ACT and PSAE exams (*independent variable*), following the implementation of the CCSS. The analysis of test scores (*dependent variable*) on the ACT and PSAE to determine the effect of the implementation of CCSS on student achievement. The parametric test, ANOVA was utilized to analyze data collected from the two groups (Class of 2010 versus Class of 2014) with the two measurements (ACT and PSAE). One-way ANOVA provided a suitable analysis for discussing the effects of the two standards in order to identify their impact on student performance. Therefore, four one-way ANOVAs based on the Illinois State Standards were used to compare the ACT and PSAE scores of the students in the Class of 2010, with the ACT and PSAE scores of the students in the Class of 2014, based on the CCSS.

For the second research question, the researcher used a quasi-experimental design to determine how the two variables are different. This methodology allowed the researcher to address the second question of the study by comparing the Class of 2010 students' archival performance data in core classes under the Illinois State Standards

with the Class of 2014 students' performance data in core classes according to the CCSS. The researcher analyzed the information to determine how the implementation of CCSS impacted cross-curriculum, instruction, and student achievement.

Prior to implementing the CCSS, each core and non-core discipline created its own standard by which to implement lessons. Today, core and non-core disciplines must incorporate CCSS (numeracy and literacy) into their lesson plans. School records provided data used for the analysis required to answer the second question. The study used data derived from Power School, the student information system that included grades from core classes (English, mathematics, social studies, and science), issued by teachers who taught core and non-core courses. Two-by-two mixed-model ANOVA was used to compare student performance (grades) in core subject areas prior to the implementation of CCSS for the Class of 2010 and after the implementation of the CCSS for the Class of 2014. The researcher ran a 2x2 factorial ANOVA on the students' performance data (grades for core classes) for the Class of 2010 and Class of 2014.

All archival quantitative data obtained prior to the implementation of CCSS was compared to data obtained following the implementation of CCSS within the high school. The official data on academic performance was collected and analyzed in order to determine the impact of the CCSS on student achievement and cross-curriculum instruction, related to the impact on student achievement in core classes and comparing the core class data in 2010, before CCSS, with the core class data in 2014, after the implementation of CCSS.

For question three, the dependent variable for each of the survey questions were the teachers' perceptions on the CCSS in the following three areas: influence on teachers

and their teaching, influence on students' education and performance and influence on administrators' roles and job satisfaction. The independent variables identified in the research questions included: gender, teacher's age and years of experience, degree achieved, and student achievement variance as reflected by the percentage of students who met proficiency on the PSAE in reading and math. To analyze the quantitative data derived from the surveys, a variety of statistical tests were used based on the question type. The participant core and non-core (*independent variables*) teachers selected answers from a Likert-type scale. The means and standard deviations from the numerical values on the Likert-type scale will be reported.

Information obtained through the surveys from core teachers and non-core teachers provided both quantitative and qualitative data for the research study. In instances where there were multiple independent variables being compared for difference in perceptions (such as for age categories, education categories, and proficiency percentages relative to teacher perceptions of teachers, students, and administrators) an ANOVA was employed. A series of between-subjects ANOVAs were used to evaluate how core teacher participants responded to the questions compared to how the non-core teacher participants responded to the questions on the teachers' survey. Five ANOVAs were administered for five categories: Teacher Moral, Curriculum & Instruction, Data and Assessment, Students Achievement, and Building Administration) on the Teachers' Perception on the Common Core State Standards Survey. The researcher incorporated descriptive analysis that included the following data: frequencies, means, standard deviation, and item-to-total correlations in order to gain an understanding of the teachers' responses to the questionnaire items. Gay et al. (2006) advocated using between-subjects

ANOVA when data between various groups was being compared. Survey answers provided additional data used for analysis of the third research question.

Limitations

The original intent of the study focused on the implementation of the CCSS affected cross-curriculum instruction, student achievement, learning environment in urban high schools, as well as the teachers' perception of CCSS and student achievement scores on state accountability assessment. One limitation in this study was the use of formative assessment scores as the sole determinant of student achievement; achievement can also be measured by other means and measures, including formative assessments, course grades and grade point average. Therefore, data from students who are simply poor test takers may have been misrepresented in the data analysis.

During the spring of 2012, the school district experienced substantial budget issues. The budget deficits created a situation where a majority of non-core teachers, approximately 45, became victims of a reduction in force (RIF). This caused disparity between the number of core and non-core teachers taking the survey. Also, due to political issues and the stressful environment surrounding the employees of the district at that time due to the RIF caused some serious questions to emerge regarding teachers' participation in the survey. The researcher determined that if the surveys were administrated during this stressful time, the results of the survey would most likely misrepresent teacher's true feelings about the CCSS and the impact on student achievement. Since teachers' perception regarding habits became unavailable for utilization in the study, future research is required to examine and either confirm or reject the findings from this study.

Another limitation of the study was the dual role of the associate principal of the school as the researcher. Although the surveys were anonymous and only identifiable by number, there were potential risks for the survey participants to suppress or adjust their responses out of concern that the associate principal could identify their individual data. Moreover, the survey instruments were vulnerable to the subjective biases that were associated with self-reported methodology, and as such, participant responses may have been inflated in the data.

While there are some limitations with regard to this study, the researcher created the most effective and conclusive data collection methods to support the results of the various study questions. When the original scopes of accurate data collection were compromised, the researcher adjusted the collection methods to accommodate the unexpected variable. The adjustments allowed the researcher to collect conclusive and concrete evidence to support the study.

Summary

The purpose of this study was to evaluate how the implementation of the CCSS affected cross-curriculum instruction, student achievement and learning environment, in urban high schools, as well as high school teachers' perceptions about the educational influence of CCSS and student achievement in reading and math. In addition, the differences between subgroups based on various teacher/school demographics, specifically, teachers' gender, age, years of teaching experience, degree achieved and student achievement reflected by the percentage of students, who met state standards in reading and math. The methodology outlined was intended to address the research

questions and generate conclusive data and finding to contribute to the empirical knowledge-base regarding standards-based and CCSS assessment in high school setting.

CHAPTER IV

FINDINGS AND CONCLUSIONS

Introduction

The purpose of this study was to determine the impact of CCSS on the learning environment. In developing the objectives for this research regarding the impact of the CCSS, the researcher: (a) compared performance data based on State Standards with performance data according to the CCSS, (b) examined teachers' perceptions regarding the educational influence of CCSS and (c) evaluated the impact of CCSS on the learning environment and cross-curriculum instruction. The purpose of this study was addressed through the following research questions:

1. As measured by Annual Yearly Progress (AYP), what is the difference in student performance based on the application of the Illinois State Standards for the Class of 2010, compared with the application of the CCSS for the Class of 2014, in a public high school?
2. As measured by student performance data based on grades earned in core classes, what is the difference in student performance for the Class of 2010 under the Illinois State Standards in core classes compared to student performance for the Class of 2014 in core classes under the Common Core State Standards?
3. Pertaining to the mandatory integration of literacy and numeracy across all curriculum areas as required under CCSS, what is the difference in

perception of CCSS, between teachers of core classes and teachers of non-core classes?

Findings

Data Analysis

This study was primarily descriptive and utilized a mixed research design. The analysis involved basic descriptive statistics, including response frequencies and corresponding percentages, measures of central tendency-means, standards deviations, and ranges for research questions one through three. Data analysis for research questions one, two, and three were inferential. For research question three, independent variables (demographics) represented the nominal data, and dependent variables (perceptions) represented the ordinal data.

Analysis of data addressing research question 1: As measured by Annual Yearly Progress (AYP), what was the difference in student performance based on the application of the Illinois State Standards for the Class of 2010, compared with the application of the CCSS for the Class of 2014, in a public high school?

The researcher employed inferential analysis for research question 1 to compare the Class of 2010 test scores from the EPAS system, based on the Illinois State Standards, with test scores earned by the Class of 2014, on the EPAS, following the implementation of the CCSS. The analysis of variance (ANOVA) was used to determine which learning standards, Illinois State Standards or CCSS enhanced classroom instruction to increase students' achievement for the state assessment.

Table 4

One Way ANOVA of Student Academic Performance for the Class of 2010 under the IL State Standard compared to the Class of 2014 under the CCSS as measured by AYP on the state tests (PSAE Examination) in Reading and Math

State Tests	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
Reading: Between Groups	304.11	1	304.11	1.46	.227
Within Group	95887.33	456	208.09		
Total	95191.44	457			
Math: Between Groups	488.78	1	488.78	2.48	.116
Within Group	89907.30	456	197.17		
Total	90396.07	457			

Note. The p -value (sig.) $p < .05$.

Table 4 illustrated findings relative to the ANOVA on students' academic performance for the Class of 2010 under the IL State Standards compared to the Class of 2014 according to the CCSS for the AYP on the state tests (PSAE Examination) in reading and math. The data in table 4 provided the answer to the research question regarding the difference in students' academic performance in reading and math for the Class of 2010 under the IL. State Standard compared to the Class of 2014 under to the CCSS.

In addition, the p -value (p) was indicated in the table, and was representative of the exact probability of obtaining the specific results (or results even more extreme) if the null hypothesis was true. The p -value reported as *sig* in SPSS. The p -values for students' academic performance on the PSAE were reading ($p = .227$) and math ($p = .116$); both greater than .05. As a result, the null hypothesis indicated that the means are not equal for the two classes and therefore, not rejected. The ANOVA revealed that there were no statistically significant differences in learning standards between the subject groups based

on the students' academic performance in reading and math on the PSAE under the IL State Standards compared to academic performance in reading and math under CCSS.

Table 5

Mean Rating and Standard Deviations for Students' Academic Performance for the Class of 2010 under the IL State Standards compared to the Class of 2014 according to the CCSS based on AYP (PSAE Examination) in Reading and Math

Total Variables	Year	<i>n</i>	<i>M</i>	<i>SD</i>
Reading	2014	227	148.37	14.00
	2010	231	146.74	14.84
	Total	458	147.54	14.43
Math	2014	227	146.57	13.46
	2010	231	144.50	14.59
	Total	458	143.53	14.06

Table 5 revealed that the means were relatively consistent across the two class years regarding students' academic performance for the Class of 2010 under the IL State Standards compared to the Class of 2014 under the CCSS based on AYP (PSAE Examination) scores in reading and math. However, after reviewing the means for the two class years, the Class of 2014 under the CCSS had a slightly higher means for reading (148.37) and math (146.57) than the Class of 2010 under the IL State Standards. Thus, the CCSS were apparently making an impact but not enough to substantiate the claim that it would improve students' academic performance.

Table 6

Average PSAB Scores in Reading and Math for the Class of 2010 & 2014

Class Year	Average Score by Subject	
	Reading	Math
Class of 2014	148	147
Class of 2010	146	144

Notes: For the Class of 2014 – The scores of all grade 11 students tested with PSAB are included in this report, regardless of their enrollment date. Adapted from ISBE School Performance Profile. Copyright 2013b and 2009 by ISBE.

Table 6 displayed the comparison scores for the Class of 2010 and 2014 on the PSAB. For the Class of 2010, the average scores were reading (146) and math (144). For the Class of 2014, the average scores were reading (148) and math (147). Based on ISBE AYP performance targets for IL State Standards and CCSS, students performed below standards (see table 7). The PSAB scores for the Class of 2014 were slightly higher, but not significant enough to indicate that CCSS improves student achievement.

Table 7

ISBE Student Performance Value Based on AYP Performance Targets Set by Federal NCLB Guidelines

Performance Level	Performance Level Descriptions	Score Range by Subject	
		Reading	Math
Exceeds Standards (Level 4)	Student work demonstrates advanced knowledge and skills in the subject.	178 – 200	179 – 200
Meet Standards (Level 3)	Student work demonstrates proficient knowledge and skills in the subject.	155 – 177	156 – 178
Below Standards (Level 2)	Student work demonstrates basic knowledge and skills in the subject.	135 – 154	136 – 155
Academic Warning (Level 1)	Student work demonstrates limited knowledge and skills in the subject.	120 – 134	120 – 135

Notes: Adapted from ISBE Student Performance Chart based on AYP. Copyright 2013c by ISBE.

Table 8

Comparable Trends of ACT Scores for the Class of 2010 and Class of 2014

Grad Year	English	Mathematics	Reading Social Studies	Science
2010	17.1	17.5	17.6	16.6
2014	16.7	17.7	17.1	17.4

Note: Adapted from ACT, 2010 and 2014 College Readiness Report and ACT test scores range from 1 to 36, retrieved from <http://www.act.org/collegereadiness/report/index.htm> Copyright 2010 and 2013 by the ACT.

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Table 8 displayed the scores for the Class of 2010 and Class of 2014 on the ACT exam. There was a similar data trend on the ACT scores for the students of 2010 and 2014. The ACT consisted of curriculum-based tests for educational development in English, mathematics, reading and science. The tests were designed to measure the skills needed for success in first-year college coursework. ACT reported the following as the minimum college readiness benchmark scores for designated college courses: English Composition: 18, mathematics: 22, social studies: 22, and science: 23. Neither of the learning standards, (IL St. Standards nor CCSS), met these ACT benchmark scores nor made an impact to increase student achievement.

Analysis of data addressing research question 2: As measured by student performance data based on grades earned in core classes, what was the difference in student performance for the Class of 2010 under the Illinois State Standards in core classes compared to student performance for the Class of 2014 in core classes under the Common Core State Standards?

The researcher employed inferential analysis for research question 2 to compare the Class of 2010 archival performance grades in core classes (English, math, social

studies, and science) under the Illinois State Standards with the Class of 2014 performance grades in core classes under to the CCSS. The ANOVA was used to determine which learning standards enhanced students' grades in the core classes.

The population sizes used for comparison were 231 high school students in the Class of 2010 and 227 high school students in the Class of 2014. The students attended an urban high school in a south suburb of a mid-western state. The official academic performance data (grades) was collected and analyzed in order to determine: (a) the impact of the CCSS on student achievement and cross-curriculum instruction, and (b) the impact on student achievement in core classes for the Class of 2010 before CCSS against the core class data in the Class of 2014 after the implementation of CCSS.

Table 9

Mean Rating and Standard Deviations for Students' Academic Performance for the Class of 2010 under the IL State Standard compared to the Class of 2014 under the CCSS for each of the Four Variables: English, Mathematics, Social Studies, and Science

Variables	Year	<i>n</i>	<i>M</i>	<i>SD</i>
English	2014	226	2.77	0.92
	2010	228	2.88	1.07
	Total	456	2.82	1.00
Mathematics	2014	228	2.99	1.17
	2010	227	2.76	1.05
	Total	455	2.88	1.18
Social Studies	2014	226	2.78	0.94
	2010	226	2.67	1.00
	Total	452	2.73	0.97
Science	2014	172	2.85	1.08
	2010	193	2.72	1.04
	Total	365	2.79	1.06

Table 9 revealed that the means were relatively consistent between the years assessed regarding the students' academic performance within each of the four variables representing core classes (English, mathematics, social studies, and science). However, the Class of 2014 under the CCSS had a slightly higher mean for mathematics (2.99), social studies (2.78), and science (2.85). The Class of 2010 achieved slightly higher scores in English (2.88) utilizing IL State Standards compared to the Class of 2014 English (2.77) classes. The results indicated that the CCSS for numeracy improved student achievement, but not enough to make a significant difference between the two learning standards. However, the data suggested that overtime, CCSS will continue to have some measure of impact to increase student academic performance as a result of the standards required for classroom instruction under CCSS.

Table 10

One Way ANOVA for Students' Academic Performance for the Class of 2010 under the IL State Standards compared to the Class of 2014 under the CCSS for each of the Four Variables: English, Mathematics, Social Studies, and Science

Core Course	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
English: Between Groups	2.77	2	1.39	1.39	.249
Within Group	449.90	453	0.99		
Total	452.66	455			
Math: Between Groups	7.44	2	3.72	3.00	.051
Within Group	560.15	452	1.24		
Total	567.60	454			
Soc. S: Between Groups	1.43	2	0.72	0.76	.470
Within Group	424.10	449	0.95		
Total	425.53	451			
Science: Between Groups	6.52	2	3.26	2.91	.056
Within Group	406.24	452	1.22		
Total	412.76	454			

Note. The *p*-value (sig.) $p < .05$.

As shown in table 10, the ANOVA provided answers to research question 2, regarding the difference in students' academic performance, as measured by grades earned in core classes for the Class of 2010 under the IL State Standard compared to the grades earned in core classes for the Class of 2014 under the CCSS. The four variables for English, mathematics, social studies, and science were assessed. The p -value in the ANOVA illustration regarding students' academic performance in the four core classes were: English ($p = .249$), mathematics ($p = .051$), social studies ($p = .470$), and science ($p = .056$). The p -values were greater than .05. As a result, the null hypothesis indicated that the means were not equal for the four subject groups and therefore, not rejected. The ANOVA revealed that there were no statistically significant differences in student performance based on data derived from grades between the subject groups based on students' academic performance in the core classes under the IL State Standards or on the students' academic performance in core classes under CCSS.

Reliability Analysis of the Survey Instrument for Research Question 3

As described in the reliability analysis of the survey instrument section in Chapter III for research question 3, thematically scaled items were analyzed for inter-item reliability using Cronbach's coefficient alpha. In instances where alpha coefficients were sufficiently strong (.60 or higher), total variables were created to represent the scale theme or construct. Thus, survey items B (13 items) and C (13 items) were combined to create a total variable scale relative to perceptions of the CCSS influence on teachers. This also included influences on them personally and on their teaching methods.

In a similar manner, survey items D (8 items) and E (10 items) were combined to create a total variable scale related to perceptions of the CCSS influence on students and

administrators. These items were thus combined into the third total variable scale.

Reliability analysis was performed on the three sets of survey items grouped as previously described. The analysis was performed during instrument development (i.e., the pilot study) and with the actual survey data. This analysis explored instrument inter-item reliability particular to thematic survey item scales regarding teacher perceptions. The pilot study reliability analysis demonstrated strong inter-item reliability for the survey instrument (*alpha* (α) > .60 on each total variable scales).

Table 11

Scale Titles, Number of Items, and Alpha Reliabilities for Pilot Survey

Title of Scale	Number of Items in Scale	Alpha Reliability
Influence on Teachers and Their Instructions (Survey Items B and C)	26	.70
Influence on Education and Student Performance (Survey Items D and E)	18	.80
Influence on School Administrators' Roles and Job Performance (Survey Item F)	9	.77
Overall Teacher Perceptions of CCSS Influence (All Survey Items)	53	.76

The pilot alpha values as shown in table 11 were as follows: teacher perceptions of CCSS on their instruction, as indicated by survey items B and C ($n = 26$) was $\alpha = .70$, teacher perceptions of CCSS' influence on education and student performance, as indicated by survey items D and E ($n = 18$) was $\alpha = .80$, and teacher perceptions of CCSS influence on school administrators' roles and job satisfaction, as indicated by survey item E ($n = 9$)

was $\alpha = .77$.

As stated, Cronbach's *alpha* measured homogeneity used to assess inter-item reliability or consistency for a set of related items. A higher coefficient *alpha* denoted a higher level of inter-item reliability coefficient. All 53 items on the survey scored a total of .90. Reliability analysis for the first set of 26 survey items (related to teacher perceptions of the CCSS – job satisfaction, instructional practices and training) resulted in an *alpha* coefficient of .81. This *alpha* coefficient was considered adequate (.60 or greater) for creating and maintaining the total variable for survey items B and C.

The second set included 18 survey items associated with respondent perceptions about the CCSS' influence on students' performance as reflected by student PSAT scores. The reliability analysis resulted in an *alpha* coefficient of .90. Thus, the second total variable was maintained using the 18 related items from survey items D and E.

The final nine survey items were related to teacher perceptions about the CCSS influence on school administrators and resulted in an *alpha* coefficient of .60. These results validated the third total variable for section F of the survey items. Table 12 displays the alpha coefficients from the various surveys.

Table 12

Scale Titles, Number of Items, and Alpha Reliabilities for Survey Instrument

Title of Scale	Number of Items in Scale	Alpha Reliability
Influence on Teachers and Their Instructions (Survey Items B and C)	26	.81
Influence on Education and Student Performance (Survey Items D and E)	18	.90
Influence on School Administrators' Roles and Job Performance (Survey Item F)	9	.60
Overall Teacher Perceptions of CCSS Influence (All Survey Items)	53	.90

Analysis of data addressing research question 3: Pertaining to the mandatory integration of literacy and numeracy across all curriculum areas as required under CCSS, what was the difference in perception of CCSS, between teachers of core classes and teachers of non-core classes?

Respondent Demographics for the Survey

The total population size included 88 high school teachers from one high school in the southern suburb of a large metropolitan city. Seventy-three teachers completed the survey that resulted in a response rate of 83% ($n = 73$ of 88). The respondents addressed each of the statements on the survey and none were omitted. The response rate was near the higher end of response rates predicted by Nutty (2008), who stated that a 20 - 43% response rate could be expected for an online survey.

Table 13

Personal Respondent Demographics for the Survey

Demographic Items	Participants (<i>n</i> = 73)	Frequency Percent
Gender		
Female	44	60.3%
Male	29	39.7%
Age Range		
Under 30	11	15.0%
30 – 40	25	34.2%
41 – 50	20	27.3%
51 – 60	11	15.0%
61 – 70	6	8.2%
Highest Level of Educations Degree		
BA/BS	8	11.0%
BA/BS + 30	7	9.6%
MA/MS	38	52.0%
MA/MS + 30	19	26.0%
Ed. D/ PhD	1	1.4%
Total Years of Teaching Experience		
0 – 5	13	17.6%
6 – 10	23	31.1%
11 – 15	14	19.0%
16 – 20	12	16.2%
21 – 30	5	6.8%
30 +	6	8.1%

Table 13 illustrated the respondent's personal demographics, such as gender, age, education, and teaching experience. This data indicated that the majority of the respondents were female between the age of 30 – 40 with a Master's Degree and six to 10 years of teaching experiences.

The researcher employed inferential analysis to question 3 and compared respondents' perceptions based on demographic variables; such as, gender and teaching experience across the total variable constructs. The ANOVA was utilized in the instances

of multiple independent variables being compared for differences in perceptions (core, non-core, and special education (SPED) core teachers). The next section review begins with a description of the data analysis.

Part I of the survey. Data analysis for items B and C of the survey were descriptive. The 26 Likert questions were designed to assess respondents' perceptions of CCSS on their instruction. The areas addressed in the survey were teacher job satisfaction (questions B1 – B4, B13, and C8), teacher training (questions B7, B8, B10, B12 and C5) and instructional practice (questions B5, B6, B9, B11, C1 – C4, C6 – C7, C9 – C13). These areas were summarized relative to survey item response frequencies and corresponding percentage as showed in Table 24 (Appendix D).

Mean and standard deviations – Perceptions about the influence on teachers' instruction. Survey item response mean and standard deviations were displayed in Table 15. Mean and standard deviations for each statement were reported and discussed relative to job satisfaction (questions B1 – B4, B13, and C8), teacher training (questions B7, B8, B10, B12, and C5), and instructional practices (questions B5, B6, B9, B11, C1 – C4, C6, C7, and C9 – C13). Data was reported in order of response strength. This analysis further confirmed the response frequency finding reported in Table 14.

Table 14

Respondents' Mean and Standard Deviations on Survey Items Related to Perceptions of CCSS: Their Instructions

Survey statements composing the teacher scale	<i>M</i>	<i>SD</i>
B1. Teacher morale improving.	3.47	1.09
B2. The stress level among teachers decreasing.	3.96	1.16
B3. Teacher resigning and citing standards as a reason.	3.56	0.92
B4. Teachers planning to retire early and citing standards as a reason.	3.47	0.95
B13. Record keeping being a major time constraint for teachers.	2.30	1.17
C8. Teachers trying to transfer out of their current grade level or subject area because of the CCSS/assessment/accountability process.	3.82	2.59
B7. Teachers resisting changes to the current teaching styles.	3.27	0.99
B8. Teachers resisting changes to the current teaching techniques.	3.34	1.02
B10. Teachers having more workshops to attend.	2.30	1.10
B12. Teacher becoming more accountable for their students' success.	2.30	0.89
C5. Teachers increasing their knowledge of assessments.	2.21	0.80
B5. Teachers spending more time collaborating.	2.68	1.08
B6. Teachers engaging in more collaborative planning.	2.77	1.09
B9. Teachers having more committee work responsibilities.	2.57	1.04
B11 Teachers spending less time teaching and more time on test preparation activities.	2.37	1.11
C1. Teachers disaggregating DEA and PSAE data to better prepare instruction.	3.12	1.05
C2. Teachers addressing student' learning styles.	2.19	0.94
C3. Teachers integrating instruction across the curriculum.	2.21	0.89
C4. Teachers improving the instructional methods applied in the classroom.	2.18	0.75
C6. Teachers obtaining a better understanding of the exact curriculum students must know.	2.27	0.87

Table 14 (Continued)

Survey statements composing the teacher scale	<i>M</i>	<i>SD</i>
C7. Teachers teaching to the tests more often.	2.03	0.97
C9. CCSS taking too much time from scheduled classroom work.	2.88	1.09
C10. Teachers spending less time helping individual students.	3.05	1.19
C11. Teachers moving more quickly through the curriculum in order to cover all of the materials on which their students are evaluated.	2.25	
C12. Course content that does not cover the CCSS seen as unimportant by teachers.	2.85	1.08
C13. Subject areas without standards or testing requirement seen as important by teachers.	2.95	0.98
<i>Note.</i> Survey anchors ranged from 1 (Strongly Agree), 2 (Agree), 3 (Neutral), 4 (Disagree) to 5 (Strong Disagree).		

Job satisfaction. In terms of job satisfaction, respondents perceived no significant improvement in morale or decrease in stress. The respondents perceived no significant need to transfer from their current assignment, resign or retire early as a result of CCSS; and were in agreement that record keeping associated with CCSS was a major time constraint for teachers.

Teacher training. Respondents indicated that their knowledge of the assessments associated with CCSS and the PSAE was increasing. However, teachers indicated that more workshops would be helpful for familiarity with CCSS. There was not a significant response indicating a resistance to changes required to the standards-based teaching methodology.

Instructional practices. Respondents indicated that they were moving faster through the curriculum in order to cover all of the material from which their students were evaluated and teaching to the tests more often. The respondents also indicated that

adherence to CCSS was taking too much time from scheduled classroom work and, as a result, they were spending less time helping individual students. A majority of the respondents agreed that the course directives not mandated by the CCSS were unimportant.

Modified workdays that reduced class schedules by one period to create professional learning communities (PLC's) were largely unwelcome as indicated by the majority of respondents. The respondents' responses were fairly neutral in terms of the affect of the disaggregation of DEA and PSAE data on classroom instruction and students' learning styles.

Part I of the survey – Analysis of data addressing research question 3: What were the differences among core and non-core teachers' perceptions of CCSS based on the first 2 sections of the survey: influence on teachers and their instruction? The researcher employed the inferential analysis for research question 3 and compared respondent's perceptions based on the three variables (core teachers, non-core teachers, and special education core teachers (core SPED) across the thematic total variable constructs using the ANOVA for part I of the survey.

Table 15

One Way ANOVA of Teachers' Subject (Core, Non-Core, and Core SPED Groups: Teacher Perceptions of the CCSS Influence on Teachers and their Instruction – Job satisfaction

Job Satisfaction	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
B1: Between Groups	7.19	2	3.60	3.18	.047
Within Group	78.97	70	1.13		
Total	86.16	72			
B2: Between Groups	18.71	2	9.35	8.38	.001
Within Group	78.17	70	1.12		
Total	96.88	72			
B3: Between Groups	0.71	2	0.36	0.42	.658
Within Group	59.26	70	1.05		
Total	59.97	72			
B4: Between Groups	0.56	2	0.28	0.31	.737
Within Group	63.38	70	0.92		
Total	63.94	72			
B13: Between Groups	15.85	2	1.03	6.66	.002
Within Group	83.49	70	1.05		
Total	99.37	72			
C8: Between Groups	6.71	2	3.36	0.50	.613
Within Group	475.97	70	6.80		
Total	482.69	72			

Note. The *p*-value (sig.) $p < .05$.

ANOVA in table 15 provided the answer to the research question regarding teacher perceptions of CCSS among three teacher types (core, non-core, and core SPED). As shown in table 15, the *p*-values in the ANOVA illustration for the questions regarding job satisfaction were: B1 ($p = .047$), B3 ($p = .658$), B4 ($p = .737$), and C8 ($p = .613$). The *p*-values are greater than .05. As a result, the null hypothesis indicated that the means were not equal for the three subject groups and therefore, not rejected. The ANOVA

revealed there were no statistically significant differences in respondent perceptions between the subject groups based on teacher job satisfaction.

However, there was a significant difference between the perception of the three subject groups based on the influence of job satisfaction in terms of question: B2 – The stress level among teacher decreasing was ($p = .001$). In an effort to look more deeply and specifically at these differences, a post-hoc test was conducted using the Tukey HSD. These findings revealed statistically significant differences between non-core teachers ($M = 3.17$) that were lower than core teachers ($M = 4.38$) and core SPED teachers ($M = 3.81$). Non-core teachers viewed CCSS as negatively influencing teachers and their teaching, significantly stronger than did the core and core SPED teachers regarding question B2 on the survey.

Also, there was a significant difference with the perception of the three subject groups based on the influence of job satisfaction in terms of question: B13 ($p = .002$) – Record-keeping was a major time constraint for teachers. In an effort to look more deeply and specifically at these differences, a post-hoc test was conducted using the Tukey HSD. These finding revealed statistically significant differences between core SPED teachers ($M = 1.94$) that were lower than core ($M = 2.08$) and non – core ($M = 3.11$) teachers. Therefore, the core SPED teachers viewed CCSS as negatively influencing teachers and their teaching significantly more strongly than did the core and non - core teachers regarding question B13 on the survey. The perception of the core SPED teachers could be due to the amount of paperwork that must be done for the Individual Educational Plan (IEP) for their students.

Table 16

One Way ANOVA of Teachers' Subject (Core, Non-Core, and Core SPED Groups: Teacher Perceptions of CCSS Influence on Teachers and their Instruction - Teacher training

Teacher training	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
B7: Between Groups	0.04	2	0.02	0.02	.982
Within Group	70.49	70	1.01		
Total	70.52	72			
B8: Between Groups	0.21	2	0.10	0.10	.907
Within Group	74.23	70	1.06		
Total	74.44	72			
B10: Between Groups	8.26	2	4.13	3.65	.301
Within Group	79.11	70	1.13		
Total	87.37	72			
B12: Between Groups	0.39	2	0.19	0.24	.790
Within Group	56.99	70	0.81		
Total	57.37	72			
C5: Between Groups	6.17	2	3.08	5.43	.060
Within Group	39.75	70	0.56		
Total	45.92	72			

Note. The *p*-value (sig.) $p < .05$.

ANOVA in table 16 provided the answer to the research question regarding the difference in teacher perceptions' of CCSS among the three subject (core, non-core, and core SPED teachers) groups on the influence on teachers and job satisfaction. As shown in table 16, the *p*-values in the ANOVA illustration for the questions regarding teacher training were: B7 ($p = .982$), B8 ($p = .907$), B10 ($p = .301$), B12 ($p = .790$), and C5 ($p = .060$). The *p*-values were greater than .05. As a result, the null hypothesis indicated that the means were not equal for the three subject groups and therefore, not rejected. The ANOVA revealed that there were no statistically significant differences in respondent perceptions between the subject groups based on the teachers and teacher training.

Table 17

*One Way ANOVA of Teachers' Subject (Core, Non-Core, and Core SPED Groups):
Teacher Perceptions of the CCSS Influence on Teachers and their Instruction -
Instructional practices*

Instructional Practice	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
B5: Between Groups	2.96	2	1.48	1.28	.284
Within Group	80.80	70	1.15		
Total	83.75	72			
B6: Between Groups	3.87	2	1.94	1.67	.196
Within Group	81.17	70	1.15		
Total	85.04	72			
B9 Between Groups	1.64	2	0.82	0.75	.476
Within Group	76.20	70	1.09		
Total	77.84	72			
B11: Between Groups	2.38	2	1.19	0.96	.388
Within Group	86.64	70	1.24		
Total	89.01	72			
C1: Between Groups	15.85	2	0.29	0.26	.773
Within Group	83.49	70	1.13		
Total	99.37	72			
C2: Between Groups	0.86	2	0.43	0.49	.618
Within Group	62.45	70	0.89		
Total	63.31	72			
C3: Between Groups	1.26	2	0.63	0.79	.456
Within Group	54.61	70	0.79		
Total	55.88	72			
C4: Between Groups	1.48	2	0.74	1.32	.274
Within Group	39.21	70	0.56		
Total	40.69	72			
C6: Between Groups	1.33	2	0.67	0.88	.421
Within Group	53.19	70	0.76		
Total	54.52	72			

Table 17 (Continued)

Instructional Practice	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
C7: Between Groups	1.57	2	0.78	0.83	.442
Within Group	66.38	70	0.96		
Total	67.95	72			
C9: Between Groups	3.80	2	1.90	1.62	.205
Within Group	82.10	70	1.17		
Total	85.90	72			
C10: Between Groups	3.69	2	1.84	1.32	.275
Within Group	98.10	70	1.40		
Total	101.78	72			
C11: Between Groups	0.94	2	0.47	0.40	.674
Within Group	82.63	70	1.18		
Total	83.56	72			
C12: Between Groups	0.67	2	0.34	0.28	.754
Within Group	82.67	70	1.05		
Total	83.34	72			
C13: Between Groups	6.71	2	0.05	0.05	.955
Within Group	475.97	70	0.10		
Total	482.69	72			

Note. The *p*-value (sig.) $p < .05$.

ANOVA in table 17 provided the answer to the research question regarding the difference in teacher perceptions regarding CCSS among the three subject teacher types (core, non-core, and core SPED) on the influence of teachers and their teaching – instructional practices. As shown in table 17, the *p*-values in the ANOVA illustration for the questions regarding instructional practices were: B5 ($p = .284$), B6 ($p = .196$), B9 ($p = .476$), B11 ($p = .388$), C1 ($p = .773$), C2 ($p = .618$), C3 ($p = .456$), C4 ($p = .274$), C6 ($p = .421$), C7 ($p = .442$), C9 ($p = .205$), C10 ($p = .275$), C11 ($p = .674$), C12 ($p = .754$), and C13 ($p = .955$). The *p*-values were greater than .05. As a result, the null hypothesis indicated that the means are not equal for the three subject groups and

therefore, not rejected. The ANOVA revealed that there were no statistically significant differences in respondent perceptions between the subject groups based on the influence on instructional practices.

Part II of the survey. Data analysis for section C and D of the survey were descriptive. The 18 Likert scale questions were designed to assess respondents' perceptions of CCSS on the influence on student education and performance. The areas addressed in the survey were student education (questions D1 – D8) and student performance (questions E1 – E10). These areas were summarized relative to survey item response frequencies and corresponding percentages as showed in Table 25 (Appendix E).

Table 18

Respondents' Mean and Standard Deviations on Survey Items: Respondents' Perceptions of CCSS – Influence on Student Education and Performance

Survey statements composing the student scale	<i>M</i>	<i>SD</i>
D1. CCSS are improving education.	3.14	1.07
D2. CCSS are a good measure of teacher effectiveness.	3.70	1.06
D3. CCSS motivate students to learn.	4.29	2.53
D4. The reporting of results on PSAE provides a reliable method to compare the quality of schools.	3.97	1.04
D5. Administrators overemphasize CCSS.	2.76	1.01
D6. CCSS reports accurately reflect what students have learned in the classroom during the past year.	3.98	0.93
D7. CCSS lead to a state narrowed aligned curriculum.	2.52	0.90
D8. The purchase of textbooks and materials are based on the content matching the CCSS.	2.94	0.93
E1. There is significant improvement in student achievement.	3.50	0.93
E2. Students leave school more equipped to be successful.	3.33	1.12
E3. Students become more accountable for their own success.	4.40	6.00
E4. Students are more proficient in reading.	3.24	0.96
E5. Students are more proficient in math.	3.23	0.91
E6. Students are more proficient in language usage.	3.29	0.94
E7. Students are more proficient in science.	3.26	0.93
E8. Students' standardized achievement scores are increasing throughout the state.	3.55	0.87
E9. The student dropout rate is declining.	3.36	0.79
E10. Student discipline referrals are declining.	3.98	0.76

Note. Survey anchors ranged from 1 (Strongly Agree), 2 (Agree), 3 (Neutral), 4 (Disagree) to 5 (Strong Disagree).

Mean and standard deviations – Perceptions about the influence on student education and performance. Survey item response mean and standard deviations were displayed in table 18. Mean and standard deviations for each statement were reported and discussed below relative to student education (questions D1 – D8), and student

performance (questions E1 – E10). Data was reported in order of response strength. This analysis further confirmed the response frequency findings indicated in the report.

Influence on student education. In terms of student education, respondents perceived the purchase of textbooks and materials based on content matching the CCSS implementation, along with CCSS leading to a state-aligned curriculum, as being overemphasized by administrators. The majority of respondents disagreed that the implementation of CCSS were improving education. The respondents did not perceive CCSS as a good measure of teacher effectiveness, nor motivating students to learn, nor an adequate method to compare the quality of schools. Respondents perceived PSAE reports as not accurately reflecting what students learned in classroom during the past year.

Influence on student performance. In terms of student performance, respondents disagreed with the perception that students' standardized achievement scores were increasing throughout the state and that students were more proficient in reading and math as a result of CCSS. The respondents did not perceive students to be more proficient in language usage or science, nor did they perceive student achievement as significantly improving or students leaving school more equipped to be successful.

Part II of the survey – Analysis of data addressing research question 3: What were the differences among core and non-core teachers' perceptions of the CCSS based on the areas of the survey: influence on students' education and performance? The researcher employed the inferential analysis for research question 3 and compared respondent's perceptions based on the three variables (core teachers, non-core teachers, and special education core teachers (core SPED) across the thematic total variable constructs using the ANOVA for part II of the survey.

Table 19

*One Way ANOVA of Teachers' Subject (Core, Non-Core, and Core SPED Groups):
Teacher Perceptions of the CCSS Influence on Student Education and Performance*

Student education and performance	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
D1: Between Groups	2.85	2	1.43	1.26	.290
Within Group	79.17	70	1.13		
Total	82.03	72			
D2: Between Groups	18.71	2	1.38	1.23	.299
Within Group	78.17	70	1.12		
Total	96.88	72			
D3: Between Groups	0.71	2	9.06	2.04	.246
Within Group	59.26	70	6.33		
Total	59.97	72			
D4: Between Groups	0.13	2	2.15	0.06	.137
Within Group	72.91	70	1.05		
Total	73.04	72			
D5: Between Groups	4.42	2	0.07	2.70	.938
Within Group	57.52	70	1.04		
Total	61.95	72			
D6: Between Groups	5.38	2	2.21	3.57	.075
Within Group	52.84	70	0.82		
Total	58.22	72			
D7: Between Groups	1.33	2	2.70	3.57	.033
Within Group	60.44	70	0.76		
Total	58.22	72			
D8: Between Groups	1.33	2	0.67	0.76	.471
Within Group	60.44	70	0.88		
Total	61.78	72			
E1: Between Groups	10.64	2	5.32	7.22	.001
Within Group	51.60	70	0.74		
Total	62.25	72			

Table 19 (Continued)

Student education and performance	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
E2: Between Groups	4.80	2	2.40	1.98	.147
Within Group	85.31	70	1.22		
Total	90.11	72			
E3: Between Groups	163.57	2	81.79	2.30	.102
Within Group	2425.91	70	34.66		
Total	2589.48	72			
E4: Between Groups	8.34	2	4.17	5.08	.009
Within Group	56.65	70	0.82		
Total	64.99	72			
E5: Between Groups	6.71	2	3.26	4.35	.017
Within Group	475.97	70	0.75		
Total	482.69	72			
E6: Between Groups	6.71	2	4.06	5.33	.008
Within Group	475.97	70	0.78		
Total	482.69	72			
E7: Between Groups	6.71	2	4.10	5.33	.007
Within Group	475.97	70	0.77		
Total	482.69	72			
E8: Between Groups	7.67	2	3.83	5.78	.005
Within Group	46.42	70	0.66		
Total	54.08	72			
E9: Between Groups	0.44	2	0.22	0.35	.706
Within Group	44.30	70	0.63		
Total	44.74	72			
E10: Between Groups	3.70	2	1.85	3.38	.040
Within Group	38.25	70	0.55		
Total	41.95	72			

Note. The *p*-value (sig.) $p < .05$.

ANOVA in table 19 provided the answer to the research question whether or not the teachers' perceptions of CCSS differed for the three subject (core, non-core, and core SPED) groups of the influence on student education and performance. As shown in table

19, the p -values in the ANOVA illustration for the questions regarding student education and performance were: D1 ($p = .290$), D2 ($p = .299$), D3 ($p = .246$), D4 ($p = .137$), D5 ($p = .938$), D6 ($p = .075$), D7 ($p = .033$), D8 ($p = .471$), E2 ($p = .147$), E3 ($p = .102$), E4 ($p = .009$), E5 ($p = .017$), E6 ($p = .008$), E7 ($p = .007$), E9 ($p = .706$) and E10 ($p = .040$). The p -values were greater than .05. As a result, the null hypothesis indicated that the means were not equal for the three subject groups and therefore, not rejected. The ANOVA revealed that there were no statistically significant differences in respondent perceptions between the subject groups based on the influence on student education and performance.

There were significant differences in the perception of the three subject groups based on the influence on student education and performance in terms of question: E1 ($p = .001$) – There is significant improvement in student achievement. There was a significant difference in the perception of the CCSS between core and non-core teachers. In an effort to look more deeply and specifically at these differences, a post-hoc test was conducted using the Tukey HSD. These findings revealed statistically significant differences between non-core teachers (E1: $M = 2.83$) that were lower than core (E1: $M = 3.67$) and core SPED (E1: $M = 3.81$) teachers. The data indicated that non-core teachers perceived the CCSS as having no impact on student education and performance; whereas core teachers did not report this belief as strongly in response to questions E1 on the survey.

There was a significant difference in teachers' perceptions of the impact of CCSS on standardized test scores as indicated in the responses to question E8 ($p = .005$) regarding whether ACT and PSAT test scores for the State of Illinois would increase as a

result of CCSS. In an effort to look more deeply and specifically at these differences, a post-hoc test was conducted using the Tukey HSD. These findings revealed statistically significant differences between non-core teachers (E8: $M = 3.00$) that were lower than core (E8: $M = 3.81$) and core SPED (E8: $M = 3.75$) teachers. Therefore, the core teachers viewed the CCSS as more likely to increase ACT and PSAT test scores than did non-core teachers.

Part III of the survey. Data analysis for section F of the survey was descriptive.

The 9 Likert scale questions designed to assess respondents' perceptions of CCSS on the on school administrators' roles and job satisfaction. The areas addressed in the survey were school administrators' roles (questions F1 – F3) and job satisfaction (questions F4 – F9). These areas were summarized relative to survey item response frequencies and corresponding percentage as showed in Table 26 (Appendix F).

Table 20

Respondents' Mean and Standard Deviations on Survey Items: Respondents' Perceptions of CCSS – Influence on School Administrators' Roles and Job Satisfaction

Survey statements composing the administration scale	<i>M</i>	<i>SD</i>
F1. School administrators being under greater pressure to increase student achievement.	1.87	0.90
F2. Administrator morale is declining.	2.45	1.03
F3. Administrators retiring early and citing standards as a reason.	3.45	0.87
F4. Record keeping becoming a major time constraint for school administrators.	2.31	0.98
F5. School administrators becoming more accountable for their schools' or district's success.	2.38	0.99
F6. Administrators spending more time overseeing test preparation.	2.73	1.04
F7. Administrators spending more time supervising test analysis.	2.55	0.97
F8. Administrators implementing only scientifically based researched programs and texts.	3.01	0.96
F9. Administrators providing scientifically based professional development for staff.	3.12	1.04

Note. Survey anchors ranged from 1 (Strongly Agree), 2 (Agree), 3 (Neutral), 4 (Disagree) to 5 (Strong Disagree).

Mean and standard deviations – Perceptions regarding school administrators' roles and job satisfaction. Survey item response mean and standard deviations were displayed in table 20. Mean and standard deviations for each statement were reported and discussed below relative to school administrators' roles (questions F1 – F3) and job satisfaction (questions F4 – F9). Data was reported in order of response strength. This analysis further confirmed the response frequency findings indicated in the report.

Administrators' roles and job satisfaction. In term of administrations' roles and job satisfaction perceptions, respondents perceived that administrators were under greater pressure due to increased student achievement mandates, and as a result, had

implemented only scientifically based researched programs and texts. Respondents were also in agreement that administrators were spending more time overseeing test analyses and test preparation. The perception among respondents was that administrators had experienced a decline in morale and that record keeping had become a major time constraint for school administrators. Respondents were somewhat in agreement that administrators provided scientifically based professional development for staff.

Part III of the survey – Analysis of data addressing research question 3: What were the differences among core and non-core teachers' perceptions of the CCSS based on the areas of the survey: influence on administrators' roles and job satisfaction? The researcher employed the inferential analysis for the research question 3 and compared respondent's perceptions based on the three variables (core teachers, non-core teachers, and special education core teachers (core SPED) across the thematic total variable constructs using the AVOVA for part III of the survey.

Table 21

*One Way ANOVA of Teachers' Subject (Core, Non-Core, and Core SPED) Groups:
Teacher Perceptions of the CCSS Influence on School Administrators' Roles & Job
Satisfaction*

School Administration Roles' and Job Satisfaction	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
F1: Between Groups	2.88	2	1.44	1.84	.167
Within Group	55.00	70	0.79		
Total	57.90	72			
F2: Between Groups	3.75	2	1.87	1.87	.163
Within Group	70.34	70	1.01		
Total	74.08	72			
F3: Between Groups	2.87	2	1.43	1.96	.148
Within Group	51.21	70	0.73		
Total	54.08	72			
F4: Between Groups	4.35	2	2.17	2.33	.105
Within Group	65.41	70	0.93		
Total	69.75	72			
F5: Between Groups	2.90	2	1.45	9.66	.233
Within Group	65.41	70	0.98		
Total	69.75	72			
F6: Between Groups	0.10	2	0.50	0.49	.639
Within Group	77.53	70	1.11		
Total	78.52	72			
F7: Between Groups	0.26	2	0.13	0.14	.873
Within Group	67.82	70	0.97		
Total	68.08	72			
F8: Between Groups	2.38	2	1.91	1.30	.282
Within Group	64.61	70	0.92		
Total	66.99	72			
F9: Between Groups	2.11	2	1.06	0.98	.382
Within Group	75.78	70	1.08		
Total	77.90	72			

Note. The *p*-value (sig.) $p < .05$.

ANOVA in table 21 provided the answer to the research question regarding the teacher perception of CCSS among the three subject (core, non-core, and core SPED) groups on the influence of school administrator roles' and job satisfaction. As shown in table 21, the p -values in the ANOVA illustration for the questions regarding school administrator roles' and job satisfaction were: F1 ($p = .167$), F2 ($p = .163$), F3 ($p = .148$), F4 ($p = .105$), F5 ($p = .233$), F6 ($p = .639$), F7 ($p = .873$), F8 ($p = .282$) and F9 ($p = .382$). The p -values were greater than .05. As a result, the null hypothesis indicated that the means were not equal for the three subject groups and therefore, not rejected. The ANOVA revealed there were no statistically significant differences in respondent perceptions between the subject groups based on influence of school administrator roles' and job satisfaction.

Analysis of qualitative data addressing research question 3: What were the differences among core and non-core teachers' perceptions of the CCSS based on the two open-ended questions on the survey: What challenges do you think educators will face when planning to implement the CCSS into their classes and what kinds of resources or tools would enhance your professional development (or enhance the professional development you may be asked to lead) on the CCSS?

Qualitative data was collected for this study and analyzed using an open coding method. An open coding method of the qualitative data included the evaluation of distinct commonalities in concepts and categories by the researcher, which then formed a basis for the analysis. A thematic coding method was used to group responses into general themes for the two open-ended questions (University of Texas, 2011). The researcher collected the qualitative data to provide more information related to the quantitative data

collected from the teachers to clarify and extend the objective data in this study by exploring the difference in teachers perceptions regarding the impact of CCSS between teachers of core classes and teachers of non core classes. Using multiple research techniques is designed to provide safeguards against bias and subjectivity.

The two open-ended questions in part three of the survey provided the respondents the opportunity to respond in their own words. Seventy-three teachers completed the survey however 52 teachers completed question one and 42 teachers completed question two for the open-ended section of the survey. The complete listing of the teachers' responses are in table form and are labeled: *Analysis of Qualitative Data Addressing Research Question 3: Open-ended Responses*. Charts of all respondents were created and are found in tables 27 and 28 (Appendices G and H).

The researcher examined the teachers' responses to find the repeating themes. As shown in tables 22 and 23, the repeated themes were identified during the initial coding and represented the commitments of the respondents who expressed the same idea in response to a question.

Table 22

Analysis of Repeating Themes for Question 1 of the Open-ended Responses: What challenges do you think educators will face when planning to implement the CCSS into their classes?

Themes	# of Occurrences	Repeating Themes
Time & Planning	21	<p>Timing, planning and evaluation those skills should already be in place. CCSS simple cause us to stop, reflect and analyze the curriculum more closely.</p> <p>Challenges: time to work collaboratively, record-keeping to track student growth (also, considering the number of transfer students who enroll with little to no grades/scores).</p>
Aligning Curriculum	17	<p>One challenge possibly is the alignment of curriculum map/timeline to the CCSS. Curriculum maps call for rapid pace, which causes teachers less time to achieve the ultimate goal: learning/improving a particular skill, rather than becoming familiar with a piece of material.</p> <p>It will take time for K-12 to be truly vertically aligned. Until then, it feels like we are “jamming material” down students’ throats, which does not usually result in quality learning. I am hopeful that Common Core will be affective in a few years.</p>
Skill Level & Deficiency	8	<p>CCSS assumes a degree of literacy for successful implementation. Our students have not familiarized the level of reading proficiency for their grade level.</p> <p>Reaching low ability students.</p>
Training – (PD on CCSS)	6	<p>Common core standards are to provide a consistent, clear understanding of what students are expected to learn, so that teachers and parents know what they need to do to help them. They are designed to be robust and relevant to the real world, reflecting knowledge and skills that our young people need for success in college and careers. Educators must continue to educate themselves on the implementation of culturally responsive classrooms to better serve the students at hand. Understanding their backgrounds to better appeal on an educational level.</p>

Table 23

Analysis of Repeating Themes for Question 2 of the Open-ended Responses: What kinds of resources or tools would enhance your professional development (or enhance the professional development you may be asked to lead) on the CCSS?

Themes	# of Occurrences	Repeating Themes
Professional Development	28	<p>Taking away” Professional Development. Reliable technology and training (I Pads for classrooms). I attended a workshop in the fall with Carol Jago (Implementing the CC) where she outlined standards and followed w/ practical examples. This was extremely helpful.</p> <p>Knowledgeable trainers.</p> <p>Training on how the standards will change our courses. Chem have barely no standards that includes our entire course. Objective lack specificity to our content. We are having to figure out the how will no guidance or support from higher ups outside our district. Frankly, I don’t think they know or we would receive the guidance, support and strategies to effectively implement the CCSS</p> <p>PD & School Improvement days where teachers can talk about CC and how it is changing classroom teaching and each team creating activities to implement CC in each course.</p> <p>Regular, organized staff development time (especially within department and course teams) to collaborate with our peers. Time allowed with district administrators for honest discussion concerning course/curriculum design.</p> <p>Social Studies teachers need an “Intro” to the CCSS.</p>
Technology	6	On-line templates to avoid recreating other resources. Continued collaboration with colleagues.
Textbook	4	More technology workshops to incorporate lessons/activities to CCSS.
Accountability (Increase Social Emotion Support)	2	Better technology like overhead projectors and computers in staff meeting areas.
Teacher Incentive	2	More and better technology!

Analysis of data address qualitative research (open – ended) question 1: What challenges do you think educators will face when planning to implement the CCSS into their classes? There were 52 respondents that answer the open – ended question 1: 42 – core teachers (language arts – 9, math – 10, science – 6, social studies – 5 and special education – 12 but only 10 non-core teachers responded to the question. As shown in table 27, the repeating themes that emerged from this question were: time and planning, aligning curriculum, skill level and deficiency, and training that provided professional development on CCSS. All of the respondents gave the same concerns on the open-ended questions on the survey that were recorded as the repeating themes. There was no difference between the groups. The majority of the respondents stated that time and planning were the challenges that they felt educators would face when implementing the CCSS into the classroom.

Analysis of data address qualitative research (open – ended) question 2: What kinds of resources or tools would enhance your professional development (or enhance the professional development you may be asked to lead) on the CCSS? There were 42 respondents that answered the open – ended question 2: 35 – core teachers (language arts – 7, math – 7, science – 5, social studies – 5 and special education – 11 but only 7 non-core teachers responded to the question. As shown in table 28, the repeating themes that emerged from this question were: professional development, technology, textbooks, accountability, and teacher incentive programs. All of the respondents provided similar repeating themes. There was no difference between the groups. The majority of the respondents stated that professional development and technology would be the kinds of resources or tools that would enhance their knowledge and skill in CCSS. However,

majority of the non-core teachers stated that more technology workshops are needed to incorporate lessons and activities using the CCSS.

Conclusions

There were two primary points the researcher concluded at the close of this study that had a significant bearing on the overall scope of study and to the ongoing study of this topic regarding CCSS. These points were: (a) to determine the impact of CCSS on student performance and (b) the teachers' perceptions regarding the educational influence of CCSS.

Most importantly, student achievement was not significantly affected by the implementation of the CCSS. Despite the overwhelming celebration associated with CCSS as an advocate for student achievement, this high school must continue to implement CCSS into classroom instruction and continue to monitor the result of CCSS, in order to assess the overall impact, if any, on student achievement. The CCSS were established to salvage the lack of continuity associated between school districts, between grade levels and between regions of a particular state. However, the mass implementation of CCSS as a means to debunk the failing state-standard model, failed to bring about a large or significant increase to student achievement.

According to Carlisle (2013), when teachers raise learning expectations, students will work harder to meet them. CCSS set higher learning expectations for all students. Consequently, it may take more time for students to meet and exceed those higher learning expectations. However, with higher, more rigorous and comprehensive CCSS, teachers will administer exams that more accurately measure students' college and career readiness as well as their yearly progress.

Following the initial implementation, test scores may drop, but these scores will provide educators with a clearer picture of where students are struggling and how they can better support their preparation for college and career in a competitive global economy.

However, the results of comparing the performance of the Class of 2010 on AYP according to the IL State Standards with the Class of 2014 performance data based on AYP under the CCSS did not yield a significant change in student's achievement. This was not at all the anticipated outcome of the application of the CCSS, according to those who studied, conceived and supported the idea. CCSS was designed to set higher learning standards for all students and prepare students and schools to meet and exceed those new performance targets.

Secondly, the teachers' perceptions gained through the administration of the survey demonstrated an environment of educators that were not in full support of the CCSS. Based on responses to open-ended questions especially, there was a measure of pushback that indicated concern over the additional content that teachers' were required to cover under CCSS, which forced educators to increase the pace of teaching, and thus, decrease the time allotted for individual instruction. The CCSS implementation also forced teachers, according to the results of the survey, to teach the concepts of the standardized tests, rather than teaching for mastery and understanding. The manner in which instruction is now required based on CCSS, according to the surveys, was also attributable to a decline in morale among teachers and administrators.

Comments attributed to a decrease in morale and elevated stress levels were the most frequent responses (74%) given by the core and core SPED teachers on the survey.

These results were supported by the teachers' comments that they felt that the CCSS were moving them more quickly through the curriculum in order to cover all of the materials on which their students are evaluated.

Going forward beyond this study, as a result of these points, and as a result of information gained from the open-ended questions, additional professional development is required to better support the transition from the IL State Standards to CCSS.

According to teachers' perceptions, some of the professional development ordinarily associated with the teaching environment had been decreased or otherwise omitted as a result of the implementation of CCSS, thus limiting the amount of time educators had to develop their mode of instruction to better serve students.

Respondents who participated in this study were primarily young teachers between the ages of 30 – 40 with at least ten years of experience. Accordingly, these teachers indicated that they were willing to implement the CCSS, and that CCSS would be more easily integrated into the current format, with the assistance of professional development, time and planning. These were the essential tools that teachers needed, based on survey results, to more efficiently and effectively utilize the CCSS into the classroom and their instruction. Professional development was the most repeated response (28) given by the participants. The teachers stated that they wanted to learn how the CCSS would impact their courses and organized professional development time to collaborate with their peers.

This finding is supported by the researcher, Fullan (1991), who stated that teachers were willing to change and implement initiatives. In addition, these teachers, the young teachers surveyed primarily, brought a fresh energy to the classroom and were

well-versed in the latest research and teaching techniques, and thus, gave their students the best chance to meet today's rigorous educational standards. Accordingly, based on survey responses, younger teachers were the most willing to accept the implementation of CCSS.

However, as survey results indicated, veteran teachers with more than ten years of experience were the most resistant to CCSS. A veteran teacher stated, "Required by law, and yet doomed to fail. No child left behind law was based on a flawed premise." In addition, these teachers were most adamant about receiving supports for professional development and required more support to facilitate acceptance and understanding of the role that CCSS would play in the ongoing learning environment.

While providing professional development and improving morale are two possible improvement strategies, educational stakeholders must recognize that overall improvement can only be realized when everyone is dedicated to the collective goal of student improvement. In so doing, larger macro-level organizations, such as those that helped develop CCSS, must continue to be involved in helping with the implementation strategies, and resulting needs, as indicated by educators and educational institutions. While at the same time, various micro-levels organizations including state and local governments as well as teacher and administrator preparation programs must also play a continuous role in the desired change in education under CCSS.

As stated earlier, one of the purposes of this research was to determine effectiveness and impact of CCSS on the learning environment through the examination of teachers' perceptions. At the core of this study, the researcher believed deeply in the effectiveness of the transformative power of providing teachers with a voice in what, and

how, they will teach. It is critically important to afford teachers the right to provide input on the changes that they will ultimately have to incorporate.

According to the data, a group of teachers are infinitely more powerful to exact change, and be supportive of leadership, when they firmly believe in the vision and the goals of the mission. However, Huffman (2011) believed that a leader merely stating a vision is not enough. The school leader must actively work to create a culture that is built upon the shared vision of the school (Huffman, Senge, 1990, Senge, Cambron-McCabe, Lucas, Smith, & Dutton, 2000). The mission of course, is the improvement of instruction and an increase in student performance. Therefore, it is an indirect goal of this research to investigate what helps improve teacher and subsequently, student performance. Properly measuring student performance, is and should always be an ongoing, longitudinal study – one that should be continued regardless of what set of standards are in effect or what educational trends are currently in vogue. Then, the members of the entire school community – teachers, leaders, and students – will find themselves on one accord, on common ground.

Implications and Recommendations

Research findings are summarized and discussed in this chapter with conclusions presented based on the findings reported. Implications and recommendations for areas of future studies are also presented in this chapter. As stated, the purpose of this study was to determine the impact of CCSS on the learning environment. Three research questions were derived from this purpose and guided this inquiry. Findings were discussed relative to the research questions, overall analysis, the survey response rate and respondent demographics.

The State of Illinois and 47 other states joined together in a collaborative effort to raise learning standards and improve college and career readiness for all students. The new CCSS established clear expectations for what students should learn in language arts and mathematics at each grade level. The standards were high, clear, and uniform to ensure that students were prepared for success in college and the workforce.

The CCSS ensured that students had a comprehensive understanding of key concepts (Common Core State Standards Initiative, 2012). Illinois adopted the CCSS in 2010 and teachers and administrators across the state were fully implementing the new standards during the 2013-14 school year. The school within this study, as well as many other schools, had already begun to incorporate elements of the CCSS into their curricula. Research stated that CCSS determined what educators should teach, not how they should teach (Common Core State Standards Initiative). Teachers will continue to have the autonomy to tailor lesson plans to the individual needs of their students. The CCSS emphasis on applying knowledge to real-world situations will better prepare Illinois students for the challenges facing them after high school graduation.

While there has been little research available regarding the impact of CCSS on student achievement, researchers and authors maintain that standards are an important part in measuring student learning (Council of Chief State School Officers, 2013). However, the data derived from analyses of achievement scores from the PSAE for the Class of 2010 utilizing the Illinois State Standards and Class of 2014 using the CCSS demonstrated that there were no significant differences in student growth in the areas of reading and math.

This lack of significant difference may be due to the lack of alignment between the CCSS and PSAE. For example, under the CCSS, a focus is placed on literacy and numeracy benchmarks. However, the PSAE is based on the State of Illinois learning standards. Thus, the PSAE for the Class of 2014 was constructed based on the Illinois State Learning Standards, even though those students were now receiving classroom instruction, and corresponding curriculum, based on the CCSS.

The results of this study reinforced the conclusions reached by the CCSSO and Illinois Board of Education (ISBE) regarding the impact of CCSS. The conclusion stated that the decline in test scores was not a reflection on student capability or teacher performance, but rather a result of implementing more rigorous learning standards under the CCSS and raising the performance level cut scores. As the lack of alignment outlined above illustrates, the decrease in test scores may also be attributed to the difference in focus areas between the CCSS and any existing state-based assessments or standards.

In the 2013-14 academic year, students and educators will begin working with more rigorous and comprehensive standards to prepare students for new assessments – aligned to the CCSS during 2014-15. ISBE will replace the PSAE with a new assessment format that is fully aligned with the CCSS. The new assessment, Partnership for Assessment of Readiness for Colleges and Careers (PARCC) would be piloted this year along with the current assessment. This assessment, due to better alignment of content, will provide more robust data that more accurately indicates student mastery, level and skill.

In relation to the third part of the research, teachers' perceptions regarding the educational influence of CCSS were examined. The results from the survey and open-

ended questions revealed that the respondents in this study were spending more time in workshops, collaborating with teaching peers. A clear and persistent message emerged regarding the need to address declining morale, increased stress and time-related pressure. Several respondents stated that seminars/professional development designed to address issues of stress and time-related pressure associated with standard-based teaching and assessment, should be provided at the state, district and school levels (Fogarty & Pete, 2010).

In particular, opportunities for teachers and administrators to express concerns related to the pressures associated with standards preparation, instruction, and assessments were needed. Productive professional development can be sustained when it is job-embedded, collegial, interactive, and results oriented (DuFour, DuFour, & Eaker, 2008; Joyce & Showers, 2002). Needed professional development can and should take place in regularly scheduled team meetings, independently, collaboratively, face-to-face with presenter, and/or on-line. The rate of success for implementing new initiatives increases when support is visible, available and accessible daily (Fogarty & Pete, 2010). Therefore, job-embedded professional learning must be implemented.

Another concern of the respondents was time management to implement the CCSS into the curricula. Seminars on time management, perhaps incorporated into teacher in-service opportunities, could be useful in providing teachers and administrators with the tools to more effectively meet the increased time-pressures associated with standards-based assessments and reporting. Time management in-services would enable teachers and administrators to achieve better personal and professional results through effective planning and clarifying objectives, spending more time working toward high-

value goals, handling paperwork and personal time (Reeves, 2000). This can be provided by a professional organization, therefore a budget must be provided for the program.

Recommendation for future research

Future research on the impact of CCSS on student academic performance, the learning environment and cross-curriculum instruction will continue to add to the body of knowledge to enable teachers, administrators, school boards, the DOE and ISBE to increase their knowledge about what specific strategies were most effective in order to continue to improve the CCSS implementation process.

1. Research that replicates the study should: (a) be conducted on a larger scale to determine if other school districts in will yield results different than those found in this study with 11th grade students, (b) include other targeted high school teachers who have similar or perhaps greater concerns, and (c) be conducted to determine which learning standards yield higher scores in improving student performance assessment data on PSAB that was aligned with the Illinois State Standards or the new Partnership for Assessment of Readiness for College and Careers (PARCC) assessment that aligned with the CCSS. The PARCC was developing a common set of K – 12 assessments in English and math that would assess the full range of the CCSS (Illinois State Board of Education, 2013d). The PARCC assessments would be implemented to the schools in 2014 –2015. The study could be replicated in 2020 to determine if the study would yield different results.
2. Survey research might be better served in terms of data validity by avoiding the use of a neutral Likert scale item response. Gall et al. (2003) stated that Likert scale

survey, without a neutral choice, forces respondents to express an attitude, whether positive or negative.

3. Research could be replicated with administrators' perceptions to obtain data to compare and contrast with the teacher/educator perceptions in this study.
4. Research can be conducted to determine the following: Does student achievement vary based on student/school socioeconomic status as reflected by the percentage of students, who met new PARCC proficiency in reading and math?
5. Research can be conducted to determine the relationship of the economic downturn beginning in 2011 on Illinois teachers' satisfaction with CCSS and maintaining their teaching position?

In reference to the significance of this study, the survey process provided teacher-respondents with the opportunity to express their perceptions about the influence of the CCSS on student achievement and professional development. The opportunity to share perceptions and express concerns was valuable. The results of this study provided information and insights about the perceptions of high school teachers regarding issues affecting them and their teaching, their students and their school leaders, relative to the CCSS. These insights proved useful because education, and the work of educators, must continue forward with the implementation of CCSS and associated (PARCC) assessments.

The findings specifically revealed issues and concerns associated with standards-based education that can be used to provide direction for workshops, classroom instruction, and enhanced communication with and between teachers and administrators. Teachers today, as compared to perhaps five years ago, appear to be more neutral about

the standards because they may have a better understanding of the requirements proposed in implementing state standards and assessments, and therefore, are better prepared for the challenges the standards present.

Perhaps most teachers have accepted the fact that standards-based education is here to stay and were no longer fighting the system. Instead, teachers are seeking educational opportunities to increase their skills and better prepare instruction, disaggregate data, and evaluate their programs. Knowing where school districts were now was the key to designing and implementing change processes to move forward from a neutral to a positive stage in the future.

In conclusion, in 2002 the United States Department of Education's stated goal was to have every child make the grade on state-defined education standards by the end of the 2013-2014 school year. At the time of this study, the 2013 PSAE proficiency data revealed that the south suburban school district and Illinois have not yet attained this goal. To expect to do so, in the time remaining, was an unrealized expectation and would require that teachers, students, and school leaders received ongoing educational direction, training, and support.

However, the findings of this study illustrate specific areas of needed direction and training to address issues associated with educator morale, stress, time-pressure, and their influence on student achievement. These supports and corresponding data used to derive at these conclusions would strengthen the current literature base that is virtually non-existent regarding the impact of the CCSS.

Going forward, for complete implementation of the CCSS to occur, the focus cannot be merely on teachers, as teachers often transition from one school or district to

another. The focus cannot be merely only on schools because school leadership and expectations shift frequently. The focus must be on embedding the goals, vision and mindset of CCSS into the culture of the district for sustainable change to occur and remain over time.

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Appendix A

Informed Consent Letter to Participants

Appendix A

Your participation in this research project is voluntary. Before taking part in this study, please read the consent form below. Your completion of this survey will serve as your full and unrestricted consent to participate in this study. Please read all the information below. If you require additional information or have questions regarding the survey or research, please forward your questions to Ms. Sherrie L. Birts, 312-953-4413, slbirts@aol.com within the 10 days of receipt of this email.

INFORMED CONSENT FORM

This study involves a survey to explore the teachers' perceptions regarding the impact of the Common Core State Standards on student achievement. The study is being conducted by Sherrie L. Birts, a doctoral student in the Ethical Leadership program in the College of Education at Olivet Nazarene University. The result of the survey will be used to complete Ms. Birts' doctoral dissertation. Olivet Nazarene's Institutional Review Board Committee has approved the survey. No deception is involved the study involves no more than minimal risk to participants (i.e., the level of risk encountered on a daily basis). Approximately 112 Rich East High School teachers are being invited to participate in this study. You are invited to complete this survey as a high school teacher at Rich East High School.

Participation in the study will take approximately 20 minutes and is confidential due to coding to prevent identifying teachers. If you volunteer to participate, you are asked to complete the survey by circling the appropriate responses on the first portion of the survey, which includes demographic data and an X in the appropriate response space for the other (non-demographic) survey items. The survey items are constructed using a five-point Likert scale. The scale breakdown is as following: 1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, and 5 – strongly agree. The first 26 survey items address the teachers' perceptions about Common Core State Standards and their influence on teaching styles and standards and the next 27 address the perceptions of the Common Core State Standards on education, data and assessment, student performance, and building school administration (53 items total) and two open-ended questions. **You are asked to return the completed survey via email (Survey Monkey) within 10 days of receipt of the email.**

Surveys will be coded to ensure participant confidentiality, yet allow follow-up contact to encourage survey responses among potential participants who do not respond within the indicated 10-day time period. All responses are treated as confidential and in no case will responses from individual participants be identified. All data will be pooled and published in aggregate form only. The only person who will know that you are a participant is the researcher. No information about you or provided by you during the research will be disclosed to other without your written permission, except (a) if necessary to protect our rights or welfare (for example, if you are injured) or (b) if required by law.

Your participation in this research is VOLUNTARY. If you choose not to participate, that will not affect your relationship with Olivet Nazarene University or your right to receive services at Olivet Nazarene University to which you are otherwise entitled. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without prejudice to future at Olivet Nazarene University.

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, right or remedies because of your participation in this research study. If you have any questions regarding your rights as a research, you may contact the Olivet Nazarene's Institutional Review Board Committee at IRB@olivet.edu.

If you have further questions about this study or your rights or if you wish to lodge a complaint or concern, you may contact the principal investigator, Ms. Sherrie L. Birts, 312-953-4413, slbirts@aol.com or her dissertation advisor, Dr. Kelly S. Brown, 815-939-5318, kbrown6@olivet.edu.

Thank you,

Sherrie L. Birts
Researcher

Statement of Informed Consent:

I have read the information provided above. I have been given an opportunity to ask questions and all of my questions have been answered to my satisfaction. By completing and returning the survey via email, I agree to voluntarily participate in this research study as described. **Completion and return of the survey is evidence of my informed consent.**

Appendix B

Online Teachers' Perceptions Survey

Appendix B

Instructions:

- Please complete the survey in one of two ways: 1) online or 2) return in the pre-addressed postage paid envelope.

A. Demographic Information (please circle the appropriate responses).

<p>1. Gender: Male Female</p> <p>2. Age:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">under – 30</td> <td style="width: 50%;">51 – 60</td> </tr> <tr> <td>30 – 40</td> <td>61- 70</td> </tr> <tr> <td>41 – 50</td> <td>above 70</td> </tr> </table> <p>3. Highest level of degree earned:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">BA/BS</td> <td style="width: 50%;">MA/MS + 30</td> </tr> <tr> <td>BA/BS +30</td> <td>Ed. Specialist</td> </tr> <tr> <td>MA/MS</td> <td>Ed.D/Ph.D</td> </tr> </table> <p>4. National Board Certification?</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Yes</td> <td style="width: 50%;">No</td> </tr> </table> <p>5. Total Years of Teaching Experience:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">0 – 5</td> <td style="width: 50%;">16 – 20</td> </tr> <tr> <td>6 – 10</td> <td>21 – 30</td> </tr> <tr> <td>11- 15</td> <td>30 +</td> </tr> </table> <p>6. What is the current student enrollment in your building?</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">0 – 50</td> <td style="width: 50%;">201 – 400</td> </tr> <tr> <td>51 – 100</td> <td>401 – 750</td> </tr> <tr> <td>101 – 200</td> <td>751 +</td> </tr> </table> <p>7. What percentage of students in your school qualifies for either free or reduced lunch?</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">0 – 25%</td> <td style="width: 50%;">51% - 75%</td> </tr> <tr> <td>26 % - 50%</td> <td>76% - 100%</td> </tr> </table>	under – 30	51 – 60	30 – 40	61- 70	41 – 50	above 70	BA/BS	MA/MS + 30	BA/BS +30	Ed. Specialist	MA/MS	Ed.D/Ph.D	Yes	No	0 – 5	16 – 20	6 – 10	21 – 30	11- 15	30 +	0 – 50	201 – 400	51 – 100	401 – 750	101 – 200	751 +	0 – 25%	51% - 75%	26 % - 50%	76% - 100%	<p>8. According to the Illinois State Department of Education, what was the overall average percentage of students in your grade level that were identified proficient in Reading?</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">0 – 25%</td> <td style="width: 50%;">51 – 75%</td> </tr> <tr> <td>26 – 75%</td> <td>76 – 100%</td> </tr> </table> <p>9. According to the Illinois State Department of Education, what was the overall average percentage of students in your grade level that were identified proficient in Math?</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">0 – 25%</td> <td style="width: 50%;">51 – 75%</td> </tr> <tr> <td>26 – 75%</td> <td>76 – 100%</td> </tr> </table> <p>10. According to the Illinois State Department of Education, what was the overall average percentage of students in your grade level that were identified proficient in Language Usage?</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">0 – 25%</td> <td style="width: 50%;">51 – 75%</td> </tr> <tr> <td>26 – 75%</td> <td>76 – 100%</td> </tr> </table> <p>11. Number of teachers in your subject matter team:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">1 – 2</td> <td style="width: 50%;">6 – 10</td> </tr> <tr> <td>3 – 5</td> <td>10 +</td> </tr> </table> <p>12. What subject do you teach?</p> <p>Fine Art (Music or Arts) Lang. Arts</p> <p>Mathematics Science</p> <p>Foreign Language Social Studies</p> <p>Physical Education</p> <p>Career Technical Education (CTE)</p>	0 – 25%	51 – 75%	26 – 75%	76 – 100%	0 – 25%	51 – 75%	26 – 75%	76 – 100%	0 – 25%	51 – 75%	26 – 75%	76 – 100%	1 – 2	6 – 10	3 – 5	10 +
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B. Teachers' Perceptions of Common Core State Standards
Teacher Morale

Please use the scale below to indicate your level of agreement or disagreement with each of the following statements.

SA = Strongly Agree
A = Agree
N = Neutral
D = Disagree
SD = Strongly Disagree

Given that the implementation of the Common Core State Standards and the state assessment (PSAE and state ACT) are well underway at Rich District 227, as a teacher, I perceive:	SA	A	N	D	SD
B. 1. Teacher morale improving.					
B. 2. The stress level among teachers decreasing.					
B. 3. Teachers resigning and citing standards as a reason.					
B. 4. Teachers planning to retire early and citing standards as a reason.					
B. 5. Teachers spending more time collaboration with one another about teaching, learning, assessments, and curriculum.					
B. 6. Teachers engaging in more collaborative planning.					
B. 7. Teachers resisting changes to the current teaching styles.					
B. 8. Teachers resisting changes to the current teaching techniques.					
B. 9. Teachers having more committee work responsibilities.					
B. 10. Teachers having more workshops to attend.					
B. 11. Teachers spending less time teaching and more time on test preparation activities.					
B. 12. Teachers becoming more accountable for their students' success.					
B. 13. Record keeping being a major time constraint for teachers.					

**C. Teachers' Perceptions of Common Core State Standards
Curriculum & Instruction**

Please use the scale below to indicate your level of agreement or disagreement with each of the following statements.

SA = Strongly Agree
A = Agree
N = Neutral
D = Disagree
SD = Strongly Disagree

As a teacher, now that the implementation of the Common Core State Standards and the state assessment (PSAE and ACT) are well underway at Rich District 227, I perceive:	SA	A	N	D	SD
C. 1. Teachers disaggregating DEA data to better prepare instruction.					
C. 2. Teachers addressing students' learning styles.					
C. 3. Teachers integrating instruction across the curriculum.					
C. 4. Teachers improving the instructional methods applied in the classroom.					
C. 5. Teachers increasing their knowledge of assessments.					
C. 6. Teachers obtaining a better understanding of the exact curriculum students are required to know.					
C. 7. Teachers teaching to the tests more often					
C. 8. Teachers trying to transfer out of their current grade level or subject area because of the Common Core State Standards/assessment/accountability process.					
C. 9. Common Core State Standards taking too much time from scheduled classroom work.					
C. 10. Teachers spending less time helping individual students.					
C. 11. Teachers moving more quickly through the curriculum in order to cover all of the materials on which their students are evaluated.					
C. 12. Course content that does not cover the state standards seen as unimportant by teachers.					
C. 13. Subject areas without state standards or testing requirement seen as important by teachers.					

**D. Teachers' Perceptions of Common Core State Standards
Data & Assessments**

Please use the scale below to indicate your level of agreement or disagreement with each of the following statements.

SA = Strongly Agree
A = Agree
N = Neutral
D = Disagree
SD = Strongly Disagree

As a teacher, now that the implementation of the Common Core State Standards and the state assessment (PSAE and state ACT) are well underway at Rich District 227, I perceive:	SA	A	N	D	SD
D. 1. Common Core State Standards are improving the quality of education.					
D. 2. Common Core State Standards are a good measure of teacher effectiveness.					
D. 3. Common Core State Standards motivate students to learn.					
D. 4. The reporting of results on Prairie State Achievement Examination (PSAE) and the ACT provides a reliable method to compare the quality of school.					
D. 5. Administrators overemphasize Common Core State Standards.					
D.6. Illinois' state assessments (PSAE and state ACT) reports accurately reflect what students have learned in the classroom during the past year.					
D.7. Common Core State Standards lead to a state narrowed aligned curriculum.					
D.8. The purchase of textbooks and materials lead to a state narrowed aligned curriculum.					

**E. Teachers' Perceptions of Common Core State Standards
Student Achievement**

Please use the scale below to indicate your level of agreement or disagreement with each of the following statements.

SA = Strongly Agree
A = Agree
N = Neutral
D = Disagree
SD = Strongly Disagree

As a teacher, now that the implementation of the Common Core State Standards and the state assessment (PSAE and state ACT) are well underway at Rich District 227, I perceive:	SA	A	N	D	SD
E. 1. There is significant measureable improvement in student achievement.					
E. 2. Students leave school more prepared to be successful.					
E. 3. Students become more accountable for their own success.					
E. 4. Students are more proficient in reading.					
E. 5. Students are more proficient in math.					
E. 6. Students are more proficient in language usage.					
E. 7. Students are more proficient in science.					
E. 8. Students standardized achievement scores increasing throughout the State of Illinois.					
E. 9. The student dropout rate declining.					
E. 10. Students discipline referral declining.					

F. Teachers' Perceptions of Common Core State Standards
Building Administration

Please use the scale below to indicate your level of agreement or disagreement with each of the following statements.

SA = Strongly Agree
A = Agree
N = Neutral
D = Disagree
SD = Strongly Disagree

As a teacher, now that the implementation of the Common Core State Standards and the state assessment (PSAE and state ACT) are well underway at Rich District 227, I perceive:	SA	A	N	D	SD
F. 1. Building administrators are under greater pressure to increase.					
F. 2. Building administrator morale declining.					
D. 3. Building administrator left the field and stating that the Common Core State Standards as a reason.					
F. 4. Record keeping becoming a major time constraint for building administrators.					
F. 5. Building administrators become more accountable for their school or district's success.					
F. 6. Building administrators spending more time supervising test preparation.					
F. 7. Building administrators spending more time supervising test analysis.					
F. 8. Building administrators implementing only scientifically based researched programs and texts.					
F. 9. Building administrators providing scientifically based professional development for staff.					

G. Teachers' Perceptions of Common Core State Standards
Professional Development

Directions: The intent of this survey is to assist the researchers better understand the kinds of challenges in implementation the Common Core State Standards in the classroom. Please answer the items based on your ability today. Your answers are confidential and anonymous.

G 1. What challenges do you think educators will face when planning to implement the CCSS into their courses?

G 2. What kinds of resources or tools would enhance your professional development (or enhance the professional development you may be asked to lead) on the CCSS?

The survey was modified from an existing measure designed by Dr. Annette Wiggins, (2010). *Idaho region IV fourth-grade teachers' perceptions about the influence of Idaho state achievement standards and the Idaho state achievement tests.*

Appendix C

Permission Letter to Use Survey

Appendix C

From: "John Wiggins" <no.1@filertel.com>
Subject: **RE: Permission to Use Survey**
Date: March 10, 2012 11:01:01 AM CST
To: "SHERRIE BIRTS" <sbirts@aol.com>

Dear Sherrie (the future Dr. Birts),
It was a pleasure to speak with you yesterday. I am pleased that my survey can be of assistance to you in continuing forward with your dissertation.
The following is permission to use the survey:
I grant, Sherrie Birts, permission to use all or sections of the survey presented in my dissertation, *Idaho Region IV Fourth-grade Teachers' Perceptions about the Educational Influence of Idaho State Achievement Standards and the Idaho State Achievement Tests*. If you have any questions, feel free to contact me.
Annette M. Wiggins
208-537-6579

From: SHERRIE BIRTS [mailto:sbirts@aol.com]
Sent: Friday, March 09, 2012 1:15 PM
To: no.1@filertel.com
Cc: SHERRIE BIRTS
Subject: Permission to Use Survey

Dear Dr. Wiggins,

It was a pleasure to speak with you. I am asking you for permission to use your survey that was presented in your dissertation, *Idaho Region IV Fourth-grade Teachers' Perceptions about the Educational Influence of Idaho State Achievement Standards and the Idaho State Achievement Tests*. I will modify the survey by changing the state standards and assessments to The Illinois Common Core State Standards and state assessment (PSAE and ACT).

If you can provide your informal consent via email, that would be most helpful. In the interim, I will email you the format that is needed for the IRB Review form this weekend.

My contact information is:

Sherrie Birts
8726 S. Luella Avenue
Chicago, IL 60617
312-953-4413
773-768-1251
sbirts@aol.com (personal email)
sbirts@live.olivet.edu (school email)

Once again, thank you for your assistance and your encouragement!

Sincerely,
Sherrie

Appendix D

Table 24

Respondents' Perceptions of CCSS: Influence on Teachers and their Instruction

Table 24

Respondents' Perceptions of CCSS: Influence on Teachers and Their Instruction

Teacher job satisfaction, teacher training, and instructional practices					
Influence on Teachers	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
B1 Teacher morale improving.	4 (5.3%)	8 (10.7%)	25 (33.3%)	22 (29.3%)	14 (18.7%)
B2 The stress level among teachers decreasing.	4 (4.3%)	6 (8.0%)	8 (10.7%)	26 (34.7%)	29 (38.7%)
B3 Teacher resigning and citing standards as a reason.	1 (1.3%)	7 (9.3%)	26 (34.7%)	28 (37.3%)	11 (14.7%)
B4 Teachers planning to retire early and citing standards as a reason.	0 (0%)	13 (17.3%)	22 (29.3%)	27 (36.0%)	10 (13.3%)
B13 Record keeping being a major time constraint for teachers.	22 (29.3%)	25 (33.3%)	10 (13.3%)	14 (18.7%)	2 (2.7%)
C8 Teachers trying to transfer out of their current grade level or subject area because of the CCSS/assessment/accountability process.	2 (2.7%)	8 (10.7%)	23 (30.7%)	27 (36.0%)	12 (16.0%)
B7 Teachers resisting changes to the current teaching styles.	2 (2.7%)	16 (21.3%)	21 (28.0%)	28 (37.3%)	6 (8.0%)
B8 Teachers resisting changes to the current teaching techniques.	2 (2.7%)	16 (21.3%)	17 (22.7%)	31 (41.3%)	7 (9.3%)
B10 Teachers having more workshops to attend.	18 (24.0%)	31 (41.3%)	10 (13.3%)	12 (16.0%)	2 (2.7%)
B12 Teacher becoming more accountable for their students' success.	11 (14.7%)	38 (50.7%)	16 (21.3%)	7 (9.3%)	1 (1.3%)
C5 Teachers increasing their knowledge of assessments.	10 (13.3%)	44 (58.7%)	14 (18.7%)	4 (5.3%)	1 (1.3%)
B5 Teacher spending more time collaborating.	7 (9.3%)	32 (42.7%)	15 (20.0%)	15 (20.0%)	4 (5.3%)
B6 Teachers engaging in more collaborative planning.	5 (6.7%)	34 (45.3%)	11 (14.7%)	19 (25.3%)	4 (5.3%)
B9 Teachers having more committee work responsibilities.	9 (12.0%)	31 (41.3%)	18 (24.0%)	12 (16.0%)	3 (4.0%)

Note. Survey anchors ranged from 1 (Strongly Agree), 2 (Agree), 3 (Neutral), 4 (Disagree) to 5 (Strong Disagree).

Table 24 (continued)

Teacher job satisfaction, teacher training, and instructional practices					
Influence on Teachers	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
B11 Teachers spending less time teaching and more time on test preparation activities.	16 (21.3)	31 (41.3%)	12 (16.0%)	11 (14.7%)	3 (4.0%)
C1. Teachers disaggregating DEA and PSAE data to better prepare instruction.	3 (4.0%)	18 (24.0%)	28 (37.3%)	15 (20.0%)	9 (12.0%)
C2. Teachers addressing student' learning styles.	13 (17.3%)	43 (57.3%)	10 (13.3%)	4 (5.3%)	3 (4.0%)
C3. Teachers integrating instruction across the curriculum.	12 (16.0%)	41 (54.7%)	13 (17.3%)	4 (5.3%)	2 (2.7%)
C4. Teachers improving the instructional methods applied in the classroom.	10 (13.3%)	44 (58.7%)	16 (21.3%)	2 (2.7%)	1 (1.3%)
C6. Teachers obtaining a better understanding of the exact curriculum students must know.	11 (14.7%)	40 (53.3%)	13 (17.3%)	9 (12.0%)	0 (0.0%)
C7. Teachers teaching to the tests more often.	23 (30.7%)	34 (45.3%)	8 (10.7%)	7 (9.3%)	1 (1.3%)
C9. CCSS taking too much time from scheduled classroom work.	8 (10.7%)	21 (28.0%)	19 (25.3%)	22 (29.3%)	3 (4.0%)
C10. Teachers spending less time helping individual students.	7 (9.3%)	21 (28.0%)	13 (17.3%)	25 (33.3%)	7 (9.3%)
C11. Teachers moving more quickly through the curriculum in order to cover all of the materials on which their students are evaluated.	20 (26.7%)	29 (38.7%)	11 (14.7%)	12 (16.0%)	1 (1.3%)
C12. Course content that does not cover the CCSS seen as unimportant by teachers.	10 (13.3%)	16 (21.3%)	24 (32.0%)	21 (28.0%)	2 (2.7%)
C13. Subject areas without standards or testing requirement seen as important by teachers.	5 (6.7%)	19 (25.3%)	27 (36.0%)	19 (25.3%)	12 (16.0%)

Note. Survey anchors ranged from 1 (Strongly Agree), 2 (Agree), 3 (Neutral), 4 (Disagree) to 5 (Strong Disagree).

Appendix E

Table 25

Respondents' Perceptions of CCSS: Influence Student Education and Performance

Table 25

Respondents' Perceptions of CCSS: Influence on Student education and performance

Influence on student education and performance	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
D1. CCSS are improving education.	2 (2.7%)	19 (25.3%)	28 (37.3%)	13 (17.3%)	11 (14.7%)
D2. CCSS are a good measure of teacher effectiveness.	2 (2.7%)	8 (10.7%)	19 (25.3%)	25 (33.3%)	19 (25.3%)
D3. CCSS motivate students to learn.	1 (1.3%)	4 (5.3%)	12 (16.0%)	30 (40%)	24 (32.0%)
D4. The reporting of results on PSAE provides a reliable method to compare the quality of schools.	1 (1.3%)	7 (9.3%)	13 (17.3%)	24 (32.0%)	28 (37.3%)
D5. CCSS are overemphasized by administrators.	9 (12.0%)	19 (25.3%)	26 (34.7%)	18 (24.0%)	1 (1.3%)
D6. PSAE reports accurately reflect what students have learned in the classroom during the past year.	0 (0%)	7 (9.3%)	11 (14.7%)	32 (42.7%)	23 (30.7%)
D7. CCSS lead to a state narrowed aligned curriculum.	7 (9.3%)	32 (42.7%)	25 (33.3%)	7 (9.3%)	2 (2.7%)
D8. The purchase of textbooks and materials are based on the content matching the CCSS.	4 (5.3%)	18 (24.0%)	31 (41.3%)	16 (21.3%)	3 (4.0%)
E1. There is significant improvement in student achievement.	1 (1.3%)	11 (14.7%)	20 (26.7%)	33 (44%)	8 (10.7%)
E2. Students leave school more equipped to be successful.	2 (2.7%)	19 (25.3%)	17 (22.7%)	23 (30.7%)	12 (16.0%)
E3. Students become more accountable for their own success.	0 (0%)	16 (21.3%)	19 (25.3%)	24 (32.0%)	1 (1.3%)
E4. Students are more proficient in reading.	0 (0%)	18 (24.0%)	27 (36.0%)	19 (25.3%)	8 (10.7%)
E5. Students are more proficient in math.	0 (0%)	16 (21.3%)	31 (41.3%)	19 (25.3%)	7 (9.3%)
E6. Students are more proficient in language usage.	0 (0%)	16 (21.3%)	28 (37.3%)	21 (28.0%)	8 (10.7%)

Note. Survey anchors ranged from 1 (Strongly Agree), 2 (Agree), 3 (Neutral), 4 (Disagree) to 5 (Strong Disagree).

Table 25 (Continued)

Influence on student education and performance	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
E7. Students are more proficient in science.	1 (1.3%)	14 (18.7%)	30 (40.0%)	21 (28.0%)	7 (9.3%)
E8. Students' standardized achievement scores are increasing throughout the state.	1 (1.3%)	6 (8.0%)	27 (36.0%)	30 (40.0%)	9 (12.0%)
E9. The student dropout rate is declining.	0 (0%)	9 (12.0%)	34 (45.3%)	25 (33.3%)	5 (6.7%)
E10. Student discipline referrals are declining.	0 (0%)	1 (1.3%)	19 (25.3%)	34 (45.3%)	19 (25.3%)
<i>Note.</i> Survey anchors ranged from 1 (Strongly Agree), 2 (Agree), 3 (Neutral), 4 (Disagree) to 5 (Strong Disagree).					

Appendix F

Table 26

*Respondents' Perceptions of CCSS: Influence on School Administrators' Roles and Job
Satisfaction*

Table 26

Respondents' Perceptions of CCSS: Influence on School administrators' roles and job satisfaction

Influence on school administrators' roles and job satisfaction	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
F1. School administrators being under greater pressure to increase student achievement.	27 (36.0%)	34 (45.3)	7 (9.3)	4 (5.3%)	1 (1.3%)
F2. Administrator morale is declining.	16 (21.3%)	19 (25.3%)	28 (37.3%)	9 (12.0%)	1 (1.3%)
F3. Administrators retiring early and citing standards as a reason.	1 (1.3%)	4 (5.3%)	40 (53.3%)	17 (22.7%)	11 (14.7%)
F4. Record keeping becoming a major time constraint for school administrators.	16 (21.3%)	27 (36.0%)	23 (30.7%)	5 (6.7%)	2 (2.7%)
F5. School administrators becoming more accountable for their schools' or district's success.	11 (14.3%)	36 (48.0%)	16 (21.3%)	7 (9.3%)	3 (4.0%)
F6. Administrators spending more time overseeing test preparation.	8 (10.7%)	26 (34.7%)	19 (25.3%)	18 (24.0%)	2 (2.7%)
F7. Administrators spending more time supervising test analysis.	7 (9.3%)	35 (46.7%)	17 (22.7%)	12 (16.0%)	2 (2.7%)
F8. Administrators implementing only scientifically based researched programs and texts.	4 (5.3%)	15 (20.0%)	36 (48.0)	12 (16.0%)	6 (8.0%)
F9. Administrators providing scientifically based professional development for staff.	0 (0%)	23 (30.7%)	30 (40.0%)	8 (10.7%)	12 (16.0%)

Note. Survey anchors ranged from 1 (Strongly Agree), 2 (Agree), 3 (Neutral), 4 (Disagree) to 5 (Strong Disagree).

Appendix G

Table 27

Analysis of Qualitative Data Addressing Research Question 3:

Open-ended Responses for Question 1

Table 27

Analysis of Qualitative Data Addressing Research Question 3: Open-ended Responses for Question 1

Professional Development	Respondents' Comments
1. What challenges do you think educators will face when planning to implement the CCSS into their courses?	<p>Timing, planning and evaluation those skills should already be in place. CCSS simple cause us to stop, reflect and analyze the curriculum more closely.</p> <p>Lack of time to do is meaningfully.</p> <p>First is, understanding and working with the Common Core for non Math and ELA teachers. Next is learning clearly how to access for various skill and levels of skill.</p> <p>At my school, students come in reading at an average 5th to 6th grade level. Their skills across the board are so low that any type of instruction is difficult. I do not know how CCSS will affect students. It will, however cause great stress among teachers who already struggle to any type of understanding with their students.</p> <p>One challenge possibly is the alignment of curriculum map/timeline to the CCSS. Curriculum maps call for rapid pace, which causes teachers less time to achieve the ultimate goal: learning/improving a particular skill, rather than becoming familiar with a piece of material.</p> <p>Required by law, yet doomed to fail. No child left behind law: based on a flawed premise.</p> <p>Challenges: time to work collaboratively, record-keeping to track student growth (also, considering the number of transfer students who enroll with little to no grades/scores).</p> <p>It appears as if many of the skills are higher level, such as analysis and synthesis, and because many of our students are struggling readers, it will be challenging to leap from these advanced tasks.</p> <p>At the high school level one of the biggest challenges that teachers face is working with students that are so "skill deficient coming into their freshman year. The CCSS make sense and are a part of a sound rigorous curriculum; it will help when the elementary and middle schools are aligned with the high schools.</p>

Table 27 (Continued)

Professional Development	Respondents' Comments
1. What challenges do you think educators will face when planning to implement the CCSS into their courses?	<p>Time is fully implement, resources to fully implement and training to fully implement.</p> <p>Have zero influence in the other 23 hours each day that the student is not in your classroom.</p> <p>Balance content and CCSS.</p> <p>What are we teaching, as the standards are much more general. How do we reach and teach millennia babies/children that don't emphasis education and discipline?</p> <p>Lack of training by State of Illinois. They implement changes without support. Changing the standards with little or no guidance from ISBE. Just doing it without any back up for local districts.</p> <p>Time and motivation.</p> <p>Factors that affect students outside classroom totally ignored or minimized. For example: Number of absences, poverty, health-mental. How does a teacher increase scores if students are not in the classroom? Not a problem implementing CCSS in schools where there is already parental support and involvement. Students must come to high school with the necessary reading and math skills; otherwise ACT is an unfair test of teacher effectiveness.</p> <p>Lack of ability to get true understanding of the subject matter.</p> <p>What kind of professional development will teachers need, especially when it comes to higher-order thinking and independence the Common Core standards demand?</p> <p>Inadequate student prerequisite skills and too much content, too little time.</p>

Table 27 (Continued)

Professional Development	Respondents' Comments
1. What challenges do you think educators will face when planning to implement the CCSS into their courses?	<p data-bbox="691 327 1430 541">Our district attempts to do too many “new programs”. Trying to do so many makes us do nothing well. Each individual program might be good, but let’s pick one and try to do it all. It would seem to me that if Common Core is most important (I think it is), then we should concentrate on that and eliminate all of the other time consuming programs that have had little or no positive effect on student performance.</p> <p data-bbox="691 625 1425 745">It will take time for K-12 to be truly vertically aligned. Until then, it feels like we are “jamming material” down students’ throats, which does not usually result in quality learning. I am hopeful that Common Core will be affective in a few years.</p> <p data-bbox="691 804 1417 863">The amount of material that must be covered regardless of student’s level of understanding the prior knowledge required.</p> <p data-bbox="691 921 1057 951">They will have to teach to the test.</p> <p data-bbox="691 1010 1333 1068">Changing the style of questioning they use on formative and summative tests.</p> <p data-bbox="691 1108 1414 1167">Covering the material in a timely manner while maintaining student retention of material.</p> <p data-bbox="691 1226 1438 1316">Challenges: time to work collaboratively, record-keeping to track student growth (also, considering the number of transfer students who enroll with little to no grades/scores).</p> <p data-bbox="691 1375 1430 1434">The gap that exists between what students can do and what the CCSS expects at each level is great and is not being addressed.</p> <p data-bbox="691 1493 1382 1583">Time constraints-getting through all the material that needs to be covered and ensuring student retention to set them up to be successful.</p>

Table 27 (Continued)

Professional Development	Respondents' Comments
1. What challenges do you think educators will face when planning to implement the CCSS into their courses?	<p data-bbox="691 327 959 359">Finding the time to do it.</p> <p data-bbox="691 453 1435 726">Common core standards are to provide a consistent, clear understanding of what students are expected to learn, so that teachers and parents know what they need to do to help them. They are designed to be robust and relevant to the real world, reflecting knowledge and skills that our young people need for success in college and careers. Educators must continue to educate themselves on the implementation of culturally responsive classrooms to better serve the students at hand. Understanding their backgrounds to better appeal on an educational level.</p> <p data-bbox="691 783 1435 873">CCSS assumes a degree of literacy for successful implementation. Our students have not familiarized the level of reading proficiency for their grade level.</p> <p data-bbox="691 930 1406 993">With the material for standardized test, plus Common Core content that leaves little room for hands-on learning.</p> <p data-bbox="691 1050 776 1081">Science</p> <p data-bbox="691 1150 1411 1213">Were not treating students as individuals. Everything now revolves around teaching students to test.</p> <p data-bbox="691 1270 1435 1333">Having a well-balanced curriculum that forces students to think rather than teaching to a test.</p> <p data-bbox="691 1390 1138 1421">Continuing updating curriculum to match.</p> <p data-bbox="691 1478 1419 1568">The time it will take to implement CCSS will be a major challenge. Having to restructure lessons and planning will be a challenge at the start of implementation.</p> <p data-bbox="691 1625 1390 1688">Many do not have a firm grasp of CCSS. Teachers are constantly getting things thrown at them without adequate training.</p>

Table 27 (Continued)

Professional Development	Respondents' Comments
1. What challenges do you think educators will face when planning to implement the CCSS into their courses?	<p data-bbox="691 327 1430 390">Time constraints. There is so much information that <u>has</u> to be taught even if the class is not ready to move on.</p> <p data-bbox="691 474 1328 537">Home, social economic environment, community and space availability.</p> <p data-bbox="691 590 1263 621">Teaching to the test, instead of critical thinking skills.</p> <p data-bbox="691 674 1438 768">We are already overwhelmed and overworked. It is just another thing to do that takes away our ability to properly prepare students for success.</p> <p data-bbox="691 821 1425 947">I think one of the challenges is giving a student previous knowledge. If a student enters our district unprepared, we are then saddled with the burden of bringing him up to entry level knowledge and then build on that.</p> <p data-bbox="691 1031 1211 1062">They should prepare a more detailed curriculum.</p> <p data-bbox="691 1115 1414 1241">The relationship of how it applies to their subject should matter. (Career Tech) English, Math and Science are ok. How can CCSS help identify the subject being taught in class and show and identify the importance and relationship it has to general subjects.</p> <p data-bbox="691 1293 1430 1356">I believe teachers won't have challenges because the implementation of Common Core has many similarities to the state standards.</p> <p data-bbox="691 1409 1016 1440">Reaching low ability students.</p> <p data-bbox="691 1493 1320 1524">Not understanding how the process works and the benefits.</p>

Appendix H

Table 28

*Analysis of Qualitative Data Addressing Research Question 3:
Open-ended Responses for Question*

Table 28

Analysis of Qualitative Data Addressing Research Question 3: Open-ended Responses for Question 2

Professional Development	Respondents' Comments
2. What kinds of resources or tools would enhance your professional development (or enhance the professional development you may be asked to lead) on the CCSS?	<p>On-line templates to avoid recreating other resources. Continued collaboration with colleagues.</p> <p>Better technology like overhead projectors and computers in staff meeting areas.</p> <p>CCSS presentation-time to work on specific lesson plans for actual classes. Reading and Math in the disciplines.</p> <p>More technology workshops to incorporate lessons/activities to CCSS.</p> <p>Taking away" Professional Development. Reliable technology and training (I Pads for classrooms). I attended a workshop in the fall with Carol Jago (Implementing the CC) where she outlined standards and followed w/ practical examples. This was extremely helpful.</p> <p>Better articulation with the elementary/middle schools, Specific curriculum development with outside resources. More time to work with the district (all campuses) and with other content areas.</p> <p>Knowledgeable trainers.</p> <p>Clear objectives/activities.</p> <p>Classroom activities that really work. Team building for teachers, Institute days should excite and invigorate the teachers, not bore and make us desire a better use of time.</p> <p>Training on how the standards will change our courses. Chem. have barely no standards that includes our entire course. Objective lack specificity to our content. We are having to figure out the how will no guidance or support from higher ups outside our district. Frankly, I don't think they know or we would receive the guidance, support and strategies to effectively implement the CCSS</p>

Table 28 (Continued)

Professional Development	Respondents' Comments
2. What kinds of resources or tools would enhance your professional development (or enhance the professional development you may be asked to lead) on the CCSS?	<p data-bbox="685 359 1451 422">Classroom management skills, knowledge of different teaching and learning tech. diversity training.</p> <p data-bbox="685 562 1451 653">Another Social Worker! A School Psychologist who can work with students w/o IEP. In my experience with co-taught some of the worst absentee issues and behavior comes from kids w/o identification!</p> <p data-bbox="685 709 1451 741">Social Studies teachers need an "Intro" to the CCSS.</p> <p data-bbox="685 821 1451 884">Purchasing the book, "The Core Six" Essential Strategies for achieving Excellence with the Common Core!!!!</p> <p data-bbox="685 940 1451 1003">School district support for holding students just as accountable as staff.</p> <p data-bbox="685 1066 1451 1157">PD & School Improvement days where teachers can talk about CC and how it is changing classroom teaching and each team creating activities to implement CC in each course.</p> <p data-bbox="685 1213 1451 1339">Regular, organized staff development time (especially within department and course teams) to collaborate with our peers. Time allowed with district administrators for honest discussion concerning course/curriculum design.</p> <p data-bbox="685 1396 1451 1428">More and better technology!</p> <p data-bbox="685 1451 1451 1514">Textbook resources (or other resources) that provide open-ended questions, tests, homework and projects.</p> <p data-bbox="685 1570 1451 1602">Improve classroom measurement techniques.</p>

Table 28 (Continued)

Professional Development	Respondents' Comments
2. What kinds of resources or tools would enhance your professional development (or enhance the professional development you may be asked to lead) on the CCSS?	<p>Time management.</p> <p>Seminars and books.</p> <p>More consistent schedules from year to year so every year you are not teaching new curriculums.</p> <p>More technology workshops to incorporate lessons/activities to CCSS.</p> <p>All teachers should be given a resource binder which includes: CCSS and sample lessons that are designed and aligned toward these standards. Opportunities to collaborate with colleagues on creating curriculum solely based upon CCSS. Training on creating CCSS lesson plans.</p> <p>We need to know how to reconcile the expectations of CCSS with the cognitive any affective reality of our students.</p> <p>I-Pads (technology that works), conferences on teaching with technology.</p> <p>Ways to assist students that are coming into our schools who are way below grade level.</p> <p>Course specific workshops-break it down to courses instead of just departments.</p> <p>Course specific workshops-break it down to courses instead of just departments.</p>

Table 28 (Continued)

Professional Development	Respondents' Comments
<p>2. What kinds of resources or tools would enhance your professional development (or enhance the professional development you may be asked to lead) on the CCSS?</p>	<p>Additional time should be provided to educators for the purpose of becoming familiar with CCSS.</p> <p>A 2 or 3 hours workshop is not sufficient time for someone to understand this concept. Also, when you give teachers workshops at the end of the day, end of a semester or end of the year, their mind is not focused. What incentives do you give a teacher to want to listen?</p> <p>Aide help in the classroom to assist with one on one help for students.</p> <p>Assistance with graduate studies costs.</p> <p>Time.</p> <p>A Foreign Language Lab for the students.</p> <p>More workshops for CTE.</p> <p>Examples of how other schools have used CCSS to subject, both General Ed. and Career Tech. What does it look like? What method and system is used to help both students and teacher to stay focused on the CCSS to help them out or set the standards for higher classroom learning. Can it be model simple and easy for everyone to use?</p> <p>Any resources that provide detailed examples of implementation to allow the teacher hands-on experience with feedback provided.</p>

Table 28 (Continued)

Professional Development	Respondents' Comments
<p>2. What kinds of resources or tools would enhance your professional development (or enhance the professional development you may be asked to lead) on the CCSS?</p>	<p>More learning sessions and state involvement with the learning standards.</p> <p>Better textbooks with richer materials that can be used to help facilitate instruction not just more worksheets with more drill & kill.</p>