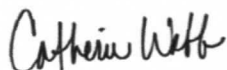
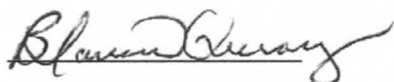


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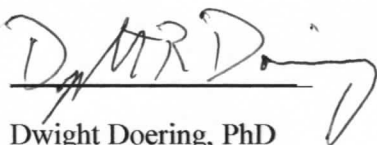
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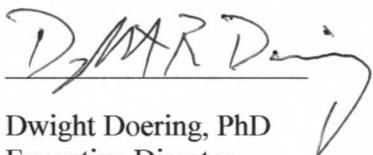


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MIXED-METHODS STUDY OF THE FACTORS AFFECTING TEACHER
IMPLEMENTATION OF THE COMMON CORE ENGLISH LANGUAGE ARTS
STANDARDS AND THE IMPACTS OF IMPLEMENTATION

by

Isma Jasbeen Seetal

A Dissertation

Presented in Partial Fulfillment of
Requirements for the
Degree of
Doctor of Education
in
Educational Leadership
May, 2019

School of Education
Concordia University Irvine

ABSTRACT

The Common Core has been at the center of contention for many years; research have both hailed its apparent virtues and condemned its perceived shortcomings (Conley, 2011; Eilers & D'Amico, 2012; Krashen, 2014a; Ravitch, 2016; Tienken, 2011). However, the standards themselves cannot be evaluated if implementation has not been effectively carried out. This study addresses the necessary topic of implementation in the Common Core context. The aims of this study were to describe the implementation of the Common Core English Language Arts Standards (CCSS-ELA) while highlighting the impacts, barriers and supports experienced by teachers in the process, to examine the differences in teachers' implementation of CCSS-ELA instructional practices and teacher leadership in various school contexts, and to find the impact of teacher transformational leadership dimensions on the implementation of CCSS-ELA instructional practices.

This study follows a sequential mixed-methods design where a survey based on The Survey of Enacted Curriculum (Council of Chief State School Officers SEC Collaborative Project, 2005) and the Multifactor Leadership Questionnaire (Avolio & Bass, 2000) was administered to ELA teachers in six schools, a title I and non-Title school at the elementary, middle and high school level of study in a school district in Southern California. Forty-eight teacher participants answered the survey with the highest percentage, 39.6%, teaching at the elementary level or being employed in non-Title I schools, 64.4%. Follow-up interviews were subsequently conducted with 22 of the 48 teacher participants. A variety of analytical techniques including inferential statistics, content analysis and grounded theory were used to analyze the data collected. The study showed that teachers' implementation of CCSS-ELA aligned instructional practices and teacher transformational leadership differed by level of study but not by school Title I status. It also brought to the fore, two specific transformational leadership dimensions and the confounding variables that affected teacher

implementation of CCSS-ELA instructional practices. This study also led to the development of a grounded theory of teacher implementation of the CCSS-ELA standards. Quantitative and qualitative findings were combined to address the research objectives of this study and posit recommendations for practice.

Keywords: Common Core State Standards, implementation, teacher leadership

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ACKNOWLEDGEMENTS

My deepest gratitude goes to my mother, my brother and other relatives in Mauritius and abroad for the support they have given me over the years. Mother, thank you for giving me the gift of education; your sacrifices, relentless hard work and deepest love have been my source of strength through life's ups and downs. Your trust is my wings, your love is my shelter and your presence, near or far, is my rock. I cannot thank you enough. My husband, Roopesh, I could not dream of a better person as my life partner; your unconditional love and affection, your invaluable and consistent support, your infallible belief in your wife's ability to do whatever she sets her mind to do have been my life's greatest blessing and motivation. As the song goes, "God blessed the broken road that led me close to you." I can't wait for the rest of our life together; I just know there is much more that we are yet to achieve...for us, for our families and our community. Thank you for being there, thank you for helping me in this dissertation process, and above all, thank you for putting up with me!

I would also like to thank my dissertation committee for guiding and supporting me through this dissertation process; I hope that this process is only the beginning of future collaborations. Dr. Webb, thank you for being a great mentor and a staunch supporter; your kind words and constructive feedback have been a major source of motivation. Thank you for believing in me. Dr. Quiroz, words are not enough to thank you for having taken me under your wings as your graduate research assistant, coached me, and having treated me with so much care and affection. I am so fortunate that our paths have crossed. Dr. Doering, thank you for being such an amazing servant leader and such a great role-model. You were the first person I spoke to at Concordia and after our conversation; I was convinced that Concordia was the right choice for me and I have not regretted that choice.

Thank you to other Concordia faculty, particularly, Dr. Eugene Kim, Tom Cooper and Jackie Franke for the scholarly conversations we have had, and for the advices and support

you have given me. I would also like to thank my sponsors for having believed in me and provided invaluable financial and socio-emotional support in the completion of this doctorate. My gratitude goes to the Rotary Club of Port-Louis, the Newport-Irvine Rotary, District 9220, and Rotary International. There are a few people in Rotary that have gone beyond what was expected to make this incredible journey of learning and growth possible; thank you Monique, PP Adam, PP Philip, Pardaman and Bill for everything you have done. My deepest gratitude also goes to the P.E.O organization which selected me as their International Peace Scholar. Ladies, thank you for the strong and consistent support you have given me; thank you for the encouraging words you have sent me, thank you for investing in me. Lastly, thank you IIE for having chosen me for the Horovitz fund for professional development. I am a proud woman, African and community leader; I hope to represent you all to the best of my ability.

Last but not least, Thank you to my Mauritian and American friends for your support. Desposito Family, thank you for adopting Roopesh and me as your own; we settled in smoothly thanks to your support and love. Rose, thank you for treating us like your children. You are certainly the better gin player of us both! Thank you to my cohort friends, particularly Kim and LaVonne, for their friendship and support. Thank you Shilpa and Yuyang for the great times together and moral support. A special thought goes to my Mauritian friends; Teena, Ziyaad, Tricia, Rabia and many more.

CHAPTER 1: INTRODUCTION

The provision of equal opportunities to all students has increased the difficulty of educating students and requires creative teaching approaches, irrespective of students' socio-economic background (Krashen, 2014a). The Common Core State Standards (CCSS), launched in 2009, and adopted in California in 2010 is a major educational reform; it is claimed to establish "clear, consistent guidelines for what every student should know and be able to do in math and English language arts from kindergarten through 12th grade" (National Governors Association Center for Best Practices & Council of Chief State School Officers, n.d., para. 1). Students who fail to master the CCSS may not be prepared for college or employment, thus generating a negative implication for the economy (Kober & Rentmer, 2011). Implementation of the standards with fidelity by school leaders and teachers is required to significantly boost student achievement (Achieve, College Summit, National Association of Secondary School Principals, & National Association of Elementary School Principals, 2013). While school leadership is fundamental to educational improvement efforts such as the Common Core State Standards (Bryk, Sebring, Allensworth, Easton, & Luppescu, 2010; Fullan, 2016; Hall, 2013), the leadership of teachers is increasingly being touted as a practical way for teachers to contribute to school reform (Criswell, Rushton, McDonald, & Gul, 2018; Poekert, Alexandrou, & Shannon, 2016; Wenner & Campbell, 2017).

Statement of the Problem

Students from low socioeconomic backgrounds enter high school five years behind those from high socioeconomic backgrounds (Reardon, Valentino, & Shores, 2012). Although many researchers and practitioners have conducted studies and authored articles that praise the virtues of, criticize the need for, and offer tips on the implementation of the CCSS (Conley, 2011; Eilers & D'Amico, 2012; Lee, 2011; Tienken, 2011), recently, there

has been rising opposition to the CCSS which has been blamed for being harmful to special students groups such as economically-disadvantaged children (Haskins, Murnane, Sawhill, & Snow, 2012; Krashen, 2014a; Ravitch, 2016). Although the negative impact of poverty on student learning and performance has been widely reported in research (Berliner, 2006; Lacour & Tissington, 2011; Levin, 2007; Reeves, 2009), there are schools and districts that have defied the odds. The Garden Grove Unified School District and Sanger Unified School District, with highly diverse student populations and high poverty levels, have been able to improve academic achievement for all their students largely through the fidelity of implementation of targeted change initiatives and effective leadership (Fullan, 2016).

Controversy about the impact of the Common Core State Standards on student outcomes such as performance cannot be adequately discussed without taking into account whether a lack of impact is due to poor implementation of the standards or the standards themselves. Failure of school reforms is not in the ideas but the implementation of the ideas (Fullan, 2016; Hess & McShane, 2013; Jerald, 2008). Proponents of CCCS have also acknowledged the challenges of implementing such a complex reform without continued support throughout the process (Cobb & Jackson, 2012). Despite the challenges, the formulation of standards should be translated into implementation to promote the possibility of improved academic performance for all students, including economically disadvantaged students. This idea is echoed in research conducted by Allensworth, Nomi, Montgomery, and Lee (2009) which examined the effects of a uniform college preparatory curriculum on students' outcomes. The researchers compared groups of students, who attended the same Chicago high schools with a high level of poverty, before and after policy implementation. The study revealed that the reform decreased disparities in advanced course enrollment in ninth grade by entering ability, race/ethnicity, as well as special education status but showed no gain in test scores and in the likelihood of student enrollment in higher education after

graduating from high school. The researchers associated this stasis with the need for deeper implementation of changes to increase learning for all students. An extensive evaluation of five gold-standard studies in education, based on large-scale research of popular educational programs showed that specific interventions failed to produce improvement in achievement due to poor implementation (Goodwin, 2011). The issue of implementation is an important one and can be boosted by providing research-based evidence to important stakeholders.

Leadership from different stakeholders is fundamental in establishing and maintaining fidelity to the implementation of change to promote the effect of reform on student outcomes. Leadership contributes to student learning; it is second only to teaching among all school-related variables that add to learning at school and the effects are usually more significant where and when it is needed the most (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Research in districts with high poverty schools that have recognized the importance of teaching and learning conditions showed that leadership was an important emerging theme (Almy & Tooley, 2012; Harris, 2007). The need to continue to study leadership in the context of the implementation of educational changes is thus critical, especially from the perspective of teachers, who are directly experiencing these changes and are responsible for implementing them.

Purpose of the Study

This study serves five main purposes. First, this study aims to examine the difference in teachers' self-reported transformational leadership and fidelity of implementation of Common Core English Language Arts Standards (CCSS-ELA) instructional practices based on the level of study (elementary, middle and High) and Title I status of their school sites. Fidelity in this study relates to the quantity and quality of use of CCSS-ELA aligned instructional strategies.

The second purpose of the study is to investigate the relationships between the dimensions of transformational leadership of the teachers, teacher beliefs and their implementation of CCSS-ELA aligned instructional strategies. Third, this study aims to assess the impact of the dimensions of transformational leadership of teachers on the implementation of CCSS-ELA instructional strategies while controlling for possible extraneous variables such as teacher beliefs.

The fourth purpose of this study was to unveil the barriers, supports, and impacts teachers perceive to have experienced in their implementation of the CCSS-ELA standards. The final purpose of this study is to explore teachers' CCSS-ELA implementation process through a qualitative approach. The qualitative findings and the quantitative data will then be analyzed and interpreted together for validation purposes and for providing a thorough and more accurate picture of the CCSS-ELA implementation process as perceived by the teachers.

Research Questions and Hypothesis

This study addressed the following research questions which are related to the implementation of the Common Core English Language Arts (CCSS-ELA) Standards:

1. How does teachers' fidelity of implementation of CCSS-ELA aligned instructional strategies and their transformational leadership differ by school study level and Title I status?
2. What is the relationship between teacher beliefs and opinions, teacher fidelity of implementation of categories of CCSS-ELA aligned instructional practices and teacher transformational leadership dimensions?
3. How do the dimensions of transformational leadership of teachers impact the fidelity of implementation of CCSS-ELA aligned instructional practices?

Hypothesis: Transformational leadership dimensions have a significant impact on the fidelity of Common Core ELA implementation. As shown in the literature, leadership is an important force driving the implementation of school change initiatives (Bryk et al., 2010; Fullan, 2016; Hall, 2013). Teacher beliefs and experience also have a significant impact on fidelity of implementation. According to research by Harn et al. (2013), a balance between fidelity of implementation and contextual fit, highlight teachers' instructional philosophies, leadership, and teacher experience as circumstantial factors that can temperate the level of fidelity.

4. What are the impacts, supports and barriers perceived by teachers in the implementation of the CCSS-ELA standards?
5. How were the CCSS-ELA standards implemented by teachers in a district in Southern California?

Theoretical Framework

Some leadership approaches are more effective in promoting change processes such as those involved in the Common Core State Standards. The intertwined nature of transformational leadership and change serves as the basis for its use as one of the theoretical frameworks for this study. An implementation fidelity conceptual framework was also used.

Transformational Leadership

The publication of the book, *Leadership*, by Burns (1970) was a pioneering piece of work which positioned transformational leadership as an important leadership approach. According to Burns (1978), leadership takes place when the engagement between follower and leader is done in such a way that they mutually raise one another up to higher motivation and morality. Mohandas Gandhi elevated the ethical aspirations, hopes, and demands of millions of Indians and was himself changed in the process of leading, hence is typically referred to as an example of a transformative leader (Burns, 1978). Bass (1985a) extended

the scope of transformational leadership proposed by Burns, contending that transformational leadership motivates followers to go beyond expectations by (a) increasing followers' awareness about the significance and worth of specified and idealized goals, (b) getting followers to surpass their interests for the benefit of the team or organization, and, (c) moving followers to address higher-level needs. His model of transformational and transactional leadership shows the dynamics of the transformation process (see Figure 1).

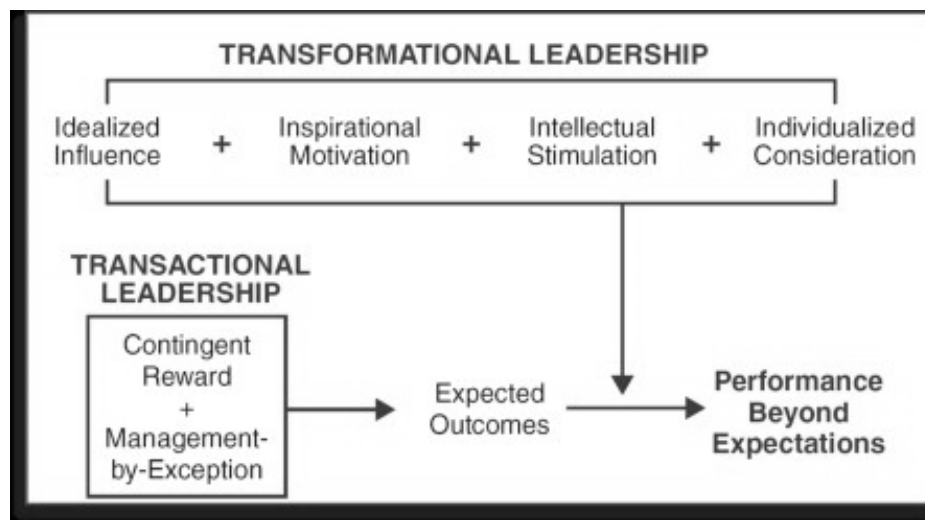


Figure 1. Full range of leadership model.

Transformational leadership is further clarified by Avolio and Bass (1999) and summarizes four main dimensions of transformational leadership:

- Charisma

Charisma or idealized influence is the emotional constituent of leadership (Antonakis, 2012). The charismatic leader provides direction and a sense of mission through a vision, by infusing pride, acquiring respect and trust, and boosting optimism (Bass, 1985b; B. M. Bass & Avolio, 1989). Leithwood, Jantzi, and Steinbach (1999) also argue that one fundamental dimension of transformational leadership practice is direction setting which can be achieved through tasks such as the creation of a school vision and establishment of school goals but also emphasizes the task of setting high expectations for performance. Charismatic leaders

excite, arouse and inspire their followers (Yammarino & Bass, 1990). A transformational teacher articulates a realistic vision of education (Mammen & Pushpanadham, 2018). An example of a charismatic leader is Nelson Mandela, the first non-white president of South Africa who was perceived as having high ethical standards and a vision which brought about massive changes in the governance of the country (Northouse, 2016).

- Inspiration

Inspiration relates to the ability of the leaders to act as a model for followers, communicate a vision and use symbols and emotional appeals to focus team members' efforts to achieve more than they would in their interest (Northouse, 2016). The work conducted by Bass (1985) combined charisma and inspiration as a single factor which nevertheless involved different behaviors; while charisma necessitated identification with the leader, inspiration did not have the same implications. Studies by Kouzes and Posner (1987) proposed a leadership model based on data gathered from interviews of more than 1,300 middle and senior-level managers. Two of the five practices proposed by the model, modeling the way and inspiring a shared vision, are in line with Bass' "charisma" and "inspiration" dimensions of transformational leadership.

- Intellectual Stimulation

This dimension includes leadership that provides followers with challenging new ideas that encourage them to rethink archaic ways of doing things and hence to be more creative and innovative (Bass, 1985). It awakens leaders' awareness of problems, awareness of their own thoughts, recognition of their beliefs and values as well as those of their followers and organization. Evidence of intellectual stimulation is demonstrated in the conceptualization, understanding, and analysis of the problems encountered as well as the solutions produced by followers (Yammarino & Bass, 1990).

- Individualized Consideration

Individualized consideration involves the inclusion of people into the change process of an organization (Conger, 2014). Transformational leaders provide a supportive climate by listening to followers' needs and linking these needs to those of the organization in which they work (Bass, 1985). Transformational leaders behave in a way that makes their acceptance of individual differences clear and allocate responsibilities in agreement with their particular affinities (Bass & Riggio, 2006; Conger, 2014). Through coaching and mentoring, they consistently provide feedback to empower followers. They adjust to the needs of the followers by sometimes delegating work and at other times, giving directives with more structure with regards to the work that needs to be completed (Northouse, 2016).

Leithwood et al. (1999) combined the components of three dimensions of transformational leadership proposed by Bass, namely individualized consideration, intellectual stimulation and modeling best practices (Inspiration) into one dimension: The development of people. Another dimension of transformational leadership the authors proposed is the *Redesign of the Organization*, which incorporates three core leadership practices, including the development of a culture of collaboration, the setting up of structures which increase participation in decision-making and establishment of fruitful relationships with the community (Leithwood et al., 1999). An extensive review of the research on transformational leadership for the years 1995 to 2005 brought to the fore another dimension of transformational leadership, 'managing the instructional program' which includes assumptions of instructional leadership (Leithwood & Jantzi, 2005). This dimension encompasses several leadership practices including setting up effective practices for staffing, offering support in instruction and shielding the staff from constant external demands (Leithwood & Jantzi, 2005).

There is abundant literature, both supportive and critical, about transformational approaches to leadership. However research in school contexts is limited (Leithwood &

Jantzi, 2006). Most of the evidence points towards the suitability of transformational leadership in schools faced with challenging changes (Carter, Armenakis, Feild, & Mossholder, 2013; Leithwood et al., 1999; Leithwood & Jantzi, 2006; Mascal, 2007). Teachers in schools with principals who adopt transformational leadership approaches are more likely to be satisfied with their principals and demonstrate additional effort and increased commitment to the organization and its reform initiatives (Leithwood et al., 1999; Nguni, Slegers, & Denessen, 2006; Yu, Leithwood, & Jantzi, 2002).

Transactional Leadership

Transactional leadership refers to all the leadership models, which emphasize the exchanges that take place between leaders and their followers (Northouse, 2016). Transactional leaders exchange things of value with followers to further their agendas as well as that of their followers' (Kuhnert, 1994). Transactional leaders are persuasive as their agendas serve the best interests of followers and convince them to do what the leader wants (Kuhnert & Lewis, 1987). However, leaders adopting a transactional approach are less responsive to change as they follow set protocols; hence they find it difficult to meet unexpected demands (Smith & Bell, 2011).

According to Bass (1985), the connections between dimensions of transactional leadership go beyond the fact that they are, to different extents, inclined toward leader and follower exchanges. They include comparatively lower leader activity and participation. The dimensions of transactional leadership are (Bass, 1985):

- Contingency reward

This dimension relates to the degree to which leaders set goals, offer rewards based on performance, gain necessary resources, and offer rewards when performance goals are achieved. The leader attempts to get agreement from followers on what should be done and what the payoffs will look like for those doing it (Northouse, 2016).

- Management by exception

There are two ways of managing by exception: actively and passively. The active form involves leaders keeping close track of followers' mistakes or rule violations and then takes corrective action. The passive form involves a more complacent role of the leader who may not be aware of problems until informed by others and usually intervenes only after standards have not been met or when problems escalate.

Laissez-Faire Leadership

The laissez-faire leader renounces his duties and delays decisions. There is an absence of feedback and effort to help followers fulfill their needs. There is also no exchange with followers or attempt to help them develop. Northouse (2016) gives the example of a laissez-faire leader as the president of a manufacturing firm who never organizes any meetings with plant supervisors, has no long-term strategy, is disconnected and hardly makes contact with employees.

Although the current study focuses on transformational leadership, its findings could possibly show a lack of transformational leadership or a greater tendency of teachers to adopt the other forms of leadership such as transactional leadership. Hence, these types of leaderships have also been included in the theoretical framework for this study.

Implementation Fidelity Conceptual Framework

In the medical arena, there are established protocols by which stakeholders need to abide before introducing new medical products such as drugs. However, there are no such set protocols in the educational field where lives are also at stake (Dinham, 2015). Although some research has appeared in the medical and behavioral health fields, research about the implementation fidelity construct and its measurements has been limited in education. Over the years, implementation fidelity has also been referred to as *treatment fidelity*, *treatment integrity* and *procedural reliability* (Hagermoser Sanetti & Kratochwill, 2009; Peterson,

Homer, & Wonderlich, 1982; Shadish, Cook, & Campbell, 2002). Implementation fidelity is defined as the extent to which an intervention or program is delivered as envisioned (Carroll et al., 2007). More recent studies focused on implementation fidelity in education and related fields have brought to the fore its complexity and multidimensionality (Dane & Schneider, 1998; Fixsen, Blase, Naoom, & Wallace, 2009). Although the organizations and labeling of the various dimensions have differed in research, there are some commonalities that emerge. A number of models for implementation fidelity of interventions (Dane & Schneider, 1998; Noell, 2008; Power et al., 2005) consist of at least one or more of the following implementation fidelity elements: (a) Content which relates to what the intervention steps that are delivered are; (b) Quality which relates to how well the intervention steps are delivered; (c) Quantity which refers to the amount of the intervention that is provided; and (d) Process which refers to how the intervention was delivered. Dimensions of implementation fidelity proposed by Dane and Schneider (1998) can be assessed on their own and can predict student outcomes (Dusenbury, Brannigan, Falco, & Hansen, 2003). In the current study, the researcher focused on two dimensions of implementation fidelity including the quality and quantity of use of Common Core English Language Arts aligned instructional practices.

Research reports a positive association between high levels of fidelity of implementation and better outcomes (Durlak & DuPre, 2008; O'Donnell, 2008). However, the opposite has not been reported (Noell, 2008) which makes research about implementation fidelity particularly important. Implementation of the standards with fidelity by school leaders and teachers are required to significantly boost student achievement (Achieve et al., 2013). However, standards on their own will not improve schools, and promote student achievement, nor will they decrease the achievement gap.

Fidelity of implementation is an important factor to consider in the examination of intervention efficacy, hence, should be studied along with factors that influence it (Carroll et

al., 2007; Goodwin, 2011; O'Donnell, 2008). There is little evidence linking intervention implementation fidelity to teacher characteristics such as education, years of experience, and gender (Justice, Mashburn, Hamre, & Pianta, 2008) but there is evidence linking teacher/intervention alignment, teacher beliefs (efficacy) and previous practices to implementation fidelity (Bruce & Ross, 2008; Rimm-Kaufman & Sawyer, 2004), hence effort is made to take into account similar variables such as teacher certifications in the present study. Leadership has been reported to promote fidelity of implementation (Hislop, 2016; Southern Regional Education Board, 2010). Demographic variables, on the other hand, appear to have little to no correlation to implementation fidelity (Justice et al., 2008).

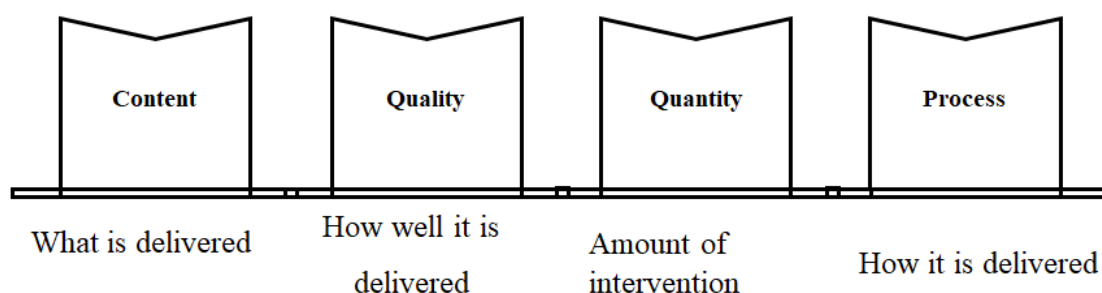


Figure 2. Implementation fidelity elements used in research

Significance of the Study

This study addresses gaps in research associated with (a) equity in the Common Core, (b) fidelity of implementation (as measured by quantity and quality) as related to student outcomes at different levels of study, and (c) mixed-methods research on leadership

Development of the Common Core State Standards was rushed, and the final product did not take into account the needs of a range of children including those with disabilities, the English language learners and those in early grades (Ravitch, 2016). Although these concerns may be moot when the upward trend in high school graduation rates is considered (Kamenez & Turner, 2016), there is nevertheless a need to continue systematic research which will examine implementation and effects across classrooms and schools serving different student groups based on low socio-economic status, English Learners, disability

status and ethnicity (Polikoff, 2017). Research addressing equity issues in the Common Core State Standards are currently limited (Polikoff, 2017). Hence this study will address a research gap through the investigation of implementation fidelity in Title I and non-Title I schools.

Without evaluation of fidelity of implementation, it is difficult to give a viable assessment of its contribution to outcomes (Carroll et al., 2007). Despite the importance of fidelity of implementation, there is a noted lack of attention given to fidelity of implementation in the K-12 literature; hence it is unsurprising that this concept has, in history, hardly been conveyed in major education studies that examine the success of K-12 core curriculum interventions (Cook & Dobson, 1982; National Research Council (NRC), 2004; US Department of Education, 2006). Most of the implementation fidelity research related to the educational field has been mainly carried out at the preschool and elementary level whereas there is limited research relating to students at the middle and high school level, particularly in the area of core language arts curriculums. Furthermore, most early childhood intervention studies only used either quantity or quality but not both in analyzing student outcomes such as performance (Downer & Yazejian, 2013). This study will thus address a research gap by assessing implementation based on both the quality and quantity dimension, at different levels of study.

Although there is a substantial amount of research on school leadership in the context of school reform (Bizar & Barr, 2001; Brezicha, Bergmark, & Mitra, 2015; Chen, 2008; Gigante & Firestone, 2008; Jwan, Anderson, & Bennett, 2010; Kaniuka, 2012; Mette, Biddle, Mackenzie, & Harris-Smedberg, 2016; Park & Jeong, 2013; Spiri, 2001), most are case-based in nature which is not sufficient in developing a strong understanding of school leadership (Leithwood & Jantzi, 2006). Although school leadership mostly refers to the school principal leadership, leadership in schools is becoming more and more distributed so that leadership is

now expected at various levels of the school, including at the classroom level from teachers. There has been a rise in the demand for the use of mixed-method designs in implementation research (Aarons, Hurlburt, & Horwitz, 2011; Landsverk, Brown, Rolls Reutz, Palinkas, & Horwitz, 2011). This study addresses a gap by making use of a mixed-methods design and data collected from a relatively larger participant sample from several high and low poverty schools within one district. A mixed methods research approach narrows the divide between quantitative and qualitative researchers and holds promise in encouraging a collective responsibility in the search for better accountability for educational quality (Johnson & Onwuegbuzie, 2004). The goal of mixed-methods research is to capitalize on the strengths of qualitative and quantitative approaches while mitigating the weaknesses of both in single research studies (Johnson & Onwuegbuzie, 2004).

Definitions of Terms

Achievement Gaps: “Achievement gaps occur when one group of students (such as students grouped by race/ethnicity, gender) outperforms another group and the difference in average scores for the two groups is statistically significant (National Center for Education Statistics, 2015).

Change: Change process is defined as “a process through which people and organizations move as they gradually learn, come to understand, and become skilled, and competent in the use of new ways” (Hall & Hord, 2011, p. 8).

Fidelity of implementation: Implementation fidelity is defined as the extent to which an intervention or program is delivered as envisioned (Carroll et al., 2007). In this study, it is measured by quality and quantity of implementation of CCSS-ELA aligned instructional practices.

Leadership: The various definitions of leadership that have appeared in scholarly research over the years have been categorized by various researchers. Bass (1990a) defined

leadership as the focus of group processes. Other definitions of leadership conceptualize leadership from (a) a personality view, (b) a behavioral view, (c) a transformational practice, or (d) a skills perspective. The definition of leadership used in this text is the one defined by Northouse (2016) who refers to leadership as a process which involves influence, occurs in group situations and comprises of shared goals. This definition of leadership makes leadership available to everyone and not limited to the labeled leader based on position (Northouse, 2016).

Transformational leadership: It is a leadership style that “involves inspiring followers to commit to a shared vision and goals for an organization or unit, challenging them to be innovative problem solvers, and developing followers’ leadership capacity via coaching, mentoring, and provision of both challenge and support” (Bass & Riggo, 2006, p. 4).

Transactional leadership: Bass (1985) claimed that transactional leadership is a leadership style which forms the basis of relationships that exist between leaders and followers regarding stipulation of expectations, clarification of duties, negotiation of contracts, and offer of recognition and rewards for reaching expected levels of performance. There are different types of transactional leadership including: (a) one in which contingent reward is given by the leader if the performance of the follower is up to expectations, and (b) another one which relates to the complacency of the leader who takes no action unless a problem becomes serious (Bass, 1999). Yammarino and Bass (1990) further divided rewards into promises (what will be obtained upon success) and rewards (followers are given what they want in exchange for demonstrating support for the leader).

Standards: “Standards define what students should understand and be able to do” (National Governors Association Center for Best Practices & Council of Chief State School Officers, n.d., para. 1).

Readiness: The Common Core State standards writers defined readiness as the capacity to thrive in entry-level, credit-bearing, academic college courses and workforce training programs without the need for remediation (Rothman, 2011).

The Common Core State Standards: The Common Core State Standards are high-quality academic standards in mathematics and English language arts/literacy (ELA) that sets consistent learning goals across states, summarizing what a student should know and be able to do at the end of each grade throughout their K-12 education. They were produced with the goal to ascertain that students graduating from high school are adequately equipped with the skills and have acquired the knowledge needed to achieve successfully in college, career and their life, irrespective of where they live (National Governors Association & Council of Chief State School Officers, n.d.).

The Common Core English Language Arts Standards (ELA): The Common Core State Standards establish guidelines for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects, allowing teachers to use their expertise in various content areas to assist students in addressing challenges in reading, writing, speaking, listening, and language. The ELA standards are based on The College and Career Readiness Anchor Standards that encourage critical-thinking, problem-solving, and analytical skills that promote success in college, career, and life. While the ELA/literacy standards articulate core knowledge and skills, there are grade-specific standards that offer more specificity. The standards are meant to complement content standards in specific areas rather than substituting them (National Governors Association Center for Best Practices & Council of Chief State School Officers, n.d.).

Formal Teacher Leadership: Formal leadership roles in education include duties such as content area coordinator, department head, or school position that takes the teacher away from the classroom to achieve (Ash & Persall, 2000).

Informal Teacher Leadership: Informal teacher leadership is characterized by a lack of distinct role within a school's hierarchy. It consists of "classroom related functions such as planning, communicating goals, regulating activities, creating a pleasant workplace environment, supervising, motivating those supervised, and evaluating the performance of those supervised" (Harris, 2003, p. 314).

Coherence: Coherence is the "shared depth of understanding about the purpose and the nature of the work" (Fullan & Quinn, 2016, p. 1). It is what lies in people's minds and actions individually but especially, collectively (Fullan & Quinn, 2016).

Simplexity: "Simplexity" is the smallest number of possibly interlinked elements that feed on one another and become successful (Fullan & Quinn, 2016). It is the characteristic of what is "simple to describe but difficult to achieve" (Fullan, 2011, p. 18). To achieve simplexity, the focus should be formulation of a small number of goals, pursue them through capacity-building and establishing a mutual clear learning connection between practice and outcomes (Fullan, 2016).

Collective Capacity: Collective capacity is the ability of groups such as school cultures, district cultures and government cultures to improve together conjointly (Fullan, 2010). Collective capacity produces emotional commitment and practical proficiency that individual capacity on its own will not come near to matching (Fullan, 2010).

Implementation dip: It is a decline in performance and self-assurance as stakeholders in a change face an innovation that calls for novel skill sets and understandings (Fullan, 2016).

Level of study: In this research, the level of study represents the elementary, middle and high school levels.

Stakeholder: Stakeholders in this study refer to those who are part of the education system, ranging from teachers to parents.

Assumptions

There are assumptions identified by the researcher that can impact the validity of this study. The researcher assumed that (a) the school principals and teachers surveyed are actively engaged in the implementation of the Common Core State Standards and have replied to the survey and interview questions truthfully and accurately; (b) the participants are familiar with basic key terms and concepts related to the Common Core State Standards; (c) the survey accurately measured the perceptions about the quality and quantity of Common Core ELA Standards implementation at different levels of study (elementary, middle and high school) in Title I and non-Title I schools; (d) The instruments chosen for this study were good measures of fidelity of implementation of CCSS-ELA; and transformational leadership (e) the interpretation of the data accurately reflected the perceptions of the participants.

Summary

In this chapter, the statement of the problem, research questions, theoretical and conceptual framework, the significance of the study, definitions of terms, limitations, delimitations and assumptions underpinning this study have been described. The need for research on the implementation of the Common Core State Standards from the perspectives of teachers was clearly highlighted. This main overarching aims of this study were to describe the implementation of the Common Core English Language Arts Standards and evaluate the impact of teacher transformational leadership on the implementation of CCSS-ELA aligned instructional practices while accounting for extraneous variables. These aims were addressed by formulating five guiding research questions for this study which are focused on teacher leadership and/or the implementation of CCSS-ELA aligned instructional practices. The two theoretical frameworks used were the transformational leadership framework and implementation fidelity framework. By exploring the chosen topics, the current research seeks to address research gaps in the area of equity in the Common Core

context, fidelity of implementation research at the K-12 level, and mixed-methods research on leadership. Some of the limitations of this study include the lack of generalizability of the findings to other districts with demographics that are not similar to the one under study and self-reporting of teacher implementation. The steps for mitigating these limitations were also discussed.

Chapter 2 is a comprehensive review of the literature which seeks to examine the research problem, and prior research related to teacher leadership, standards in reform, implementation of the Common Core Standards in California, factors affecting implementation, barriers to implementation, supports for implementation, impact of implementation

CHAPTER 2: REVIEW OF LITERATURE

Standards are designed to influence the core technical principles of schooling; teaching and learning (Elmore, 2004). The Common Core State Standards (CCSS) places higher demands on students to engage in more critical thinking and less repetitive learning than earlier state standards and, therefore, represent a significant change from teachers' existing instructional practices (Porter et al., 2011). Leadership plays a fundamental role in promoting curricular reforms that result in instructional practices impacting student learning positively (Crowther, Kaagan, Ferguson, & Hann, 2002; Leithwood et al., 2004).

This study serves five main purposes: (a) to examine how teachers' self-reported transformational leadership, beliefs and fidelity of Common Core English Language Arts Standards (CCSS-ELA) implementation differ by level of study and Title I status; (b) to investigate the associations between dimensions of transformational leadership of the teachers, their beliefs and implementation of CCSS-ELA Standards, (c) to assess the impact of the dimensions of transformational leadership of teachers on the implementation of CCSS-ELA; (d) to identify the barriers, supports and outcomes teachers have experienced in CCSS-ELA implementation; (e) to describe the implementation of the CCSS-ELA standards.

The review of the literature presented in this chapter is provided to present the knowledge base and context upon which this study was built. It recognizes the contributions of authors in various relevant areas including that of school reform, Common Core State Standards and leadership, synthesizing information from predominantly primary sources.

Teacher Leadership

School leadership has moved beyond titles and designated positions to become a more collective undertaking shared with teachers, support staff and even students (Spillane, Camburn, & Pareja, 2007). In a system where leadership is distributed, responsibility for

leading and managing the school varies from activity to activity, and involves multiple formally designated leaders and informal leaders (Spillane et al., 2007).

Beyond just the principal, top-performing nations such as Singapore and Finland have boosted student achievement by also encouraging more teachers to lead, especially, in the areas of curriculum, assessment, and school community partnerships. Teacher leadership has been the focus of much educational research carried out over the past three decades (Amore, Hoeflich, & Pennington, 2015; Beachum & Dentith, 2004; Crowther et al., 2008; Crowther et al., 2002; Harris, 2003, 2005). A literature review by York-Barr and Duke (2004) reported that, over the years, three “waves” of thinking about teacher leadership have emerged. First, teachers were assigned formal roles such as managers. In the second wave, teachers occupied positions such as those of instructional leaders; and in the third, teacher leadership was perceived as the main way to change the culture of schools to improve instruction for higher student learning. This wave saw the emergence of concepts such as professional learning communities and the aligning of teachers’ professional objectives and actions with school improvement plans (York-Barr & Duke, 2004).

More than shared leadership based on governance, shared leadership that is focused on helping teachers produce positive outcomes in their classrooms is promising (McDougall et al., 2007). Model elements such as goals focused on academic achievement, indicators and assistance offer a common foundation on which shared leadership among various stakeholders can be nurtured successfully and efficiently (McDougall, Saunders, & Goldenberg, 2007). In addition, school structures need to be intentionally put in place for formal and informal teacher leadership to contribute to school improvement initiatives (Muijs & Harris, 2007). This includes a culture where mutual trust and collaborative work is a central component, as is a common vision, clear management structures and robust program for the development of leadership (Muijs & Harris, 2007).

Teacher leadership is integrated in roles that do not lead to the creation of false, mandated formal hierarchies (Darling-Hammond, Bullmaster, & Cobb, 1995). Teachers have a significant leadership role in decisions about classroom instruction, instructional strategies and student grading, however, they have limited authority in student behavior policies, engaging in school improvement planning and determination of the content of professional development programs (Ingersoll, Sirinides, & Dougherty, 2018). Other roles taken by teachers beyond their classroom precincts include union representatives, textbook chairperson, and lead teachers or department heads in their schools (Darling-Hammond et al., 1995; Little, 1995). The work of teacher leaders is quite complex and ambiguous (Danielson, 2007). Teachers may be wary about taking on leadership activities outside of their classroom due to time constraints, lack of administrative support, and low confidence in leading their colleagues (Muijs & Harris, 2007). Researchers believe that all teachers can exercise leadership within their schools (Crowther et al., 2002; Darling-Hammond et al., 1995). However, teachers are often assigned formal leadership roles with very little or no training (Danielson, 2007).

Teacher Leadership in Different Contexts

Transformational leadership is required at all levels of organizations particularly in critical, chaotic, unstable and unpredictable environments (Bass, 1985). Hence, leadership exercised by principals but also by teachers is particularly important in high poverty schools where there are many challenges. Danielson (2006) describes teacher leaders as focused on the school mission during adversity. The benefits for all students groups, including students with special needs, will be resolved through the decisions taken by teachers and school leaders regarding standards implementation (McLaughlin & Overturf, 2012). School improvement in urban high poverty schools is effective when more than the principal and a few teachers in formal leadership positions work together as they call for solutions to

technical challenges as well as adaptive challenges which are complex problems requiring new learning to solve (Heifetz & Laurie, 1997). Teacher leaders share their expertise, experience and knowledge of instructional practices with peers with the aim of supporting struggling students through collaborative work focused on data analysis, amending instruction and goal setting (Stegall & Linton, 2012). However, teacher leadership is not a good way for building capability of teachers for improvement in instruction in schools with low levels of capacity (Stoisich, 2017).

Elementary, middle, and high school teacher leaders have a positive impact on school culture, creating productive environments conducive to continuous learning for other teachers and the school system (Roby, 2011). The findings of three case studies conducted by Stone, Horejs, and Lamas (1997) at an elementary, middle, and high school in Northern California showed that the responsibilities of teacher leaders varied based on the study level, that is, whether the teachers were teaching at the elementary, middle or high school level.

Elementary school teachers needed to provide their input to the design of leadership roles to make sure of their relevance to them (Stone et al., 1997). They also perceived achievements solely in terms of their classroom or grade level rather than a school-wide improvement effort (Stone et al., 1997). This finding was supported by Angelle and Schmid (2007) who reported that elementary school teachers tend to view their leadership roles as being limited to their classroom. Elementary school teachers have countless roles that go beyond their teaching responsibilities such as tasks from tying shoes to developing social skills, which may lead to additional leadership activities outside of the classroom being viewed as “extra.” Elementary school teachers perceive more collaboration and willingness for shared practice as compared to high school teachers but not relative to middle school teachers (Angelle & DeHart, 2011).

Middle school teachers view achievement as improvement in school climate but fail to make a link to school improvement (Stone et al., 1997). They view teacher leadership as a

way to improve professional practice through collaborative work, school progress, personal and professional gains, setting the right example, desire for bringing about change and support (Stone et al., 1997). Teacher leaders at the middle school level engaged in new projects can experience barriers such the difficulty of balancing their classroom instructional responsibilities with the pseudo-administrative responsibilities entrusted to them (Yost, Vogel, & Rosenberg, 2009).

High School teacher leaders are found to be more effective as they are perceived as leaders by both their school principals and their peers (Stone et al., 1997). Teacher leadership roles at the high school level have evolved from teacher resistance and classroom focus to a wider role in schoolwide improvement efforts (Stone et al., 1997). Teacher willingness to share their expertise with peers is essential to ongoing collaboration and nurturing of leadership skills.

Standards in Reforms

Scholarly research in the past decade has extensively described the rise of standards-based reform as a National movement for improvement in Education (Ravitch, 1995; Smith, 1992). The publication of *A Nation at Risk* and its description of the gloomy state of Education in the U.S is what many educational scholars believe to have been the catalyst for the standards-based reform movement (Hamilton, Stecher, & Yuan, 2008; Ravitch, 1995). Many policymakers, educators, and scholars advocate the use of curriculum standards. When standards form part of an overall systemic approach to reform, they can boost effectiveness and efficiency of instruction by stipulating common goals, proposing instructional strategies and assessing the performance of students and teachers (Smith & O'Day, 1991). However, skeptics highlight some concerns in the adoption and implementation of standards. Previous reform strategies have failed to shift classroom practice implying that standards may only have a superficial impact on districts and schools (Ogawa & Collom, 2000). Increased

accountability placed on teachers for the attainment of standards can have a counterproductive effect, with teachers responding by limiting themselves to instructional practices that meet the minimum levels of performance set by the standards (McNeil, 1988). Darling-Hammond (1994) argues that systemic change should start with policies that generate a system which emphasizes greater teacher knowledge and balanced school capacity rather than standards. Despite political divisiveness, standards have gained far-reaching support by setting high expectations for all students without imposing or prescribing the approaches or means that would be used to meet them, thus leaving some room for flexibility and local influence by teachers, districts and states (Rothman, 2011).

The Common Core State Standards

Initial discussions by state chiefs on the formulation of the common standards started in November 2007 in the Annual Policy Forum in Columbus, Ohio (Council of Chief State School Officers & National Governors Association Center, n.d.). This led to the formation of an international Benchmarking Advisory Group by the National Governors Association (NGA), Council of Chief State School Officers (CCSSO), and Achieve Inc. that comprised of national and local education and policy leaders.

The Development of the Common Core State Standards

The group worked on a call for action which recommended to “upgrade state standards by adopting a common core of internationally benchmarked standards in math and language arts for grades K-12 to ensure that students are equipped with the necessary knowledge and skills to be globally competitive” (Jerald, 2008, p. 24). The standards were drafted in 2009 by a team of academics and assessment specialists upon request from the National Governors Association and the Council of Chief State School Officers. State school chiefs and governors acknowledged the importance of reliable learning objectives anchored in the real-world and launched this initiative to boost students’ college-, career- and

life- preparedness, irrespective of where they live. During the development, the standards were categorized into two groups: (a) college- and career- readiness standards which gave guidelines as to what students should know and understand by the time of graduation from high school (b) K-12 standards which outline the expectations for students in elementary through to high school (Council of Chief State School Officers & National Governors Association Center, n.d.).

During the year 2009, at various stages of development of the standards, feedback was collected from states, formal work groups, feedback groups and the public including educators (Council of Chief State School Officers & National Governors Association Center, 2013). The standards were released in June 2010 accompanied by a report of the validation committee who reviewed them (National Governors Association Center for Best Practices & The Council of Chief State School Officers, 2010). Over the next two years, States and territories engaged in the review, formally endorsing and implementing the Common Core State Standards.

The Race to the Top (RttT) program was created to award grants to states who are leaders in reform implementation plans. As part of the incentive to obtain Race to the Top (RttT) funding, nearly all states have adopted the Common Core State Standards (CCSS) in English/language arts and math, which represents a far-reaching curriculum reform effort of unparalleled scale (Bowling & Pickerill, 2013; Ujifusa & Molnar, 2013). To assess students' attainment of the CCSS, new assessments were created (Herman & Linn, 2013). The assessments, based on the new standards, as well as on the capabilities of new technologies, would be performed by two consortia, the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (Herman & Linn, 2013).

Characteristics of the Common Core State Standards

The CCSS holds promise in becoming one of the most significant policy changes in the history of American public education in the last century because of the shift away from the states' use of different academic content standards (McDonnell & Weatherford, 2013a). The Common Core standards for Mathematics and ELA are both grade-specific and intended to influence the curricula without prescribing how teachers should teach the standards in the classroom (Common Core State Standards Initiative, n.d.). It addresses the problem of lack of depth of academic content (Common Core Standards Initiative, 2010) and not only takes into consideration the value of content but also that of skills (Common Core State Standards Initiative, n.d.). The validation report produced by the National Governors Association Center for Best Practices and the Council of Chief State School Officers (2010, p. 3) outlined that the standards met the following characteristics:

- Reflective of the core knowledge and skills in ELA and mathematics that students need to be college- and career-ready;
- Appropriate regarding their level of clarity and specificity;
- Comparable to the expectations of other leading nations;
- Informed by available research or evidence;
- The result of processes that reflect best practices for standards development;
- A solid starting point for adoption of cross-state common core standards; and
- A sound basis for the eventual development of standards-based assessments.

A proponent claimed that the Common Core State Standards were so specific that it is not necessary for districts to rewrite them (Kendall, 2011). According to Kendall (2011), the development of the curriculum based on the Common Core immediately followed the publication of the standards so that practitioners gained access to a series of online resources, which made it possible for them to avoid the textbook should they wish to do so.

The adoption of CCSS by various states did not immediately provoke widespread controversy; however, despite its perceived benefits, the CCSS has become increasingly subject to debate. The CCSS has been criticized by political groups, particularly supporters on the conservative side, as being an intrusion into education (McDonnell & Weatherford, 2013b). Data compiled from *Edweek* showed that by 2013, a minimum of 12 states, consisting of the Republican-majority legislature, had either acted against the CCSS or had encountered strong initial opposition against it (McDonnell & Weatherford, 2013b). The degree of input from school-based stakeholders in the formulation of the Common Core State Standards seems to be minimal, the standards were not field-tested and it is not clear if the tests devised to measure academic outcomes of the standards will be valid enough to warrant the significant high-stakes consequences that will arise from using them (Mathis, 2010). Other critics attack the reasons for which the standards were created, stating the lack of statistically significant relationships between the highest performing economies and their ranks on international tests (Tienken, 2008) as well as the absence of standards in 10 of the 27 nations that outranked the U.S on the 2006 PISA science test (McCluskey, 2010). However, there are only a small number of states that oppose the CCSS. Hence it is not likely to pose a fundamental threat to the continuation of the CCSS even if some states decide to abandon them (McDonnell & Weatherford, 2013b). Some studies emphasize that the standards were clear and fewer in number (Calkins, Ehrenworth, & Lehman, 2012), other studies report the high number of standards or the overly high expectations they place on students (Kendall, 2011; Rothman, 2011).

The Common Core State Standards for English Language Arts and Literacy (CCSS-ELA)

The CCSS-ELA is made up of three main components which include a comprehensive set of standards for students in kindergarten to Grade 5, a comprehensive set

of standards for students in Grade 6 to Grade 12, and literacy standards for students from Grade 6 to Grade 12 particular to science subjects, history, social studies, and technical subjects. According to the National Governors Association Center for Best Practices and the Council of Chief State School Officers (n.d.), the ELA and literacy standards are based on the College and Career Readiness Anchor Standards by outlining core knowledge and skills whereas specificity is offered by grade-level standards. They claim that, since the students are required to learn how to read, write, speak, listen and make use of language efficiently in multiple content areas, the standards promote literacy skills and notions needed for students to be prepared for college and their career in various disciplines.

The report put together by the Center on Education Policy entitled *The Common Core State Standards: Progress and Challenges in School District's implementation*, shows that more than 50% of participants agreed or strongly agreed that the CCSS-ELA standards will be more rigorous than current state standards and will result in better students' skills (Kober & Rentmer, 2011). It is important to understand how the standards differ from previous standards and the changes that are required for implementing the standards well. The three main shifts in ELA include (a) regularly tackling exercises involving complex texts and their academic language, (b) reading, writing, and speaking based on evidence from literary and informational text, and (c) constructing knowledge through content-rich nonfiction (National Governors Association Center for Best Practices and the Council of Chief State School Officers, n.d.). The New York State Department of Education, one of the leaders in Common Core implementation outline six instructional shifts that characterize the implementation of the CCSS-ELA standards (see Table 1).

Table 1

Instructional Shifts Required for the CCSS-ELA

| | Shift | Description |
|---|---|---|
| 1 | Balancing Informational and Literary Text | Reading done by students center on a genuine balance of informational and literary texts |
| 2 | Knowledge in the Disciplines | Students build knowledge about the world through TEXT rather than the teacher or activities. |
| 3 | Staircase of Complexity | Students read the central text particular to their grade level, around which instruction revolves. Teachers are patient, spare extra time, space and support in the curriculum for close reading. |
| 4 | Text-based Answers | Students engaged in enriching and in-depth evidence-grounded conversations about text. |
| 5 | Writing from Sources | Writing emphasizes the use of evidence from sources to inform or make an argument. |
| 6 | Academic Vocabulary | Students constantly build the transferable vocabulary they need to access grade level complex texts. This can be done effectively by spiraling like content in increasingly complex texts. |

Note. Adapted from “Instructional shifts for the Common Core” by Engage^{ny}. Retrieved from <https://www.engageny.org/resource/common-core-shifts>

Common Core-Aligned Instructional Strategies

Common Core-aligned instructional strategies call for increased rigor. In a comparative study of the CCSS and state standards Porter et al. (2011a) found that CCSS required more cognitively demanding processes compared to previous standards, for example, there were more requirements to “demonstrate understanding” in Mathematics and to “analyze” in ELA. Students should have frequent, thorough, culturally and linguistically pertinent and engaging experiences with reading and writing (National Council of Teachers of English, 2013). District leaders claim that all teachers know the CCSS, and of those teachers, 89% of teachers are aware of instructional strategies to implement the standards (Fong, 2016). However, poor delivery of a program has the potential to influence the extent to which full implementation is realized (Carroll et al., 2007).

Teachers in high poverty schools have to use additional or specific instructional strategies in their delivery of the CCSS to cater for the needs of their learners. According to the U. S. Department of Education (2018), schools that have a high percentage of students on free and reduced lunch categorized as Title I benefit from Title I funds that must be used for activities and research-based teaching methods that will be most beneficial in supporting all students in meeting required state standards. For instance, teachers in high poverty schools place more focus on teacher authority and control and tend to value student autonomy and constructivist strategies less than the teachers in other schools (Solomon, Battistich, & Hom, 1996). Some teachers tend to use culturally relevant pedagogy to teach children from diverse backgrounds, which allows them to link students’ learning and classroom experiences to their home discourses and experiences (Howard, 2001). Whether in high or low-poverty schools, common core aligned instructional strategies should be infused in all aspects of the ELA curriculum, from reading to speaking.

The CCSS outline the importance of authentic classroom activities in contextualizing reading strategy instruction: Students need to shape their skills, ways, knowledge, personalities, and experiences that would allow them to confront new challenging texts confidently. This training should be entrenched in reading activities, rather than being taught separately (Coleman & Pimentel, 2012). Although the Common Core State Standards specify the level of reading that students are expected to reach at the end of each grade, this does not imply that all assigned reading should invariably be at those levels (International Reading Association, 2012). To help students attain the necessary level, teachers should put in place an ambitious schedule of rich and varied narrative and informational reading, including easier texts than what is outlined in the standards (International Reading Association, 2012). This is particularly important for English language learners (ELLs) who need a literacy-rich school environment where students are deeply involved in a variety of language experiences (National Governors Association Center for Best Practices & Council of Chief State School Officers, n.d.).

Greater focuses on writing, as well as increased coordination from CCSS implementation in K-12, also contribute to increased student proficiency in the long run (Chandler-Olcott & Zeleznik, 2013). Teachers have reportedly amplified the focus placed on writing for specific audiences and purposes (Hillocks, 2002) as well as writing across the curriculum (Applebee & Langer, 2011) following changes in their state's writing standards and tests. Others have adjusted the time dedicated to daily writing (Stecher, Chun, Barron, & Ross, 2000). There is a lack of variety in the writing exercises assigned to students by teachers; while teachers of Grades 4 to 6 typically assign writing-to-learn activities, other assignments which include informative writing, research projects and persuasive writing have not been widely used (Gilbert & Graham, 2010). The writing standards' focus on only three types of text, narrative, argumentative and informational text which decreases teachers'

likelihood of teaching other forms of text, such as poetry, that also represent important reasons for writing beyond the precincts of schools and encourage reflection and critique (Chandler-Olcott & Zeleznik, 2013).

Teaching writing to different groups of learners often requires novel or different strategies. Different student groups such as English Learners can struggle with the types of texts required by the standards. Hence more complex types of text should only be taught after a foundation has been constructed by the teaching of narrative forms of text (Olson, Scarcella, & Matuchniak, 2015). Appropriate scaffolding but also, constant modeling and exploration of English learners' rich cultural backgrounds as well as the creation of a learning community which publishes and celebrates writing constitute best practices that should be used by teachers teaching English learners (Olson et al., 2015). A range of adaptations are often made for weaker writers, most of which are, however, not regularly applied (Gilbert & Graham, 2010). Reforming writing instruction requires differentiated pedagogical help for students who need assistance (Cutler & Graham, 2008).

States highlight the importance of instruction in speaking and listening as the basis for reading and writing (Center on Standards and Assessments Implementation, 2017). The focus of the Speaking and Listening Standards are one-on-one, small groups and whole class academic dialogues as well as presentations and informal discussions (Common Core State Standards Initiative, 2010). According to the Center on Standards and Assessments Implementation (2017), some of the strategies used by various states in teaching these standards include:

- Putting together language-rich organized discussions and oral presentations that integrates scaffolding to meet the needs of all students;
- Planning for collaborative dialogues between students that encourage the use of academic language and include the use of multimedia and multisensory resources,

- Creating opportunities for students to read text appropriate to their grade level aloud;
- Promoting reflection about speaking and listening skills to identify areas for improvement; and
- Monitoring student grade-level progress by observing teachers, student self-evaluations, peer assessments, and appropriate rubrics.

Digital tools promote literacies highlighted in the CCSS (Hutchison & Colwell, 2014). According to Newman, Coyle, and McKenna (2013), a change in teacher behavior has been observed through their integration of technology in instruction, and their use of technology to support the planning of lessons that are aligned to state and common core state standards. The CCSS calls for multimedia to extend students' reading, by requiring them to compare knowledge gleaned from their reading to the knowledge they acquire from other multimedia resources such as video (Coleman & Pimentel, 2012). The standards also require students to evaluate media critically. Multimedia can complement students' reading experiences by getting students to take in or express the details of a text rather than distracting them away from the text or being a substitute for the text (Coleman & Pimentel, 2012). Multimedia when carefully selected and scaffolded can support ELLs in language-rich instruction by providing multisensory input such as visuals and oral language (Silverman & Hines, 2009). Technology also supports writing instruction. Using a project called the iPoetry project, authors Curwood and Cowell (2011) showed that the transformation of traditional writing concepts into multimodal compositions using digital tools can boost student's critical engagement, foster awareness of audience and promote the adoption of creative uses of several modalities.

The use of digital tools also support students' interaction and collaboration with their peers, which is an expectation stipulated in the CCSS (Hutchison & Colwell, 2014). As

specified by Smerdon et al. (2000), one-on-one iPad technology brings the student to the center of learning by giving them opportunities to communicate, collaborate and solve problems creatively (Chou, Block, & Jesness, 2014). iPad apps, such as Storybook Maker for creating e-books, Croak.it, for podcasting, and Fotobabble, allowing users to take and share mobile photo and audio content in real time, have been adopted in classrooms for critical literary response (Wood & Jocius, 2014). Electronic resources also allow teachers to integrate more differentiation in their lessons so as to give students different assignments and assignments specifically designed to meet students' progress targets (Tallerico, 2013). However, in the process of searching for technologies to support student learning, teachers experienced certain challenges, namely Internet connectivity, time to learn, ease of use, and support (Tallerico, 2013).

Implementation of the Common Core State Standards (CCSS)

The CCSS relies upon in-depth, fully incorporated implementation to impact student growth and development (Conley, 2011; McDonnell & Weatherford, 2013b). Implementation is made up of “the process of putting into practice an idea, program, or set of activities and structures new to the people attempting or expected to change” (Fullan, 2016, p. 67). Organizations such as Achieve, the CCSSO, McREL, the National Governors Association as well as many state departments of education have provided guidelines to support implementation of the CCSS at the state, district and school level (Achieve, 2012a; Council of Chief State School Officers, n.d.; Grossman, Reyna, & Shipton, 2011; McRel International, n. d). The recommended steps commonly include, a review of the capacity of the system, getting buy-in and support from various stakeholders, alignment with standards, capacity-building through professional development, curriculum development and shift in instruction, and a plan for the introduction of new assessments

Implementation of the CCSS in California

The plan for the Common Core State Standards implementation in California was submitted to the California State Board of Education under the leadership of State Superintendent of Public Instruction Tom Torlakson on March 7, 2012, and subsequently presented to Governor Jerry Brown on March 19, 2012 (California Department of Education [CDE], 2014). The three phases of implementation included: (a) The awareness phase which consisted of the introduction to CCSS, the implementation plan and establishment of partnerships and collaborations; (b) The transition phase consisted of the collaboration between all stakeholders, use of needs assessments, and professional staff development delivery; and (c) The implementation phase which involved continued support for professional development, the alignment of curriculum, instruction, and tests as the standards are fully embedded in all content areas (CDE, 2014). The rollout of the CCSS in California coincided with the introduction of the LCFF, which decentralized education-decision making to the local districts and schools, hence the implementation of the CCSS in California was mostly influenced at the local level rather than by the state (McLaughlin, Glaab, & Carrasco, 2014).

Factors Affecting CCSS Implementation

Improved student outcomes in education result from effective innovations and implementation efforts (Fixsen et al., 2009). However there are several factors that may affect the implementation fidelity. Previous studies on specific factors impacting implementation of the CCSS are described below; they focus on the factors that have been explored in this study including socio-economic factors, a school's level of study, the beliefs that its teachers hold, as well as the leadership demonstrated by its teachers and the principal.

External Influences

There are many influences outside of the school environment which can affect the implementation of the Common Core State Standards. Although there is general appeal about having common standards across the Nation, the support is greater when the label “Common Core” is dropped (Henderson & Peterson, 2014; West, Henderson, Peterson, & Barrows, 2017). This suggests that the Common Core resonates with political affiliation. The Common Core is often discussed in association with Past President Obama’s initiative of Race to the Top, which substituted the No Child Left behind Act (Toppo, 2012). Debates about the Common Core have diverted the attention of conservatives from their most important goal in the educational conflicts; ensuring every state and district increases academic standards, hold schools and teachers accountable, offer comprehensive educational selections to families, and ensure taxpayers’ money is being used as effectively as possible to improve primary and secondary schooling (Finn Jr. & Brickman, 2014).

Research exposes the importance of involving parents to help students succeed (Epstein, 2011). Schools would benefit from establishing partnerships with parents to clarify the ways in which parents can contribute to their children’s learning (Martin, Marchitello, & Lazarín, 2014). However, teachers commonly believe that parental engagement is low (Epstein, 2002; Shores, 1998). Some parent-related factors that promote the implementation of the Common Core State standards include regular parental engagement (Martin et al., 2014) and communication between schools and parents (Dunkle, 2012).

Socioeconomic Factors

Factors related to school structures are likely to influence the fidelity of implementation of school programs (Domitrovich et al., 2008). In contrast, research by Berends (2000), reported the lack of effect of school-related factors on teachers’ support for

educational change; poverty composition, the size of the school, and elementary school were not statistically related to teacher support after accounting for other factors.

A key objective of the CCSS is to hold all students, irrespective of socio-economic status or geographical location to the same high expectations. However, the CCSS has been blamed for ignoring the problem of poverty (Krashen, 2014b) and for potentially revealing how far disadvantaged children lag behind on the more advanced literacy skills demanded by rigorous Common Core ELA standards (Haskins et al., 2012). According to Ravitch (2016), the Common Core State Standards are viewed as too ambitious and lead to an increase in the number of students failing. On the other hand, the Hechinger Report argues that the achievement gap may increase at the beginning stages of implementation but that in the long run, the Common Core may contribute more significantly to leveraging the playing field than the tests that were administered before (Mathewson, 2015).

Several studies have shed light on the implementation of the Common Core State Standards for the benefit of special student populations such as ELLs and economically-disadvantaged students. A study by Palacios et al. (2014) reported that 62% of the respondents in the study which included curriculum directors, research directors, ELL directors, special education directors, and communication directors, indicated that their district was good or excellent at meeting the needs of special student populations. Superintendents in high poverty districts reported that the staff in their district was not as prepared to implement the CCSS as compared to staff in low-poverty districts, which made implementation more challenging (Finnan & Domenech, 2014). This problem was compounded by the lack of technological support in those districts and the increased difficulty of teaching specific high-needs student groups (Finnan & Domenech, 2014).

Teacher Demographics

Prior research reports that involvement in reform efforts may be influenced by the demographic characteristics of teachers, such as their age, experience (Huberman, 1989), gender (Hubbard & Datnow, 2000; Paechter, 2003). A study by Berends (2000), which used hierarchical linear modeling, showed that teacher characteristics accounted for 26% of the total variance in teacher support for a new design and 19% of the variance in implementation of the design. In contrast, a more recent study by Justice et al. (2008) showed that demographic variables appear to have little to no correlation to implementation fidelity. These different findings call for teacher characteristics to be examined in the context of a reform (Kirby, Berends, & Naftel, 2001).

Previous national studies showed mixed findings about the distribution of qualified teachers across schools with varying socioeconomic demographics. Studies by the National Center for Education Statistics report that teachers teaching in high poverty schools had slightly lower qualifications and certifications. They also had fewer teachers with higher degrees than teachers in low poverty schools (Henke et al., 1997) in contrast to a study by Lippman, Burns, and McArthur (1996). A more recent study showed that there are only small differences in the effectiveness of teachers working with students that high and low socioeconomic status in the average study district (Isenberg et al., 2016).

Teacher Beliefs

Beliefs are the lenses that impact a person's view of some facet of the world or the dispositions that drive action (Philipp, 2007). A study by Spillane and Zeuli (1999), of math teachers' practices in response to national and state reform proposals, showed that teacher beliefs affect implementation of reform; teachers in the sample believed that they were implementing the new curriculum but in fact, failed in implementing its critical aspects as they had different understandings of the new policies and hence responded differently to

them. Implementation fidelity can, however, be increased when teachers believe in a particular program's benefits and about their level of comfort in implementing the program (Beets et al., 2008; Little, Sussman, Sun, & Rohrbach, 2013). Some researchers, however, have reported no significant relationships between teacher beliefs and their implementation of specific strategies in reading (Chou, 2008; Khonamri & Salimi, 2010).

Although the No Child Left Behind Act (NCLB) of 2001 has led to some reported positive outcomes such as improved achievement of younger students particularly from disadvantaged backgrounds, greater teacher compensation and more time allocated to math and reading (Dee & Jacob, 2010), it has also been criticized as being a catalyst for teacher burnout and high teacher attrition (Hanushek & Rivkin, 2010; Hill & Barth, 2004). Surveys of teachers over the years support this negative view of NCLB which persists among teachers about NCLB's stringent requirements in driving good teachers out of the profession (Cavanagh, 2012). The thinking trends and beliefs developed through NCLB have tainted the perception of teachers and their expectations about the Common Core State Standards (Ward, Johnson, & Branson, 2014). Scrutiny of individual teachers' work with standards discloses that it is probable for teachers to react only to those facets of standards that are in line with their existing practices and beliefs (Coburn, 2001).

Research shows that teacher beliefs can also be affected by the level of study. In her implementation study of the California Reading Initiative, Coburn (2006) found that many school staff in the early grades felt that certain strategies such as reading comprehension did not apply to them. Previous research also shows that teachers beliefs about what students can achieve were higher in junior classes than in higher levels of K-12 education (Rubie-Davies, 2006), although this trend was not observed in later similar studies by the same authors (Rubie-Davies, Flint, & McDonald, 2012).

Scholarly research has highlighted the unconscious process through which teachers (Coburn, 2001) and principals (Coburn, 2005) understand the challenge posed by instructional policies through the view of their prior knowledge and beliefs but also their social exchanges with colleagues (Coburn, 2001; Siciliano, Moolenaar, Daly, & Liou, 2017; Tschannen-Moran & McMaster, 2009). Teachers' interactions with other teachers not only provides them with ideas on how to reach special student populations such as ELLs, but also helps them begin to believe that they can reach them (Schmidt, 2013). Research suggests that a reform-oriented mindset, which constitutes beliefs that those students, can learn irrespective of ethnicity, socioeconomic factors or disability, are an important characteristic exhibited by teachers in schools where achievement gaps are reducing (Chenoweth, 2009).

The beliefs held by teachers affect their implementation of reforms and educational improvement initiatives in various ways (Spillane & Zeuli, 1999; Tschannen-Moran & McMaster, 2009). There are three main types of beliefs that have been reported in scholarly research as being more pertinent to implementation. First, teachers have beliefs about their ability to deliver on the new policy (Tschannen-Moran & McMaster, 2009). Teachers judge their abilities based on a number of factors including the verbal encouragement, perceptions of past experiences of teaching and the degree of emotional connection they experience when they teach (Tschannen-Moran & McMaster, 2009). Second, the adequacy of supporting resources available for implementation is also important. Policies are rejected when stakeholders perceive a lack of time and other resource constraints hampering implementation efforts (Coburn, 2001). Third, beliefs about the potential positive impact of the policy also affect implementation. This also relates to the beliefs that teachers hold about academic subjects and their views about what constitutes satisfactory expectations for their students which also impacts the way in which they implement academic interventions (Tschannen-Moran & McMaster, 2009). Although the negative impact of the NCLB on

teachers had mostly stained teachers' perceptions of what CCSS would be like (Ward et al., 2014), research shows that California teachers generally welcomed the CCSS as a positive change from the rote-memorization that characterized the NCLB period (McLaughlin et al., 2014).

Teachers working in high poverty schools show a higher likelihood than those in lower poverty schools to believe that the CCSS standards will lead to better student outcomes in ELA (American College Testing, 2012). In a study carried out in 2001, Coburn found that, when working with their colleagues, teachers of a high poverty school serving mostly minority students, dismissed policy messages about reading which they considered to be too challenging for their students. Collaboration among colleagues can strengthen negative teacher beliefs about students.

Teacher Leadership

Teachers are the final arbitrators of the implementation process (Coburn, 2001). Educational change is dependent upon what teachers do and think (Fullan, 2016). Teacher leadership has become a key vehicle for school improvement as teachers share leadership roles while implementing and supporting school improvement initiatives (Criswell & Rushton, 2006; Poekert et al., 2016). Findings about the impact of teacher leadership on the school level has been mixed; some studies that show positive effects come primarily from the school effectiveness and reform carried out over the years (Angelle, 2007; Hargreaves, 1994; Hargreaves & Braun, 2012; Lowery-Moore, Latimer, & Villate, 2016; Nicholson, Capitelli, Richert, Bauer, & Bonetti, 2016). Other studies outline some of the negative impacts of teacher leadership such as the conflicts in decision-making, the slower pace of reform implementation when teacher leadership is adopted or the need for concrete steps to be taken for teacher leadership to really contribute to school improvement (Muijs & Harris, 2007; Weiss, Cambone, & Wyeth, 1992).

Teacher leadership calls for concrete steps to be taken to form leadership teams and to offer leadership roles (Muijs & Harris, 2007). Various districts have formalized teacher leadership in the common core movement by creating opportunities for teacher involvement such as getting teachers to engage in district- and school-level governance, having teachers on special assignment, and putting teachers in leadership roles who still dynamically practice in the classroom (Amore et al., 2015). The teacher leader can have various roles; however some contribute more considerably to school development and change such as mentoring, induction and continual professional development of colleagues (Muijs & Harris, 2007). One of the responsibilities of classroom teachers who aspire to take on more leadership roles within their schools is to help other teachers change (Silva, Gimbert, & Nolan, 2000). This is an important component of transformational leadership as defined by Burns (1978) who argued that transformational leaders have the ability to meet existing followers' needs but also shape new motivations and desires in them.

Teachers' implementation can be affected by a range of variables in a school setting (Durlak & DuPre, 2008). In an extensive review of the literature, Harris (2005) outlines three main requirements that support teacher leadership. First, Harris (2005) emphasizes the need for time to be scheduled for teachers to meet and discuss various issues including development of schoolwide improvement plans and collaborating with one another. Second, the author calls for better professional development that will not only address teachers' skills and knowledge but will also target specific areas related to their leadership role (Harris, 2005). Third, for teacher leadership to really bring about transformational changes in a school there needs to be structured programs that promote collaboration or networking that will genuinely tap and develop teachers' potential (Darling-Hammond et al., 1995; Harris, 2005).

Examining leadership from teachers' views, Johnson et al. (2014) established that teachers were more committed to school-wide improvement change initiatives when they had the chance to contribute to change instead of simply being expected to follow principal instructions. Teachers also need autonomy in making innovations work for their students (Klieger & Yakobovitch, 2012). Hence, principals who work in collaboration with teachers to boost learning are likely to be more successful in achieving the objectives of ambitious instructional policies than those who rely on the authority of their position to force teachers to fulfill their vision (Johnson et al., 2014).

Barriers to Reform Implementation

History is rife with attempts made to mandate the implementation of large-scale standards-based reforms with policies that emphasize accountability and that stipulate learning targets measured by student achievement on standards-aligned assessments (Elmore, 2008; Fullan, 2016; Hopkins, Spillane, Jakopovic, & Heaton, 2013; McDermott, 2006). The complexity of implementation of large-scale educational reform has been highlighted in scholarly work (Clandinin & Connelly, 2012; März & Kelchtermans, 2013). There is a gap between policy makers' intents and what essentially occurs in the classroom (Cuban, 2013).

Research demonstrates that shifting educational practices is a challenge and increases in difficulty when the change requires a transformation of the current structure of schooling (Cuban, 1993). When California became one of 45 states to adopt the CCSS standards for English and math, it prepared for a broad overhaul of its approach to instruction and assessment (Reed, Scull, Slicker, & Winkler, 2012). Teachers and school administrators have faced numerous challenges in the implementation process.

Teacher-Related Barriers

Spillane's (2005) 4-year case study analyzing the implementation of math standards in Michigan reported that the right conditions were needed to enable teachers to carry out

changes in pedagogical practices. Reported barriers to large-scale standards-based educational reforms implementation include lack of teacher motivation or skills in implementing new policies (McLauhlin, 1990; Odden, 1991). Thus, policy implementation can also be understood as a challenge of teacher learning (Cobb & Jackson, 2012). In the face of program changes, there are staff members, including teachers and administrators alike, who will embrace change and those who will resist change (Goatley, 2012). However, a statewide survey conducted in 2014 showed that Californians including teachers, administrators, parents and community members mostly supported the CCSS (Baldassare, Bonner, Petek, & Shrestha, 2014) compared to some other states where there had been more backlash against the CCSS.

Lack of Clarity

Failure of large-scale standards-based reform implementation has also been attributed to the lack of clear description of how teachers are expected to change their instruction when implementing new standards (Hargreaves & Fullan, 2012). Districts and teachers have to cultivate their interpretation about the way in which policy links to practice (Coburn, 2001; Elmore, 2008). Implementation is facilitated by having a clearly defined and operationalized program (Fixsen et al., 2009). Many school administrators have reported the lack of a district framework to guide the development of a coherent curriculum, which has resulted to units being used in an incoherent way (McLaughlin et al., 2014)

Text Complexity

Determination of the appropriate complexity of text required for each grade level contributes fundamentally to the implementation of the CCSS-ELA which states and districts can control within the CCSS framework (McLaughlin et al., 2014). A primary challenge to implementation is having teachers explore ways to determine appropriate text complexity to engage students slightly above their ability (Williamson, Fitzgerald, & Stenner, 2013).

Students are required to read more challenging texts as compared to what was required in the past; the CCSS offers a daring vision of students as self-directed learners. However, this change does not apply to readers in Kindergarten and Grade 1 (International Reading Association, 2012). Students at elementary level usually read less informational text than required by the state standards (Moss, 2008), receive little instructional guidance in how to understand texts independently (Council on Advancing Adolescent Literacy, 2010), and the texts are usually simplified through reading aloud or regular questioning based on small portions of the text.

Professional Development

Professional development provided by districts in California ranged in scope and duration. While some districts such as the Los Angeles Unified School District enlisted the help of 300 to 400 Common Core fellows to boost CCSS implementation, other districts limited their initial training to one or two days of professional development (McLaughlin et al., 2014). Teachers, in many instances, have not only suffered from insufficient training but also from a lack of adequate or from poor quality professional development (Hall, Hutchison, & White, 2015; McLaughlin et al., 2014).

Research reports specific areas related to the Common Core where professional development was particularly needed. Teachers usually have limited access to writing of high quality in teacher education and professional development (McCarthy, Woodard, & Kang, 2013) and often feel they lack appropriate preparation to teach writing (Gilbert & Graham, 2010). Many teachers feel uncomfortable teaching with the use of technology as is required by the CCSS and are unprepared to analyze the data generated as part of CCSS assessments (McLaughlin et al., 2014). A study by Stoisch (2017) recommended that professional development for teachers in high poverty schools (a) have job-embedded support and accountability for involvement in collaborative and instructional activities, (b) includes

direct support for teachers in using professional development as part of a broader strategy of school improvement.

Alignment of the Standards with Testing

The Common Core State Standards can revolutionize public education by ensuring the college and career-readiness of all high school graduates. However, universal standards alone are not enough to achieve these goals; they must be combined with aligned testing, a form of accountability, which would provide data showing students' progress (Jochim & McGuinn, 2016). Besides external testing, classroom assessments should also be modified to familiarize students with the new demands of state tests (Achieve, 2012b). However, professional development promoting understanding of new assessments and including analysis of students' work based on grade-level expectations were the least evident in both ELA and math training (Palacios et al., 2014). Issues such as teacher capacity, ambitious new teacher evaluation programs and the lack of engagement of the main stakeholders in assessment-related matters have plagued alignment efforts (Jochim & McGuinn, 2016). According to both charter and public school educators, the new assessments pose a particular challenge to Hispanic, Asian and other immigrant parents whose went through traditional methods of instruction. Despite the emphasis on rote-memorization, the traditional method worked for them and, has improved their children's test scores in many instances (McLaughlin et al., 2014). Although the importance of alignment of standards with testing cannot be understated, for coherence to be achieved in an education system, there is also a need for strong alignment between all the layers of the system, including the central office administration, the school administration, and educators so that instructional changes are implemented with fidelity and lead to positive changes in teaching and learning (McDougall et al., 2007).

Standards-Related Barriers

Some other barriers identified by teachers relate to the standards. Though some content areas may be prioritized over others, the sheer number of standards within a content area that a teacher must address in their instruction can be overwhelming (Kendall, 2011; Rothman, 2011). Research has reported teachers' discontent about having to rush through curricula to cover materials that will appear on the test (Palmer & Rangel, 2011), which usually causes teachers to adopt more direct instruction to the detriment of more engaging and beneficial pedagogical methods (Hamilton et al., 2008). Some teachers contend that the standards set unrealistic expectations for students who may not be developmentally ready or adequately prepared for the standards (Hall et al., 2015). The complexity of an intervention has been reported to impact implementation fidelity negatively (Greenhalgh, Robert, MacFarlane, Bate, & Kyriakidou, 2004)

Lack of Adequate Resources

Teachers faced a lack of resources in Common Core implementation (Gewertz, 2012; Hall et al., 2015). In particular, teachers have pointed out the lack of resources needed to support the learning of specific student groups such as English Learners, special education students and struggling students (McLaughlin et al., 2014). One of the main implementation concerns expressed by teachers was not only the availability but also the quality of CCSS-aligned materials. Off-the-shelf curricula, particularly those from traditional publishers, did not show strong alignment to the standards (Fong, 2016). This led districts to delay the adoption of CCSS-aligned curricula, in an effort to give time to publishers to create new resources (Fong, 2016). Other districts combined off-the shelf curricular with teacher-designed or open source online resources, however, the resources, which were not vetted, created another issue for teachers (Fong, 2016).

A dearth of resources related to CCSS-aligned professional development was also a challenge. Educators sought a variety of resources to address CCSS implementation issues, but in particular, many of them, particularly those in small or rural districts increasingly turned to online professional development resources as their main source of materials (Ash, 2011; McLaughlin et al., 2014). Conclusions about the utility of such resources have been mixed, either because of doubt cast over the quality of online modules or because of teachers' limited understanding which hampers their effective application (McLaughlin et al., 2014).

Lack of Time

The provision of a reasonable amount of time and human resources for teachers, school leaders, local policymakers to come together to make better sense of the products of standards is critical (Spillane, 2005). Practitioners report that too little time was available for professional development activities, to develop new curricula and instructional resources and to communicate with various stakeholders such as parents (McLaughlin et al., 2014). In a research by Hall et al. (2015), the barrier to implementation of the Common Core State Standards in writing most commonly mentioned by participants was the lack of instructional time. Teachers and administrators also struggled to go through the incessant flow of instructional units, classroom projects, workshops and other Common Core implementation supports that were directed to them from vendors and other sources (McLaughlin et al., 2014). Due to lack of time but also due to funding and staffing constraints, some district have taken a proactive approach of engaging teachers and coaches in curriculum development, although this approach was not very common (Fong, 2016). Educators in high-poverty schools also believe that class preparation time is a strong contributor to student performance (American College Testing, 2012).

Supports for Reform Implementation

The standards are perceived as influencing teacher behavior, which implies that the CCSS-ELA is a step in the right direction. Reforms, on their own, cannot lead to implementation of instructional innovation in a school; teachers and other staff have to carry out the implementation process (Rowan & Miller, 2007). Implementation of changes such as the Common Core State Standards requires a concerted effort from various stakeholders. In fact, teachers and school principals act as the chief representatives and voices of the Common Core State Standards in their communities (Cristol & Ramsey, 2014). Policies calling for substantial changes on the part of teachers, however, have frequently received limited support for learning (Elmore, 2004).

Funding

The implementation of the standards has created a surge of new expenses for districts, which range from costs related to the professional learning of teachers and administrators, inspecting and/or developing curricula that are aligned to the standards, establishing the necessary infrastructure and technology for state assessments, and supporting personnel in a plethora of other implementation efforts (Fong, 2016). Tom Torlakson, the then state superintendent of public instruction, highlighted that the state invested \$1.25 billion for Common Core implementation, but explained that a big portion of it was spent on technology necessary for the new computer-based tests (Harrington, 2017). While this one-time funding offered some relief, it did not appease the concerns of districts about not having long-term and continued funding to cater for on-going CCSS implementation (Fong, 2016).

Torlakson explained that districts must now fund training by tapping into Local Control Funding Formula (LCFF) dollars as part of their accountability plans (Harrington, 2017). The LCFF made provision for additional funding support for students who are consider “high-need” such as low-income students, English learners and and/or students in

foster care (California Department of Education, 2019), hence Title I schools receive additional funding to cater for their greater percentage of high-need students. However, it is possible for high-need schools not to obtain valuable concentration grants; these funds are based on district-wide shares of high-need students, hence individual schools that have proportion of students that exceed the concentration threshold do not receive additional funding (Hill & Ugo, 2015). There are many schools in Southern California that have bigger shares of high-need students than their districts, several of which are in Orange County (Hill & Ugo, 2015).

Capacity-Building

Considering that factors such as curricula, leadership, exposure to expert knowledge, social networks, goals of quality teaching constantly alter as novel policies and reforms are introduced, the particular influence of professional development remains hard to insulate from other variables (Knapp, 2003; Wayne, Yoon, Zhu, Cronen, & Garet, 2008). However, prior studies show that reforms lead to uneven changes in teacher practices due to lack of knowledge or due to existing beliefs and practices (Cohen, 1990; Spillane & Zeuli, 1999). This implies that professional development is an important tool in guiding changes in teacher instructional practices with the aim of reaching instructional targets (Arbaugh & Brown, 2005; Correnti, 2007; Fong, 2016). Research by Hess and McShane (2013) shows that teacher professional development is critical to aligning classroom instruction to the CCSS-related changes. Professional development that is broad, hands-on, and continuous will support teachers in their understanding of the standards (Killion & Hirsh, 2013). Research by Ruchti, Jenkins, and Agamba (2013), investigating the implementation of the CCSS in middle and high schools in Idaho, reported that teachers primarily needed support in the form of professional staff development, collaborative time with peers as well as individual planning time. The likelihood of experiencing the transformative impact of the standards is

limited without significant investments in capacity, willingness and expertise to boost writing instruction in schools in the U.S (Graham & Harris, 2013). Teachers also need training in the creative use of technology so as to meet the requirements of the CCSS while developing student's digital fluency (Cosmah & Saine, 2013).

Professional Learning Communities

After the processes of vision setting and alignment of goals, school leaders should set up professional communities (Eilers & D'Amico, 2012). Professional learning communities (PLCs) are strong tools that allow educators to come together to promote continuing growth and improvement for themselves and their students (Barton & Stepanek, 2012). Principals can influence the successful implementation of PLCs by scheduling time for collaboration (Barton & Stepanek, 2012). Frequent team learning and mutual involvement maintains connections across the new implementation (Coburn & Stein, 2006). Furthermore, professional learning which gives opportunities for inquiry with colleagues encourages teachers to challenge their own assumptions and practices (Gallimore, Ermeling, Saunders, & Goldenberg, 2009).

Communication

Effective communication is essential for school leaders particularly in engaging discussions about transitions such as the Common Core State Standards (Gullen & Chaffee, 2014). Guiding meaningful professional conversations also calls for school leaders to examine the various aspects of the common core and discuss with faculty, using pertinent questions to stimulate critical thinking, and leading everyone to look for answers collaboratively (Eilers & D'Amico, 2012).

Shared Goal of Literacy

The Common Core State Standards focus on disciplinary literacy, the teaching of reading and writing in social studies, history, science and technical subjects, beyond the ELA

classroom, hence teaching ELA is a shared responsibility. A shift from implicit or informal expectations to setting up links between the standards in history/social studies, science and technical subjects and the CCSS requires a strong strategy of implementation to ascertain their impact in Grades 6 to 12 (Achieve, 2010). Disciplinary literacy implementation should involve content area teachers in teaching the disciplinary literacy standards, teaching of literacy strategies specific to each discipline and provide professional development opportunities for teachers in discipline-related literacy practices (International Reading Association, 2012).

Instructional Resources

Several states have been proactive in getting common core-aligned instructional materials to support CCSS implementation early in the process. For example, Ohio teachers had created a model K-12 curriculum for ELA, math, science and social studies easily accessible to teachers from the Ohio Department of education (Ohio Department of Education, 2017) website while New York State provided a wide range of instructional materials including exemplar curricula by grade level through their Engage NY website (New York State Education Department, n.d.). Nonprofits such as WestEd, through their Common Core Curriculum Mapping Project, created the first curriculum maps aligned with the CCSS which they made available for free for teachers' use (WestEd, 2011).

Technology

Although concern about the adequacy of technology emerged across various districts and counties in California as a result of the Common Core State Standards, some districts with a well-resourced IT and technical infrastructure had few concerns about the technology and focused instead on building the computer skills of students (McLaughlin et al., 2014). Supports such as The ConnectED initiative launched by President Obama in 2013 emphasized the need to ensure that schools have 99 percent Internet capacity to better prepare

students for college and their careers. It provided funding, commitments and resources for technology integration and upgrade (Office of Educational Technology, 2013). Recently, some teachers have had increasing success at integrating technology as part of their curriculum with adequate TPACK and planning support (Harris & Hofer, 2009). When curriculum objectives guide the planning process and teachers have the requisite content knowledge, teachers are able to integrate technology in meaningful ways (Harris & Hofer, 2009).

Impact of the Common Core State Standards

Shifts in practice have rarely been fulfilled, which have resulted in attempts at school reform failing to produce expected results and student achievement flat-lining or declining (Cuban, 1996; Elmore, 1996; Goodman, 1995). The creators of the standards are of similar opinion; they content that implementation of the standards with fidelity by school leaders and teachers are required to significantly boost student achievement (Achieve, College Summit, National Association of Secondary School Principals, & National Association of Elementary School Principals, 2013). Critics of the Common Core have associated declines or a plateau in achievement on the National Assessment of Educational Progress (NAEP) since 2013 and the international assessments as the Program for International Student Assessment (PISA) to support their arguments about the lack of impact of the Common Core on student achievement (Phelps, 2018). The Common Core State Standards have also been blamed for leading schools to test based curriculums while reducing opportunities for students to develop a range of skills including curiosity, exploration, perseverance, critical and creative thinking (Brooks & Dietz, 2013). On the other end of the spectrum, other researchers claim that the standards will have a greater impact on student learning as long as unpacking the standards does not promote repetitive drill and kill and is focused on higher cognitive skills (Goldweber, 2012). The standards can also have a positive impact on student engagement

when teachers use strategies such as provision of autonomy in assignments, the ability to access, analyze and create multi-media texts (Howard, 2016).

Teachers' responses resulting from standards-based reform have been mixed; some have perceived the change positively while others have experienced characteristic negative emotions to the change. One of the barriers to educational change remains teacher resistance. Later career teachers, for example, have been found to be more resistant to change in some cases but also more open to meaningful conversations about implementation initiatives (Snyder, 2017). Other teachers have experienced fear, anxiety, stress and guilt as a result of standards-based reforms. However, some of the negative responses that inherently come with change can be mitigated using specific strategies. For example, by adopting a slow transition to the CCSS, California may have avoided the conflicts such as those related to teacher evaluation that were triggered in states such as New York or Maryland (Warren & Murphy, 2014).

The Common Core State Standards can impact individual teachers but also have a broader impact at the school level. The existing school culture is a factor affecting teachers' implementation of new initiatives. The culture of a school impacts the quality of a teacher's practice (Angelides & Ainscow, 2000). The culture of a school can also shift as a result of the implementation of the new educational initiatives (Brooks & Dietz, 2013; Brown, 2012). School culture consists of important features such as shared decision-making, collaboration and teaming (Sindelar, Shearer, Yendol-Hoppey, & Liebert, 2006). Roby (2011) highlights the potential contribution of elementary, middle, and high school teachers' leadership to a positive school culture. This positive culture would, in turn, support the creation of a fruitful learning environment.

Summary

This chapter reported extensively on the existing literature related to the implementation of standards-based reform and leadership in various settings, including in low poverty and high poverty schools as well as at different levels of study. The concept of standards-based reforms is discussed from a historical perspective, followed by a description of the Common Core State Standards with emphasis on the English Language Arts standards including various aspects of the standards, such as their formulation, development, and factors affecting their implementation, the barriers and supports in implementation as well as a brief discussion of their impacts. The role and importance of teacher leadership in implementation as well as in the Common Core State Standards implementation is also covered. Chapter 3 will cover the methodology used in this research.

CHAPTER 3: METHODOLOGY

The primary purpose of this quasi-experimental mixed-methods research conducted was to establish a causal relationship between teacher transformational leadership and fidelity of Common Core English Language Arts (CCSS-ELA) implementation (as measured by quality and quantity of Common Core English Language Arts implementation) in Title I and non-Title I schools at various levels of study (Elementary, Middle, and High) in a district in Southern California. The following research questions were addressed in this study:

1. How does teachers' fidelity of implementation of CCSS-ELA aligned instructional strategies and their transformational leadership differ by school study level and Title I status?
2. What is the relationship between teacher beliefs and opinions, teacher fidelity of implementation of categories of CCSS-ELA aligned instructional practices and teacher transformational leadership dimensions?
3. How do the dimensions of transformational leadership of teachers impact the fidelity of implementation of CCSS-ELA aligned instructional practices?
4. What are the impacts, supports and barriers perceived by teachers in the implementation of the CCSS-ELA standards?
5. How were the CCSS-ELA standards implemented by teachers in a district in Southern California?

While the first three research questions will be addressed using quantitative analyses, the last research questions will be addressed using both quantitative and qualitative methods. This study addresses research gaps in the area of (a) equity in the Common Core, as there is a lack of research regarding the implementation of the common core in economically-disadvantaged settings, (b) fidelity of implementation (as measured by quantity and quality of

CCSS-ELA aligned instructional practices) in relation to student outcomes at different levels of study, and (c) mixed-methods research on leadership.

Despite the benefits of gathering quality and quantity implementation measures of implementation fidelity, especially as a way of exploring their interaction on student outcomes (Downer & Yazejian, 2013), there is a lack of research which combines both quality and quantity of implementation. Furthermore, there is a lack of understanding of how fidelity of implementation to core curriculums is related to outcomes (O'Donnell, 2008). This research will thus address a research gap in the field of implementation fidelity. Also, research addressing equity issues in the Common Core State Standards are currently limited (Polikoff, 2017). Hence this study addresses another research gap by the investigation of implementation fidelity in both Title I and non-Title I schools. Although there is a substantial amount of research on school leadership in the context of school reform (Bizar & Barr, 2001; Brezicha et al., 2015; Chen, 2008; Gigante & Firestone, 2008; Jwan et al., 2010; Kaniuka, 2012; Mette et al., 2016; Park & Jeong, 2013; Spiri, 2001), most are case-based in nature which is not sufficient in developing a strong understanding of school leadership (Leithwood & Jantzi, 2005). This study, however, uses a mixed-methods design with data collected from participants in both Title I and non-Title I within a specific district in Southern California.

Hence, this research is significant because it addresses a major dearth of research in specific areas. Through a combination of qualitative and quantitative analyses, the data revealed some pertinent findings that were used to draw a set of recommendations that may be of help to schools and teachers in the targeted district and other districts of comparable demographics. The findings of the study can also inform future professional development initiatives within the district.

The study made use of a survey combining sections of two valid and widely-used research instruments, the Multifactor Leadership Questionnaire (MLQ-5X) and the Survey of

Enacted Curriculum (SEC) which was either administered online or as a hard copy based on the school's preference. The survey was administered to teacher participants at the selected Title I, and non-Title I schools in a district in Southern California. Follow-up face to face, online or phone semi-structured interviews were then conducted with a subsample of teachers. Face to face interviews were conducted with school principals of the selected school sites to explore their perceptions about their leadership, how fidelity of CCSS-ELA implementation was happening in classrooms and how they were supporting CCSS-ELA implementation at their school sites.

The methodology used to explore the research questions and test the hypothesis is presented in this chapter. The chapter is broken down into four main sections: (a) Selection and description of sample, (b) instrumentation, (c) data collection, and (d) data analysis.

Method

This research was carried out using a mixed methods research methodology. According to Greene, Caracelli, and Graham (1989), the purposes of mixed-methods research are classified as: (a) triangulation, (b) complementarity, (c) development, (d) initiation, (e) expansion. In the current study, the researcher used mixed-methods research for validating quantitative findings and for extending the breadth and range of findings by making use of diverse methods for different inquiry components. This type of methodology takes advantage of the strengths of both qualitative and quantitative methodology by merging components of both methods in a single research study to ensure breadth and depth of understanding (Johnson, Onwuegbuzie, & Turner, 2007).

This mixed methods study employed a sequential explanatory model. This type of design is comprised of two phases: quantitative data in the first phase informs the selection of participants for the second qualitative phase (see Figure 3). The second qualitative phase helps to clarify and explain results from the first quantitative phase.

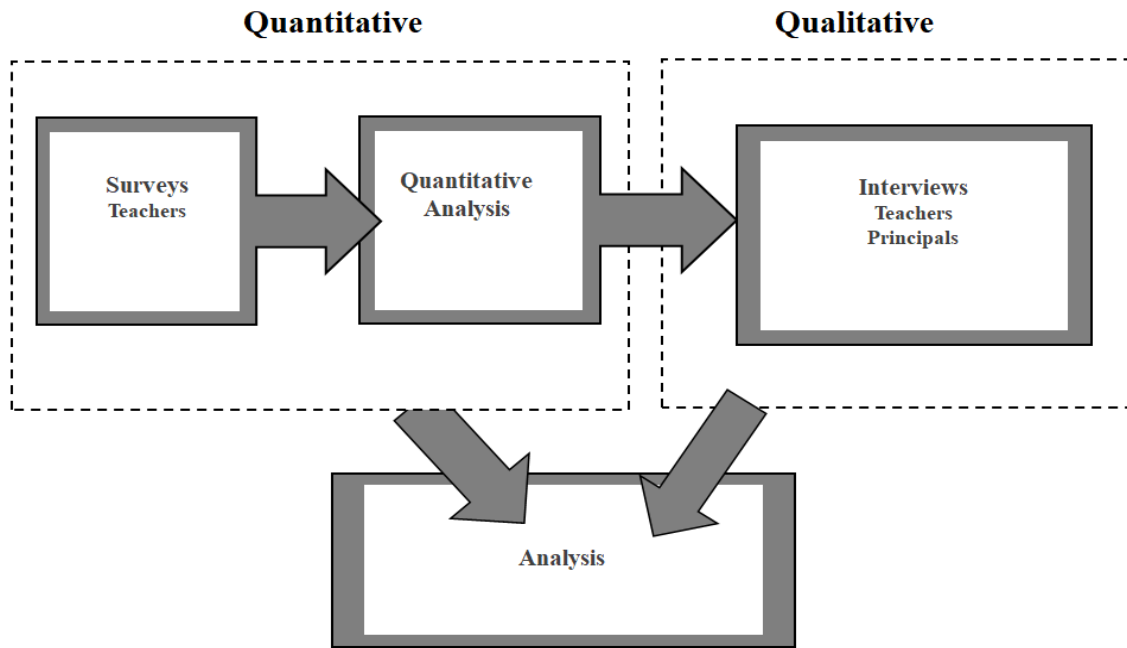


Figure 3. Sequential explanatory model

Sampling Procedures

According to Palinkas et al. (2015), a combination of sampling strategies is likely to be more appropriate for use in implementation research. In the current study, which focuses on leadership and the implementation of the Common Core English Language Arts Standards, convenience sampling was used to select the district, purposive and maximum variation sampling, was used to choose different types of schools to be targeted in the study which will bring diverse perspectives, and maximum variation was used to choose interview participants

Convenience sampling was used to select a district in Southern California which comprises of both Title I and non-Title I schools and which is geographically close to the researcher's workplace. The schools within the district were then selected using a type of purposive sampling called maximum variation sampling; various school sites were chosen from the pool of traditional public schools within the district; one Title I and one non-Title I school at each level of study including the elementary, middle and high school levels to maximize diversity relevant to the research questions. Maximum variation sampling allows

for key common patterns that cut across cases to be unveiled and gains its importance from having arisen out of heterogeneity (Bachmann et al., 2009). The researcher wished to uncover common patterns but also examine how the implementation of the CCSS-ELA was understood and experienced in diverse school settings.

Specific criteria were used to select the six schools targeted in this research through criterion sampling, another type of purposive sampling. In purposive sampling, the researcher deliberately identifies a set of criteria which guides sample selection (Gay, Mills, & Airasian, 2011). The three criteria used in this study included (a) size of school, and hence number of teachers working in the school; (b) the percentage of economically-disadvantaged students, that is, the school's Title I status; and (c) achievement of students in the California Assessment of Student Performance and Progress (CAASPP) English Language Art tests with proficiency level close to or greater than 50% in the year 2016-2017, which was the third year of Common Core State Standards implementation in California. From the public schools, specific school sites with a greater number of teachers and a high percentage of students meeting or exceeding the proficiency levels in ELA for the year 2016-2017 were selected. Although knowledge and experience are important in purposive sampling, the accessibility and readiness of participants, and their ability to express their experiences and opinions in a clear, coherent and reflective manner is also important (Bernard, 2005; Spradley, 1979). Five of the six schools initially chosen, were accessible as the school leaders gave their consent. One school leader declined to participate, thus the researcher sought and obtained authorization from another school which also had a high number of teachers and had close to 50% of students meeting or exceeding proficiency levels.

Size of the school was an important factor to consider as a bigger school increases the sample size of participants from which data is collected. A bigger sample allows inferences about the population to be made through subsequent statistical analyses. The sample size of

teachers in the selected schools increased from elementary to high school (see Table 2). Publicly-available CAASPP scores for specific Title I and non-Title I schools reported online on the California Department of Education website were consulted to identify schools showing better achievement than other schools in ELA in the district. This strategy was used to allow the researcher to explore the teacher implementation strategies and leadership practices used in higher performing schools.

Since this research focuses on implementation of the ELA standards, the teacher participants in the study were teachers teaching ELA in the six selected schools in the district. The survey was administered to all the ELA teachers, however not all teachers answered the survey. The teachers that responded to the survey were given the opportunity to give their consent and sign up for follow-up interviews. The researcher conducted some preliminary analyses on the quantitative data which allowed her to select participants from the pool of teachers who gave their consent to participate in follow-up interviews. Since the researcher aimed to address her final research question using grounded theory, it was important to choose a heterogeneous sample of teachers, from the group of teachers who accepted to participate, who showed high, medium and low implementation of CCSS-ELA aligned instructional strategies. This method is aligned with Strauss and Corbin's theoretical sampling strategy (1998) which can help confirm or disconfirm the conditions under which the model developed by the researcher through grounded theory holds. Hence an effort was made to interview at least three teachers from each school, one showing high, one showing low and one showing medium implementation. Although the researcher was able to recruit at least three teachers who showed these varying implementation levels from five of the six schools, only two teachers were recruited from one of the schools.

Table 2

Teacher Sample Size

| Level of Study | Number of teachers (2017-2018) | |
|----------------|--------------------------------|--------------------|
| | Title I School | Non-Title I School |
| Elementary | 20 | 23 |
| Middle | 34 | 44 |
| High | 87 | 9 |

Setting and Population

The selected district, found in Southern California has an enrollment of 24,130 with 39.7% of socioeconomically-disadvantaged students and a total of 30 schools (see Table 3). The schools do not all have similar grade-level configurations. However, the majority of elementary schools include Grades K to 5; Middle schools encompass Grades 6 to 8, and high schools include Grades 9 to 12. The district data for Fall 2017 report full implementation and sustainability of academic standards. The District School Climate Index (SCI) for the same semester is 409 over 500. The index offers a school-level description of a combination of factors that affect learning achievement in schools. The SCI formula is calculated based on the weighted mean of two domains: (a) supports and engagement (50%); and (b) violence and substance use at school (50%).

Table 3

Number of Public Schools in Selected District

| Schools by Type | 2016-17 |
|-----------------|---------|
| Elementary | 19 |
| High School | 3 |
| Middle | 5 |
| Total | 30 |

Note. Table includes charter schools in the appropriate category.

Schools

A total of six schools were selected, a Title I and a non-Title I school at each level of study. The total student population in the schools ranged from 541 to 2,535 for the 2017-2018 school year (see Table 4). For the same year, the mean number of teachers in the targeted schools were lower in elementary ($M = 22$, $SD = 1.4$) and middle schools ($M = 39$, $SD = 7.1$) as compared to high schools ($M = 89$, $SD = 8.0$). The average expenditure per pupil in middle ($M = \$6,322$, $SD = 873$) and high schools had similar values ($M = \$6,307$, $SD = 254$) whereas the expenditure per pupil for elementary schools was higher ($M = \$6,723$, $SD = 248$). The average teacher salary for all non-Title I schools ($M = \$88,939$, $SD = 17,255$) is higher than the average teacher salary for Title I schools ($M = \$85,220$, $SD = 17,254$). However, the average expenditure per pupil in title I schools ($M = \$6,775$, $SD = 251$) is higher than the expenditure per pupil in non-title I schools ($M = \$6,127$, $SD = 243$). Title I schools also receive more funding per student thanks to the Local Control Funding Formula (LCFF) which has moved California to a weighted student funding methodology, giving supplemental and concentration grants per pupil to schools based on the percentage of the total enrollment accounted for by English Learners (EL), free and reduced-price meal (FRPM) program eligible students and foster youth.

Table 4

Characteristics of Selected Title I and non-Title I Schools at Elementary, Middle and High School level

| School Code | Title I/Non-Title I | Enrollment (2017-2018) | | | Percentage of students who met or exceeded expectations in ELA (2016-2017) | | Average yearly Teacher Salary | Expenditure per pupil (2016-2017) |
|-------------|---------------------|------------------------|----------------------------|--------------------------------|--|----------------------------|-------------------------------|-----------------------------------|
| | | Total | Economically-Disadvantaged | Number of teachers (2017-2018) | Total | Economically-Disadvantaged | | |
| EA | Title I | 541 | 65.2 | 20 | 46 | 37.78 | \$85,837 | \$6,899 |
| EB | Non-Title I | 632 | 29.3 | 23 | 52 | 28.26 | \$90,900 | \$6,547 |
| MA | Title I | 909 | 72.2 | 34 | 49 | 36.24 | \$86,050 | \$6,940 |
| MB | Non-Title I | 1,233 | 13.7 | 44 | 75 | 46.29 | \$88,268 | \$5,705 |
| HA | Title I | 2,316 | 72.2 | 87 | 63 | 55.29 | \$83,778 | \$6,487 |
| HB | Non-Title I | 2,535 | 29.8 | 91 | 81 | 65.67 | \$87,650 | \$6,128 |

The average yearly teacher salary for the elementary school teachers ($M = \$88,367$, $SD = 3,582$) and middle school teachers targeted in the study were close ($M = \$87,159$, $SD = 1,568$). High school teachers targeted in the study, on the other hand, earned lower salaries ($M = \$85,714$, $SD = 2,737$).

Sample

This mixed methods study targeted the ELA teachers working in six schools, two elementary, two middle and two high schools in a district in Southern California and six school leaders, primarily school principals, at the selected schools. As shown in Table 5, there were a greater number of elementary teachers who participated in the study ($n = 19$) as compared to Middle ($n = 10$) and High school teachers ($n = 14$). There were close to twice as many Non-Title I school ($n = 30$) teachers as compared to Title I school teachers ($n = 17$).

Table 5

Number of Survey Teacher Participants in the Study by Level of Study and School Title I Status

| | Elementary | Middle | High | Total |
|-------------|------------|--------|------|-------|
| Title I | 5 | 5 | 7 | 17 |
| Non-Title I | 14 | 9 | 8 | 31 |
| Total | 19 | 10 | 15 | 48 |

The survey participants had the option to participate in follow-up interviews; the sum of interviewees ($n = 22$) consisted of a greater number of participants from the elementary level ($n = 10$), Non-Title I schools ($n = 10$) (see Table 6).

Table 6

Number of Teacher Participating in the Interviews by Level of Study and School Title I Status

| | Elementary | Middle | High | Total |
|-------------|------------|--------|------|-------|
| Title I | 3 | 3 | 4 | 10 |
| Non-Title I | 7 | 2 | 3 | 12 |
| Total | 10 | 5 | 7 | 22 |

Instrumentation

Quantitative data about the fidelity of Common Core English Language Arts Standards implementation, leadership and teacher opinions and beliefs were collected from teacher participants through a survey adapted from the Multifactor Leadership Questionnaire (Avolio & Bass, 1999) and the Survey of Enacted Curriculum (Council of Chief State School Officers, 2013). Subsequently, qualitative data was collected through semi-structured face-to-face, online or telephone interviews with teachers to learn more about the quality and quantity of CCSS-ELA aligned instructional practices they use in the classroom which would complement and expand on the data collected in the quantitative phase. Face-to-face semi-structured interviews was also conducted with school principals in the selected schools to learn more about their perception of the implementation of the Common Core English Language Arts Standards (CCSS-ELA) and the strategies used by teachers in their implementation. Principal's perceptions were subsequently used for validating teacher perspectives discovered from analyses of teacher interview data.

Survey

The teachers' questionnaire was made up of four main sections. The first page of the questionnaire was the consent page outlining the details of the research, which participants had to sign to show consent. Participants could also provide their email address on the cover page if they were willing to participate in follow-up interviews. The first three sections gathered information about factors which, based on the literature review, can impact educational change efforts such as Common Core; the first section is focused on participant demographic information, the second section is on teacher beliefs and the third on teachers' self-perceived transformational leadership. The fourth and final section of the survey is based on the fidelity of ELA implementation as measured by quantity and quality of CCSS-ELA aligned instructional strategies used by teachers. This section is divided into three

smaller subsections focused on three groups of CCSS-ELA aligned instructional practices, including instructional activities to construct meaning, small group activities and Hands-On and Technology Activities (see Appendix A). Three open-ended questions designed by the researcher were included at the end of the survey which centered on the barriers, supports, and impacts of the CCSS ELA implementation as perceived by teachers.

The Multifactor Leadership Questionnaire. The Multifactor Leadership Questionnaire (MLQ-5X) is the standard instrument used for assessing transformational, transactional and laissez-faire leadership behaviors (Avolio & Bass, 2000). The short version of the MLQ consists of 45 items altogether and is divided into four subscales of transformational leadership, three subscales of transactional leadership and one of laissez-faire leadership. However, for this study, only the four subscales relating to transformational leadership; idealized influence, inspirational motivation, intellectual stimulation and individualized consideration, were included. The total number of items of transformational leadership included in the survey was thus 20. The MLQ can be used to examine individual as well as group profiles of teachers (Avolio & Bass, 2000).

The Survey of Enacted Curriculum. The first evidence of the predictive capacity of the Survey of Enacted Curriculum content (opportunity-to-learn) measures emerged with a study conducted by Gamoran, Porter, Smithson, and White (1997) and has been confirmed, over the years, by large scale studies of student performance (Collares & Smithson, 2007). Subscales of analysis used in the past included the following

- Analyze information
- Evaluate
- Create
- Educational Technology

Block sections of the Survey of Enacted Curriculum (SEC) for ELA devised by the Council of Chief State School Officers Wisconsin Center for Education Research (see Appendix B) was used in this survey as it allows for several aspects of implementation fidelity to the CCSS-ELA standards to be measured including the quality and quantity of CCSS-aligned instructional practices used. The anchors of the original SEC scale ranged from *none* to *considerable*. For the purpose of this study, the scale was modified to *not at all* to *in all classes*.

Open-Ended Questions. The three open-ended questions at the end of the survey focused on the impact of the Common Core ELA standards, the supports teachers received as well as the challenges teachers encountered in their implementation. The questions were:

1. According to you, what is the impact of the Common Core English Language Arts Standards on student outcomes such as student achievement?
2. What are the supports you have received in implementing the Common Core English Language Art Standards?
3. What are the barriers you have encountered in implementing the Common Core English Language Art Standards?

The survey was pilot-tested with four teachers working in Southern California who were part of the researcher's cohort to ensure that the format was easy to navigate and that it was error-free. The survey was subsequently edited based on the feedback received.

Interviews

The semi-structured teacher interviews were either conducted face to face, online or by telephone by the researcher based on the teacher's indicated preference. Research-based strategies to foster quality interviews, such as establishing trust and ensuring the flow, quality and clarity of the interview questions were used by the researcher (Rubin & Rubin, 2012).

An initial interview guide with preliminary questions was devised based on the review of the literature as well as issues arising from the survey. The literature review pointed to the types of questions to be asked to appropriately structure the interview. It also outlined the questions that should be asked when the researcher uses grounded theory to a method of analysis of interview data. Examples of questions for exploring the phenomenon with the aim of developing a grounded theory include:

- How did it unfold?
- What influenced or caused this phenomenon to occur
- What strategies were employed during the process
- What consequences resulted?

Although an interview guide is not necessary from a grounded theory perspective (Corbin & Strauss, 2014), it sets the groundwork for subsequent interviews (Castillo-Montoya, 2016). This guide included questions mainly focused on Research Question 4, exploring three main topics; the barriers, supports and perceived impact of CCSS-ELA implementation, the way they were implementing the standards and their beliefs and opinions about the standards (see Appendix C). Montoya summarized the types of questions proposed by previous researchers in maintaining the conversational tone and purpose of the research: (a) introductory questions, (b) transition questions, (c) key questions, and (d) closing questions.

The researcher asked one or two introductory closed-ended questions about the teacher's number of years of experience working in education and their current school site. Transition questions mainly preserved the conversational tone of the interview and were open-ended in nature. The key questions asked during the interview are central to a study and tend to solicit the most valuable information (Rubin & Rubin, 2012). The researcher asked six to seven key questions which were centered on the central phenomenon of this

study; the implementation of the Common Core ELA Standards. Closing questions were asked to help teachers transition out of the interview while providing opportunities for reflection and provision of additional insight (see Table 7).

Table 7

Types of Interview Questions and Sample Teacher Interview Questions

| Type of Question | Explanation of type of question | Sample Question |
|----------------------|---|---|
| Introductory | Confirming background information-non-threatening general information | So how long have you been working at your current school site? I saw from your survey that you have had a long career in this district. |
| Transition Questions | Questions that segue smoothly into the key questions centered on the main topics of the interview | So you have witnessed the pre and post common core. How were the standards rolled out at your school site? |
| Key Questions | Questions that are focused on answering Research Question 4 and validating the quantitative findings of the research. | In what ways has your teaching changed since the implementation of the common core state standards? Can you maybe describe what a lesson was like before the common core and what it is like now? |
| Closing Questions | Questions that provide opportunity for closure. | What recommendations would you give to a teacher who is trying to implement a standards-based reform? |

These interview questions were pilot-tested with four teachers working in Southern California. Hence the researcher used the preliminary interview guide as a backbone for all interviews; while keeping some questions constant across different interviews, she also added and modified other questions based on the responses that each teacher gave in his survey and based on topics emerging from previous interviews. Hence the number of questions asked in the different interviews varied. The duration of each interview ranged from 15 to 22 minutes

Face-to-face semi-structured interviews were also carried out with a school leader from each of the selected six schools. School principals indicated their consent by email

confirmation. Principals' demographics, beliefs, the ways in which they are supporting teachers' classroom implementation of the CCSS-ELA standards, and the ways in which the teachers were implementing the Common Core State Standards were discussed. An interview guide was created for interviews with school principals as well (see Appendix D) with similar types of interview questions: introductory, transition, key and closing questions (see Table 8). The number of introductory questions asked of principals ranged from two to four. They focused on the amount of work experience and the qualifications of the school leader.

Table 8

Types of Interview Questions and Sample Principal Interview Questions

| Type of Question | Explanation of type of question | Sample Question |
|----------------------|---|--|
| Introductory | Exploring background information: general information about principal professional background | How many years have you been working at this school? |
| Transition Questions | Questions that segue smoothly into the key questions centered on the main topics of the interview | So you have witnessed the pre and post common core. How were the standards rolled out at your school site? |
| Key Questions | Questions that are focused on answering Research Question 4 and validating teachers' data | In what way are teachers implementing the Common Core ELA standards in their classrooms? |
| Closing Questions | Questions that provide opportunity for reflection | And what are your personal views about the common core |

The researcher conducted pilot interviews with three school leaders, two school principals and one assistant school principal who were part of the researcher's doctoral cohort and also worked in California. Their feedback allowed the researcher to make edits to her

questions to ensure clarity and give the opportunity to the researcher to practice giving interviews before the actual interviews were conducted. The duration of each interview varied between 13 and 20 minutes.

Procedures for Data Collection

The district was first contacted by email for approval to conduct the study. Following approval, emails were sent to the selected schools explaining the scope and details of the study. The researcher requested meetings with the school principals to discuss the research, seek site authorization and conduct interviews with them. After the first email and subsequent follow-up emails, the researcher set appointments with five schools principals. One school declined to participate so the researcher selected another school with similar demographics whose school principal consented to the study. The purpose of this first meeting was to give the opportunity to the school principals to answer any questions they had about the research, discuss the most efficient way the survey could be administered and the ways the researcher could support the school in its initiatives. For five of the six interviews conducted with school principals, five of them happened during that very first meeting, after relevant matters about the research had been addressed. One of the principal interviews was conducted at a later stage.

Survey Distribution

Dissemination of the surveys happened in various ways in the different schools depending on the decisions taken during the initial meeting with the school principals. One middle school principal invited the researcher to talk about her research to the ELA teachers during the departmental meeting and to give out hard copies of the teacher survey for voluntary completion by a certain date. Teachers who opted to participate in the surveys then handed over their completed questionnaires before the set date to the school secretary who offered the participants gift cards given by the researcher. One elementary school principal

and middle school principal chose to administer hard copies of the surveys during a staff meeting together with gift cards while the other elementary school principal had the hard copies placed in the teachers' boxes and gift cards were then given by the school secretary when the completed survey was returned. The high school principals chose both the online and hard copy survey so that teachers had the option to choose from different modes. The hard copies of the surveys were placed in the teachers' boxes and an email was sent from the school office to the ELA teachers explaining the research and asking for teachers' voluntary participation. Teachers who completed the surveys were asked to inform the school secretary about their participation. The secretary then gave them the gift cards the researcher had provided as compensation.

The researcher sent follow-up emails to school secretaries about two weeks after the distribution of the questionnaires or the dissemination of the online survey to inquire about the status of the collection. By liaising with the school secretaries, the researcher was able to make informed decisions as to whether to collect the completed surveys after two weeks or whether more time was needed for collection. The school secretaries were asked to send reminders to the teachers about the survey. In three of the six schools, the school principals also verbally reminded the teachers about the survey or sent email reminders. The time allocated for survey collection ranged from 3 to 12 weeks depending on the discussions the researcher had with the school secretaries.

Interviews

Upon collection of the interview surveys, all teachers who consented to be interviewed were contacted by email. Only 11 teachers replied to this initial email. A follow-up email was sent out two weeks later to encourage participation which resulted in an additional six teachers agreeing to set up interview appointments. The researcher planned to interview at least three teachers from each school; one teacher which had high, one with

medium and one with low implementation levels of CCSS-ELA when compared to other teachers in the same school who had agreed to participate in interviews. Hence, the researcher performed some basic descriptive analyses on the data for teachers who agreed to participate in follow-up interviews to identify the teachers that fell into those categories of implementation levels. However, the subsample of teachers from each school did not represent a variety of implementation levels; in a few schools those teachers agreeing to participate had high implementation levels. To include the perspectives of teachers from each school with varying levels of implementation, the researcher sent a final follow-up email to the specific teachers within the pool of teachers who had agreed to participate who had medium and low levels of participation. She was thus able to recruit five more teachers for interviews.

Preparation of Teacher and Principal Interviews

The researcher prepared her interviews based on the eight principles of the preparation stage of interviewing proposed by McNamara (2009). The principles included: (a) choosing an appropriate setting which lacks distraction; (b) explaining the interview objective; (c) addressing confidentiality issues; (d) explaining the structure of the interview; (e) indicating the length of the interview; (f) making sure participants know how to get in touch with the researcher later; (g) asking participants if they have any questions before getting started with the interview; and (h) not relying on the power of memory to recall responses. The researcher conducted most of the interviews at the teachers' schools sites in a quiet location at times of the day when teachers were free, primarily before school started, during lunch or after school hours. The interviews were carried out in the teachers' classrooms, in the school library at times when it was not in use or on a bench outside the classroom. One teacher chose to be interviewed at the Starbucks close to his school which was slightly noisier. The researcher started her interviews by introducing herself, making

sure that the participants understood how she chose her research topic and the importance of the study to her personally and to her area of research. She also reiterated confidentiality understandings to make sure that the participants were more comfortable to share their honest perspectives and verbally confirmed their consent to participate. She made sure they were aware of the structure of the interview which would start off with general demographic questions and transition into key questions related to the main topic of the study, that is, the implementation of the Common Core English Language State Standards. She asked whether the participant had any questions before starting the interview. At that point, the researcher used an App called video recorder on her laptop to audio record the interview. At the end of the interview, the researcher offered the participant a \$15 gift card.

Validity and Reliability

Existing research instruments having high reliability values were combined to construct the survey used in this study. This survey was pilot-tested for clarity and accuracy. Several strategies were used to strengthen the credibility of the qualitative findings for this study, including intercoder reliability, peer review, clarification of researcher perspective and member checking. The teachers' perceptions were validated by comparison with data collected from school principals.

Survey

The two research instruments combined to construct the survey used in this study are both widely used and valid research instruments. The Survey of Enacted Curriculum was chosen because it allows information about fidelity of implementation to be collected which helped address the second research question for this study relating to the impact of leadership on the fidelity of Common Core ELA implementation. The reliability values for the subscales of the Survey of Enacted Curriculum used to gauge fidelity of implementation have ranged from .647 (Educational Technology) to .857 (Analyze Information) and have been

repeated with multiple samples over the years with very similar results (J. L. Smithson, personal communication, March 9, 2018). Two main sections of the SEC were used for this study; the Survey of Instructional Activities in English, Language Arts and Reading and the teacher beliefs section (see Appendix B). The section of the Survey of Enacted Curriculum (SEC) on teacher beliefs and opinions was adapted for use in this study. Four items were chosen by the researcher based on relevance to the study. The researcher added an additional question, with a negative direction to correct for agreement bias (Baumgartner & Steenkamp, 2001) and act as cognitive “speed bumps” which calls for higher cognitive processing (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Cronbach’s alpha was recalculated to ensure internal consistency and found to be higher than .80.

A leadership section from the Multifactor Leadership Questionnaire (MLQ-5X) was included in the survey for this study to gather information about teachers’ use of transformational leadership. The Multifactor Leadership Questionnaire (MLQ-5X) was used as it is the most reliable and valid leadership instrument for measuring leadership styles within educational organizations. It meets the eight hallmarks of good scientific research including: (a) purposiveness, (b) rigor, (c) testability, (d) replicability, (e) precision, and confidence, (f) objectivity, (g) generalizability, and (h) parsimony (Whitelaw, 2001). Discriminatory and confirmatory factor analyses have both been used to validate the factor structure of the MLQ-5X. The model used in this study is based on a 6-factor model (Avolio & Bass, 1999). A set comprising of 1, 498 valid cases was used to find the reliabilities of this model. The reliability, as measured by the Cronbach’s alpha of each of the six leadership factor scales on the instrument, range between .64 and .92 (Avolio & Bass, 2004). The values were all above .7 except for management by exception: active, which was consistent with the research literature. The researcher requested her peers who are teachers in Southern

California to pilot test the survey to ensure content validity, clarity and to ensure it is error-free.

Interviews

Information about leadership and fidelity of implementation of the Common Core State Standards was collected through different data collection methods from two sources, teachers but also school principals, hence increasing validity. School principals were asked about the ways in which teachers were implementing the CCSS-ELA, and their responses were contrasted with the responses of teachers for validation. Interview questions were pilot-tested with teachers and school principals to ensure clarity, content validity and relevance. Feedback about the language, wording, and applicability of the interview questions was also sought from the dissertation committee members. Furthermore, interviews were semi-structured to promote reliability and ensure that participants can subsequently be evaluated in a relatively standard way.

Corbin and Strauss (2014) suggested that the researcher should plunge themselves in the setting being studied to form a comprehensive opinion about the complexity and variability of the studied phenomenon. The researcher conducted both the teacher and principal interviews at the specific school sites which allowed her to make informal observations about the school environment and climate. She also welcomed the opportunity to observe a lesson of one of the teachers which gave her additional insight into the instructional strategies used by teachers in their classrooms. After each interview, the researcher logged in the details of the interviews, interview settings and any comments or observations as a memo. In memos, the researcher tries to formulate the observed processes and to sketch out the flow (Creswell, 2013). Credibility and consistency was addressed by a statement of the researcher's biases and assumptions and by working collaboratively with another coder in the qualitative portion of this research in various stages of the coding

process. According to Weber (1990), in content analysis, different people should code the text in the same way so the classification procedure is deemed reliable. During the content analysis process, inter-rater reliability was calculated by the researcher and found to be higher than 80%. Credibility and consistency in the qualitative analyses was also addressed through member checks. Member checks allowed sharing of the researcher's interpretation of the data with the participants to assure credibility (Merriam, 2007). Upon the conclusion of the grounded theory analyses, the researcher sent a summary of the theory and the representative diagram to one participating teacher and school principal to validate the findings and to allow them to provide additional descriptions, if needed. The researcher also sent the same information to two of her peers to ensure that the diagram was clear and seemed logical to them. Discussions with one of her peers allowed the researcher to provide further clarifications about the focus of the research. The researcher collaborated with the methodology expert on her dissertation committee who acted as a peer reviewer throughout the study (Creswell, 2013). The peer debriefing sessions were carried out weekly throughout the data analysis process to inspect, assess, and interpret the data being collected.

Researcher's Perspective

According to Creswell (2013), it is important for researchers to clarify any biases related to the study by commenting on former experience, prejudiced views and orientations that may have shaped the researcher's chosen method and interpretation of the findings of this study. The researcher is an international student scholar coming from a country where implementation of educational reform has been largely unsuccessful. As a researcher and school principal working in her native country, she has experienced teacher resistance to top-down educational policies and has formed an opinion about some of the factors that have hampered implementation. Her motivation in choosing the current study topic stemmed from her interest in educational reform and the ways in systemic education reform can be promoted

in various contexts. However, she approaches this research from a bipartisan point of view untainted by political discourses.

Data Analysis

The quantitative and qualitative data collected in this study will be analyzed separately and then be integrated together. Quantitative data collected from teachers will be analyzed using descriptive and inferential statistics whereas qualitative data will be analyzed using content analysis and

Quantitative Data Analysis

Data were coded and analyzed using SPSS 25.0. Descriptive statistics including the use of percentages, means and standard deviations were used to describe demographic teacher information by school Title I status and level of study, and presented using cross-tables. Data for the first research question in this study was analyzed using inferential statistics. The *t*-test was used to find whether there were statistically significant differences in the implementation of the Common Core English Language Arts Standards by school Title I status and the Brown Forsythe test was used to investigate whether the differences in the implementation of the Common Core English Language Arts Standards at the elementary, middle or high school level were statistically different. Data for the second research question that is, information on teacher transformational leadership dimensions and teachers' implementation of the Common Core English Language Arts Standards was determined using Pearson's correlations. The third research question was addressed using Hierarchical Linear Modeling (HLM) with 2-levels to isolate the impact of teacher leadership on fidelity of implementation of the Common Core English Language Arts Standards. HLM is a powerful tool used to model cross-level effects and separate the variance and covariance components of tailored models (Raudenbush & Bryk, 2002). The first level in the HLM used in this study accounted for two teacher level variables affecting implementation including

teacher beliefs and opinions; and teacher certifications. The second level accounted for teacher leadership affecting fidelity of implementation. School level variables were tested in various 3-level models, however, these variables did not have a significant relationship with implementation fidelity of CCSS-ELA. According to Raudenbush and Bryk (2002), multilevel modeling calls for smaller number of assumptions than other statistical methods and deal well with missing data and small or discrepant group sample sizes.

Content Analysis

The qualitative open-ended questions included in the survey were analyzed using content analysis. Content analysis is a methodical, replicable procedure for condensing many words of text into fewer content categories based on clear coding rules and categorization (Weber, 1990). One of the most important decisions in content analysis is the definition of the coding unit (Weber, 1990). The coding unit chosen by the researcher was the teacher participant's response to each open-ended question. The responses to each open-ended question was aligned to a theme as outlined in the question, for example, all the responses to the open-ended question on the impact of the CCSS-ELA adhere to the common theme Impact. When themes are used as coding units, the researcher is coding for expressions of an idea (Minichiello, 1990). The researcher coded the teacher responses inductively, using a constant comparative method (Glaser & Strauss, 2009). The help of an independent coder was thought to ensure that coding was done systematically and consistently. When multiple coders are involved, the researcher should develop a coding manual including category names, definitions or rules for assigning codes, and examples (Weber, 1990). The researcher constructed a preliminary manual which was given to the independent coder. The coding process was carried out iteratively until sufficient coding consistency was achieved (Weber, 1990). The frequencies of each major code was then calculated and displayed on bar charts.

Qualitative Data Analysis

Data analysis in qualitative research involves preparing and organizing the data, then reducing the data into themes through a process of coding and condensing the codes, and finally representing the data in figures, tables or discussions (Creswell, 2013). Online interviews with teachers and school principals were recorded and transcribed by the researcher and by using a professional online transcription service with a quick turnaround time and 99% reported accuracy. The researcher individually did a quick check of each transcript received from the transcription service to ensure accuracy and clarity. For any suspected mistake, the researcher listened to the corresponding audio recording again and made any corrections deemed necessary.

The researcher read the transcripts several times in their entirety to get a feel of the text before dividing it into segments from which themes related to the participants' experiences on leadership and implementation fidelity were developed. Additional Memos were added on the Atlas.ti software as the researcher read the text. The researcher used the three stages of grounded theory (Corbin & Strauss, 2014) to code the interview data: (a) open coding where categories of information were developed, (b) axial coding in which categories were combined, and (c) selective coding where a "story" will be created which links the categories.

In the open coding phase, Creswell's (2013) lean coding approach was used in developing a short list of codes to which code labels were assigned. This list was then expanded as the researcher reviewed the database several times, until there were a maximum of 72 codes. The researcher used constant comparison and questioning to create broader categories. In the axial coding, categories are linked the categories together in novel ways (Creswell, 2013). In this process, the researcher created associations between the categories and subcategories identified in the open-coding step in novel ways, and organized the

emerging axial codes under different classifications; the central phenomenon, the causal conditions, strategies, the context, intervening conditions and consequences resulting from the phenomenon (Creswell, 2013). In the selective coding phase, the axial codes were reduced to bigger, more abstract categories and a higher theoretical level. A grounded theorist produces a theory by interpreting the interrelationships that emerge among categories formed in axial coding (Creswell, 2013). A diagram was then built to represent the theory that emerged.

Ethical Issues

The survey administered was kept confidential, although not anonymous. The confidentiality of the participants was ensured in four main ways. First, the online survey was made confidential by avoiding requests for personal identifier information such as names. However, those who consented to participate in follow-up interviews were requested to provide their phone numbers or email addresses on the online survey. Secondly, the researcher used SurveyMonkey to design and administer the survey as the settings on SurveyMonkey allow for greater confidentiality. Survey responses on SurveyMonkey are owned and managed by the survey creator and are hence treated as private to the survey creator. Furthermore, SurveyMonkey has a comprehensive and thorough privacy policy that ensures that all information from respondents that is hosted on their servers is physically and digitally protected. Physical protections of the facilities in which servers are located include 24×7 monitoring, cameras, visitor logs, and entry requirements as well as dedicated cages to separate their equipment from other tenants. Network security by SurveyMonkey is ensured through various methods including firewalls, access control through Virtual Private Networks and two-factor identification, and encryption technologies through Transport Layer Security. SurveyMonkey is, furthermore, Payment Card Industry Data Security Standard compliant.

Third, the researcher, on her side, has not made the survey public, so that information given by respondents was only accessible by her. All data were stored on a password-protected computer in a locked room. The security of the account was maintained by using a complicated password. Fourth, in the publication of the dissertation, only aggregated results were reported. Furthermore, interviewees were referred to using their names; hence individual participants were not identifiable. All recordings of online interviews and other research-related data will be deleted permanently within three years after the completion of the research.

The issue of time lost by participants in participating in the interview and survey was alleviated by ensuring that the survey instrument and interview protocol were pilot tested. This allowed for a reliable estimate of the time taken to complete the survey to be gauged and future participants to be informed accordingly. Furthermore, the researcher compensated participants for their time in completing the survey by offering them a gift card. The teachers who consented to participate in the survey for the study were given a gift card by the researcher. Teachers who subsequently consented to participate in the interview were offered a \$15 or 20 gift card prior to the start of the interview.

The survey offered the participants the possibility of withdrawing from the research at any time by clicking on a checkbox, even after completing it. The researcher included her contact details at the end of the survey so teachers could contact her at a later stage should they need it, may it to express concerns or any other issues.

CHAPTER 4: RESULTS

This study had five purposes; first, it aimed to investigate whether teacher transformational leadership and fidelity of implementation of Common Core English Language Arts (CCSS-ELA) aligned instructional practices in a unified school district in Southern California differed statistically by school Title I status and school level of study using inferential statistics. The study also aimed to find the relationship between teacher opinions and beliefs, teacher transformational leadership, and fidelity of implementation of CCSS-ELA aligned instructional practices as perceived by teachers. The relationships were established using correlational analysis which set the basis for the third objective of this study; to find the impact of teacher leadership on teachers' CCSS-ELA implementation using Hierarchical Linear Modeling while accounting for other variables. The fourth research question focused on the teachers' perceived barriers, supports and impacts of CCSS-ELA implementation. The final objective of this study was to explore the perceptions of teachers about CCSS-ELA implementation using grounded theory, which led to the creation of a theory of CCSS-ELA implementation. A visual model of the theory representing the concepts and relationships gleaned inductively from the teacher interview data was subsequently created.

A survey adapted from two valid and widely-used research instruments were administered to 48 teacher participants: the Multifactor Leadership Questionnaire (MLQ) by Avolio and Bass (2000) and the Survey of Enacted Curriculum (Council of Chief State School Officers SEC Collaborative Project, 2005). The researcher included three self-constructed open-ended questions at the end of the survey. Following the quantitative data collection phase, the researcher interviewed a subsample of 22 teachers who had indicated their consent to be contacted for follow-up interviews. An effort was made to ensure that this subsample of teachers was representative of the various levels of study by using snowball

sampling and systematically following up with teachers. School principals were also interviewed for further insight and validation of the theory of CCSS-ELA implementation that was constructed in this study.

Survey instruments were piloted for accuracy and content validity. Internal validity of the CCSS-ELA subscales was recalculated by using Cronbach's alpha since some of the questions were adapted for the purposes of this study. The credibility and reliability of the qualitative findings of this study was boosted by using piloted interview questions and interrater reliability during the content analysis of open-ended survey questions. Two coders: the researcher and an independent coder trained by the researcher were engaged in the coding of the teacher and school principal interviews for greater reliability. Research-based processes were used in the grounded theory analysis leading up to the construction of the theory. The researcher also validated the grounded theory on teacher CCSS-ELA implementation by contrasting the findings from teacher interviews with school principal views. Member checks were also conducted; the visual representation of the grounded theory and a summary of the findings were sent to a school principal and teacher participant for validation. It was also sent to two of the researcher's peers, both teachers in Southern California, for validation.

There were 48 teacher and six school principal participants in this study. The breakdown of the demographic characteristics of the teacher survey participants provided in Chapter 4 showed that participating teachers were mostly female, from the elementary level of study, had masters' degrees and the elementary level certification. The subsequent interview subsample was made up of 22 teachers, with a minimum of three teachers at each level of study; a teacher showing low, one showing medium and one showing high implementation as compared to other teachers in their school.

This study was guided by five research questions:

1. How does teachers' fidelity of implementation of CCSS-ELA aligned instructional strategies and their transformational leadership differ by school study level and Title I status?
2. What is the relationship between teacher beliefs and opinions, teacher fidelity of implementation of categories of CCSS-ELA aligned instructional practices and teacher transformational leadership dimensions?
3. How do the dimensions of transformational leadership of teachers impact the fidelity of implementation of CCSS-ELA aligned instructional practices?
4. What are the impacts, supports and barriers perceived by teachers in the implementation of the CCSS-ELA standards?
5. How were the CCSS-ELA standards implemented by teachers in a district in Southern California?

Research Question 1 and 2 were answered using inferential analyses such as *t*-tests and one-way ANOVAs. Research Question 3 was answered using a two-level Hierarchical Linear Modeling. The three open-ended questions included at the end of the survey were analyzed using content analysis to address the fourth research question in this study while Research Question 5 was addressed qualitatively using the processes of open, axial and selective coding in a grounded theory approach. The quantitative and qualitative findings were then integrated together for validation, explaining and complementing the quantitative findings.

This chapter presents the findings for the five research questions. It is organized into six main sections which include:

1. an overview of the response rate for the study;
2. descriptions of the demographic characteristics of the survey participants;

3. the quantitative results section which shows the analyses of the teacher survey data for addressing Research Question 1 to Research Question 3;
4. the content analysis section which shows the analyses for Research Question 4
5. the qualitative results section which shows the development of the theory for CCSS-ELA implementation, to answer Research Question 5;
6. The mixed methods results section which integrates the quantitative and qualitative sections. The qualitative data was used to expand on and validate the quantitative results obtained to address Research Questions 1 to 3.

Response Rates

The data collection for this mixed-methods study was carried out from May 2018 to December 2018 in a district in Southern California. A survey on leadership and the implementation of the Common Core English Language Arts Standards (CCSS-ELA) was administered in three ways, either online, through a paper copy or through both modes to teachers ($n = 98$) teaching English Language Arts (ELA) in a total of 6 schools, a Title I and a non-Title I school at each level of study, elementary, middle and high school level.

There were slightly more than 50% of targeted ELA teachers who participated in the survey; however, two of them were removed from the sample to be analyzed due to non-response on more than 75% of the survey items (see Figure 4).

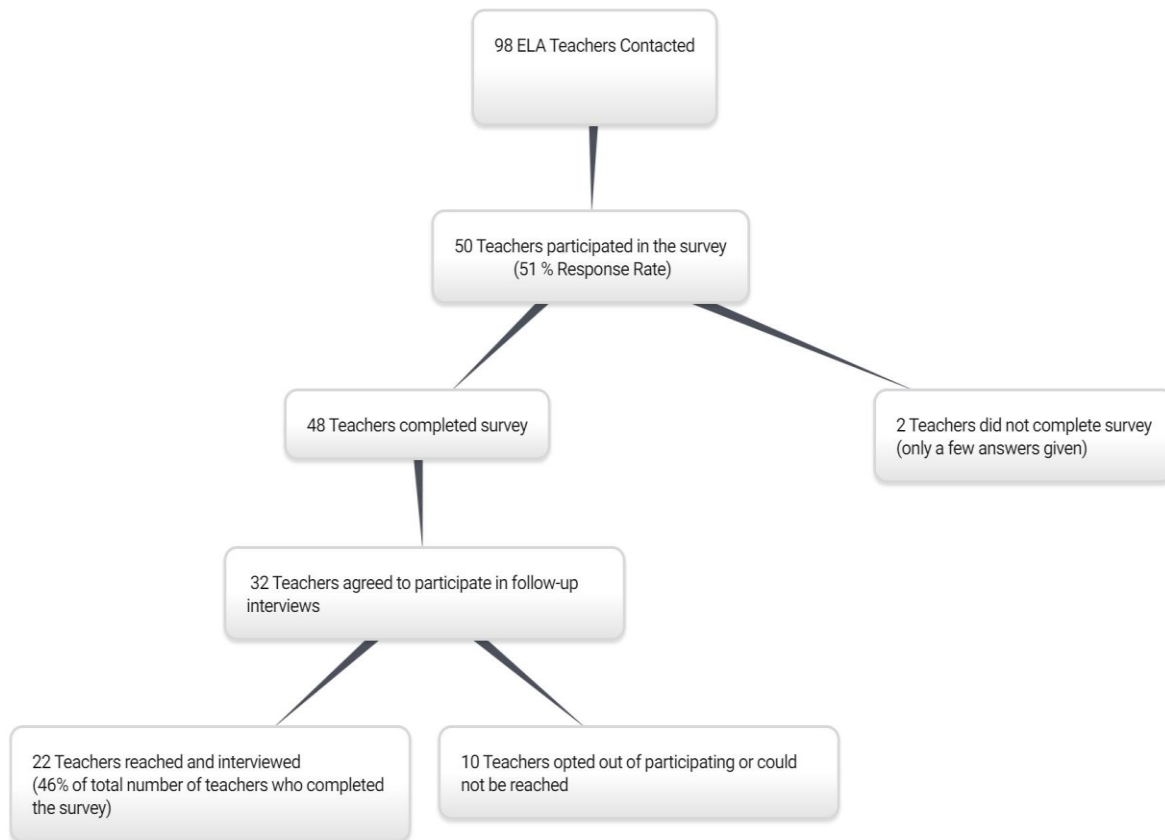


Figure 4. Flowchart showing number of participants in the survey and interviews.

Schools were offered the option of disseminating the surveys to the ELA teachers online, through a paper copy or through both modes. Three of the six participating school principals in this study chose for the survey to be disseminated through both modes, while three of the schools used the paper copy option. Altogether, 83% ($n = 39$) of the total number of respondents ($n = 48$) opted to answer the survey on the paper copy.

Sixty-seven percent ($n = 32$) of the teachers who answered the survey ($n = 48$) indicated that they agreed to participate in follow-up interviews by checking the required box on the consent form attached to their survey and giving their contact email address (see Figure 4). Three of the teachers contacted for follow-up interviews declined to participate while seven of them could not be reached. Hence, 22 teachers were interviewed; 87% were interviewed face-to-face ($n = 18$), 5% ($n = 1$) of the participants were interviewed through an online platform and 13% by telephone ($n = 3$).

Demographics

There were 39.6 % ($n = 19$) of teacher survey participants ($n = 48$) working at the elementary school level whereas there were 31.2 % ($n = 15$) working at the middle school level. Twenty-nine percent ($n = 14$) were high school teachers. Teachers from Title I schools comprised 35.4 % ($n = 17$) of the total number of teacher participants whereas teachers from non-title I schools comprised 64.6 % ($n = 31$) of the sample ($n = 48$).

Participant Demographics by School Title I Status and Level of Study

The demographic variables for teacher participants from Title I and Non-Title I schools are shown in Table 9. The percentage of teachers having particular demographic characteristics such as gender was calculated as a percentage of the total number of teachers who answered the specific question. For example, not all teachers answered the question regarding certifications; some teachers left this question blank. Since 46 teachers of the total number of participants ($n = 48$) answered this question, the percentage of teachers who had each type of certification was calculated out of 46. The same method was used to calculate percentages throughout this section on demographics.

The sample of teacher participants ($n = 48$) was mostly made up of females ($n = 43$) of which, more than half came from non-Title I schools ($n = 26$). The sample of females ($n = 43$), was made up of 37.5% ($n = 18$) elementary level teachers (see Table 7). More than 50% ($n = 25$) of the teacher participants had masters degrees, out of which the highest percentage, 33.3% ($n = 12$), taught at the elementary level (see Table 9 and 10).

Table 9

Gender, Highest Educational Degree and Certifications by School Title I status

| Variable | | Schools | | | | | |
|---|--------------------|------------|------|----------------|------|--------------------|------|
| | | <u>All</u> | | <u>Title I</u> | | <u>Non-Title I</u> | |
| | | Count | % | Count | % | Count | % |
| Gender (<i>n</i> = 48) | | | | | | | |
| | Male | 5 | 10.4 | 0 | 0.0 | 5 | 10.4 |
| | Female | 43 | 89.6 | 7 | 35.4 | 26 | 54.2 |
| Degree (<i>n</i> = 36) | | | | | | | |
| | Undergraduate | 9 | 25.0 | 3 | 8.3 | 6 | 16.7 |
| | Masters | 25 | 69.4 | 10 | 27.8 | 15 | 41.7 |
| | Doctorate | 2 | 5.6 | 0 | 0.0 | 2 | 5.6 |
| | Other | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Certifications (<i>n</i> = 46) | | | | | | | |
| | Elementary | 19 | 41.3 | 7 | 15.2 | 12 | 26.1 |
| | Middle | 1 | 2.2 | 0 | 0.0 | 1 | 2.2 |
| | Secondary ELA | 15 | 32.6 | 7 | 15.2 | 8 | 17.4 |
| | Elementary and ELA | 2 | 4.3 | 0 | 4.3 | 2 | 4.3 |
| | Others | 9 | 19.6 | 2 | 5.4 | 7 | 15.2 |

There was a greater percentage, 41.3% (*n* = 19), of teacher participants who had the Elementary School certification, of which 15.2% (*n* = 7) were from Title I and 26.1% (*n* = 12) from non-Title I schools. As shown in Table 7 and 8, most of the teachers who had the elementary school certification (*n* = 19) or the combined elementary and ELA certification (*n* = 2) were teaching at the elementary school level (*n* = 13).

Table 10

Gender, Highest Educational Degree and Certifications by Level of Study

| | | Level of study | | | | | |
|------------------------------------|--------------------|-------------------|------|---------------|------|-------------|------|
| | | <u>Elementary</u> | | <u>Middle</u> | | <u>High</u> | |
| | | Counts | % | Counts | % | Counts | % |
| Gender (<i>n</i> = 48) | Male | 1 | 2.1 | 2 | 4.2 | 2 | 4.2 |
| | Female | 18 | 37.5 | 13 | 27.0 | 12 | 25.0 |
| Degree (<i>n</i> = 36) | Undergraduate | 4 | 11.1 | 2 | 5.6 | 3 | 8.3 |
| | Masters | 12 | 33.3 | 4 | 11.1 | 9 | 25.0 |
| | Doctorate | 0 | 0.0 | 0 | 0.0 | 2 | 5.6 |
| | Other | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Certifications (<i>n</i> = 46) | Elementary | 13 | 28.3 | 6 | 13.0 | 0 | 0.0 |
| | Middle | 0 | 0.0 | 1 | 2.2 | 0 | 0.0 |
| | Secondary ELA | 1 | 2.2 | 0 | 0.0 | 14 | 30.4 |
| | Elementary and ELA | 1 | 2.2 | 1 | 2.2 | 0 | 0.0 |
| | Others | 3 | 6.5 | 6 | 13.0 | 0 | 0.0 |

Table 11 shows the demographic variables of teachers in Title I and non-Title I schools. The mean age of teachers in non-Title I schools ($M = 43.2$, $SD = 11.7$) was slightly higher than the mean age of teachers in Title I schools ($M = 41$, $SD = 10.0$). The amount of experience that participant teachers have in teaching at their current school site was also higher for non-Title I schools ($M = 11.9$, $SD = 7.0$) as compared to Title I schools ($M = 8.5$, $SD = 5.6$). Overall, teachers from Non-Title I schools had been teaching ELA for more years ($M = 15.4$, $SD = 8.9$) as compared to teachers from Title I schools ($M = 13.5$, $SD = 6.1$).

Table 11

Age, Number of Years Teaching ELA, Number of Years in Current School by School Title I Status

| Variables | School Type | <i>n</i> | <i>M</i> | <i>SD</i> | <i>Mdn</i> | Minimum | Maximum |
|---------------------------------|-------------|----------|----------|-----------|------------|---------|---------|
| Age | All schools | 46 | 42.2 | 10.0 | 44.5 | 21 | 60 |
| | Title I | 17 | 40.5 | 10.0 | 39.5 | 21 | 56 |
| | Non-Title I | 29 | 43.2 | 10.0 | 46 | 24 | 60 |
| Number of Years teaching ELA | All schools | 48 | 14.7 | 8.0 | 14 | 1 | 30 |
| | Title I | 17 | 13.5 | 6.1 | 14 | 3 | 27 |
| | Non-Title I | 31 | 15.4 | 8.9 | 15.4 | 1 | 30 |
| Number of Years at Current Site | All schools | 48 | 10.7 | 6.7 | 11 | 1 | 24 |
| | Title I | 17 | 8.5 | 5.6 | 5 | 3 | 20 |
| | Non-Title I | 31 | 11.9 | 7.0 | 12 | 1 | 24 |

Participant Demographics by School

Teacher participants' descriptive statistics for age, the number of years they taught ELA, and the number of years they taught in their current school was calculated for the six schools selected in this study, by school Title I status and by level of study (see Tables 11 to 13). As shown in Table 11, the mean age of teachers at the elementary level for the non-Title I school ($M = 44.5$, $SD = 6.4$) was close to the mean age for the Title I school ($M = 44.8$, $SD = 7.2$). However, the median ages of the teacher participants is greater for the non-Title I school ($Mdn = 46.0$) as compared to the Title I school ($Mdn = 41.0$). Since the median for the non-Title I school ($Mdn = 46.0$) is higher as compared to its corresponding mean ($M = 44.5$, $SD = 6.4$), the distribution is skewed to the left (negative). Conversely, the median for the Title I school is skewed to the right as its mean is higher than its median.

A similar trend in mean age is observed at the high school level, although there is greater variation in the data (see Table 12). The mean age of teachers in the Title I high

school ($M = 38.4$, $SD = 13.7$) was close to the mean age of teachers in the non-Title I high school ($M = 41.4$, $SD = 14.3$). There was a bigger difference between the median ages of middle school teachers in Title I ($Mdn = 34$) and non-Title I schools ($Mdn = 41$) as compared to the difference in their mean ages. At the middle school level, the mean age for the Title I ($M = 38.4$) and non-Title I school ($M = 41.4$) were close in value. The mean and median teacher ages, especially for the non-title I middle school level was close, indicating the distributions may be close to normality (see Table 11).

Table 12

Age, Years Teaching ELA, Years in Current School for Elementary Level Participants

| Variables | School | <i>n</i> | <i>M</i> | <i>SD</i> | <i>Mdn</i> | Minimum | Maximum |
|---------------------------------|-------------|----------|----------|-----------|------------|---------|---------|
| Age | | | | | | | |
| | Elementary | | | | | | |
| | Level | 18 | 44.6 | 6.4 | 46.0 | 31 | 54 |
| | Title I | 5 | 44.8 | 7.2 | 41.0 | 38 | 54 |
| | Non-Title I | 13 | 44.5 | 6.4 | 46.0 | 31 | 53 |
| Number of Years teaching ELA | | | | | | | |
| | Elementary | | | | | | |
| | Level | 19 | 18.5 | 7.8 | 18.0 | 1 | 30 |
| | Title I | 5 | 17.6 | 5.4 | 16.0 | 14 | 27 |
| | Non-Title I | 14 | 18.9 | 8.6 | 22.5 | 1 | 30 |
| Number of Years at Current Site | | | | | | | |
| | Elementary | | | | | | |
| | Level | 19 | 11.7 | 7.8 | 11.0 | 1 | 24 |
| | Title I | 5 | 6.4 | 5.4 | 4.0 | 3 | 16 |
| | Non-Title I | 14 | 13.6 | 7.8 | 13.5 | 1 | 24 |

Table 12 shows that the median number of years teachers have taught ELA at the elementary level in the Title I schools ($Mdn = 16.0$) was lower as compared to the non-Title school ($Mdn = 22.5$) although their means were close in value. At the middle school level (see Table 13), the median for the number of years teaching ELA in the Title I school ($Mdn = 12.0$) was slightly higher than the median for the number of years teaching ELA in the non-Title I school ($Mdn = 11.0$). At the high school level (see Table 14), the trend was similar;

the median for the Title I school ($Mdn = 14.0$) was close to the median for the non-Title I school ($Mdn = 13.0$). Irrespective of level of study and school title I status, the medians and the corresponding means for the number of years teachers have taught ELA were not the same, showing that the distributions were skewed.

Table 13

Age, Number of Years Teaching ELA, Number of Years at Current School for Middle School Teachers

| Variables | School | <i>n</i> | <i>M</i> | <i>SD</i> | <i>Mdn</i> | Minimum | Maximum |
|------------------------------|--------------|----------|----------|-----------|------------|---------|---------|
| Age | | | | | | | |
| | Middle | | | | | | |
| | School Level | 14 | 40.4 | 13.6 | 40.5 | 21 | 60 |
| | Title I | 5 | 38.4 | 13.7 | 34.0 | 21 | 56 |
| | Non-Title I | 9 | 41.4 | 14.3 | 41.0 | 24 | 60 |
| Number of Years teaching ELA | | | | | | | |
| | Middle | | | | | | |
| | School Level | 15 | 11.5 | 8.8 | 12.0 | 1 | 27 |
| | Title I | 5 | 9.6 | 5.3 | 12.0 | 3 | 15 |
| | Non-Title I | 10 | 12.5 | 10.2 | 11.0 | 1 | 27 |
| Number of Years Current Site | | | | | | | |
| | Middle | | | | | | |
| | School Level | 15 | 8.7 | 5.8 | 11.0 | 1 | 24 |
| | Title I | 5 | 7.6 | 4.6 | 5.0 | 3 | 13 |
| | Non-Title I | 10 | 9.2 | 6.5 | 11.0 | 1 | 18 |

As shown in Table 11, the median number of years that teachers have worked at their current school site was higher for non-Title I schools as compared to Title I schools, at the elementary, middle or high school levels. The greatest difference was at the elementary level, where the median number of years for the non-Title I school ($Mdn = 13.0$) was more than three times the median for the Title I school ($Mdn = 13.0$). This shows greater teacher attrition in Title I schools at the elementary level. The variation in the number of years of

work experience at the school site was also greater in the non-Title I elementary school ($SD = 7.8$) as compared to the Title I elementary school ($SD = 5.5$).

Table 14

Age, Number of Years Teaching ELA, Number of Years at Current School for High School Teachers

| Variables | School | <i>n</i> | <i>M</i> | <i>SD</i> | <i>Mdn</i> | Minimum | Maximum |
|------------------------------|-------------------|----------|----------|-----------|------------|---------|---------|
| Age | | | | | | | |
| | High School Level | 14 | 40.9 | 9.6 | 39.5 | 28 | 56 |
| | Title I | 7 | 39 | 9.11 | 38.0 | 28 | 56 |
| | Non-Title I | 7 | 42.9 | 10.4 | 45.0 | 28 | 53 |
| Number of Years teaching ELA | | | | | | | |
| | High School Level | 14 | 12.9 | 5.4 | 13.5 | 6 | 23 |
| | Title I | 7 | 13.3 | 5.8 | 14.0 | 6 | 23 |
| | Non-Title I | 7 | 12.6 | 5.4 | 13.0 | 6 | 22 |
| Number of Years Current Site | | | | | | | |
| | High School Level | 14 | 11.6 | 5.7 | 12.0 | 3 | 33 |
| | Title I | 7 | 10.6 | 6.3 | 9.0 | 3 | 20 |
| | Non-Title I | 7 | 12.6 | 5.4 | 13.0 | 6 | 22 |

Quantitative Data Analysis

The CCSS-ELA aligned instructional strategies scale included in the teacher questionnaires was divided into three subscales; the instructional activities to construct meaning, the small group activities and the use of technology which together summed up to 24 items. The percentage values missing for each variable in these three subscales ranged from 2.1 to 4.2%. Little (1995) introduced a multivariate chi-square test for the missing completely at random data mechanism (MCAR) that compares observed means for each pattern with expectation-maximization (EM) estimated means. The MCAR test can provide the empirical basis for listwise deletion which has been reported in scholarly literature as the most widely used technique in psychology and education (Peugh & Enders, 2004). However,

the small sample size used in this study makes listwise deletion undesirable hence Estimation-Maximization technique was selected to replace the missing values in the data.

Missing Values Analysis

Missing data was imputed using Missing Values Analysis within SPSS 25.0. A non-significant Little's MCAR test, $\chi^2(63) = 58.17, p = .65$, revealed that the data were missing completely at random. When data are missing completely at random and only a very small portion of the data are missing, a single imputation using the expectation maximization (EM) algorithm provides unbiased parameter estimates and improves statistical power of analyses (Enders, 2001). EM was used to impute missing values.

Reliability Estimates

Cronbach's alpha was calculated for the CCSS-ELA instructional strategies which was made up of a total of 24 items scale and was broken down into three subsections. Intercorrelations r values, between the items ranged from -.131 to .832. A close look at the correlations showed that two of the items on the scale, "Learn facts and procedures, skills and conventions" as well as "Use individualized instruction and tutorial software" had higher percentages (more than 70%) of weak inter-item correlations of less than .3. They were removed from the scale. The resulting Cronbach's alpha was .940.

Normality of Scale

The values of the 22 remaining items on the CCSS-ELA instructional strategies scale were added to form a composite score of implementation for each participant. The CCSS-ELA scale was analyzed for normality using the Shapiro-Wilk's test (Razali & Wah, 2011; Shapiro & Wilk, 1965). Based on the Shapiro-Wilk's test which was found to be not statistically significant ($p = .184$), visual inspection of the histograms, normal Q-Q plots and boxplots, it was found that the distribution for the composite scores for the CCSS-ELA aligned instructional practices was approximately normally distributed with a skewness of -

.25 ($SE = .34$) and kurtosis of $-.82$ ($SE = .67$). This satisfies the normality assumption necessary for parametric tests. The boxplot showed that there were no outliers in the data.

Research Question 1

Research Question 1 was: How does teachers' fidelity of implementation of CCSS-ELA aligned instructional strategies and their transformational leadership differ by school study level and Title I status? The possibility of parametric tests such as the one-way Analysis of Variance (ANOVA) and independent t -tests on the composite scores of implementation of CCSS-ELA aligned instructional practices were assessed using normality and homogeneity tests on groups of teachers by study level and groups of teachers by school Title I status.

Implementation of CCSS-ELA by school level of study and school Title I status.

The assumptions for a one-way ANOVA were tested using SPSS 25.0. Boxplots showed that there were no outliers in the Total CCSS-ELA aligned instructional activities score by study level (see Figure 5)

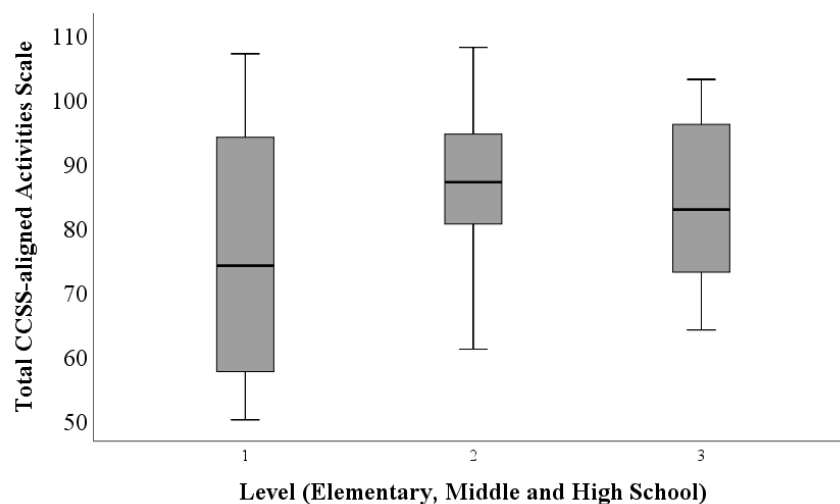


Figure 5. Boxplots for composite scores of CCSS-ELA aligned instructional practices by level of study.

The normality assumption was further examined using boxplots, normal Q-Q plots and running the Shapiro-Wilk's test which was not statistically significant. Hence, an approximate normal distribution was assumed for each level of study group.

The sample sizes for subgroups of the categorical variables, level of study and Title I status were not equal. Levene's test for equality of variance was carried in SPSS to test the assumption that the subgroups for the level of study and Title I status have homogeneous variance on the implementation of CCSS-aligned instructional practices. An alpha level of .05 was used for the analyses. The test for homogeneity of variance for level of study groups was significant, Levene $F(5, 42) = 2.57, p = .041$, indicating that this assumption underlying the application of the one-way ANOVA and t -test was not met. ANOVA can be used as a valid test in the absence of homogeneity when the variance in heterogeneity is small and group sizes are the same (Lix, Keselman, & Keselman, 1996). Heteroscedastic tests such as the Welch and Brown-Forsythe statistics are robust against heterogeneous variances (Brown & Forsythe, 1974). They perform better than the ANOVA step used by Levene's test in small and unequal sample sizes (Parra-Frutos, 2013), which is the case in this particular study (see Table 15). In particular, the Brown-Forsythe test controls rates of Type I error in a variety of settings (Mendes & Pala, 2004).

Table 15

Descriptives for CCSS-ELA Aligned Instructional Practices for Level of Study Groups

| Groups by Level of study | <i>n</i> | <i>M</i> | <i>SD</i> | <i>SE</i> | 95% Confidence Interval for Mean | | <i>Minimum</i> | <i>Maximum</i> |
|--------------------------------|----------|----------|-----------|-----------|--|----------------|----------------|----------------|
| | | | | | Lower Bound | Upper Bound | | |
| 1 | 19 | 75.42 | 18.89 | 4.33 | 66.32 | 84.53 | 50 | 107 |
| 2 | 15 | 88.13 | 12.77 | 3.30 | 81.06 | 95.21 | 61 | 108 |
| 3 | 14 | 83.89 | 12.75 | 3.41 | 76.53 | 91.25 | 64 | 103 |
| Total | 48 | 81.86 | 16.15 | 2.33 | 77.17 | 86.55 | 50 | 108 |

Brown Forsythe Test. The Brown Forsythe test, was significant at the .05 alpha, $F(2, 43.58) = 3.24, p = .0497$. Post hoc comparisons, using the Games-Howell post hoc procedure, were carried out to examine whether the differences between pairs of study group levels were statistically significant (see Table 16). Participants in Group 1, working at the elementary school level, had the lowest mean ($M = 74.42, SD = 18.89$) on the implementation of CCSS-ELA aligned instructional practices as compared to the middle ($M = 88.13, SD = 12.77$) and high school level ($M = 83.89, SD = 12.75$). The mean difference in implementation of CCSS-ELA aligned instructional practices between the elementary level, Group 1, and the middle school level, Group 2, approached statistical significance ($p = .066$) at an alpha level of .05. The mean differences between Groups 2 and 3 was not statistically significant ($p > .050$).

Table 16

Post-hoc Games-Howell Tests for CCSS-ELA aligned Implementation between Level of Study Groups

| (I) Level (Elementary, Middle and High School) | (J) Level (Elementary, Middle and High School) | Mean Difference (I-J) | SE | p | 95% Confidence Interval | |
|---|---|-----------------------------|-------|-------|----------------------------|----------------|
| | | | | | Lower Bound | Upper Bound |
| 1 | 2 | -12.712 | 5.446 | 0.066 | -26.11 | 0.68 |
| | 3 | -8.47 | 5.514 | 0.288 | -22.04 | 5.10 |
| 2 | 1 | 12.712 | 5.446 | 0.066 | -0.68 | 26.11 |
| | 3 | 4.243 | 4.743 | 0.648 | -7.52 | 16.00 |
| 3 | 1 | 8.47 | 5.514 | 0.288 | -5.1 | 22.04 |
| | 2 | -4.243 | 4.743 | 0.648 | -16 | 7.52 |

Note. Group 1 = Elementary Level; Group 2 = Middle School Level; Group 3 = High School Level

The p value only indicates whether the probability that the observed difference between two groups are due to chance. However, it is important not only to report whether a treatment affects people but also to report how much it affects them (Cohen, 1990). When the large sizes are sufficiently large, statistical tests will almost invariably show a significant

difference, unless there is a complete absence of effect; however very small differences, even statistically significant, are often meaningless (Sullivan & Feinn, 2012). The effect size for this analysis ($d = .117$) was found to be below Cohen's (1988) convention for a small effect ($d = .20$). However, it is not characteristic in educational interventions to have effects that would be described as anything other than "small" according to Cohen's categorizations (1988).

t-test. An independent samples *t*-test was carried out in SPSS to determine whether the implementation of CCSS-aligned instructional practices differed based on schools' Title I status. The test for normality was carried out by examining standardized skewness and using the Shapiro-Wilks test which indicated that the data were statistically normal. The test for homogeneity of variance was not significant, Levene $F(1, 46) = 1.88, p = .177$, indicating that this assumption underlying the application of the independent *t*-test was met. There were also no outliers in the composite score for CCSS-ELA aligned instructional activities by schools' Title I status (see Figure 4).

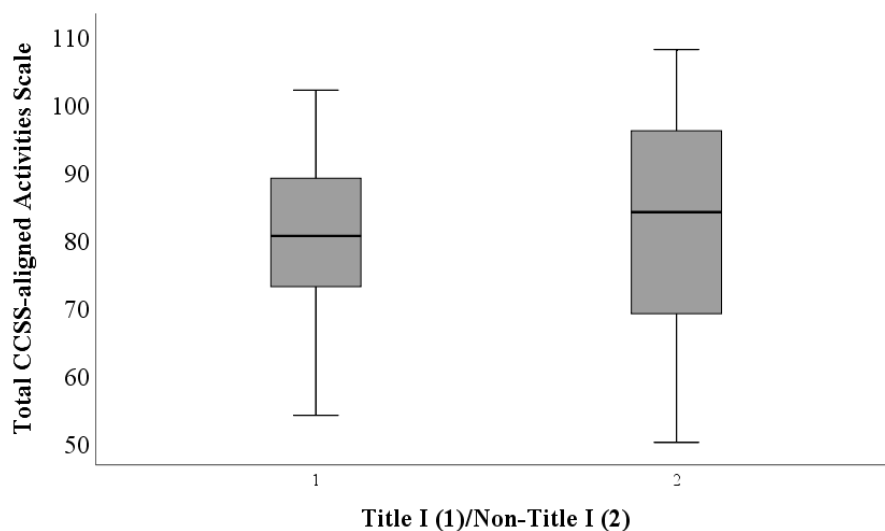


Figure 6. Boxplots for composite scores of CCSS-ELA aligned activities by level of study.

When equal variances were not assumed, there was no statistically significant difference in the implementation of the CCSS-ELA aligned instructional strategies by

teachers in Title I ($M = 80.67$, $SD = 13.61$) and non-Title schools ($M = 82.52$, $SD = 17.57$); $t(46) = -.403$, $p = .69$.

Teacher transformational leadership by level of study and title I status. The composite score for transformational leadership was calculated for each participant by summing the individual scores for each item on the leadership scale. Levene's test for equality of variance was carried out in SPSS 25.0 to test the assumption that the composite scores for teacher transformational leadership for different teacher groups based on study levels had equal variances. The test for homogeneity of variance was not significant, Levene $F(2, 45) = .355$, $p = .70$, indicating that the assumption for equal variance underlying the application of the one-way ANOVA was met. The Shapiro Wilks' test was not significant for groups 2 and 3, showing normal distributions. It approached significance in the distribution for Group 1, however, the researcher opted for the one-way ANOVA since it is robust against slight violations of the normality assumption.

ANOVA. As shown in Table 17, teachers in Group 1, working at the elementary school level, had a mean transformational leadership score ($M = 65.95$, $SD = 7.68$) close to those working in middle schools ($M = 65.73$, $SD = 6.56$) but higher as compared to those working at the high school level ($M = 59.50$, $SD = 7.57$).

A one-way ANOVA was conducted, $F(2,45) = 3.74$, $p = .031$, which demonstrated that there were statistically significant differences in transformational leadership between the three groups of teachers, Groups 1, 2 and 3, at different levels of study.

Table 17

Descriptive Statistics for Teacher Transformational Leadership Scores for the Level of Study Groups

| Subgroups by Level of study | <i>n</i> | <i>M</i> | <i>SD</i> | <i>SE</i> | 95% Confidence Interval for Mean | | <i>Minimum</i> | <i>Maximum</i> |
|-----------------------------|----------|----------|-----------|-----------|----------------------------------|-------------|----------------|----------------|
| | | | | | Lower Bound | Upper Bound | | |
| 1 | 19 | 65.95 | 7.68 | 1.76 | 62.25 | 69.95 | 44 | 75 |
| 2 | 15 | 65.73 | 6.56 | 1.69 | 62.10 | 69.37 | 49 | 76 |
| 3 | 14 | 59.50 | 7.57 | 2.03 | 55.13 | 63.87 | 48 | 74 |
| Total | 48 | 64.00 | 7.73 | 1.11 | 44.00 | 76.00 | 44 | 76 |

Note. Group 1 = Elementary Level; Group 2 = Middle School Level; Group 3 = High School Level

Post hoc comparisons, using the HSD Tukey post hoc procedure, were carried out to examine whether the differences in mean teacher transformational leadership between levels of study groups were statistically significant (see Table 18).

Table 18

Post-hoc Tukey HSD tests for Mean Transformational Leadership between Level of Study Groups

| (I) Level (Elementary, Middle and High School) | (J) Level (Elementary, Middle and High School) | Mean Difference (I-J) | <i>SE</i> | <i>p</i> | 95% Confidence Interval | |
|--|--|-----------------------|-----------|----------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| 1 | 2 | 0.214 | 2.527 | 0.996 | -5.91 | 6.34 |
| | 3 | 6.447* | 2.577 | 0.042 | 0.20 | 12.69 |
| | | | | * | | |
| 2 | 1 | -0.214 | 2.527 | 0.996 | -6.34 | 5.91 |
| | 3 | 6.233 | 2.719 | 0.067 | -0.36 | 12.82 |
| 3 | 1 | -6.447* | 2.577 | 0.042 | -12.69 | -0.20 |
| | 2 | -6.233 | 2.719 | 0.067 | -12.82 | 0.36 |

Note. Group 1 = Elementary Level; Group 2 = Middle School Level; Group 3 = High School Level

* $p < .05$

The mean transformational leadership score between the elementary level, Group 1, and the high school level, Group 3, was statistically significant at an alpha level of .05, $p =$

.042 whereas the mean differences between Groups 2 and 3 only approached statistical significance, $p = .067$. Conversely, the difference between Groups 1 and 2 was not statistically significant, $p = .996$.

***t*-test.** An independent samples *t*-test was carried out in SPSS 25.0 to determine whether teacher transformational leadership composite scores differed based on the school Title I status. The test for normality, examining standardized skewness, boxplots (see Figure 5), and the Shapiro-Wilks test indicated that the Title I ($n = 17$) and non-Title teacher groups ($n = 31$) had a normal distribution. The test for homogeneity of variance was not significant, Levene's test, $F(1, 46) = .248, p = .621$, indicating that the equal variance assumption underlying the application of the independent *t*-test was met.

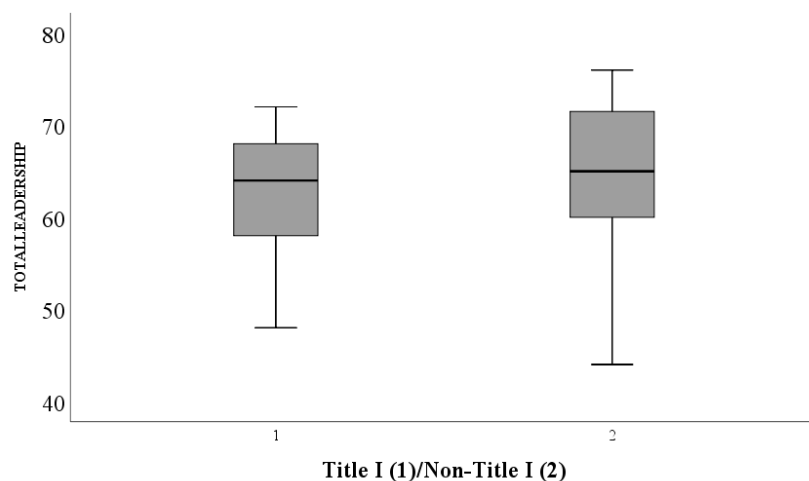


Figure 7. Boxplots for Transformational Leadership composite score by Title I status.

The independent *t*-test showed that although the mean of the composite transformational leadership scores of teachers in Title I schools ($M = 62.88, SD = 13.61$) was lower as compared to the mean score of teachers in non-title I schools ($M = 64.61, SD = 8.22$), the difference was not statistically significant, $t(46) = .248, p = 0.464$.

Research Question 2

The second research question of this study was: What is the relationship between teacher beliefs and opinions, teacher fidelity of implementation of categories of CCSS-ELA aligned instructional practices and teacher transformational leadership dimensions? Data

analysis was carried out by using descriptive and inferential statistics including simple Pearson correlations to evaluate the relationships between the composite scores of individual teacher transformational leadership dimensions, the composite scores of the implementation of CCSS-ELA aligned instructional activities and the composite scores of the teacher beliefs and opinions construct.

The researcher calculated the composite scores per participant on each of the teacher transformational leadership dimensions by adding the items under each subscale including idealized influence, inspirational motivation, individualized consideration, idealized behavior, and intellectual stimulation. The sum of the scores on each subscale was aggregated to form the overall transformational leadership construct. Examination of the Q-Q plots, boxplots and results of the Shapiro-Wilks test which was found to be statistically not significant ($p > .050$), indicated that the distribution of the composite scores of the transformational leadership construct was normal. A Pearson Linear correlation analysis was conducted to find the relationship between the composite scores of the implementation of CCSS-aligned instructional practices and the transformational leadership composite scores with an alpha level of .05. The correlation between the two variables was very weakly negative and statistically not significant, $r(48) = -.031, p > .050$.

To analyze the relationship between individual dimensions of transformational leadership and individual categories of CCSS-aligned instructional practices implemented, the Pearson correlation was used (see Table 19). The correlations between teacher beliefs and three of the five dimensions of transformational leadership, including idealized influence, idealized behavior and individualized consideration were statistically significant ($p < .05$) with a positive correlation with strengths ranging from moderate at .517 to weak, .302.

Table 19

Correlations between Composite Scores of Dimensions of Teacher Transformational Leadership, Categories of CCSS-ELA aligned Instructional Practices, and Teacher Beliefs

| Measure | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|-----------------|-------|-------|--------|--------|-------|-------|-------|----|
| 1 Idealized influence | <i>r</i> | | | | | | | | |
| | <i>n</i> 48 | | | | | | | | |
| 2 Idealized Behavior | <i>r</i> .539* | | | | | | | | |
| | <i>n</i> 48 | 48 | | | | | | | |
| 3 inspirational motivation | <i>r</i> .332* | .431* | | | | | | | |
| | <i>n</i> 48 | 48 | 48 | | | | | | |
| 4 Intellectual Stimulation | <i>r</i> 0.276 | .345* | .393* | | | | | | |
| | <i>n</i> 48 | 48 | 48 | 48 | | | | | |
| 5 Individualized consideration | <i>r</i> .335* | 0.270 | 0.163 | .414* | | | | | |
| | <i>n</i> 48 | 48 | 48 | 48 | 48 | | | | |
| 6 Belief and opinions Construct | <i>r</i> .517* | .373* | 0.063 | 0.136 | .302* | | | | |
| | <i>n</i> 45 | 45 | 45 | 45 | 45 | 45 | | | |
| 7 Technology activities | <i>r</i> -0.166 | 0.007 | 0.268 | -0.146 | -0.263 | 0.129 | | | |
| | <i>n</i> 48 | 48 | 48 | 48 | 48 | 45 | 48 | | |
| 8 Small Group Activities | <i>r</i> -0.132 | 0.022 | 0.184 | -0.078 | -.294* | 0.216 | .812* | | |
| | <i>n</i> 48 | 48 | 48 | 48 | 48 | 45 | 48 | 48 | |
| 9 Instructional activities to construct meaning | <i>r</i> 0.044 | .303* | 0.256 | 0.019 | -0.110 | 0.236 | .746* | .748* | |
| | <i>n</i> 48 | 48 | 48 | 48 | 48 | 45 | 48 | 48 | 48 |

* $p < .05$

The correlation between one of the categories of CCSS-ELA aligned instructional practices, total instructional activities to construct meaning and total idealized behavior was weakly positive (see Table 19 and Figure 5). The CCSS-ELA aligned small group activities, and the individualized consideration dimension of teacher transformational leadership was weakly negative (see Figure 5) and statistically significant at the alpha .05 level, $r(48) = -.296, p < .050$. According to Northouse (2016), individualized influence dimension relates to the ability of the leader to attend to individual needs of the followers. A negative correlation shows that the teacher leader usually attends to the individual needs of the followers less as he implements more group activities with the students. Considering that the Common Core is

expected to encourage collaboration, a possible drawback that this analysis suggests is that teachers are then accommodating the individual needs of the students less.

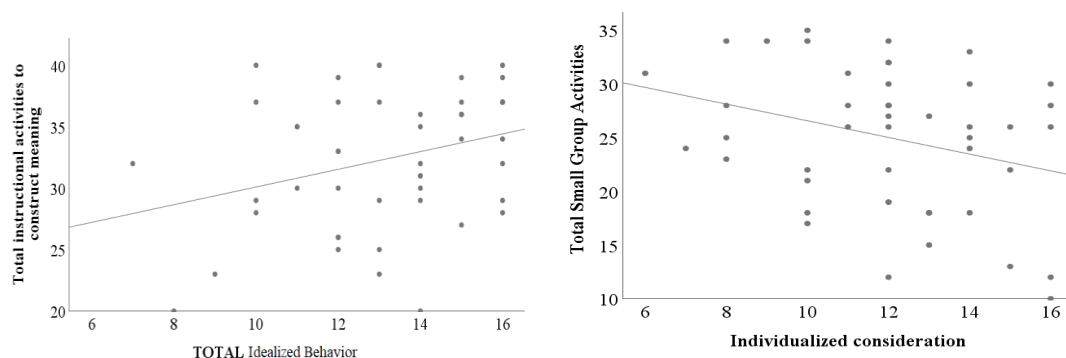


Figure 8. Scatterplots showing the correlation between composite score of small group activities and individualized influence.

Research Question 3

The third research question was: How do the dimensions of transformational leadership of teachers impact the fidelity of implementation of CCSS-ELA aligned instructional practices?

Hierarchical Linear Modeling (HLM) was used to assess the impact of teacher transformational leadership dimensions on fidelity of CCSS-ELA implementation. HLM is described as a generalization of Ordinary Least Squares (OLS) regression by Paterson and Goldstein (1991). It is a technique used to analyze multilevel or nested data. In this study, it is used to analyze data about the impact of teacher leadership dimensions on fidelity of implementation of CCSS-ELA aligned instructional practices while controlling for other teacher-related confounding variables. The Pearson's correlations between school-level variables such as school Title I status, study level (elementary, middle, high school), average teacher income, percentage students reaching proficiency level in ELA, total school enrolment, percentage of socio-economically disadvantaged students and fidelity of CCSS-ELA implementation were weak and not statistically significant so were not included in the HLM model. The outcome variable in this study was the composite score for CCSS-ELA

aligned instructional practices. The outcome variable was continuous and placed at the level 1 of clustering in the HLM analysis

Two-levels HLM was used; Level 1 consisted of two control variables teacher certifications categories and teacher opinions and beliefs. Level 2 included two transformational leadership dimensions that were found to have a stronger and statistically significant correlation with fidelity of CCSS-ELA aligned instructional practices. The descriptive statistics of the variables used in the model are shown in Table 20. The equations representing the models are shown below:

$$Y_{ij} = \beta_{0j} + \beta_{1j}X_{ij} + r_{ij} \quad (1)$$

where:

Y_{ij} = dependent variable measured for the i th level-1 unit nested within the j th level-2 unit, that is the implementation of CCSS-ELA aligned instructional practices measured for teacher i in classroom j

X_{ij} = value on the level 1 predictor; here it presents the teacher transformational leadership of teacher i in classroom j

β_{0j} = intercept for the j th level-2 unit, teacher transformational leadership for teacher i who does not show transformational teacher leadership

β_{1j} = Regression coefficient associated with X_{ij} for j th level 2 unit; here it represents the regression coefficient for teacher transformational leadership for classroom j

r_{ij} = random error associated with teacher transformational leadership

An example of a combined 2-level HLM general equation showing level 1 and 2 predictors is shown below.

$$Y_{ij} = \gamma_{00} + \gamma_{10}X_{ij} + \gamma_{01}G_j + \gamma_{11}G_j X_{ij} + U_{1j} X_{ij} + U_{0j} + r_{ij} \quad (2)$$

Equation 2 shows a mixed model which accounts for both fixed and random effects (Gill, 2003). Fixed effects remain invariable across groups. The fixed effects are represented

by γ_{00}, γ_{10} . X_{ij} represents teacher transformational leadership and G_i represents the combined classroom factor which includes teacher beliefs and opinions and teacher certification. A cross-level term $G_j X_{ij}$ which represents classroom factor x teacher transformational leadership is included as well as the composite error $U_{1j} X_{ij} + U_{0j} + r_{ij}$

Hence for the current research, the equation is

$$\text{Implementation of CCSS-ELA}_{ij} = \gamma_{00} + \gamma_{10} \text{Teacher Transformational Leadership}_{ij} + \gamma_{01} (\text{Classroom factor}_{ij}) (\text{Teacher Transformational Leadership}_{ij}) + \gamma_{11} G_j X_{ij} + U_{1j} X_{ij} + U_{0j} + r_{ij}$$

Table 20

Descriptive Statistics for Independent and Outcome Variables Used in HLM Analysis

| Variables | Categories | Distribution |
|------------------------------|--------------------------------|--------------|
| Certifications | Elementary/Early Childhood | 39.6 |
| | Middle School | 2.1 |
| | Elementary + Middle School | 6.3 |
| | Elementary + Secondary ELA | 4.2 |
| | Elementary + Special Education | 4.2 |
| | Elementary + Other | 2.1 |
| | Other | 6.3 |
| | Missing | 4.2 |
| Teacher Opinions and Beliefs | <i>n</i> | 45 |
| | <i>M</i> | 18.91 |
| | <i>SD</i> | 2.78 |
| | Range | 15-20 |
| Inspirational Motivation | <i>n</i> | 48 |
| | <i>M</i> | 12.73 |
| | <i>SD</i> | 1.98 |
| | Range | 8-16 |
| Individualized Consideration | <i>n</i> | 48 |
| | <i>M</i> | 12.02 |
| | <i>SD</i> | 2.46 |
| | Range | 7-16 |
| Fidelity of Implementation | <i>n</i> | 48 |
| | <i>M</i> | 81.86 |

| | |
|-----------|--------|
| <i>SD</i> | 16.15 |
| Range | 50-108 |

In Model 1, the two variables, teacher certifications and composite score for teacher beliefs accounted for 14% of the variance in the fidelity of implementation of the CCSS-ELA instructional practices. Overall, Model 2, which included two dimensions of transformational leadership, individualized consideration and inspirational motivation, explained 29% of the variance (see Table 21).

Table 21

HLM Model

| Variable | B | |
|------------------------------|---------|---------|
| | Model 1 | Model 2 |
| Certifications | .313* | .232 |
| Teacher Beliefs | .207 | .297* |
| Individualized consideration | | -.347 |
| Inspirational Motivation | | .264* |
| R^2 | .14 | .29 |
| R^2A | .1 | .21 |
| <i>Sig F Squared</i> | .045 | .029 |

* $p < .05$

Content Analysis

The qualitative analysis software Atlas.ti 8 was used for the content analysis of the three open-ended questions included at the end of the teacher survey. The coding of the responses to the questions was done based on three semantic domains emphasized in the fourth research question of this study, that is, the impacts, supports and barriers experienced by teachers in the implementation of Common Core English Language Arts (CCSS-ELA) aligned instructional practices.

Research Question 4

The fourth research question of this study was: What are the impacts, supports and barriers experienced by teachers in the implementation of the CCSS-ELA standards. In the

first step of the content analysis process, the decontextualization stage, the researcher familiarized herself with the data by going through the open-ended questions. Campbell et al. (2013) emphasize that for calculation of coder agreement, it is easier to work with clearly demarcated segments of the text, such as sentences or paragraphs. In this study, the unit of analysis was clearly demarcated as each participant's response. After deciding of the unit of analysis, the researcher then skimmed through the data again and realized that a few responses given by teachers were not informing the research question, so the decision was taken that not all responses needed to be coded if they did not inform the research question. Each teacher response could be coded with one or more codes.

The researcher conducted open coding of 50% of the teacher responses using an inductive and deductive process. An independent coder, trained by the researcher, used open-coding to code the same data. Based on the discussions, a codebook was set up for each semantic domain combining emerging codes from the data as well as codes based on the literature review (see Appendices H to J). In an iterative process, all the responses were then coded again by the two independent coders; preliminary intercoder reliability was calculated for feedback, coding problems and disagreements were discussed and the codebooks were revised with a final number of 33 codes across the three semantic domains (see Table 22).

Table 22

Code Frame for Semantic Domains, Number of Codes and Domain Descriptions

| Semantic Domains | Number of Codes | Basic Description |
|------------------|-----------------|---|
| Impact | 11 | Perceived positive and negative impact of the CCSS-ELA implementation on students |
| Supports | 8 | Perceived supports received by teachers in CCSS-ELA implementation |
| Barriers | 14 | Perceived challenges encountered by teachers in CCSS-ELA implementation |
| Total | 33 | |

Then, 50% of the three open-ended responses were coded one final time using the revised codebook and the intercoder reliability was computed on Atlas.ti across each semantic domain and found to be close to 90% agreement. This process ensured that a reliable codebook was used by the researcher who then proceeded to code the rest of the data.

Impacts. The frequencies at which each code was mentioned in teacher responses for the first semantic domain, supports for CCSS-ELA implementation were plotted on a bar chart (see Figure 6).

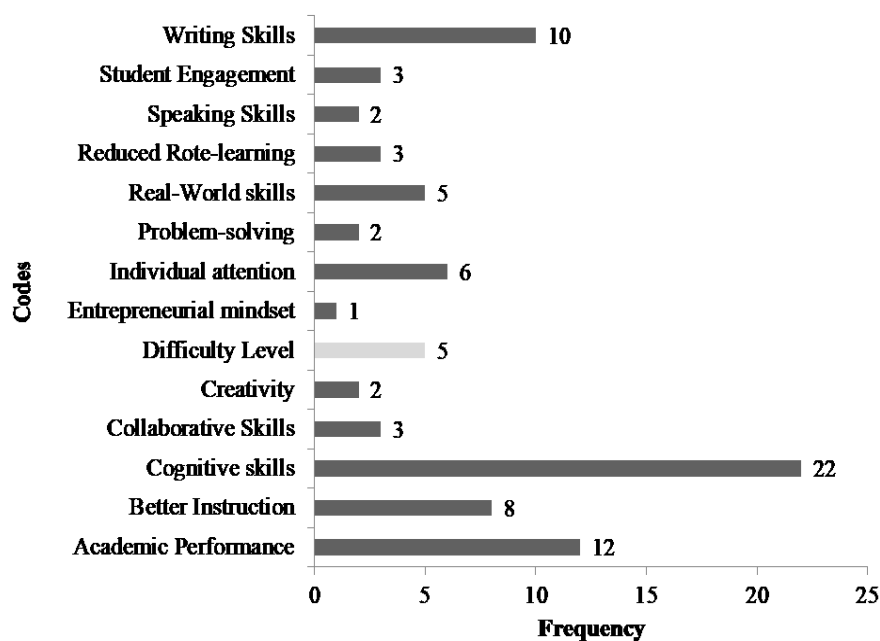


Figure 9. Bar Chart showing frequency of codes for the impact of the CCSS-ELA standards implementation.

The teacher responses about the impact of the CCSS-ELA standards consisted of 14 codes, which mostly reported a positive impact ($n = 13$). The only negative impact was associated with the additional difficulty level that the CCSS-ELA standards have added. Some individual teachers perceive that students struggle with the standards that one teacher referred to the standards as being “GATE” standards, implying that the standards were appropriate for the more gifted students (see Table 23).

Table 23

Sample Teacher Responses for Most Frequently Mentioned Positive and Negative Impacts

| Code | Positive/Negative | Sample Teacher Responses |
|----------------------|-------------------|--|
| Difficulty Level | Negative | <ul style="list-style-type: none"> •“I feel the standards are really ‘GATE’ standards. Lots of students struggle to achieve such standards” •“Some common core characteristics support independent thinking and creative problem-solving but some standards are pushing or above students’ developmental level” •It challenges them to think deeper but our students are unable to make connections/understand. |
| Cognitive skills | Positive | <ul style="list-style-type: none"> •Having the students make deeper connections and determine the greater meaning to assignments •I believe CCSS in ELA to be rigorous and challenge students to think and act at a higher level •It helps them to think critically and go beyond the surface •Common Core Standards allow for more conceptual and abstract thinking, rather than just rote memorization (that high-stakes testing often demands). •I think the results have been mixed. Initially the common core was misunderstood and threw everyone into a state of panic. However, now the idea is to instill a higher level of critical thinking, reading and learning. Ultimately (and ideally), this will push an individual student to grow. |
| Academic Performance | Positive | <ul style="list-style-type: none"> •The more a student can relate the subject matter to their own lives, the better achievement. •Common Core ELA is a guide for helping students succeed •Overall, I think it has had a positive impact on achievement. •It keeps a focus for learning and teaching on a daily basis and therefore, impacts how students are taught and learn. This allows students to achieve and better their skills. |

The code with the highest frequency was cognitive skills with 46% ($n = 22$) of the teachers suggesting, for example, that the implementation of the standards has promoted critical thinking skills, deeper thinking and students’ ability to make connections (see Table 23). The second impact of CCSS-ELA implementation most frequently mentioned in teacher

responses was academic performance, with 25% ($n = 12$) of the teachers in the sample believing that the standards led to academic gains.

Supports. There were 8 codes for the second semantic domain, which highlighted the variety of supports received by teachers in their implementation of the CCSS-ELA standards (see Figure 7).

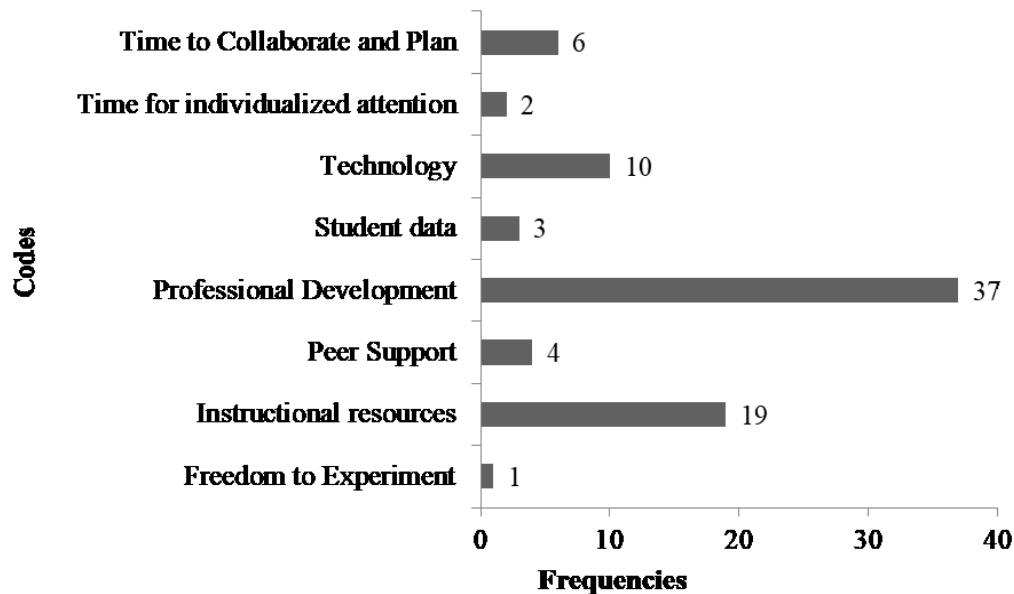


Figure 10. Bar Chart showing frequency of codes for supports in CCSS-ELA Standards implementation.

More than 75% of the teachers ($n = 37$), mentioned professional development as a support in their implementation process. Different types of professional development activities were mentioned by teachers including in-service training and coaching cycles. Workshops such as the Readers' and Writers' workshop seemed to be more widely adopted in the district (see Table 24). Professional development was either provided at the district or site level (see Table 24). Instructional resources were another major support for the teachers ($n = 19$). Examples of instructional supports mentioned included new units of study, new books and curriculum (see Table 24).

Table 24

Sample Teacher Responses for Most Frequently Mentioned Supports in the Implementation of the CCSS-ELA Standards

| Code | Sample Teacher Responses |
|--------------------------|---|
| Professional Development | PD days on Writer's and Reader's workshop reading/writing workshop Lucy calkins district and school site professional development coaching cycles, pilot curriculum, writer's workshop We have received support from the district readers and writers workshop. |
| Instructional resources | Various professional developments on teaching and instructional strategies and tools to use. Also, I have several books, charts, curriculum guides that I use professional development, reading and writing units of study new reading and writing curriculum |
| Technology | Various word work levels (materials), chapter books, writing and reading curriculum to support all readers and all writers technology, professional learning opportunities, data analysis, improvement goals, student needs analysis We have lots of technical/digital coaches who help us implement new strategies to connect current social/societal/political events to curricular concepts covered in the texts we read. Lots of in-services and trainings and technology Apps to support learning |

Ten teachers mentioned technology as a support in the implementation of the CCSS-ELA standards. Some examples of technology uses include the adoption of Apps and the use of digital coaches.

Barriers. This semantic domain included the greatest number of codes which captured the variety of barriers that the teachers encountered in the implementation of the CCSS-ELA. As reported in Figure 8, time was an obvious and most frequently mentioned constraint ($n = 11$), followed by the difficulty experienced by students in teaching the standards ($n = 7$), and issues related to resources ($n = 6$).

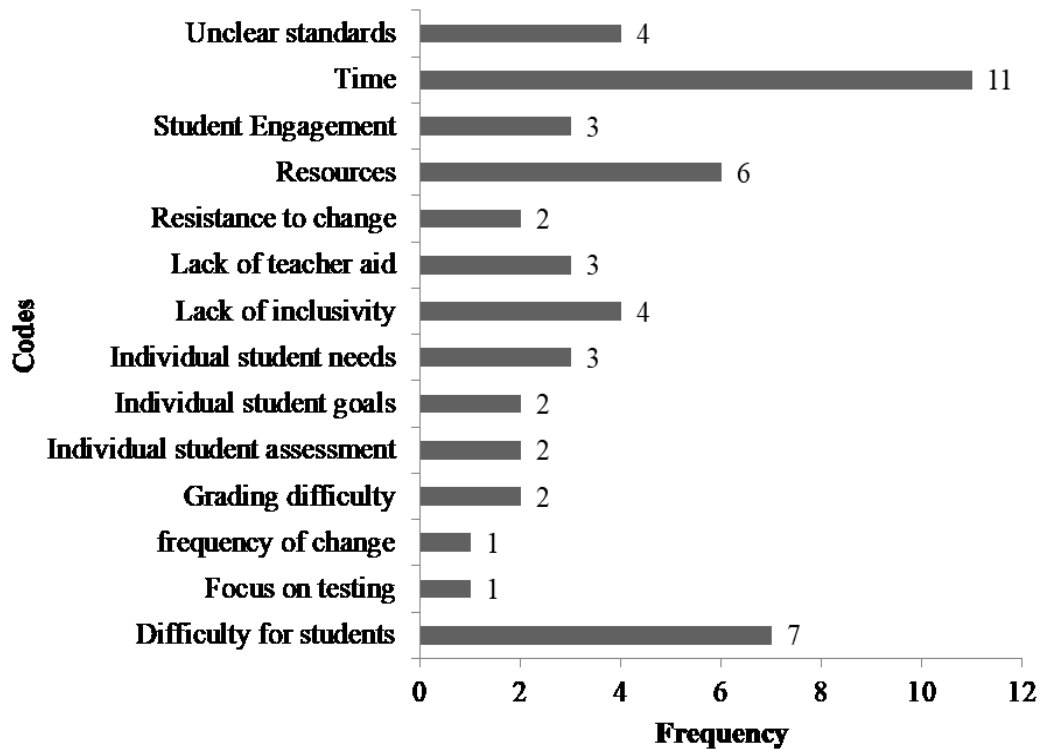


Figure 11. Bar chart showing frequency of codes related to barriers experienced by teachers in CCSS-ELA implementation.

Teachers mentioned time as a major constraint, referring either to their lack of time in fulfilling their duties related to the CCSS-ELA implementation or blamed the activities related to the CCSS-ELA implementation as taking up significant amounts of time (see Table 25). Teachers also mentioned that the standards were difficult for students, with some of the responses highlighting the equity issues arising, e.g. one teacher mentioned that the standards were “very hard for lower kids or second-language” students. The code entitled resources included teacher responses which focused on the inadequacy of resources such as an out-to-date curriculum or lack of access to resources (see Table 25).

Table 25

Sample Teacher Responses for Most Frequently Mentioned Barriers in the Implementation of the CCSS-ELA Standards

| Code | Sample Teacher Responses |
|------------------------|---|
| Time | Time constraints to cover all objectives fully Time-never enough to prepare or teach Too much info to cover in one year More time to collaborate with colleagues or just more time to work on modifying curriculum more often. |
| Difficult for Students | Students not able to read between the lines. Literal-do well on the surface questions Some standards above students' developmental level very rigorous-very hard for lower kids or second-language |
| Resources | Most of our resources are out of date, so we have spent time ensuring that the Language Arts Texts are aligned with the standards. Not having an ELA Common Core curriculum in our district |

Impacts, Barriers, and Supports to Implementation. The common codes across semantic domains of impacts, barriers and supports in the Common Core English Language Arts implementation (CCSS-ELA) were identified. Thematic ideas represented by some of the codes related to barriers, supports, and impacts were associated with one another. From the excerpts of teacher responses, the relationships between the common codes could be identified. Common codes were related to one another in three possible ways: Some codes supported, contradicted or both supported and contradicted one another. When the codes for barriers and supports were examined, time was mentioned as being both a support and a barrier to implementation, which shows a contradiction (see Table 26). Teachers experienced time as a constraint but also acknowledge the additional time that they were given to engage in CCSS-ELA implementation activities. Some of the teacher responses are shown in Figure 9.

Table 26

Codes for Barriers and Supports to CCSS-ELA Implementation Cross-Table

| Barriers | Supports |
|-------------------------------|--|
| Time | Time for Individualized Attention |
| Difficulty for students | Time to Collaborate and Plan |
| Resources | Freedom to Experiment |
| frequency of change | Instructional resources |
| Grading difficulty | Peer Support |
| Individual student assessment | Professional Development |
| Individual student goals | Student data |
| Individual student needs | Technology |
| Lack of inclusivity | |
| Lack of teacher aid | |
| Resistance to change | |
| Focus on testing | |
| Student Engagement | |
| Unclear standards | |

Teachers were given additional time for professional development such as Readers' and Writer's workshop, collaboration and working with target student groups such as English Learners. On the other hand, some teachers experienced time constraints related to lesson planning and development of new CCSS-ELA aligned resources. More teachers ($n = 11$) mentioned time as a barrier than as a support ($n = 8$). Time was cited as a support but also a barrier. Time was given by the school sites and the district for teachers to collaborate with one another and to plan their lessons (see Figure 9).

Instructional resources were cited as both a support and a barrier. More teachers mentioned instructional resources as supports ($n = 19$) rather than as a challenge ($n = 6$). While teachers received books and other instructional materials in support of their implementation of the CCSS-ELA standards, some teachers highlighted that they didn't have a curriculum (see Table 24 and 25).

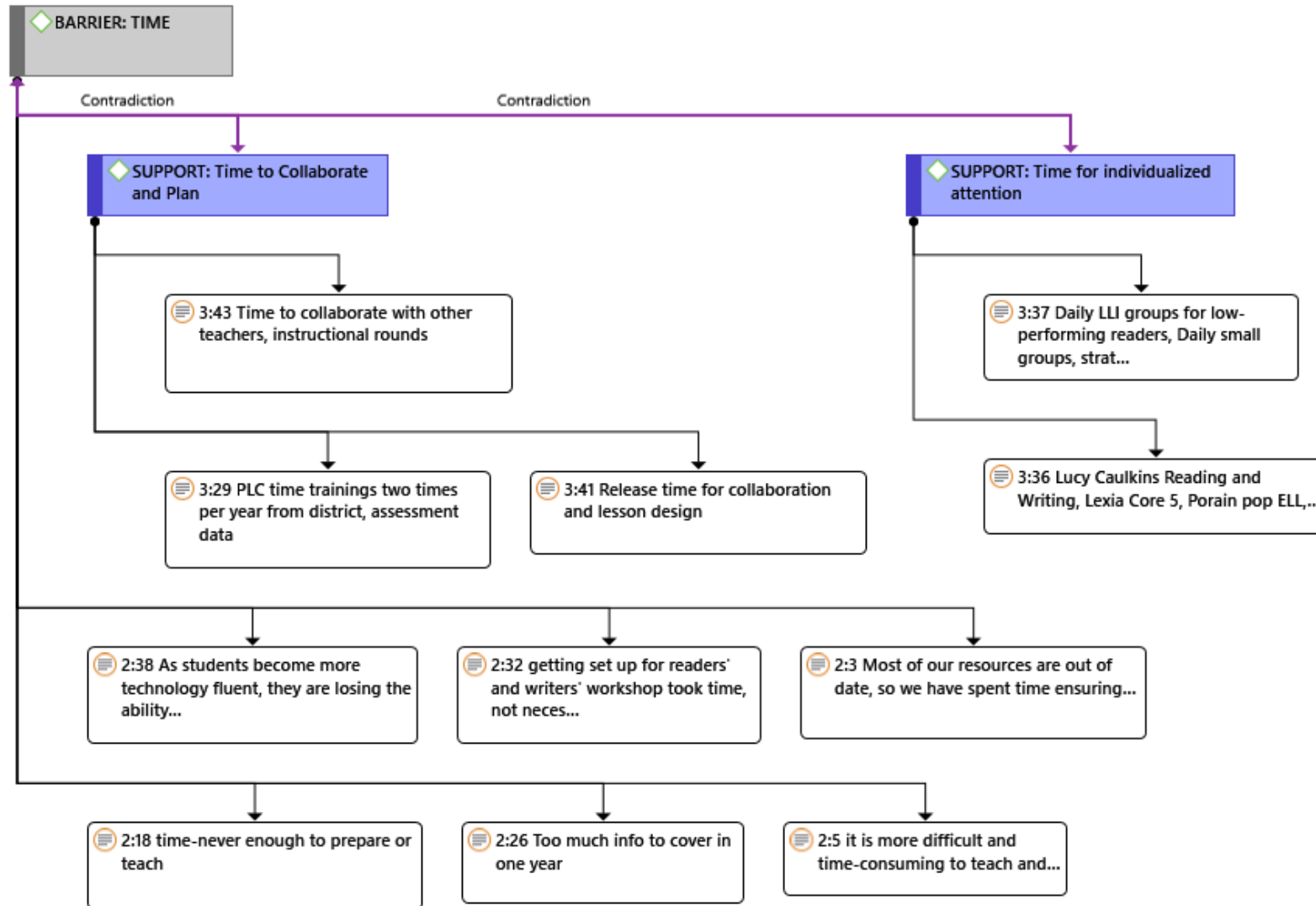


Figure 12. Bar Chart showing frequency of codes for supports in CCSS-ELA Standards implementation.

The open-ended questions on impacts and barriers yielded the same number of codes ($n = 15$). The same number of teachers ($n = 3$) mentioned student engagement as having an impact on students but also as a barrier for teachers.

Table 27

Codes for Impacts and Barriers to CCSS-ELA Implementation Cross-Table

| Impact | Barriers |
|---------------------------|--------------------------------|
| Academic Performance | Time |
| Difficulty Level | Difficulty for Students |
| Student Engagement | Student Engagement |
| Better Instruction | Resources |
| Cognitive skills | Focus on testing |
| Collaborative Skills | frequency of change |
| Creativity | Grading difficulty |
| Entrepreneurial mindset | Individual student assessment |
| Individual attention | Individual student goals |
| Problem-solving | Individual student needs |
| Real-World skills | Lack of inclusivity |
| Reduced Rote-learning | Lack of teacher aid |
| Speaking Skills | Resistance to change |
| Writing Skills | Unclear standards |

Responses showed that the barriers experienced by teachers with regards to student engagement were at the level of the teacher. Some teachers struggled to design lessons that would keep students invested and engaged. However, other teachers mostly perceived student engagement at the level of the student; as either a positive or negative impact on the CCSS-ELA implementation. Some teacher responses implied increased student engagement, while one teacher found that students were off-task during table discussions (see Figure 10).

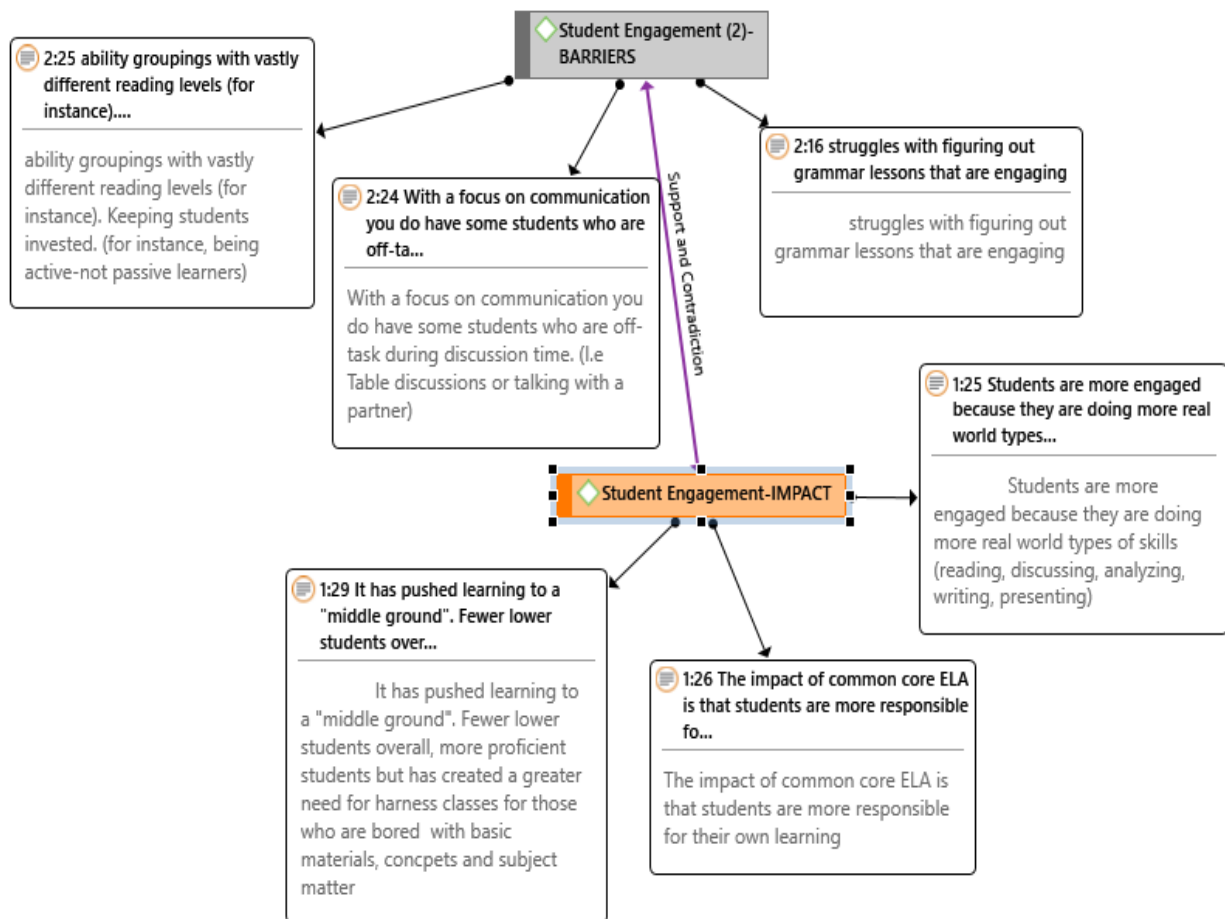


Figure 13. Selected excerpts related to student engagement.

One impact of the CCSS-ELA standards implementation was mentioned as adding a level of “difficulty for students” which was also confirmed by teachers as being a barrier to implementation particularly when teachers deal with vulnerable student groups (see Figure 11).

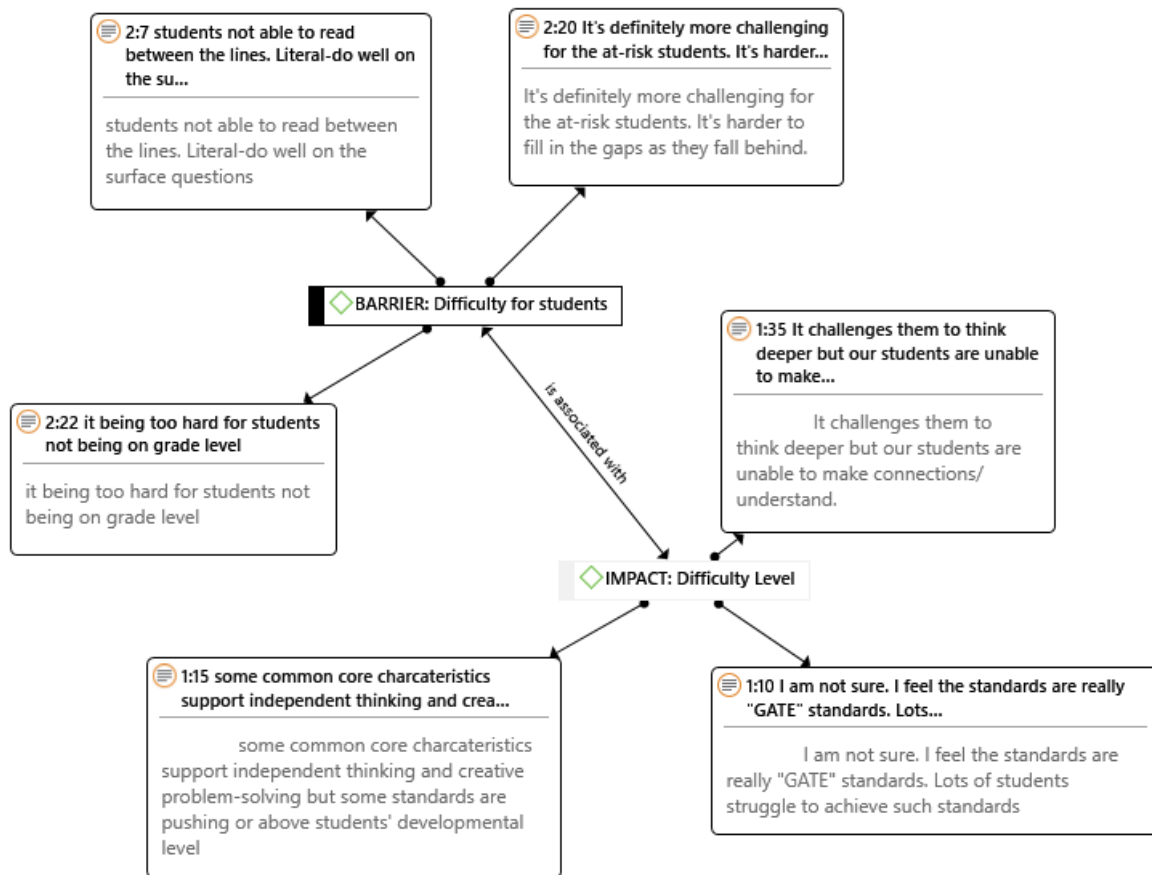


Figure 14. Selected excerpts of teacher responses related to student engagement mentioned as an impact and a barrier.

Qualitative Data Analysis

Information was collected through semi-structured interviews conducted across 6 school sites from 22 English Language Arts teachers (see Table 28 and 29). The interview teacher participant sample was comprised of a greater number ($n = 10$) of elementary school teachers, mostly female participants ($n = 10$) and a greater number of master's degree holders ($n = 12$).

Table 28

Demographic Variables of Teacher Interview Participants

| Variable | Categories | Frequency |
|------------------------------------|---------------|-----------|
| Study Level (<i>n</i> = 22) | Elementary | 10 |
| | Middle | 5 |
| | High | 7 |
| Gender (<i>n</i> = 22) | Male | 3 |
| | Female | 19 |
| Degree (<i>n</i> = 17) | Undergraduate | 3 |
| | Masters | 12 |
| | Doctorate | 2 |
| Certifications (<i>n</i> = 20) | 2 | 10 |
| | 4 | 8 |
| | 8 | 1 |
| | 10 | 1 |
| | missing | 2 |

Note. 2 = elementary/early childhood certification only; 4 = secondary English, language arts, or reading certification only; 8 = elementary and middle school certification only, 10 = elementary and special education

Teacher interview participants had a mean age of 42.5 (*SD* = 10.4), had spent, on average 15.2 years (*SD* = 7.6) teaching ELA and stayed on average, 11.3 years (*SD* = 6.8) at their current school site (see Table 27).

Table 29

Descriptive Statistics for Teacher Interview Participants

| Variables | <i>n</i> | <i>M</i> | <i>SD</i> | <i>Mdn</i> | Minimum | Maximum |
|-----------------------------------|----------|----------|-----------|------------|---------|---------|
| Age | 21 | 42.4 | 10.4 | 45 | 21 | 60 |
| Number of Years teaching ELA | 22 | 15.2 | 7.6 | 14 | 2 | 28 |
| Number of Years in current school | 22 | 11.3 | 6.8 | 11 | 2 | 24 |

Research Questions 5

The fifth research question was: How were the CCSS-ELA standards implemented by teachers in a district in Southern California?

This question was addressed using grounded theory. According to Creswell (2013), in grounded theory research, the researcher should conduct 20 to 30 interviews based on numerous field visits to collect enough information to saturate categories emerging from the data. Interviews ranged from 15 to 25 minutes long. Ten interviews were transcribed by the researcher who then used an online transcription service called transcriptionPuppy to get the transcriptions of the remaining interviews.

There is currently limited theory about the real-world implementation of the Common Core English Language Art Standards (CCSS-ELA). Strauss and Corbin's (2014) systematic process of open-coding, axial coding and selective coding were used to analyze the interview data and a conceptual model was then created to show the process of implementation.

Open coding. The researcher read through the interviews to become more familiar with the data and the context of each school site. School descriptions obtained by the researcher from school websites and school site memos taken by the researcher was also read to ensure that data were interpreted within the specific context of each school site and thus promote a better understanding of the CCSS-ELA implementation process.

The next stage was the open-coding process. The researcher first coded all the interview transcripts independently without the use of any guiding theoretical framework through an iterative process of coding emergent concepts, reviewing them and developing a preliminary codebook for a second coder, trained by the researcher. The smallest unit of meaning used in the open-coding process of this study was a sentence. However, if the sentence did not inform the research question or was too vague, additional sentences were considered until a code could be ascribed. This microanalysis allowed the researcher to

interpret and understand the meaning of participants' responses. These in-depth comparisons also allowed the researcher to recognize when the data began to reach saturation (Creswell, 2009). This process yielded 72 codes which were combined into 36 individual codes by constant comparison, from which the researcher created a codebook with brief definitions. An independent coder used the preliminary codebook to code four interview transcripts. Disagreements were discussed and ironed out to yield some new code names and a reduction of the number of codes to 31.

Codes representing events, objects, actions/interactions, and processes that were established by the researcher as being conceptually similar or related in meaning were classified together as abstract concepts called "categories." The researcher categorized the codes into 22 meaningful categories based on their commonalities. Each category included broad properties which varied over a dimensional continuum (Corbin & Strauss, 2014). Each category comprised of two to four properties and from two to five dimensions. The properties and dimensions are subcategories of the major category. Based on the text segments coded, the properties and dimensional range of each category was identified. Specification of properties and dimensions describes and analyzes categories while also providing precision for the development of a grounded theory (Corbin & Strauss, 2014). The researcher discussed the categories and their properties with the independent coder (see Table 30).

The categories varied along a continuum defined by the properties and dimensions, for example, teachers used one of the categories "instructional practices to construct meaning" through two different approaches, either a teacher or student-centered approach (see Table 19). One of the dimensions of this category was the duration; some teachers dedicated whole lessons for those types of activities while others only dedicated a short amount of time on them per lesson. Some other dimensions of defined categories included

the size, frequency, types, intensity, level, ability, availability, pace, memorization, amount, and variety as shown in Table 30.

Table 30

Detailed Categories, Properties, Dimensions

| Categories | Properties | Dimension |
|---|---|--|
| 1. Instructional Practices to Construct Meaning | •Teacher-centered approach | Degree (Small to High), Duration (Short to Long), Type (Lecturing to textbook-teaching) |
| | •Student-centered approach | Frequency (Sometime to Very Often), Types (Analysis to Presentations), Intensity (Developing to Intensive) |
| 2. Paradigm Shift | •Shift in the teaching focus | Focus (Content to Skills), Size (Big to Small) |
| | •Teacher role | Sage on the Stage to Facilitator |
| | •Assessment shift | Difficulty Level (Easy to Difficult), Type (Multiple Choice to Performance Tasks) |
| 3. Professional Development | •Teacher preparation programs | Level (Very Prepared to Not Prepared) |
| | •In-service training | Frequency (One-Day to Weeks), Focus (General to Targeted) |
| | • | Frequency (Sometimes to Often), Helpfulness (Very Helpful to helpful) |
| | •Instructional coaching | Frequency (Sometimes to Often), Helpfulness (Very Helpful to helpful) |
| 4. Small Group Activities | •Peer-to-peer coaching | Frequency (Sometimes to Often), Helpfulness (Very Helpful to helpful) |
| | •Group work strategy | Ability (Same ability to Mixed Ability Groups), Duration (Short to Long) |
| | •Collaborative projects and presentations, | Frequency (Sometimes to Often), Differentiation Level (Small to Big), Duration (Short to Long) |
| 5. Teacher Abilities | •Test preparation (Drill and practice team exercises) | Frequency (Sometimes to Often) |
| | •Teach to all Students | Frequency (Sometimes to Often) |
| | •Student performance monitoring | Frequency (Sometimes to Often) |
| | •Classroom management | Frequency (Sometimes to Often) |

| Categories | Properties | Dimension |
|---------------------------------------|---|--|
| 6. Technology Activities | <ul style="list-style-type: none"> • Issues • Instructional strategies | Degree (Small to High), Type (Technical to Human) Frequency (Sometimes to Often) Availability (Low to High), Positive to Negative |
| 7. Resources | <ul style="list-style-type: none"> • Access • Acquisition | Difficulty Level (Easy to Difficult) Degree (Small to High) |
| 8. Standards | <ul style="list-style-type: none"> • Rigor • Clarity • Complexity • Progression | Degree (Small to High) Degree (Small to High) Size (Small to Big) |
| 9. Student Academic Impact | <ul style="list-style-type: none"> • College preparedness • Student performance • Student skills development • Student learning style | Degree (Small to High) Level (High to Low) Positive to Negative Type (Soft to Hard Skills) Pace (Slow to Fast) Memorization (High to Low) |
| 10. Community Influences | <ul style="list-style-type: none"> • Population mobility • Media propaganda | Pace (Slow to Fast) Intensity (High to Low) |
| 11. Culture | <ul style="list-style-type: none"> • Risk-taking • Collaborative • Change | Degree (Small to High) Types (Formal to informal), Frequency (Sometimes to Often) Positive to Negative (Slow to Fast) |
| 12. Funding | <ul style="list-style-type: none"> • Title I • Uses | Amount (Small to Big) Variety (Low to High) |
| 13. Student Classroom Attitudes | <ul style="list-style-type: none"> • Student accountability • Student engagement | Degree (Low to High) Degree (Low to High) |
| 14. Implementation Time | <ul style="list-style-type: none"> • Time support • Time constraints | Degree (Small to High) Degree (Small to High) |
| 15. Teacher Preparedness | <ul style="list-style-type: none"> • Teacher experience • Age | Level (Low to High) Young to Old |
| 16. Principal and District Leadership | <ul style="list-style-type: none"> • Experience • Practices | Level (Low to High) High Impact to Low Impact |

| Categories | Properties | Dimension |
|------------------------|---|--|
| 17. Emotional Response | <ul style="list-style-type: none"> • Teacher emotions • Student response | Positive to Negative |
| 18. Teacher Attitudes | <ul style="list-style-type: none"> • Resistance • Openness to change • Teacher experience | Positive to Negative High to Low High to Low Level (Low to High) |
| 19. Teacher Workload | <ul style="list-style-type: none"> • Piloting materials • Resource development • Teacher aid | Positive to Negative, Time Demands (Low to High) Positive to Negative, Difficulty Level (Easy to Difficult) Positive to Negative, Frequency (Sometimes to Often) |
| 20. Teacher Beliefs | <ul style="list-style-type: none"> • Past experiences • Self-efficacy • Equity • Intellectual stimulation | Type (Professional to Personal) Weak to Strong Weak to Strong Weak to Strong |
| 21. Teacher Leadership | <ul style="list-style-type: none"> • Roles • Peer support | Formal to informal Extensive to lacking |
| 22. School Variables | <ul style="list-style-type: none"> • Classroom arrangement • Level of study • Student demographics influences | Flexibility (Low to High), Size (Medium to Big) Percentage Economically- Disadvantaged (Low to High) |

Axial Coding.

In Stage 2, axial coding was carried out in which linkages between categories was established. The researcher not only sought to describe the central phenomenon identified in open-coding, that is, the implementation of the Common Core English Language Arts Standards, but also tried to explain it. Hence, the researcher used a combination of inductive and deductive reasoning to link categories together to form axial codes which fit into a basic frame of generic relationships that included the following elements:

1. Causal conditions that influence the implementation of the Common Core English Language Arts State Standards;
2. Action and Interaction strategies for addressing the phenomenon;
3. Context and intervening conditions that shape the implementation of common core-aligned instructional strategies, which constitutes the broad and general conditions that influence the action and interaction strategies.
4. Consequences of undertaking strategies, which will include the impact on students, teachers and the community.

Strauss and Corbin's (2014) intention with this stage has been recognized as to re-assemble the broken down data in innovative ways by establishing links between categories and their subcategories. The researcher discussed the emerging connections with the independent coder who was involved in the open-coding process. Based on the discussions, the axial codes list was refined until codes were non-repetitive and mutually exclusive (see Table 31).

The context in which teachers had to undertake the implementation of the CCSS-ELA was one infused with controversy illustrated by the media which would portray the Common Core State Standards either in a positive or negative light and one where their workload had increased considerably. There were several intervening conditions identified which were combined into a smaller number of axial codes, including school structure, time for implementation, type and frequency of CCSS-ELA instructional strategies, resources and teacher competence

Table 31

Axial Codes Arranged by Context, Conditions, Strategies and Consequences of the implementation of the Common Core ELA Standards

| Frame Components | Categories or Subcategories | Axial Codes |
|--|--|---|
| Context | | |
| Causal Conditions | Workload | Increased Workload |
| | Media Propaganda | Media Propaganda |
| | Teacher Attitudes | Teacher Attitudes |
| | Standards | Standards |
| | Teacher Leadership | Leadership |
| Intervening (or moderating) Conditions | Principal Leadership | |
| | Funding | Funding |
| | Student Demographics | |
| | Influences | School Structure |
| | Level of Study | |
| Strategies | Classroom Arrangement | |
| | Time for implementation | Time for implementation |
| | Teacher or Student Centered | Type and frequency of CCSS ELA Instructional Strategies |
| | Frequency | Frequency of use CCSS ELA instructional Strategies |
| | Resources | Resources |
| Consequences | Teacher Preparedness | Teacher Competence |
| | Teacher Abilities | |
| | Teacher Beliefs | |
| | Instructional Practices to Construct Meaning | Common Core-Aligned Instructional Practices |
| | Small Group Activities | |
| | Technology Activities | |
| | Professional Development | Professional Development |
| | Student Academic Impact | Academic Impact |
| | Student Classroom Attitudes | |
| | Teacher Emotions | Emotional Impact |
| | Student Response | |
| | Culture | School Impact |
| | Paradigm Shift | |

Selective Coding.

In Stage 3, the selective coding process was carried out to yield a visual representation of the theory developed (see Figure 12). In this stage, it is helpful to make a ‘descriptive narration or representation of the central phenomenon of the investigation’ (Corbin & Strauss, 2014). In the selective coding stage, the researcher found the broad concepts that encapsulate the data by combining the main categories and/or subcategories that emerged in axial coding. Previous coding rounds were used by the researcher to explore, interpret and establish the interrelationships that allowed for the theory to be built. From the data, the researcher identified input factors which were classified as external and internal factors affecting CCSS-ELA implementation. The input factors vary according to certain conditions that teachers have mentioned during their interviews including school structure, teachers’ workload, and time for implementation-related activities. The input factors affect the processes of implementation which included teachers’ use of the Common Core English Language Arts Standards and professional development. The implementation of the CCSS-ELA standards leads to two main outcomes including school and stakeholder impacts

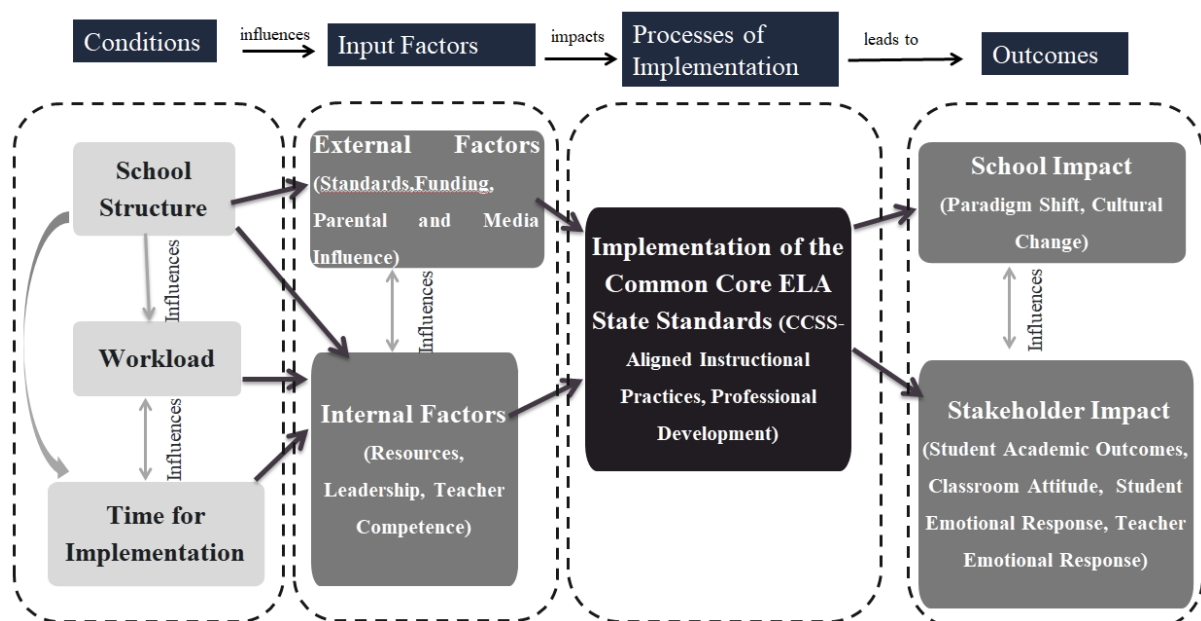


Figure 15. Visual representation of theory for Common Core ELA Standards implementation

Central phenomenon. The central phenomenon emerging from the data was the implementation of the Common Core English Language Arts Standards. The two major strategies employed in this district for teachers' implementation of the CCSS-ELA standards were professional development and teachers' use of Common Core aligned instructional practices. Professional development took various forms ranging from district wide professional development days to in-service training such as the support of instructional coaches for mentoring teachers. These professional development activities also varied in duration; late school start times gave teachers some hours in the morning for professional development while at the district level, professional development days were given for several Common Core related activities such as unpacking the standards (see Table 28). While the perspectives of teachers were mostly positive, there were a few negative views that were uncovered as well. Common Core aligned instructional activities included tasks (see Table 28):

1. To construct meaning such as analysis of a text, synthesis of information from different sources, relating activities to prior learning;
2. Small group activities such as the use of collaborative structures, mixed ability groups or pull-out strategy groups targeted to specific student groups;
3. Activities that included the use of technology such as the use of iPads or various Apps to differentiate, support or expand learning.

The activities were mostly student-centered which constituted a shift from previous classroom instructional strategies which were more teacher-centered. Although the main approach to instruction might have changed, teachers still used direct instruction in their classes, although for a shorter period of time. The workshop model was found to be widespread in the district, with teachers engaging in direct teaching for a short period of time following which students were assigned various types of engaging activities which were

largely collaborative in nature and mostly anchored in technology (see Table 28). Most teachers' perceptions about integration of technology have been positive, for example, a teacher stated:

ELs and socio-economically disadvantaged students actually receive maybe the greatest benefit from Common Core because with everything that I've just mentioned plus the advent of technology it's sort of leveling the playing field for those lower level students who might not have had the access that they had before.

However, some teachers did point out some concomitant issues they associated with technology use in their classrooms. For example a teacher referred to technology as being a distraction, "I would say with some students, because we have our one-to-one school with iPads that some of them have that iPad more as a distraction instead of a tool to help them." Another teacher emphasized the negative effect on students' attention span: "On the other hand though, I'm going to get on the bandwagon that everybody talks about is that sometimes like too much technology has really affected their attention span. It's affected their time and their time management."

Table 32

Common Core ELA Implementation Strategies and Sample Interview Excerpts

| Strategies | Excerpts |
|--|--|
| Professional Development | <ul style="list-style-type: none"> • So all of the schools have had instructional coaches throughout the entire district. So and what the instructional coach offers is professional development and offers to model a lesson or co-teach a lesson. Work alongside with the teacher and observe a lesson and get feedback. • No. I mean we did have a few-- like maybe during our late start times or districts PDs where they were kind of talking about it but it was nothing earth shattering or no here's the standards and here's the curriculum to go with it. • We also had various professional development where we were unpacking the standards, understanding them, breaking them down into their component parts and talking about how we can implement them. • Yeah. So every so often we have a full staff development day, so either the district will come in and give us choice sessions to choose from. So they're anything from content based and professional development to skills-based professional development. • So, how it was implemented in the school was through curriculum. Through a lot of training, a lot of in-services, a lot of conversations in this school especially, but in the district collaboration is stressed. |
| Common Core-aligned Instructional Activities | <ul style="list-style-type: none"> • For instance, claim evidence reasoning, writing. So we took, I just did this not too long ago, we took a scholastic magazine which is in high interest, current events. And then one was-- it was women, should women join the military draft? • Because it's so different then you know, and then your lesson, the district did this a lot of training on you know many lesson that-- your lesson should only be seven or eight minutes and then you should be moving on to workshop you know to the working groups or one-on-one conferences and so it was a very big shift of-- okay, how do I get my lesson to eight minutes, now? • And so, kids that are reading below their level, they have been able to group with other students around the school, and they get pulled, and they work in a really small group with an LLI teacher, and she's working on maybe for phonemic awareness to be working on comprehension skills. • To find articles on my own, I search for apps, the best apps for eighth-graders. I had to continually search for other things that would support the standards. And I still do today • We use our iPads basically on a daily basis for them to either research ideas or to show me their ideas through some form of technology. So we try to integrate that a whole bunch in the classroom. |

External Factors. The external factors are the influences emerging from outside the school sites that impact teachers' implementation of the Common Core English Language Arts Standards that were mentioned by teachers during their interviews. They include perceptions about the standards which were primarily descriptive, including words such as "comprehensive", "rigor", "convoluted". They also included teachers' perceptions about funding as well as parental and media influences. Teachers referred mainly to the availability or lack of Title I funding for various Common Core-related expenses (see Table 29). Perceptions about parental input were mostly negative; teachers perceived a lack of support and understanding from parents with regards to the standards. A teacher mentioned: "And the parents don't understand all of this. Because if the teachers took a while to get educated the populace isn't, which allows the whole subject to be politicized anyway."

Internal Factors. Internal factors encompass categories such as resources, leadership and teacher competence. Teachers mentioned their search for and availability of resources through the district, internet, peer collaboration and states that were early implementers of the Common Core. However, teachers also felt the lack of resources, particularly at the beginning of implementation, which led some to develop their resources (see Table 33). Leadership was not limited to the principals and district but was also exercised formally and informally by teachers. Teachers were entrusted with leadership roles such as that of department chairs whereas other teachers led the implementation through their informal leadership behaviors. Teacher competence includes the preparedness of teachers in teaching the standards, their abilities to fulfill various roles besides instruction such as classroom management and monitoring of student progress. It also includes their beliefs about the supports they receive, about students' ability to learn and about their self-efficacy.

Table 33

Main Factors affecting CCSS ELA Implementation and Sample Excerpts

| Main Factors | Sample Text Segments |
|------------------|---|
| External Factors | <ul style="list-style-type: none"> • Now, I will tell you that in the school because if you got a different schools that is a unique situation because we are not a Title 1 school, so we don't have extra supports through the funding and then but we're also don't have the wealth of the PTA of being paid for that. • The standards before were shorter and more simple but also they required less as far as rigor for the students so that's where I find them a little bit challenging is the standards are longer, there are fewer of them but they're longer, more convoluted • So some of the you know productive struggle that we like to see in math think the parents don't quite understand it. |
| Internal Factors | <ul style="list-style-type: none"> • No, textbooks, but a lot of them are just from my colleagues or I come up with them or sometimes we just research on the internet like bucket various activities that we just see that we like • And so we were kind of in there learning right beside the teacher. So I think that's helpful. If we're all kind of struggling a little bit with it and there some freedom to stumble • They've also kept teachers as coaches, digital coaches, instructional coaches. The district has changed the way in which it handles kids who formerly were home-schooled. • So do we need the standards for that? I don't think so. I think that just we're bad teachers if we don't do that you know. If we're good teachers we're going to teach them to the standard but in their own differentiated way. • So when I looked at it, it didn't just look like something some politicians made up that was going to help us be better than other countries, or smarter or more competitive in a world market. It was like this is what we want for our children. And then the other, you know perks will come, you know they'll score okay on the tests and they'll do, you know well, so. • I don't think we have tons of data. We felt almost there was-- we look every year, and it wasn't that we slid backwards. It was more like, we're just getting some usable data and more [site?] there was kind of felt like a little stagnation in the seventh grade. But then when we looked, we said, "Wait", but by the time they get to eight, they were looking good. |

School Impact. The implementation of the Common Core ELA standards had repercussions on the culture of a school and on the thinking of teachers. The Common Core was destined to be a fundamental change in the fabric of the educational system, with a major

shift in instructional practice. The teachers recognize the paradigm shift involved in the implementation of the Common Core State Standards (see Table 34). The culture of the schools have subsequently changed to safer environments where teachers are allowed to take risks without fear of punitive consequences. The culture has also become more collaborative which was formally encouraged when school principals and district leaders set scheduled times for meetings. Informal collaboration around the CCSS-ELA standards was also abundant among teachers where teachers shared resources and ideas with one another on a regular basis (see Table 34).

Stakeholder Impact. During their interviews, teachers spoke about students' academic outcomes, emotional response and classroom attitudes that emerged from CCSS-ELA implementation. While some teachers commented on the growth of students, others pointed out the initial adverse impact that the standards had on student performance in tests. However teachers recognize that irrespective of performance and socio-economic background of students, the implementation of the standards have brought out a development in the skills of students including in higher order thinking , critical thinking, presentation, and collaborative skills amongst others. Teachers also feel that the learning brought to the classrooms thanks to the Common Core is more anchored in real-world situations. The Common Core has brought more engagement to the classroom, so teachers perceive that students are learning in a productive and engaged atmosphere (see Table 34). The teachers are also able to engage various student groups such as English Learners by using differentiation and various supports such as technology. However, the shift brought about by the standards have also triggered teacher anxiety and stress. Teachers' emotional response to the standards have been mixed; teacher resistance, fear and stress as well as teacher enthusiasm have all been reported by teachers (see Table 34). Teachers also recounted that students on their side showed both positive and negative emotional responses to the use of CCSS-ELA aligned instructional

practices in the classroom; they experienced greater satisfaction with their work and took greater ownership of their learning. However, teachers also highlighted that some students, particularly some student groups such as English Language Learners struggled with the standards more.

Table 34

Categories of Impacts Resulting from CCSS ELA Implementation and Sample Excerpts

| Categories of Impact | Sample Text Segments |
|----------------------|--|
| School Impact | <ul style="list-style-type: none"> • And so with the Common Core, it allows you to do so many things that I feel the old standards didn't, and so that it's okay to take those risks. Hopefully someone's going to be working in a district where administration lets them do that. I do and I'm grateful for that. • Well with those like Wednesdays. That's a good two hours that we sit down--or actually two and a half hours, it's a while, where we can share--or even we just email each other and everyone is just so helpful • It's hard to speak specifically here and I have to speak more globally because the Common Core had been well implemented before I came into this site. I think it's just a shift in thinking and how teachers really approach Instructional delivery. |
| Stakeholder Impact | <ul style="list-style-type: none"> • Right, It was a bit overwhelming, to be honest, and it was just like, oh my gosh now you have a ` whole another thing piled onto your plate but it's proved to be like truly amazing and the kids love it and I love it • And that's what a lot of older teachers had said that when those standards came out, it was crazy and terrible. And the student feel that way for me maybe because I was a new teacher. I know that it felt that way for some of the other older teachers • I think we're very anxious. We were anxious if it is going to work. We thought of this, I mean-- and because we like seasons teachers, we'd seen that pendulum swing from whole language and phonics and then back to phonics and anyway, so we thought is this just going to be a fad? • Yes. There's always this adjustment period at the beginning and time to get used to the standards, get used to the platform and all the rest of it. • And it was only going to help develop deeper thinkers and more credible thinkers and that kind of thing. • You'll see readers workshop with kids laying on the floor and reading, a lot more noise but it's productive noise. So there's more student talks; students to students, students to teacher. |

Validation

The conceptual model for teacher CCSS-ELA implementation was validated by using principal interviews. Each principal interview transcript was coded for the occurrence of each category in the broad theoretical concepts illustrated in the grounded theory diagram, that is, the input, processes and outcome factors. The researcher coded for occurrence of concept for each school principal and not frequency so as to explore the number of school principals who mentioned each category during their interviews.

Overall, all the school principals mentioned all the broad concepts including: External Factors, Internal Factors, Implementation of the Common Core ELA State Standards, School Impact and Stakeholder Impact. The percentage of school principals who mentioned the specific categories within the broad theoretical concepts ranged from 50 to 100% (see Table 35). All the school principals mentioned 50% ($n = 7$) of the categories including Standards, Teacher Competence, Leadership, CCSS-Aligned Instructional Practices, Professional Development, Paradigm Shift, Student Academic Outcomes. The category in the external concept that was mentioned by all the school principals was the standards. The internal subfactors mentioned by all school principals were teacher competence as well as leadership, which encompass both teacher and principal leadership. All the school principals agreed on the two strategies used in the district for CCSS-ELA implementation, that is, they perceived that professional development and CCSS-ELA aligned instructional practices were used as the main methods of CCSS-ELA implementation. With regards to the impact of the implementation of these strategies, 100% of the school principals agreed that it led to a paradigm shift as well as improved academic outcomes for students, either in the form of skills development or actual academic growth (see Table 35).

Table 35

Percentage Number of Principals Mentioning Categories Outlined in Conceptual Model and Examples of Coded Principal Excerpts

| Broad Concept | Categories | % | Excerpts |
|---------------------------------|--------------------------------------|------|--|
| External | Standards | 100 | The one is the increased rigor...hmm..before with other testing methods, the rigor wasn't necessary to show mastery. |
| | Funding | 50 | So for example at my site we the school district provides four days a week of instructional coach and I pay out of my state funds an additional day. |
| | Parental and Media | 50 | So I think, the biggest maybe disadvantage for them is their parents didn't come from that process in the classroom and it's very different for them. |
| Internal | Teacher Competence | 100 | We have units and then we're really looking more at Master grading because now the grade books are set up by the teaching points and then through the daily meetings that teachers have with because you meet one to one and then a small group then the teacher can monitor their progress in those teaching points and they can assess them right then and there. Did they master. Did they not. |
| | Leadership | 100 | So I think it was really supporting those teachers who were eager that innovators supporting them so that people could see that it could work. |
| | Resources | 83.3 | And we just pulled what they did and did it in our classrooms cause we didn't have the curriculum yet and that it was just kind of an introduction here. |
| Common Core ELA State Standards | CCSS-Aligned Instructional Practices | 100 | Yeah but I mean I definitely think collaborative structures is a huge one meaning kids to interact and what that looks like and how to organize your classroom |
| | Professional Development | 100 | It was right at the same time that our school district adopted reading and writing workshop. And we were using a lot of CGI Cognitively Guided Instruction |
| School Impact | Paradigm Shift | 100 | Think it's just a shift in thinking and how teachers really approach Instructional delivery. |
| | Cultural Shift | 66.7 | There's a lot of focus on teacher trying, teacher risk taking. |
| Stakeholder Impact | Student Academic Outcomes | 100 | Well beginning of the common core to now you see growth |

| | | |
|----------------------------|------|---|
| Classroom Attitude | 66.7 | However we've seen huge growth in engagement, one is student efficacy |
| Student Emotional Response | 83.3 | I think that it's because it feels easier than the old way in some strange way it feels easier to kids at first and then when they really understand what you are asking them to do they understand that it is not so easy so I think that initially they they weren't scared of it but in the long term it is little bit more challenging to get to a place of higher understanding. |
| Teacher Emotional Response | 66.7 | I know there's a lot of anxiety. Anytime there's a change change is not met with eagerness all the time. |

Further validation of the grounded theory was established through member check by sending a summary of the theory and its visual representation to a participating school principal and an elementary teacher who both agreed with the model. The researcher also sent the same information to two of her peers; one of them is a teacher in an elementary school in a district in the same county as the one in which the current research has been carried out while the other worked as a teacher in Southern California and is now a faculty member in higher education. Both peers agreed with the model. The elementary teacher mentioned the Benchmark Standards which was not under investigation in the current study but provided some great ideas for future research.

Peer review was carried all throughout the qualitative coding in the data analysis process. The researcher discussed emerging codes with the methodologist who is part of her dissertation committee, with particular emphasis on codes that might be ambiguous. Disagreements were discussed, ironed out until consensus was met about the emerging codes. The methodologist also checked that the research process and analytical methods used were sound and suggested improvements which were implemented by the researcher.

Explanation of Quantitative Findings with Qualitative Data

Quantitative data analyses relating to Research Question 1 showed that the difference in the implementation of the CCSS-ELA instructional strategies by level of study was

statistically significant. Specifically, the post-hoc tests revealed that the difference in implementation between the elementary level and high school was statistically significant.

The researcher carried out thematic analysis of the teacher interview transcripts. Opinion and beliefs of teachers pertaining to particular levels of study were coded and labelled as level of study. Some of the excerpts for elementary and high school teachers are shown in Figure 12.

The qualitative thematic analysis allowed the researcher to explore the reasons for the perceived differences in the opinions and beliefs of teachers teaching at the elementary and high school level, which can explain the differences in implementation. An elementary school teacher thought that the standards placed more of a burden on students in their classrooms as the children were younger. Another teacher referred to the standards at elementary level as being too “vague.” At the high school level, the beliefs of the teachers were generally more positive; teachers believed that students at that level were more prepared for the standards for various reasons, for example, because of an appropriate middle school education or because of the focus that high school students maintained on their goals beyond high school graduation (see Figure 16). Previous research (Beets et al., 2008; Spillane & Zeuli, 1999) has reported that teacher opinions and beliefs impact fidelity of implementation, which has also been confirmed in the current research through hierarchical linear modeling. The difference in teacher beliefs and opinions between the elementary and high school level had contributed to the difference in CCSS-ELA implementation revealed in the quantitative analysis.

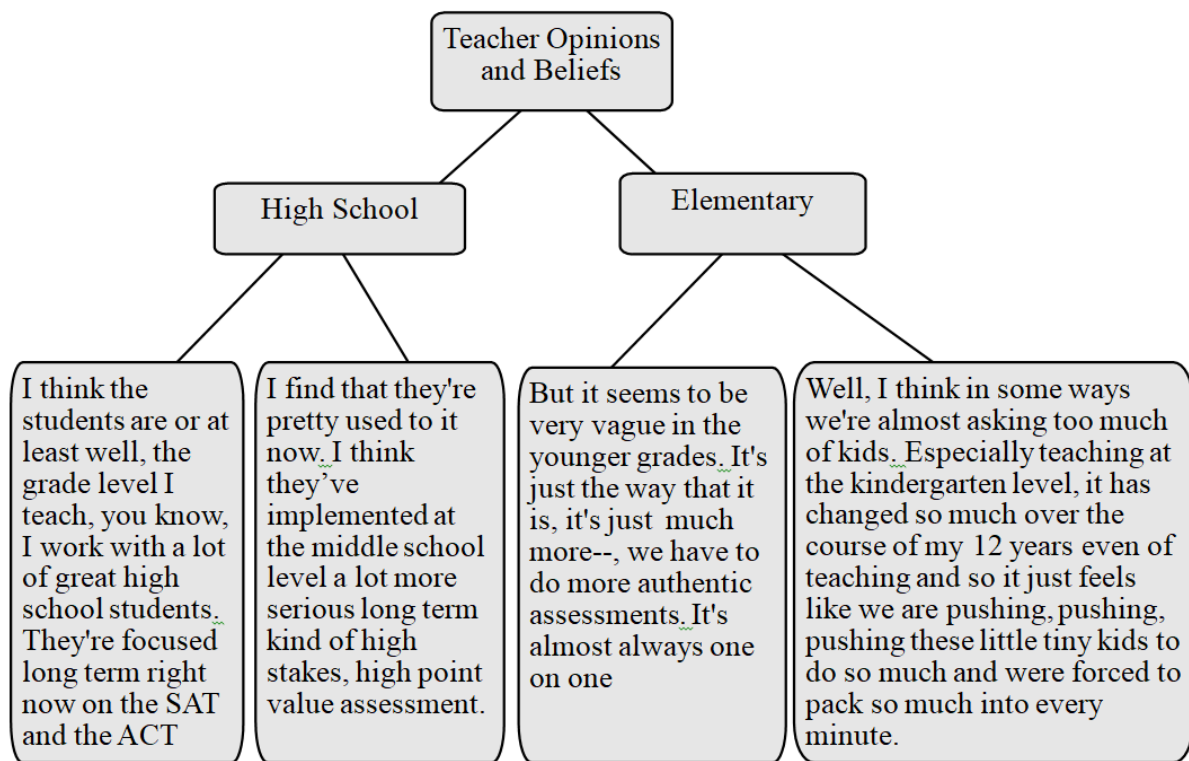


Figure 16. Excerpts showing elementary and high school teachers' opinions and beliefs about levels of study.

The quantitative analysis for Research Question 1 revealed that there was also a statistical difference between teacher transformational leadership at various levels of study. Post-hoc tests showed that the difference lied mainly between the elementary and high school level. The teacher interviews revealed some of the transformational leadership behaviors of high and elementary school teachers. High school teachers seemed to embrace the Common Core as a common goal to be achieved, which is an important characteristic of the transformational leader (Bass & Avolio, 1989; Bass, 1990). This was clearly articulated by one of the high school teachers interviewed:

So, I think anyone implementing standards based reform, as long as people are treating it as we're all in this together and communication to the important stakeholders, which really are our parents, at least in this particular school, we were

very good about communicating to parents what the transition was going to be, what an English classroom used to look like, what it's going to look like.

Other transformational leadership behaviors reported by high school teachers included optimism with regards to the changes brought about by the standards and supporting other teachers in making the shift that the Common Core calls for. One of the teachers showed both optimism and the willingness to help other teachers:

Some of them are still struggling. I mean, I'm younger so I feel like I'm a lot more tech-savvy anyways so they definitely have struggled and even still do struggle like I'm always showing them how to do it but it's nothing that--everyone can do it.

Some of the elementary teachers showed optimism as well. For example, a teacher claimed that:

And the idea of a common, kind of a common curriculum across many states made a lot of sense or even though the United States is such a huge place with so many different cultures and types of people. I still think as you know, but most of us can agree like these are some critical things we want students all across our country to have access to equally.

Other teachers distinguished themselves by acting as role models for their peers; they showed the motivation to learn and to grow. A teacher demonstrated satisfaction to have moved to the district because it offered opportunities to grow:

When I came to [Current District] I remember thinking, these people have the answers, I'm growing, I'm growing again and that feeling of just being like nobody has the answer went away, it was like people have the answer and are helping me grow and I feel like I'm becoming a better educator

However, elementary school teachers generally seemed to perceive the goals of the Common Core as being more difficult to achieve due to the lower developmental level of the

children at that younger age. A few elementary teachers reported lower academic expectations of their students. One of the elementary teachers highlighted her observation of student performance which made her question the high expectations placed on elementary school students:

I had a lot of kids shutdown, and I had some kids that just couldn't move off problems because they just couldn't answer the question. And so I just felt like that was a lot of pressure on kids that-- especially at this age.

From quantitative analyses for Research Question 1, the difference in CCSS-ELA implementation and teacher transformational leadership in Title I and non-Title I schools was not found to be statistically significant. The teacher interviews provided some explanations for the common level of implementation across Title I and non-Title I schools across the district. One possible explanation is the additional funding provided to Title I schools which provided extra supports that help overcome the barriers that special students groups such as economically-disadvantaged students experience. This is in line with the grounded theory developed as part of the study, which allowed funding to be identified as one of the external factors affecting implementation of the CCSS-ELA standards. A teacher explained:

So our school gets a lot of funding, thankfully and a lot of the funding is wired according to technology for the students. Our kids get a laptop computer checked out to them as if it were a library book at the beginning of the school year and they're able to bring it home. They can do a lot of their work on it.

The lack of statistical difference between transformational leadership demonstrated by teachers in Title I and non-Title schools can be explained by the additional supports that Title I schools receive through supplementary funds. These financial supports offered teachers in Title I schools opportunities to lead despite the constraints that come with teaching in schools with higher proportion of students on free and reduced lunch. The teachers in Title I schools

had the opportunity to receive more instructional coaching as confirmed by one of the school principals:

So some school sites with a high English language learner population have higher numbers of days with a coach looking cause a lot of our funding comes through our EL funding so is wrapped into this with the curriculum is also the language that comes along with that and how to support our English language learners.

These findings support the idea that the district has used funding effectively which has nurtured transformational teacher leadership and resulted in the implementation of the CCSS-ELA standards across both Title I and non-Title schools.

Quantitative analysis through Hierarchical Linear Modeling to address the third research question showed that two dimensions of teacher transformational leadership affect implementation fidelity of the CCSS-ELA implementation when two variables, teacher opinions and beliefs, and teacher certifications, were accounted for. The grounded theory developed as part of this study provided support of the causal effect of

1. Teacher opinions and beliefs on CCSS-ELA implementation of instructional practices

This variable was embedded in the grounded theory model as part of the internal factors impacting implementation.

2. Teacher certifications on CCSS-ELA implementation of instructional practices

Teacher certification was also included in the grounded theory model as part of the category “teacher competence” of the internal factors impacting implementation.

3. Teacher transformational leadership dimensions on CCSS-ELA implementation of instructional practices

The hierarchical linear modeling (HLM) showed that some specific dimensions of transformational teacher leadership were major variables affecting the implementation CCSS-

ELA aligned instructional practices while the qualitative data provided additional information about the specific teacher leadership behaviors that played a part in CCSS-ELA implementation. Teacher leadership was included as part of internal factors in the grounded theory model.

Teacher leaders reported specific behaviors that aligned to the two transformational leadership dimensions affecting implementation, that is, behaviors focused on individualized consideration and inspirational motivation. The teachers demonstrated individualized consideration in their leadership behaviors when dealing with their peers but also their students. Teachers used differentiation in their lessons, showing their ability to accommodate their teaching to meet individual student needs. For example, a teacher explained: “But if someone has mastered that skill then I can move on. So it also helps me adjust to the level of the student because I have a lot of levels in my classes.”

Qualitative analysis of teacher interviews and content analysis of open-ended survey questions also gave clues as to the factors which support teachers in giving individualized attention to students. Instructional coaching allows teachers to give more individualized attention to their students. A teacher emphasized the role of the coach in individualized instruction: “So she's here on Mondays and Fridays. So they plan, they look at their data, how they are going to meet the needs of all of their learners.” Teacher support other teachers to change and grow for example by supporting them with technology use or by sharing resources.

Teachers demonstrated inspirational motivation by showing their commitment to the goals of the common core, by acting as role models and demonstrating their optimism. A teacher pointed out her goal for the English Learners: “The goal is really to have them expanding and then out of the EL system.”

CHAPTER 5: DISCUSSION

The previous chapter presented the quantitative and qualitative results addressing the five research questions of this study. Chapter 5 consists of these four respective sections: (a) Discussions of findings; (b) Implications and recommendations for practice; (c) Future research; (d) Conclusion.

The first section in this chapter includes in-depth discussions of the findings obtained in Chapter 4 for each research question; the findings are linked to previous research carried out in the field, commonalities and differences are explained within the context of the specific district participating in this study. In the third section, the implications of the study results to practice, that is, the implementation of educational reform, particularly of standards-based reform, are discussed and recommendations are given. In this section, the desirable practices implemented in the district are also acknowledged and highlighted. Recommendations are also drawn to support the district in promoting teacher leadership and better CCSS-ELA implementation in various contexts. In the fourth section, areas of future research are suggested which add to the current study or can be interpreted in combination with the current research.

Discussion of Findings

Previous researchers have investigated the two main topics of this dissertation, mainly the implementation of Common Core-aligned instructional practices (Chandler-Olcott & Zeleznik, 2013; Coleman & Pimentel, 2012; Hutchison & Colwell, 2014; Olson et al., 2015; Porter et al., 2011; Tallerico, 2013) as well as teacher leadership (Amore et al., 2015; Beachum & Dentith, 2004; Crowther et al., 2008; Crowther et al., 2002; Harris, 2003, 2005). This study served two main purposes which were broken down into five research questions; the first was to contribute to the body of research in the field and address research gaps by examining these constructs in various school settings, find the associations between them and

establish whether a causal relationship exists. The second purpose of this study was to explore the process of CCSS-ELA implementation from the perspectives of teachers, by examining the barriers, supports, and impacts of CCSS-ELA implementation and building a theory emerging from the teacher interview data.

Research Question 1

The first research question of this study was: How does teachers' fidelity of implementation of CCSS-ELA aligned instructional strategies, and their transformational leadership differ by school study level and Title I status?

The difference between teachers' fidelity of implementation of CCSS-ELA aligned instructional practices at various levels of study was found to be statistically different, with highest mean implementation scores at the high school level and ranked in a decreasing order across middle and elementary school levels respectively. This supports previous research conducted about the Common Core which shows that teachers face the issue of discrepancy at various grade levels (Calkins et al., 2012). Previous research (Calkins et al., 2012) shows that intellectual development is progressive, happening over time and across subjects, which may explain why there is the highest implementation at the high school level, as the students have had time to develop their cognitive skills more and are better prepared. This may have, in turn, facilitated teachers' implementation of strategies that require higher order thinking skills. Post-hoc tests showed that the larger difference lied mainly between the elementary level and the high school level. The larger difference in implementation between the elementary and high schools was further investigated through hierarchical linear modeling, which identified positive teacher beliefs and opinions as being a confounding variable impacting higher fidelity of implementation positively. These findings are consistent with previous research showing positive associations between teacher beliefs and attitudes and

implementation fidelity of interventions and innovations have emerged over the years (Bruce & Ross, 2008; Rimm-Kaufman & Sawyer, 2004).

Qualitative analyses provided insight into these differences in beliefs and attitudes between the elementary and the high school level teachers which may have impacted the fidelity of implementation of CCSS-ELA aligned instructional practices of the teachers at these two levels of study. High school teachers believed that students were more motivated to learn due to their focus on attaining their academic goals such as passing college-preparedness tests, their higher developmental level and their familiarity with the requirements after having gone through a good middle school education. In contrast, elementary school teachers expressed concern about the amount and complexity of the work called for by the standards for their students who are developmentally less mature. Teachers seemed to believe that the early years should be focused on building the foundation rather than tackling the standards heads-on, as this will help them build on it in the later grades. This is in line with a study which was carried out by Coburn (2006) on the implementation of the California Reading initiative who reported that the educators in the early grades felt that some strategies did not apply to them. However, it contrasts with the findings of Matlock et al. (2016) which showed that teachers' attitudes tended to become increasingly negative as grade-level taught increased due to a perceived increase in stress level due to more testing in the higher grades. However, the same study also showed that early career teachers had better views of the CCSS and its implementation as compared to veteran teachers (Matlock et al., 2016). The high school teachers in the current sample had been teaching ELA for less time, which may have given rise to the more positive beliefs and opinions observed at that level as explained in the next section.

Previous research (Beets et al., 2008; Spillane & Zeuli, 1999) has reported that teacher opinions and beliefs impact the fidelity of CCSS-ELA instructional practices

implementation. An examination of the demographic characteristics of the sample of survey teacher participants provides a probable contributing cause for this difference in beliefs; the teachers at the high school level had a lower median number of years of experience in teaching ELA which may have affected implementation. Some research has reported the lack of effect of teacher background such as education, years of experience, and gender on intervention implementation fidelity (Justice et al., 2007), while others have been conclusive about the impact of teacher characteristics (Berends, 2000; Hubbard & Datnow, 2000; Huberman, 1989; Paechter, 2003). The teacher interviews showed that new teachers who had received common core pre-service training at the high school level or who had just started teaching reported more openness and optimism towards the benefits of standards. Previous research has shown that teachers' beliefs in a particular program's benefits and their level of comfort in implementation can affect their implementation fidelity (Beets et al., 2008; Little et al., 2013). Teachers' beliefs about academic subjects and their interpretations about what are satisfactory expectations for their students also have an impact on academic interventions (Tschannen-Moran & McMaster, 2009). High school teachers were less experienced, with a lower median number of years of experience teaching ELA as compared to high school teachers which may have caused high school teachers to be more open to change, to hold higher academic expectations for their students and to show more faith in the instructional shift called for by the standards which, in turn, increased the CCSS-ELA implementation.

The differences in implementation of CCSS-ELA aligned instructional practices by school Title I status was not found to be statistically significant. This implies a positive widespread CCSS-ELA implementation may it be in Title I and non-Title schools. This finding is in contrast to previous research results which have highlighted the load of challenges that Title I schools additionally faced when mandated with the Common Core that not only calls for a complete pedagogical shift but huge monetary investments in upgrading

technology and other resources. For example, a study gathering perspectives of superintendents showed that superintendents in high poverty districts believed that these districts were less prepared to implement the CCSS and experienced a lack of technological support (Finnan & Domenech, 2014). Policies fail when stakeholders experience time and resource constraints hampering implementation efforts (Coburn, 2001). One of the broader influences that may have promoted the equitable implementation of the CCSS standards was the additional allocation of funding to Title I schools. The Local Control Funding Formula (LCFF) was introduced almost at the same time as the rolling out of the standards in California (McLaughlin et al., 2014). According to the teachers, the district under study had invested significant funds in Common Core-related processes such as professional development; Title I schools were thus able to benefit from perks such as having instructional coaches more frequently at their school sites, purchase of more resources and the technological devices needed to support teachers in differentiating their lessons to meet diverse students' needs. The importance of funding also appeared during the development of the qualitative grounded theory for this study; funding was identified as one of the external factors affecting implementation. The content analysis of responses to open-ended questions also validated the value of financial resources for example by showing that instructional resources were one of the most commonly mentioned supports in the implementation of the Common Core State Standards. Scholarly literature has reported that instructional coaches support capacity-building needed for implementation by tying teacher practice to on-going curricular and instructional reform, thus impacting school infrastructures (Coburn & Woulfin, 2012; Hopkins et al., 2013). Teachers in Title I schools in this study recognized the value of having more time with instructional coaches, which may also have contributed to similar implementation as non-Title schools.

The teacher transformational leadership across various levels of study was found to be statistically significant. These findings support previous research by Stone, Horejs, and Lamas (1997) that showed that teacher leader responsibilities differed by level of study. Post hoc tests showed, once again, that the difference lied between the elementary and high school level. Leadership scores were higher for the high school level teachers than the elementary teachers. This is not surprising since teachers at the elementary level did not report any formal leadership roles outside their classrooms whereas, at the high school level, teachers took roles such as department chairs. Teacher leadership requires concrete action towards creating leadership teams and offering leadership roles (Muijs & Harris, 2007).

Transformational leaders embrace a common vision for the school and high expectations for followers (Bass, 1985b; Bass & Avolio, 1989). In the research sample, teachers at the elementary school level expressed lower academic expectations of their students. Research shows that elementary school teachers have numerous roles in addition to teaching academics, ranging from tying students' shoes to supporting their social skills, which may lead to other leadership activities outside of the classroom being viewed as "extra" (Angelle & Schmid, 2007). Teachers at the high school level reported helping other teachers in their CCSS-ELA implementation for example by coaching colleagues on technology use. This is an important component of transformational leadership as defined by Burns (1978) who argued that transformational leaders have the ability to attend to followers' needs but also stimulate new motivations and desires in them. Teachers at the elementary level also mentioned sharing ideas and resources with one another, but the peer support mentioned seemed limited in scope and did not include actual peer mentoring.

Teacher transformational leadership by school Title I status was found to be non-significant. This implies that the difference in teacher transformational leadership did not vary based on the percentage of socio-economically disadvantaged students in this district.

Teachers in both types of school were either given opportunities to lead or/and were leading informally. The district and school sites provided the supports needed for teacher leadership to be nurtured in both types of schools. First of all, teachers in Title I and non-Title I schools were allocated time for various CCSS-ELA implementation processes such as time for collaboration and planning. The content analysis emphasized time as one of the supports in CCSS-ELA implementation. According to Harris (2005), one of the factors affecting teacher leadership is time; he posits that teachers need to have scheduled time to collaborate on various issues such as school improvement plans. Although a majority of teachers perceived that time was a constraint, they also acknowledged the time supports they had been given such as release time, scheduled Professional Learning Communities (PLC) meetings and late starts in the morning which allowed them to work together around activities related to the Common Core State Standards. Teachers in both types of schools also received professional development in various forms which created opportunities for them to be mentored and to develop their potential as leaders of change.

Research Question 2

The second research question of this study was: What is the relationship between teacher beliefs and opinions, teacher fidelity of implementation of categories of CCSS-ELA aligned instructional practices and teacher transformational leadership dimensions?

The correlation between two categories of CCSS-ELA aligned instructional practices (small group activities), and one dimension of transformational leadership (individualized consideration) was weakly negative and statistically significant. The process of grounded theory development allowed the researcher to identify culture change as an impact of CCSS-ELA aligned instructional practices. School cultures have become more collaborative and encouraging towards change as teachers feel safer to share their views, concerns, and practices with peers probably because those views have been institutionalized by CCSS and

encouraged by school principals. This trend is also happening at the classroom level in the implementation of the standards as teachers are embracing new strategies. Although there is also a lot of differentiation happening in the lessons, it was interesting, though not surprising, to discover that teachers who use more group activities with their students scored lower on individualized attention. This implies that teachers were capitalizing on the social interactions between students to promote learning and giving less attention to students individually. As part of the qualitative analysis for this study, it was found that teachers expressed the necessity for teacher aids or more time from teacher aids to support the learning of their students. They also highlighted the difficulty in conducting one-to-one student conferences with students; small group activities, on the other hand, allows them to meet various standards at one go. However, it is important to note that the negative correlation between small group activities and individualized attention was weak. Qualitative analysis showed that teachers were using some differentiation strategies when assigning group work for example by using mixed ability groups.

There was a positive association between positive teacher beliefs and opinions and three dimensions of transformational leadership; idealized influence, idealized behavior, and individualized consideration. Idealized influence involves transformational leaders acting as role models and earning the trust of followers. This implies that the teachers in the sample who had a positive opinion about their school, and the CCSS reform were more likely to act as role models to their students and their peers. This is in line with previous research which reports that teacher leaders serve as examples to emulate, may it be to their peers or to their students (Barth, 2001). Teacher beliefs and opinions were weakly correlated with individualized consideration, which refers to the leader's consideration of a follower's individuality. Transformational leaders link priorities of every follower to the organizational progress (Bass & Avolio, 1994). Teachers in this study showed awareness about the needs of

their students, may it be the need for more classroom resources or more time as outlined in the content analysis carried out by the researcher. Positive teacher beliefs and opinions, for example, about the potential of economically-disadvantaged students to thrive can drive action to nurture student growth irrespective of the challenges. Many teachers in this sample believed that all students could learn; however, the required tools are necessary to help them succeed.

Research Question 3

The third research question was: How do the dimensions of transformational leadership of teachers impact the fidelity of implementation of CCSS-ELA aligned instructional practices?

The hierarchical linear regression revealed two dimensions of transformational leadership, inspirational motivation, and individualized consideration as being the strongest predictors of fidelity of implementation of CCSS-ELA aligned instructional practices. There was a significant amount of variability in teachers' implementation of CCSS-ELA aligned instructional practices that was also explained by classroom level variables including teacher certifications and teacher opinions and beliefs. However, school-level variables such as school Title I status and level of study did not have a significant impact on teacher implementation of CCSS-ELA aligned instructional practices. It should be noted that the Brown Forsyth test carried out to find the differences in implementation of CCSS-ELA aligned instructional practices between the elementary, middle and high school level was only borderline significant. Furthermore, it does not take into consideration various other variables that can impact implementation by teachers at different levels of study and the interactions between them. When included in the current model, the level of study variable, that is, implementation of CCSS-ELA instructional practices by elementary, middle and high school teachers was not found to be statistically significant. Previous research has reported

that high poverty schools have to face many additional hurdles in their implementation of the CCSS (Finnan & Domenech, 2014). However, despite these difficulties, which were explored in details in the qualitative analysis of this study, there has been mostly uniform implementation across high and low-poverty schools within the district under study. School-level variables did not give a statistically significant result when included in the HLM model. This implies that the approach taken by the district and individual schools in CCSS-ELA implementation through the provision of training and resources allowed for equitable implementation. This is reassuring because there is not a lot that a school can do to change school level variables such as student composition.

Teacher beliefs and opinions and teacher certification were mediating variables between the impacts of two dimensions of teacher transformational leadership on CCSS-ELA implementation. Teacher beliefs and opinions had a positive relationship with CCSS-ELA implementation. This is in line with previous research which reports that teachers' fidelity of implementation is associated with teacher/intervention alignment, teacher beliefs (efficacy) and previous practices (Bruce & Ross, 2008; Rimm-Kaufman & Sawyer, 2004). However, it contrasts with other studies which report no relationship between teacher beliefs and their implementation of reading strategies (Chou, 2008; Khonamri & Salimi, 2010). Support for the impact of teacher beliefs and opinions were also provided by the qualitative analysis of this study.

Teacher certifications were found to be the mediator variable with the strongest prediction value on CCSS-ELA aligned instructional practices. Teachers who had multiple certificates showed higher implementation as compared to those with single credentials. Certification status measures teacher qualifications through knowledge about the content of the subject and about teaching and learning. During the 1980s, there was low demand for teachers and all teachers had certified status, hence there was too little variability in

certifications to assess effects in large-scale studies (Darling-Hammond, 2000). However, the wide variety of certification options available in the state of California today makes consideration of types of teacher certifications and pathways to certification relevant and important in assessing impact on reform implementation. For example, elementary teachers can earn a multiple subject teaching credential through a district internship program, the Peace Corps or a university program amongst others (Commission on Teacher Credentialing, 2017) which all constitute different experiences which can affect teachers' teaching practice. An example is the National Board Certification which has been shown to improve teachers' quality of teaching practice (Gitomer, 2007; Goldhaber & Anthony, 2007; Loeb, Elfers, & Plecki, 2010). The qualitative analysis in this study showed that many experienced teachers but also and particularly, new teachers felt more prepared to address the standards due to their teacher credentialing programs which were anchored in the standards.

Two dimensions of transformational leadership; inspirational motivation and individualized consideration were included in level 2 of the HLM. The negative correlation between individualized attention and implementation of CCSS-ELA aligned instructional practices shows that as teacher leaders implement the CCSS-ELA aligned strategies; they tend to pay less attention to the individual characteristics of their students or peers. This may be attributed to the greater emphasis on collaborative work which the standards called for; students were often placed in small groups for various activities such as projects. The teacher would then teach to the group. Previous research shows that leaders who exercise individualized consideration treat their followers as individuals, gets to know them well and listens to their concerns and their ideas (Hoffman & Frost, 2006; Kirkbride, 2006; Sarros & Santora, 2001). The qualitative analysis revealed that teachers struggled to find one-on-one time with students such as conducting student conferences, due to various difficulties such as the sheer number of standards and the depth of work that was required to cover the standards.

The difficulties in teaching special student groups such as English Language Learners have been highlighted in research reports and articles about the Common Core (Johnson & Wells, 2017; Ramirez, 2015). Content analysis revealed that some of the barriers faced by teachers in implementation were meeting individual student goals, catering to their unique needs and assessing their individual students for mastery. When this study was conducted, teachers were only just starting to focus more on English Language Development (ELD) standards.

Despite the negative correlation observed between individualized consideration and implementation of CCSS-ELA standards, the qualitative analysis for this study did show some instances where teachers demonstrated more individualized consideration while using CCSS-ELA aligned instructional strategies. For example, the qualitative analysis of teacher interviews reported that teachers use differentiation in their classes, including when using small group instruction, for example by using mixed ability groupings and scaffolding strategies; this shows some awareness of the individual strengths and weaknesses of their students. Furthermore, they interact and give regular feedback to their students. This is in line with previous research by Bass (1998) which indicates that transformational leaders who demonstrate individualized consideration interact with their followers and are aware of their particular concerns. Teachers, for example, demonstrated awareness of the increased difficulty posed by the standards for specific student groups such as English Language Learners and economically-disadvantaged students while others additionally expressed reflective ideas on how to address this challenge. Transformational leaders accept individual differences and allocate tasks based on personal affinities (Conger, 2014; Simić, 1998). Hence, while the quantitative analysis showed that as teachers showed less individualized instructional when implementation CCSS-ELA aligned small group activities increases, the qualitative findings provided valuable findings of some instances where differentiation was also embedded within assigned collaborative tasks.

In the HLM model, the inspirational motivation dimension of transformational leadership was found to be positively correlated with CCSS-ELA aligned instructional practices implementation. Leaders using inspirational motivation express themselves articulately, in a thrilling and persuasive manner, about a vision of the future that followers can embrace and strive towards (Bass, 1998). Although some teacher resistance was noted, the qualitative analysis also unveiled that teachers focused on the long-term benefits of implementation, acting as role models by showing resilience to the barriers that they had to face during the early days of CCSS introduction. Leaders should be inspirational to increase followers' efforts and commitment (Yukl & Van Fleet, 1982). Teachers in the sample were likely to inspire their peers by maintaining their focus on the goal of student learning despite the chaotic conditions that characterize the beginning of educational change.

It is possible that the common goals expressed by the teachers in the sample emerged from clarity from the district. The district and school sites introduced the common core incrementally and made expectations clear to teachers; for example, teachers showed awareness about the expected emphasis on writing. According to Kirkbride (2006), shaping expectations, portraying the future as reachable, and reducing convoluted matters to key issues using simple language are indicators of inspirational motivation. Thus, the districts and school principals also exercised inspirational motivation through various processes, for example, by working with teachers on breaking down and focusing on essential standards. Teachers also demonstrated academic optimism about the implementation of the standards, concepts that are subsumed by inspirational motivation; they acknowledged that the standards added a level of difficulty to student learning although most teachers perceived the impact of the standards as positive in improving student academic performance and in the development of a range of skills. This supports previous research which reported that transformational

leadership is positively correlated with optimism (Gooty, Gavin, Johnson, Frazier, & Snow, 2009).

Research Question 4

The fourth research question of this study was: What are the impacts, supports, and barriers experienced by teachers in the implementation of the CCSS-ELA standards.

Of the 14 different impacts of the CCSS-ELA that teachers mentioned, only 1 of them was negative. The three most commonly mentioned impacts of the CCSS-ELA standards mentioned by teachers were positive and included the development of cognitive skills, academic performance and students' writing skills.

Impacts. Teachers believed that the CCSS supports student learning, but acknowledge that this may not have been reflected in student grades yet; however, they show optimism about the long-term impact on student academic achievement. Their views support the concept of an implementation dip which characterizes the initial phases of a change such as the Common Core State standards. The dip is accurately a decrease in performance and confidence as schools face an innovation that requires novel skills and understandings (Fullan, 2016). The literature has offered mixed views about the impact of the CCSS on student performance. The Common Core State Standards are viewed as too ambitious which will increase the number of students failing (Ravitch, 2016), whereas the Hechinger Report (Mathewson, 2015) argues that the achievement gap may increase at the beginning stages of implementation but that in the long run, the Common Core will contribute more significantly to leveraging the playing field than the tests that were administered before. Fidelity of implementation of the Common Core State Standards and resultant national computer-based tests promise to generate first-rate learning for every student (Conley, 2011). Twelve out of 44 teachers believed that the Common Core would lead to better student academic performance. The districtwide focus on writing may improve student performance. Research

shows that greater attention on writing, as well as better coordination from CCSS implementation in K-12, contribute to increased student proficiency in the long run (Chandler-Olcott & Zeleznik, 2013).

The perceived impacts of the CCSS included the development of a range of skills. There have been scholarly supports reported over the years about the benefit of the Common Core State Standards to the development of students' skills (King, 2011; Kober & Rentmer, 2011). The skills that teachers mentioned included writing, speaking, real-world, problem-solving, creativity, collaborative, and cognitive skills. This implies that teachers believe in both impacts whose benefits may be seen in the short term such as increased collaboration and writing as well as longer-term impacts such as real-world skills that will support them in their future academic learning or career. The views of the teacher participants are aligned with the arguments of the designers of the common core who claimed that the standards were created to ensure that students graduating from high school are adequately equipped with the skills and have acquired the knowledge needed to achieve successfully in college, career and their life, irrespective of the geographic location of their residence (National Governors Association Center for Best Practices & Council of Chief State School Officers, n.d.). Teachers mentioned writing and cognitive skills at a higher frequency. Previous research provides accounts of limited amounts of writings and small decreases in the volume of writing over the past decade, although the foundational amount of writing was not particularly capacious to start with (Applebee & Langer, 2009; Cutler & Graham, 2008; Gilbert & Graham, 2010). However, 10 out of 48 teachers in this study have reported the Common Core implementation's impact on writing in the classroom; not only did they report an increased amount of student writing, but also broader types of student writing. This implies that the decline in writing that has been observed over the years has been offset to some extent in the district under study through a focus on writing which was initiated as part

of the implementation process of the CCSS. Twenty-two out of 48 participating teachers mentioned the cognitive impacts of the CCSS-ELA standards for example, by highlighting student gains in critical thinking, reasoning, and inquiry. Research by Porter et al. (2011) illustrates the increased rigor called for by the standards through examples of cognitively-demanding processes involved in standards implementation such as requirements to “demonstrate understanding” in Mathematics and to “analyze” in ELA. These higher-order thinking demands have to find their place in a culture that often associates these cognitive processes to the higher performing students; a few teachers, in their interviews, expressed the view that the standards were too complex for the students. Several studies have also brought to the fore similar teacher doubts about the appropriateness of higher order thinking for low-achieving students (Weinstein, 1996; Zohar, Degani, & Vaaknin, 2001; Zohar & Dori, 2003).

Barriers. Teachers mentioned 14 categories of barriers in response to one of the open-ended questions in the survey about barriers encountered in the implementation of the CCSS-ELA. The three barriers most commonly mentioned were time, resources and difficulty for students. However, time to collaborate with colleagues and to plan was also perceived as supports by teachers. This implies that some effort was made by the district and school sites to schedule time for teachers to meet, plan and discuss CCSS-related matters, however 11 out of 48 teachers felt that time was still a constraint, for working on the curriculum, for collaborating and lesson planning, and for covering all the standards at the classroom level. This supports previous studies which have showed that time was limited for various CCSS-related activities such as to develop curricula and instructional resources (McLaughlin et al., 2014) or for instructing students for example on writing (Hall et al., 2015).

Teachers also pointed out the lack of resources as a major challenge to CCSS implementation; they found the resources at their disposal out-of-date or not aligned to the

standards. They had to spend time and effort in finding the resources, online, from other teachers or early implementers such as the State of New York. They expressed the challenge of not having a set curriculum given by the district although some teachers also saw this process as beneficial in getting teachers to work together on curriculum development. This finding provides support to previous research that has also reported a lack of resources as a barrier to Common Core implementation (Gewertz, 2012; Hall et al., 2015). However, research shows that over time, resources became more and more available. Studies by the Bill and Melinda Gates Foundation carried out in 2013 and 2015 respectively reported that two-thirds of all teachers in the 2015 study perceived digital and non-digital resources as available and enough to support student learning of subject standards which represented an increase of 55% from their initial findings in the 2013 study (Bill and Melinda Gates Foundation, 2015). This may be the reason for which teachers in the current study have also reported instructional resources as support in their implementation of the Common Core State Standards. Although lack of resources was a major problem at the beginning, as resources were increasingly available from publishers, districts, peers and online, they acted as a support in implementation. The teachers also highlighted that the implementation of the standards added a level of difficulty to student learning. This aligns with previous research which shows that teachers perceive the standards as imposing unrealistic expectations for students who may not be developmentally ready or adequately prepared for the standards (Hall et al., 2015).

Supports. There were eight support categories mentioned by teachers, including technology, student data, professional development, peer support, instructional resources, time for collaboration and planning and time for individualized attention. An overwhelming number of teachers mentioned professional development as support. Professional development took various forms ranging from professional learning communities, workshops

or instructional coaching sessions. Research by Darling-Hammond (2009) has reported the lack of effectiveness of workshop-style professional development activities which do not give teachers the opportunity to engage in the practices about which they are learning and do not significantly change their beliefs. Scholars have also suggested that professional development programs that give teachers expanded sets of activities such as coaching and mentoring rather than receiving direct instruction, and that are aligned to teachers' real-world experiences are more effective (Cohen & Hill, 2000; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009). Hence, in the district under consideration, both professional development activities reported as effective and less effective in previous research were used. However, professional development was evidently given a fundamental role in the district, in encouraging the implementation of CCSS policies by shaping and bolstering teacher practice to improve student learning. This aligns with previous research which has recognized the value of professional development in establishing a crucial link between policy and instructional practice (Cohen & Hill, 2000; Hess & McShane, 2013; Knapp, 2003). Implementation fidelity is promoted when teachers believe in the benefits of a program and when they are more comfortable in implementing the program (Beets et al., 2008; Little et al., 2013). The current district has effectively invested in professional development on a large scale, which has given teachers various opportunities to become more familiar with the standards and CCSS-ELA aligned instructional strategies

The availability of instructional materials was mentioned as support by 19 out of 48 teachers. It was interesting to note that more teachers perceived instructional resources as a support rather than a barrier. This is aligned with prior research by the Bill and Melinda Gates Foundation which provided researched-based evidence of a significant increase in availability of resources to support student learning of standards and at the same time, reported some areas where teachers felt that resources were still limited (Bill and Melinda

Gates Foundation, 2015). This implies that although more common-core aligned resources are now available for teacher use, resources in specific subject or grade-level areas found wanting should be addressed to promote higher implementation of the Common Core State Standards. Technology devices were readily available in the district under consideration in this study; for example, teachers and students had access to iPads in their classrooms, with a large portion of students having the possibility of checking out devices to bring home. In some schools, devices were available for one-on-one student use. This finding aligns with previous research by the Bill and Melinda Gates Foundation which reports that teachers generally perceive the commitment of their schools to funding both hardware and software. Teachers used technology in various ways to support student learning for example, by sharing resources on an online platform, by seeking resources or creating resources. Teachers also used various activities which required students to familiarize themselves with and develop their digital skills such as video editing and researching. Technology was also used for scaffolding and differentiating instruction for the students especially student groups such as English Language Learners. This finding strengthens prior research by the Bill and Melinda Gates Foundation (2015) which reported that more than half of the teachers in their study use digital tools to nurture independent practice and to customize the learning experience to students' individual needs.

Research Question 5

The fifth research question of this study was: How were the CCSS-ELA standards implemented by teachers in a district in Southern California? Through the use of grounded theory, the inputs, processes, and outputs of the Common Core English Language Arts implementation process was found and illustrated on a visual model.

Internal and External Factors. The inputs consisted of the external and internal factors affecting implementation. External factors encompass factors such as the influence of

the standards, parental input and media portrayals which originate from outside of the school site and on which the teacher participants have no or limited control. Research has shown that external influences such as politics have given rise to decreasing, polarizing public support for the standards (Henderson, Peterson, & West, 2014). Although studies have not focused on the agenda-setting influences of the media on education, there has been research published on the effect of the media on policies in education (Anderson, 2007). Politicians' influence on the media and, in turn, the media's impact on education policy has been reported, in scholarly research, as being strong. For example, research by Gerstl-Pepin (2002) showed the media oversimplifies educational issues and portrays them as being framed from political candidates perspectives rather than examining them in depth and informing the public about various perspectives such as those of teachers. In an EducationNext Poll, more participants were found to be supportive of the Common Core when the label "Common Core", often associated with a political party, was removed from the question (Henderson et al., 2014; West et al., 2017). This implies that polarization due to politics has been present in the implementation of the standards throughout the implementation process. This calls for caution to be exercised in assessing media portrayals of the Common Core which are influenced by politics (Toppo, 2012).

Schools should develop partnerships with parents to explain how parents can engage in their children's learning (Martin et al., 2014). However, the current research shows that teachers perceive that parental support and engagement in the Common Core has been limited. This aligns with previous research which shows that teachers generally hold the belief that parents' engagement is low (Epstein, 2002; Shores, 1998). Regular parental engagement (Martin et al., 2014) and communication between schools and parents promote the implementation of the Common Core State Standards (Dunkle, 2012). However, the current study reports teachers' perceptions about parents' misunderstandings and lack of

knowledge about the Common Core State Standards which they mainly attributed to the Common Core depiction in the media. This implies that the current district may be missing out on the benefits of stronger and more effective parent-school partnerships around issues concerning student learning such as the Common Core. The lack of Common Core engagement from parents is, however, not surprising. Research has shown that parental engagement in learning educational trends, standards and policies have been infrequent (Oyserman, Brickman, & Rhodes, 2007).

Another external factor which affects CCSS-ELA implementation is the standards themselves. The teachers in this study have criticized various standards-related factors while others have, in contrast, expressed their appreciation for standards. Previous research reflects the same mixed views about the standards as the teachers in this study; while some have been positive, emphasizing that the standards were clear and fewer in number (Calkins et al., 2012), others studies reporting a negative perception (Kendall, 2011; Rothman, 2011). However, the current study reported mostly a negative perception, supporting previous research which give some evidence that teachers feel overwhelmed by the number of standards (Kendall, 2011; Rothman, 2011) and dubious about the high expectations required of students (Hall et al., 2015). Research also shows that the ambiguity of an intervention can affect implementation fidelity negatively (Greenhalgh et al., 2004). Although there is hardly anything that teachers can do to affect the formulation of the standards themselves, they can use strategies that would help bring more clarity to the standards and make the work manageable. The current district has encouraged some of these practices, such as unpacking the standards.

Internal factors emerge from the immediate school environment in which the teacher participant evolves. They include the resources available to the teachers, the leadership of the school principal and peers as well as the teacher competence which in turn, comprises of sub-

factors such as teachers' level of preparedness, beliefs and teacher demographics. An internal factor identified as impacting CCSS-ELA implementation was the availability of relevant and effective CCSS-aligned resources for teachers. This factor was also identified by the content analysis carried out in this study as both a barrier and facilitator of CCSS-ELA implementation.

While some teachers in the sample expressed their confidence and self-efficacy beliefs in implementing the CCSS, others felt unprepared for the changes involved in the Common Core. From teacher interviews, it was gleaned that whether positive or negative, teacher beliefs impacted implementation of CCSS-ELA. The findings of this study echoes prior research which has highlighted the unconscious process through which teachers (Coburn, 2001) and principals (Coburn, 2005) understand the challenge posed by instructional policies through the view of their prior knowledge and beliefs but also their social exchanges with colleagues (Coburn, 2001; Siciliano et al., 2017; Tschannen-Moran & McMaster, 2009). Teacher characteristics, such as years of experience, seemed to have an impact on teacher beliefs and hence their implementation of the CCSS-ELA. Teachers who were relatively new, with only a couple of years of experience or who had only recently entered the profession seemed to have a more positive view about the standards and greater willingness to use CCSS-ELA aligned practices. This contrasts with research on novice teachers which show that they suffer from cognitive overload which limits their cognitive processing to foundational instructional skills, classroom management issues, and curricular content (Borko & Livingston, 1989; Feldon, 2007). However, the current study follows the same line of findings reported by Snider (2017), who also highlighted the higher resistance existing among veteran teachers.

The new teachers in the sample demonstrated enthusiasm, general acceptance and implementation of the standards. This can be attributed to adequate pre-service training

about the standards which new teachers had the opportunity to receive; when they entered the profession they did not know any different from the Common Core. One teacher also reported receiving support in common core implementation from peers.

Teachers also perceived leadership by teachers and principals as important drivers of CCSS-ELA implementation. This study supports research conducted over the years which portray leadership as significant organizational support for school improvement (McDougall et al., 2007; Sebring et al., 2006). Principals demonstrated leadership in CCSS-ELA implementation in various ways such as establishing a common vision of student learning, providing supporting resources for CCSS-ELA implementation and cultivating a culture of risk-taking where experimentation with new strategies was safe and where teachers collaborated towards common goals. This research also shows that teacher leadership also affects implementation. This finding is in line with previous research which highlights the role of teacher leadership in school improvement (Criswell & Rushton, 2006, 2006; Poekert et al., 2016, 2016). Formal and informal teacher leaders expressed their leadership by guiding other teachers, acting as role models and driving positive changes in their classroom instruction, possibly fueled by collaborative work during professional learning communities (PLC) meeting. Successful PLCs create opportunities for shared leadership, cultivating a culture where teachers can take risks, learn (Buffum & Erkens, 2009), grow (Barton & Stepanek, 2012) and maintain connections across new implementation (Coburn & Stein, 2006).

However, teacher leadership seems to be limited to the classroom. This mirrors recent findings by Ingersoll et al. (2018) which show that teachers play a considerable role in decisions about teaching in the classroom, instructional methods and grading of student work but don't have much power in broader processes such as student behavior policies. This calls for intentional action to be undertaken to create more formal leadership roles at various grade

levels to encourage teachers in taking more active roles in schoolwide improvement initiatives, especially at the elementary school level. School structures should be put in place for formal and informal teacher leadership to contribute to school improvement initiatives (Muijs & Harris, 2007).

In the grounded theory model, the internal factors are affected by teachers' workload, time given for CCSS-ELA implementation activities and school structure. The current study revealed teachers' mixed perceptions about the time allocated for CCSS-ELA activities; some felt ample time was given for collaboration, professional development, and planning while others felt that time was not sufficient. Research has mostly reported the lack of time perceived by teachers for professional development, developing resources and communicating with parents (McLaughlin et al., 2014). Workload has been identified in this study as a conditional influence affecting internal factors such as teacher leadership. Teachers in the sample experienced an increased workload due to concomitant common core-related activities such as resource creation and piloting resources which consumed a lot of their time and has hampered their willingness to get involved in CCSS activities beyond the classroom. The structure of a school affects both the internal factors and external factors affecting strategies used for CCSS-ELA implementation, for example, the school demographics such as the number of ELLs affects the funding the school obtains as part of their Local Control Funding Formula (LCFF).

Implementation of CCSS-ELA standards. There were two main strategies used in the process of implementation of CCSS-ELA standards by teachers; these include using CCSS-ELA aligned instructional practices and getting involved in professional development. The teacher interviews showed teachers received a variety of professional development activities related to the Common Core State Standards such as the readers' and writers' workshops. This district has shown recognition of the value of professional development,

like other districts that have identified that teachers should be supported through professional learning and instructional coaching to achieve the requisite level of proficiency (Fong, 2016). Time was built into school days for teachers to meet in professional learning communities, to discuss issues about the Common Core, assessments, analyze student data and share ideas. These meetings are also sources of professional learning as teachers have the opportunities to have conversations about student learning and to learn from one another. This finding follows the same line of reasoning as Gallimore et al. (2009) who contended that professional learning involving inquiry with peers encourages teachers to challenge their assumptions and practices. Teachers have reported instructional coaches as being helpful in implementing CCSS-ELA instructional practices as they provide constant feedback for educational improvement, co-teach and model lessons, and support teachers in trying new or expand on existing instructional strategies. Research shows that instructional coaching that includes classroom demonstrations provides opportunities for teachers to observe what is happening with their students which contributes to instructional quality through collaboration (Grose & Strachan, 2011).

Besides learning from professional development, most teachers showed awareness about and invested their efforts in using CCSS-ELA aligned instructional practices in their classroom to implement the standards. This is aligned with previous research by Fong (2016) which showed that a majority of teachers showed awareness about strategies aligned to the Common Core. The activities implemented by teachers differed by ELA areas addressed such as writing and reading and by the special student populations such as English Language Learners that require more differentiation. Teachers mentioned the variety in reading and writing that the standards required. This aligns with best reading practices that have been reported by organizations such as the International Reading Association (2012). Although the writing standards have introduced argumentative writing and other types of writing

deemed more appropriate to college preparedness, research highlights that there is still a lack of variety in writing exercises assigned by teachers to learners such as informative writing (Gilbert & Graham, 2010). The current study shows a diverging finding as teachers in the sample allocate various types of writing exercises ranging from long-term projects to narratives. This can be associated with the district-wide emphasis on the development of writing skills. This implies an effective strategy of incrementally focusing on different areas until mastery is achieved which promoted coherence. According to Fullan (2016), when teachers can talk the walk, for example, in this district by showing clarity about the instructional focus on writing, coherence is achieved.

Teachers showed individualized instruction through various ways such as by pacing students' learning using Apps, by using mixed and same ability groupings and pull-out groups. Although teachers have experienced difficulties in tailor-making their instruction to meet the needs of all learners such as meeting ELD standards, they have received support in this area through instructional coaching and technological tools and resources. Although the integration of technology in the classroom has been linked to various challenges, electronic resources have also been recognized as a strategy to differentiate instruction more to meet learners' progress targets (Tallerico, 2013). This research recognizes the value that teachers place on instructional coaches; research claims that teachers who are coached incur a greater likelihood of transmitting the instructional practices they have acquired to their classroom (Knight, 2008).

School and Stakeholder Impacts. This study has found that the implementation of the Common Core State Standards has led to a change in paradigm and school culture characterized by increased and more rigorous student-centered activities, more collaboration and teacher risk-taking. Research has indicated the importance of culture as a factor affecting implementation of reform which in turn reinforced positive changes in school culture (Ravitz,

2010). Other authors and researchers have similarly to the current study posited that the implementation of the Common Core State Standards could support changes in culture (Brooks & Dietz, 2013; Brown, 2012). Considering that teacher collaboration has been embedded in the school day, it is not surprising to see this impact reflected on a larger scale at the school level. Research shows that when teachers collaborate, their professional lives are made more pleasant leading to more cooperative cultures at the school level (Datnow, Borman, & Stringfield, 2000). This implies that changes at the individual level have been widespread amongst the teachers and this effect was felt at the broader school scale.

The impact of the standards on teachers was also experienced at an emotional level. Some expressed fear and stress while others were enthusiastic or excited about the shift in learning which they believed would be more beneficial to student learning. These emotional responses are characteristic of change. Michael Fullan (2016) explains the difficulty of change effectively using a fishbowl metaphor; the fish that has to jump from one bowl to the other experiences discomfort and uncertainty as to its ability to swim in the other bowl and often prefers the comfort and security of its own bowl. Change requires a leap of faith which is difficult to achieve. Other teachers in the sample, who expressed more self-efficacy beliefs, expressed quicker and easier acceptance of the Common Core State Standards.

The impact of the standards on students has also been mixed. According to the creators of the standards, once implemented, the standards should provide strong, engaging and challenging learning experiences for students that should increase their college and career preparedness (Council of Chief State School Officers, 2013). The current study reports that teachers in the sample perceive higher student engagement as a consequence of standards implementation, expressing similar perceptions as the standards' creators. Teachers also think that implementation of CCSS-ELA impacts student academic achievement. Although concern was expressed about at-risk students such as economically-disadvantaged students'

performance, teachers mostly believed that students developed their skills and would improve their performance, in the long run, thanks to the CCSS-ELA implementation. Prior research by the Education Sector, an independent policy think tank, reports that states that have adopted high academic and proficiency standards have seen as a greater decline in students scoring below basic in the NAEP between 2003 and 2011 (Clark & Cookson, 2012). Other studies have indicated that shifts in practice have rarely been fulfilled, which have resulted in failed attempts at school reform to produce expected results and student achievement flatlining or declining (Cuban, 1996; Elmore, 1996; Goodman, 1995). Whether positive or negative, there are different impacts of the standards on students' academic achievement. However, as aligned with the views of the creators, most teachers perceived the standards as a vehicle for students to build a range of skills within and outside of the scope of the standards such as cognitive skills and job-seeking skills respectively (Achieve, 2012c).

Limitations

This study has three main limitations. It focuses on the perceptions of the principals and teachers three years after the implementation of the Common Core State Standards in California. A longitudinal study spanning over several years would provide a more powerful means of establishing a cause and-effect relationship between leadership and implementation.

The sample size of teachers surveyed was small and was limited to one district; hence caution must be exercised not to generalize the findings of this study to districts with different demographics or the entire state. The current study revealed that there was no statistically significant difference in CCSS-ELA implementation and teacher transformational leadership between Title I and non-Title I schools due to specific reasons, including the amount and appropriate channeling of funding. A district with only non-Title I schools may not be receiving as much funding, which may lead to different findings than that observed in this study. .

Semi-structured face-to-face, phone and online interviews were used during this study; however, observations were not used as a data collection method. Hence results are based on self-reported perceptions of participants. However, studies examining the reliability and validity of the main research instrument used in this study, the Survey of Enacted Curriculum self-reports, have been favorable (Porter, Polikoff, & Smithson, 2009). This may be partly because teachers are requested to describe their instructional practices in a neutral language rather than being asked to rate the degree of compliance of their strategies with regards to the intent of the standards (Porter, McMaken, Hwang, & Yang, 2011). It is also notable that every effort was made so that the quantitative and qualitative data could be used for data validation purposes to strengthen the credibility of the research findings.

Delimitations

The study was delimited to a maximum of two schools at each level of study (elementary, middle and high), one Title I school and one non-Title I school in one district in Southern California during the 2017 - 2018 school year. Also, the study was delimited to public schools, including schools serving grades Kindergarten to twelve since standards used in public and private schools may differ. Community day schools, continuation schools, specialized schools, private schools and alternative schools were not included in this study due to the variety of instructional programs offered which is beyond the control of the researcher. Selection of teachers was limited to ELA teachers and administrators were limited to school principals within one school district.

Implications and Recommendations

This study provides valuable findings about the implementation of the Common Core English Language Arts (CCSS-ELA) Standards which can inform teachers, school leaders, district leaders and policy-makers as to areas requiring practical action. The researcher also

recommends some comprehensive action steps which various stakeholders can take to improve CCSS-ELA implementation and teacher leadership.

The differences in teacher beliefs and opinions, leadership, and implementation between the elementary and high school level noted in this study is not surprising. However, they can be addressed at various levels and through specific strategies. Elementary school teachers need specific knowledge, skill sets, and temperaments to be able to drive school improvement efforts alongside principals. Leadership training can be provided to those teachers who are interested in growing leadership behaviors and skills. There are increasing numbers of formal professional development programs that districts and school leaders can tap into to promote teacher leadership. For example, teachers can be encouraged to become national-board certified teachers who have been identified as fostering teacher leadership (Carpenter & Sherretz, 2012). Districts can also establish partnerships with innovative teacher development programs offered by institutes of higher education or nonprofits, for example, Teachers21 offers a Boston Teacher Leadership Certificate program which prepares teachers for instructional leadership responsibilities (Teachers21, n.d.). On a smaller scale and at a lower cost, principals can work with teachers on the development of leadership development plans, which would provide a system of guidance for teachers to learn about, implement and develop specific leadership strategies through feedback and reflection. The school principal also plays an important role in distributing leadership. Transformational leaders communicate with followers in a setting that is mutually enriching, by supporting the realization of higher-order necessities and allowing them to grow and transform (Khanin, 2007). Working on a leadership development plan collaboratively would increase communication between teacher leaders and school principals and bring them together around a common goal.

The leadership capabilities taught need to be consistently nurtured through the leadership networks across schools within districts and across districts which would provide teacher leaders the opportunity to keep learning about new leadership strategies put in place in various school settings, share existing and budding knowledge acquired through on-the-job experience, support each other's leadership growth and be accountable to one another. These networks can be developed at various levels; local, state or national (Teacher Leadership Exploratory Consortium, 2012). Currently, formal teacher leadership roles in the district are limited; these need to be created at various levels of study, may it be at the elementary or the high school level to provide increased opportunities for teacher leaders to emerge or develop. Leadership roles that teachers can assume include resource providers, instructional experts, curriculum experts, classroom supporters, learning facilitator, mentor, school committee leaders, data coaches amongst others (Harrison & Killion, 2007). The teacher leader acting as a data coach or practitioner-researcher can use action research to investigate ways in which teacher leadership is being implemented and suggest strategies for improvement, which would be mutually beneficial to him and on a larger scale, to his school and district. Appropriate compensation should be considered for these new teacher leader roles.

Two dimensions of transformational leadership, individualized consideration, and inspirational motivation have affected teachers' implementation of the Common Core State Standards in the district under study. This has many implications for practice; the instructional shift that the standards require is facilitated when teachers can meet the needs of the diverse learners by tailor-making instruction and giving learners appropriate attention. However, teachers in the current study emphasized their increasing workloads which sometimes make it difficult to give sufficient attention to those students that need it the most within the classroom. Schools still have pull-out groups or additional scheduled time for support to struggling learners who need more individualized consideration. Individualized

attention can be facilitated within the classroom setting by the provision of teacher aids to classrooms where their support is currently not available or more time can be given to teachers with teacher aids especially at the elementary level where the teacher has to deal with additional tasks such as tying students' shoes. However, a few steps need to be taken to make the best out of this support. Teacher aids sometimes do not have clearly defined roles, shoulder greater responsibilities than they are paid or trained for, or receive little in-service training (Ward, 2011). The integrity of teacher aids' work should be maintained at all costs and should be limited to supporting teachers in their instruction. School principals and teachers should work together on defining the roles of teacher aids and on putting together plans for teacher aids to take a more active part in the school life, for example, by attending PLC meetings. This can also help them learn from teachers and share their unique insights. To promote inspirational motivation, teachers acting as role models and demonstrating exemplary instructional practices should be encouraged and celebrated. People need to experience success to continue moving forward (Fullan, 2016).

The implementation of reform, as demonstrated in this study, is affected by teacher beliefs and opinions. Implementation fidelity can be amplified when teachers believe in a specific program's benefits and about their level of comfort in implementing the program (Beets et al., 2008; Little et al., 2013). Although some of the more experienced teachers reported high levels of implementation as well, this research also brings to the fore that novice teachers were more comfortable in implementing the standards particularly those who received adequate preparation in their pre-service training and were thus more familiar with the strategies required by the Common Core. This calls for more training that would improve the self-efficacy beliefs of teachers with varying levels of experience including those teachers who have been teaching for a long time whose perceptions may have been tainted by previous reforms. According to Ward, Johnson, and Branson (2014), the thinking trends and

beliefs developed through NCLB may have adversely affected the perceptions of teachers and their expectations about the Common Core State Standards. Although a variety of professional development activities have been provided to teachers, there is a need to think carefully about the format of such programs. Research shows that professional development which supported teacher proficiency through follow-up coaching had the strongest impact on the self-efficacy beliefs and implementation of new strategy (Tschannen-Moran & McMaster, 2009). Districts implementing instructional changes or other educational improvement programs and interventions should seek the help of instructional coaches, at the beginning stages of implementation to give professional development and throughout implementation through constant monitoring and feedback, to support teachers in shifting their practice. Professional development opportunities based on vertical planning would also allow teachers to see how student work at one grade level affects the next grade level; this would be especially beneficial to teachers teaching the lower grades as this would give them the opportunity to interact with other teachers in the higher grades and see how their work is currently contributing to high school student achievement in the long run and how they can improve their contribution.

In the grounded theory for this study, workload and implementation time was found to influence internal and external factors which, in turn, affect the implementation of CCSS-ELA. Teachers in the sample expressed their anxiety, fear, and stress of having to deal with the changes that the implementation of the Common Core State Standards brought along. These emotional responses in the face of significant educational changes can be alleviated using research-based strategies. In 2014, the Department of Education surveyed teachers on their workload, with more than 43 000 teachers suggesting possible solutions to workload issues (Anderton, 2015). A couple of strategies can be put in place by districts and school principals to reduce teacher workloads, so teachers have more time to deal with policy

changes and carry out implementation effectively. One of these strategies is to have longer amounts of protected non-teaching time to plan lessons and mark work (Anderton, 2015). This will not only give more implementation time to teachers but also help decrease their workload. Another strategy is to ensure ready availability of off-the-shelf, adaptable curriculum and materials during the beginning stages of implementation of educational change. Districts and schools can also relegate some administrative tasks that burden teachers to support staff such as employing pastoral support workers (Anderton, 2015).

Recommendations for Future Research

Data from this study led to various significant findings of teacher leadership and the implementation of the Common Core English Language Arts Standards (CCSS-ELA). However, there are limitations to this study that can be addressed in future research on these topics. The quantitative analysis allowed for four factors to be identified as affecting the fidelity of implementation of CCSS-ELA aligned instructional strategies while the qualitative analysis allowed for additional factors to be identified such as funding, principal leadership, and teacher workloads. Future research can assess the variance accounted for by the qualitative factors identified. Studies using larger sample sizes for quantitative analysis could be used to boost statistical power. This study looks at the implementation of the CCSS-ELA at a specific point in time; it would be interesting to investigate how implementation has changed over time and the factors' external to and within the school sites that have contributed to these changes. The analyses carried out in this study led to the production of a conceptual framework on the implementation of the CCSS-ELA standards. Further research can test the validity of the model in other settings, such as in districts with different demographics. The model can be adjusted or expanded based on the findings that emerge.

This study also acts as a starting point for future studies on teacher transformational leadership in the context of educational change. Research on teacher transformational

leadership using the Multifactor Leadership Questionnaire has been limited. A more thorough investigation of teacher transformational leadership could be carried using a 360 degrees approach where teachers self-assess their transformational leadership skills and also have peers and leaders rate them on the same skills. Previous research by Bass, Avolio, and Atwater (1996) shows that women are more transformational leaders than men and hence more effective leaders. The current study consists of a majority of female teacher participants. Future research can be conducted with greater numbers of male participants. This study collected information about transformational leadership behaviors of teachers; however, precludes examination of other leadership behaviors such as transactional and laissez-faire leadership behaviors which can also be exhibited by teachers. Other researchers can expand on the current research by exploring these leadership behaviors as well. Whether or not implementation translates into better student achievement is also another question that is worth considering, and that can be explored in further research on this topic.

Summary and Conclusion

The findings in this study have addressed research gaps in various areas; first, it has provided valuable information about equity issues related to the common core in which prior scholarly investigation has been limited. The differences in implementation of CCSS-ELA instructional practices and teacher transformational leadership in Title I and non-Title I schools across the district under consideration was found to be statistically non-significant; which is reassuring. This study suggests that poverty is not a fatality and that carefully orchestrated strategies from well-intentioned districts have the potential to address some of the challenges to implementation that lower school socioeconomic status can bring. Implementation studies such as this one serve as a starting point in assessing the standards themselves; Are the standards and higher expectations that they called for really leveraging the playing field? Are they reducing the achievement gap or are they creating a bigger ridge

between student populations with different socioeconomic status? This question could not be answered if the standards were not being implemented with fidelity across schools with different socio-economic compositions and different levels of study. The onus falls upon researchers to bring clarity and evidence-based arguments to the Common Core debate that has been abated in recent years but certainly not dismissed.

The study also reported the differences in the fidelity of implementation of CCSS-ELA instructional practices, teacher transformational leadership and teacher beliefs and opinions across levels of study, the elementary, middle and high school level. Although this finding follows a trend that has been reported in previous research, addressing these differences holds the benefit of promoting consistent implementation which would, in turn, lead to the various grade levels reaping the benefits from the common core and other educational programs. Several recommendations have been proposed to promote consistent implementation across grade levels including effective professional development followed by coaching and monitoring to give new and older teachers alike the opportunity to boost their self-efficacy beliefs. Increased vertical planning between teachers at various levels of study would also be beneficial; it is likely to increase alignment between various levels of study and help shape teacher beliefs about their roles in the grand scheme of student learning, achievement and student graduation from high school, particularly those teaching the lower grades.

The second research gap addressed by this study was in the area of fidelity of implementation in which research has been limited, especially in the K-12 area. Fidelity of implementation need not be associated with stringent accountability, but instead can be used as a valuable source of information for various purposes may it be to provide a foundation on which decisions can safely be taken about corrective measures or to bring out exemplary practices which are already in place that other districts can learn from. This study did both.

It brought to the fore the relentless focus the district placed on writing which has led to coherence among the teachers about the goals to be achieved. It has also highlighted the wise financial investments the district has made in professional development, instructional coaching and technology which has helped leverage the playing field between Title I and non-Title I schools. At the same time, it has identified a few areas for improvement or strategies to facilitate the implementation of future educational initiatives in the district; these include the support of teacher aids, greater scheduled amount of protected time for teacher planning, more professional development that will be followed up by coaching, and the provision of off-the-shelf resources.

This study also contributed to the body of research on teacher leadership and mixed-methods in leadership studies. The researcher used a mixed-methods design which allowed her to supplement her quantitative findings with rich qualitative data, which provided a more complete picture of CCSS-ELA implementation in the schools under study, as compared to previous research which was mostly case-based. For example, the quantitative findings found statistically significant differences in teacher transformational leadership and implementation of CCSS-ELA instructional practices between the levels of study while the qualitative data provided the why and the how of these differences. Recommendations were given to address the statistical differences in teacher transformational leadership between the elementary and the high school level; at the district level, new teacher leader positions could be created with adequate compensation for the increased responsibilities that teacher leaders are expected to shoulder. At the school level, professional development could be focused on teacher leadership development. School principals can work with teachers on leadership development plans, and teacher leadership can be nurtured and maintained through the development of teacher leaders' networks with teacher leaders of other schools in the same or other districts. This study holds some interesting findings and recommendations that can

possibly be customized or in part used to support other districts besides the one under consideration, schools, policy makers and researchers in addressing implementation issues around the Common Core.

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APPENDIX A

Survey of Instructional Practices

The purpose of this teacher survey is to collect data about Common Core English Language Arts (ELA)-aligned instructional practices used by teachers as well as their quantity of use in order to explore the impact of Common Core English Language Arts implementation on student achievement. This survey has been adapted from the Survey of Enacted Curriculum (CCSSO SEC Collaborative Project, 2005) and the Multifactor Leadership Questionnaire, MLQ-5X (Avolio & Bass, 2004).

Please report on your instructional practices **over the course of a school year**. Please refer only to activities that are part of English, language arts, or reading instruction. If you teach at the elementary level, please respond in reference to teaching ELA only. If you teach at the Middle and High School Levels and teach more than one ELA class/block, respond only for the first class/block that you teach each week. The strategies outlined in the survey are aligned to various English Language Arts standards at all grade levels.

Your participation in this survey is voluntary and your personal information will remain confidential. Reports of results will not allow for identification of individual participants. The questionnaire poses no risk to you, and there is no penalty for refusal to participate.

SECTION A: Participant information

Gender

Age

Number of years you have taught English Language Arts.....

Number of years working in current school

Grade Level(s) taught:

Highest degree held:.....

.....

What certifications do you currently possess?

- ☐ Emergency, provisional or temporary Certification
- ☐ Elementary/Early Childhood Certification
- ☐ Middle School Certification
- ☐ Secondary English, language arts, or reading Certification
- ☐ National Board Certification
- ☐ None
- ☐ Other

SECTION B: Teacher Beliefs about Change Climate

| | Completely Disagree | | Neutral | | Completely Agree |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. I enjoy teaching English, language arts, and reading. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. I am supported by colleagues to try out new ideas in teaching English, language arts, and reading | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. I receive support from the administration for teaching English, language arts, and reading | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. English, language arts, and reading teachers in this school regularly share ideas and materials. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Teaching English Language Arts and Reading is boring | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

SECTION C: Leadership

Judge how frequently each of the following statement fits you. The word “others” may mean your peers, clients, direct reports, supervisors, and/or all of these individuals. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.

| Not at all | Once in a while | Sometimes | Fairly Often | Frequently, if not always | | |
|--|--------------------------|--------------------------|--------------------------|---------------------------|--------------------------|--------------------------|
| 0 | 1 | 2 | 3 | 4 | | |
| | | | 0 | 1 | 2 | 3 |
| 1.I instill pride in others for being associated with me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.I go beyond self-interest for the good of the group | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.I act in ways that builds my respect | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.I display a sense of power and confidence | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5.I talk about my most important values and beliefs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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SECTION D: Common Core-Aligned English Language Arts and Reading Activities

Please report on the instructional practices you used during the course of the most recent school year.

I. Instructional practices for constructing meaning

In the target class, for how much time do students engage in the following English Language Arts activities, aimed at constructing meaning from text?

| | Not at all | | | | In all classes |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 19. Complete English, Language arts, and reading exercises from a text | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. Write a response or explanation using brief constructed responses of several sentences or more | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. Respond creatively to texts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. Relate text to personal experience | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. Relate text to prior learning | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. Use reading to solve real-world problems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. Use writing to solve real-world problems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. Analyze information to make inferences or draw conclusions | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

II. Small Group Activities

In the target class, over the most current school year, for how much time do students engage in the following small group English Language Arts activities?

| | Not at all | | | | In all classes |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 27. Discuss how they read and write | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 28. Complete written assignments from the textbook or worksheets | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 29. Work on an assignment, report, or project that takes longer than a week to complete | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- | | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 30. Work on a writing project in which group members engage in peer revision | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 31. Review assignments | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 32. Prepare for a test or quiz | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 33. Prepare or practice for a presentation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

III. Hands-On and Technology Activities in English Language Art and Reading Standards

In the target class, for how much time do students engage in the following hands-on or technology English Language Arts activities?

- | | | | | | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | | | | | Not at all | | | | | In all classes |
| 34. Work on projects such as puppet shows, plays, or dioramas | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 35. Build models or charts that support the text (e.g. mind maps, storyboards) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | Not at all | | | | | In all classes |
| 36. Learn facts or practice procedures, skills, or conventions | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 37. Engage in a writing process (e.g., prewriting, drafting, editing, or revision) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 38. Research and collect information (e.g., internet, CD-ROM, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 39. Display and analyze data/information (e.g., bar charts, pie charts etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 40. Create multi-media presentations (e.g., website, PowerPoint, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 41. Take online assessments such as tests, quizzes, online assessments, or diagnostic inventories | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 42. Use individualized instruction or tutorial software | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

The result of this study will be made available through CUI Digital Repository
<https://www.cui.edu/library/index/id/24734>

If you have any questions, please contact the researcher by email on the
isma_seetal@hotmail.com
 Thank you for participating

APPENDIX B

Research Instruments

Table B1

Sections of the Multifactor Leadership Questionnaire and the Survey of Enacted Curriculum Combined to Construct the Survey for this Study.

| Participants | Measuring Instrument | Constructs | Questionnaire | Description |
|-------------------|------------------------------|---|--|--|
| Teachers | Survey | Leadership | Short version of the Multifactor Leadership Questionnaire | 5-Point likert scale ranging from 0 (<i>Often</i>) to 4(<i>Frequently</i>) |
| | | School Description, Classroom Description | Survey Of Instructional Practices from the Survey of Enacted Curriculum | Set of categorical and data entry questions |
| | | Teacher demographics and beliefs | Teacher characteristics, Teacher opinions and beliefs from the Survey of Enacted Curriculum | 5-Point likert scale ranging from 0 (<i>Completely Disagree</i>) to 4(<i>Completely Agree</i>) |
| | Survey, Follow-up Interviews | Quality and Quantity of Delivery | Survey of instructional activities in English, Language Arts and Reading from the Survey of Enacted Curriculum | 5-Point likert scale ranging from 0 (<i>Not at all</i>) to 4(<i>All the time</i>) |
| School Principals | Interviews | Implementation Practices | N/A | Pretested researcher developed questions |
| | | Leadership | N/A | Pretested researcher developed questions |

APPENDIX C

Teacher Interview Guide

Date:.....

Teacher Name:

School:

Thank you for accepting to meet with me today. To facilitate note-taking, I would like to audio tape our conversations. Would you agree to this? Researcher introduces herself, outlines the purpose of the research and discusses confidentiality. The interview should take about 20 minutes. Please feel free to skip any questions you may not be comfortable with. You can also withdraw from the interview at any time.

I will start with some general questions and transition into questions about your implementation of the Common Core English Language Arts Standards. Do you have any questions for me before we start?

Introductory Question

1. So I would like to confirm how long you have been working in your current school. I saw from your survey that you have had a long career in this district.

Transition Question

2. So you have witnessed the pre and post common core. How were the standards rolled out at your school site?

Probes:

- What was your initial reaction to the Common Core State Standards at that time?
- Was that feeling echoed amongst other ELA teachers? How do you feel about the standards now?

Key Questions

3. How did the administration support you in these initial stages?
4. In what ways has your teaching changed since the implementation of the common core state standards?

Probes:

- Describe what a lesson was like before the common core and what it is like now?
 - You mentioned in your survey that one of the strategies you use is to xxxxxx. Can you describe in what ways you do this? How are these strategies helpful? How do the students respond to it?
5. How did the achievement of your students change when the Common Core was initially implemented? How did it change from the point of implementation until now?
 6. In your survey, you also mentioned that xxxxx (barrier, impact or support). Can you please elaborate on that/ clarify.
 7. How do you think the Common Core affects student skills?
- Probe: Which skills do you think the Common Core promotes
8. Do you think that the Common Core State Standards serves all student groups well?including special student groups such as English Language Learners?

Closing Question

9. What recommendations would you give to a teacher who is trying to implement a standards-based reform?

APPENDIX D

School Principal Interview Guide

Date:.....
 School Principal Name:
 School:

Thank you for accepting to meet with me today. To facilitate note-taking, I would like to audio tape our conversations. Would you agree to this? Researcher introduces herself, outlines the purpose of the research and discusses confidentiality. *The interview should take about 15-20 minutes. Please feel free to skip any questions you may not be comfortable with. You can also withdraw from the interview at any time.*

I will start with demographic questions and then move to some questions about the implementation of the Common Core English Language Arts Standards at your school site. *Do you have any questions for me before we start?*

Introductory Questions

1. How long have you been working in education?
2. How long have you been working in the school?
3. How long have you been a school principal?
4. How long have you been a school principal at this school site?
5. What is your highest educational degree you have completed?

Transition Question

6. So you were a teacher/school principal when the standards were rolled out? Could you please describe how the implementation of the Common Core State Standards was carried out at the current school site?

Probe:

- How was it rolled out in your previous school?

Key Questions

7. Describe the practices you use(d) to drive the implementation of the Common Core State Standards within the school?

Probe:

- How did you support teachers in their implementation?

8. According to you, what is the impact of the Common Core English Language Arts Standards on student outcomes such as student achievement?

Probe: Do you think that the standards are serving all the students well? Including special student groups such as English Language Learners?

9. What barriers have/are you encountering in the implementation of the Common Core English Language Arts Standards?

10. What do you attribute these barriers to?

Probe:

- How did you deal with these issues?

11. In what way are teachers implementing the Common Core.

Closing Question

12. What are your views about the standards themselves?

Please let me know how I can support the school in any research activities you would like to carry out. Thank you again for your time.

APPENDIX E

Teacher Survey Consent Form

This study is being conducted by Isma Seetal under the supervision of Dr Catherine Webb, School of Education. This study has been approved by the Institutional Review Board, Concordia University Irvine, in Irvine, CA.

PURPOSE: The study in which you are being asked to participate is primarily designed to investigate impact of teacher leadership on CCSS-ELA implementation at different levels of study (elementary, middle and High) in schools with high and low populations of economically-disadvantaged students after accounting for relevant variables.

PARTICIPATION: Participation is voluntary, refusal to participate will involve no penalty or loss of benefits and you may discontinue participation at any time without penalty or loss of benefits, to which you are otherwise entitled.

CONFIDENTIALITY: This survey is confidential. The information is stored on a password-protected computer and is only accessible by the researcher. You have the option of participating in follow-up interviews should you wish to do so.

DURATION: The survey should take no more than 20 minutes for you to complete.

COMPENSATION: Survey Participants will be offered either a Starbucks Gift Card or an hour of service by the researcher (e.g designing a lesson plan, a worksheet) for their participation in the survey. Interview participants will receive an additional Gift Card and/or an hour of service by the researcher (e.g designing a lesson plan, a worksheet).

RISKS: There are minimal risks involved in this survey.

BENEFITS: Research participants will have the opportunity to reflect on their instructional strategies. The research will also benefit the district as it will showcase CCSS-aligned instructional practices that promote student achievement

RESULTS: The result of this study can be obtained through the CUI Digital Repository

CONTACT: If you have any questions, please contact isma_seetal@hotmail.com

*1. I agree to participate in the research study. I understand the purpose and nature of this study and I am participating voluntarily. I understand that I can withdraw from the study at any time, without any penalty or consequences. ☐ Yes ☐ No

*2. I grant permission for the aggregated (not individual) data generated from this survey to be used in the researcher's publications on this topic. ☐ Yes ☐ No

*3. I agree to participate in online following-up interviews. ☐ Yes ☐ No

4.If you agree to participate in the interview, please enter your phone number

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APPENDIX F

Principal Interview Consent Form

Research information

Title of the Study: Implementation Fidelity of the Common Core ELA standards and the relationship to student achievement; Perceptions of school principals and teachers.

Researcher/s: Isma Seetal

Researcher/s' Affiliation with Site: None

Researcher/s' Phone Numbers : +1 949 527 8034

Researcher/s' CUI Email Address: isma.seetal@eagles.cui.edu

Researcher/s' University Supervisor: Dr Catherine Webb

University Supervisor's Phone & E-mail: +1 714 519 8900 & catherine.webb@cui.edu

PURPOSE: The study in which you are being asked to participate is designed to investigate the impact of teacher leadership on CCSS-ELA implementation at different levels of study (elementary, middle and High) in schools with high and low populations of economically-disadvantaged students after accounting for relevant variables such as leadership.

PARTICIPATION: Participation is voluntary, refusal to participate will involve no penalty or loss of benefits and you may discontinue participation at any time without penalty or loss of benefits, to which you are otherwise entitled.

CONFIDENTIALITY: This survey is confidential. The information is stored on a password-protected computer and is only accessible by the researcher. Pseudonyms will be used to refer to interview participants in the research.

DURATION: The interview should take no more than 15-20 minutes for you to complete.

RISKS: There are minimal risks involved in this survey.

BENEFITS: Research participants will have the opportunity to reflect on their school sites' implementation of the Common Core English Language Arts Standards. The research will also benefit the district as it will showcase effective and teacher leadership CCSS-aligned instructional practices.

RESULTS: The result of this study will be accessible through the CUI Digital Repository Top of Form

*** 1. Name of school site**

of f

*** 2. Your position at this school site**

*** 3. Please indicate whether you give permission for your organization to participate in this study by checking the corresponding box below.**

- ☐ I provide authorization for this study to be conducted at the specified school site.
- ☐ I do not provide authorization for this study to be conducted at the specified school site.

Question Title

*** 4. Confidentiality**

☐ I understand that participation in this study is confidential. Only the researcher, collaborators, and supervising professor will have access to participants' identities and to information that can be associated with their identities.

Question Title

*** 5. As part of this study, the researcher also aims to explore the school administrator's views about leadership and implementation of the Common Core State Standards.**

Could you please indicate whether you (or another school administrator such as the assistant principal of the school) agree to be contacted for a 20 minutes interview at your convenience. The researcher will see liaise with your secretary for an appointment.

☐ Yes

☐ No

APPENDIX G

IRB Approval

TICKET ID:#4276

Date: **Mar 27, 2018 @ 09:11 pm**Creator: isma.seetal@eagles.cui.eduSummary: **EDD IRB Application – Expedited Review – Seetal (Webb)**

If you have any additional information regarding this case respond to this email. Please remember to keep "[Ticket #4276]" in email topic.

On Apr 09, 2018 @ 04:10 pm Blanca Quiroz wrote:

Ticket closed: CONCORDIA UNIVERSITY IRVINE INSTITUTIONAL REVIEW BOARD
PROTOCOL REVIEW

IRB Protocol Number: 4276

IRB Approval Date: 03/09/2018

Ms. Seetal

Congratulations! Your research proposal has been approved by Concordia University-Irvine's IRB. Work on the research indicated within the initial e-mail may begin. This approval is for a period of one year from the date of this e-mail correspondence and will require continuation approval if the research project extends beyond a year.

If you make significant changes to the protocol during the approval period, you must submit a revised proposal to CUI's Institutional Review Board (IRB). Please write your IRB # and "EdD IRB Application Addendum # (and the IRB Protocol number)" in the subject line of any future correspondence.

If you have any questions regarding the IRB's decision, please contact me by replying to this e-mail or by phone at 512 810 9172

Kind Regards,

Blanca Quiroz

EdD IRB Reviewer

Thank you,

Concordia University Office of Institutional Research

Email: OIR@cui.edu Phone: [\(949\)214-3433](tel:(949)214-3433)

APPENDIX H

Codebook for Open-Ended Question 1

| Code | Definition | Examples (Quotations) |
|----------------------------|--|--|
| Cognitive skills | Cognitive skills are the core skills your brain uses to think, read, learn, remember, reason, and pay attention. More reading | "Deeper meaning", "Connections" |
| Better Instruction | Relates to a shift in instruction towards the use of better instructional practices, better quality lessons, better teacher skills | "allows a clearer direction for instruction" |
| Collaborative Skills | Relates to greater team work among students in and outside the classroom | "Common Core has a large collaboration and creativity aspect" |
| Creativity | Originality, artistry, innovativeness, Imagination | "Common Core has a large collaboration and creativity aspect" |
| Real-World skills | Real-life applications of learning e.g gain in professional skills, becoming good citizens, greater college and university preparedness, ability to face future challenges | The more a student can relate the subject matter to their own lives, the better achievement. |
| Writing Skills | More writing, better writing, variety in writing | They are adapting to more writing and thinking critically |
| Problem-solving | Use different ways to tackle a problem, ability to tackle issues | use different ways to tackle a problem |
| Entrepreneurial mindset | Boldness, Sense of initiative | try new things |
| Difficulty Level | Difficult for the students | |
| Individualized Instruction | teach students according to their abilities | differentiation |
| Academic Performance | Academic Success, academic achievement | I think the common core standards are challenging but ultimately result in higher level thinking skills and student achievement. |

| | | |
|--------------------|--|--|
| Rote-learning | Less memorization, less teaching to the test | Common Core Standards allow for more conceptual and abstract thinking, rather than just rote memorization |
| Student Engagement | more involved in their learning, in classes | |
| Speaking Skills | Presentation skills, public speaking | Students are able to expand their critical thinking skill through reading, writing, listening and speaking |

APPENDIX I

Codebook for Open-Ended Question 2

| Agreed Code | Definition | Examples (Quotations) |
|--------------------------|--|---|
| Professional development | Any type of professional development, in-service, pre-service, workshops, trainings offered at the site-level, district-level or outside the school | PD days on Writer's and Reader's workshop |
| Technology | Technological devices (projectors, ipads), tools (e.g Apps/online quizzes/games), software (microsoft, excel) and platforms such as social media. | Professional development for the district is helpful. I integrate technology on an almost daily basis. There is still a need for traditional/classic stories with some comprehension questions, as long as the teacher doesn't stop there. I structure my units with specific skills in mind many districts lead in-service and meetings within our team and other schools. New trainings and programs we have tried and are using. |
| Peer Support | Collaboration with colleagues, sharing of ideas during meetings, sharing of resources, moral support from colleagues, advice from colleagues, guidance from colleagues, peer friendship, | |
| Instructional resources | Materials such as Curriculum materials (guides, maps), lesson plans, books and texts | Also, I have several books, charts, curriculum guides that I use |
| Student data | Use of student data such as demographic and achievement data. Any other useful data such as student retention rates, graduation rates..etc | I have had training in writer's and reader's workshop to support the CCSS and have learned to focus on and analyze data to drive my instruction. |
| Freedom to Experiment | supportive climate where mistakes and experimentation are allowed and does not incur punitive intervention. Allows for risk-taking | flexibility from district admin when trying new material (Curriculum), school admin supporting with professional development before implementation, new material |

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|-----------------------------------|--|
| Time to Collaborate and Plan | Scheduled time during school hours to work collaboratively with colleagues e.g during PLC meetings, release time for lesson planning |
| Time for individualized attention | Scheduled time during school hours to provide individualized support for students that need it e.g English Learners |

APPENDIX J

Codebook for Open-Ended Question 3

| Agreed Code | Definition | Examples (Quotations) |
|--------------------------|--|---|
| Individual student goals | Difficulty of the teacher in helping students reach the goals she/the students have set for academic, socio-emotional, personal success | reaching the goals I've set for each student's success |
| Resources | Inappropriate or lack of access to resources such as texts, books, lesson plans, curriculums, assessments. Inappropriate here relates to any characteristics that is equivalent to "not of good quality", not relevant, not acceptable in one way or another | Most of our resources are out of date, adequate curriculum, Assessments to monitor students, I guess what I mean is that finding these items was challenging although we have a curriculum being used (feels incomplete) |
| Time | Time constraints or any time-consuming activities related to the CCSS e.g time to unpack the standards, time for the teacher to learn, to grade. Anything that requires time of the teacher or student | Most of our resources are out of date, so we have spent time ensuring that the Language Arts Texts are aligned with the standards. |
| Frequency of change | Fast pace at which change happens, notion of speed | The barriers are the constant changes in the programs we use |
| Grading difficulty | Ambiguous grading criteria, difficulty in grading based on common core state standards requirements, difficult to check students for mastery | it is more difficult and time-consuming to teach and grade this way, but very beneficial to the students. |
| Difficulty for students | Standards are challenging for students, level of difficulty implied, above student's developmental levels, lack of student ability to understand or tackle the material | The CCSS in ELA are quite rigorous and some students resist the challenge. The mastery model of grading can be tedious and challenging as well, students not able to read between the lines. Literal-do well on the surface questions |
| Time | Lack of time, or activities are time-consuming. Lack of time for students to learn all the skills | time constraints to cover all objectives fully |

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|-------------------------------|--|--|
| Resources | Here it is not the access or quality of the resources that is being questioned | |
| Individual student needs | The variety and high number of different student needs, having to deal with students that have vast gaps in ability | Time, Energy, trying to meet so many different needs |
| Lack of teacher aid | | checking each student for mastery, lack of hands-on support via classroom aides/helpers |
| Individual student assessment | A teacher helper who can assist in the class | |
| | How to evaluate each student considering each student is different in their needs, need for more aligned, genuine assessments | checking each student for mastery, lack of hands-on support via classroom aides/helpers |
| Unclear standards | Here the standards are being blamed for not being clear in one way or another, of being too complex to understand, vague, ambiguous | some standards are ambiguous or vague. Some standards above students' developmental level |
| Student Engagement | Difficulty in engaging students in class | struggles with figuring out grammar lessons that are engaging |
| Lack of inclusivity | inability to cater to students of various backgrounds including students with various socio-economic level, gifted (GATE) students, students with disabilities, minorities, English Language (EL), equity issues arising from implementation | |
| Resistance to change | | very rigorous-very hard for lower kids or second-language probably, the initial panic and resistance to change. Also, tweaking existing lessons including higher level critical thinking questions and approaches. |
| Focus on testing | Teacher or students' resistance to change | I think the goal of common core is often overlooked when we still feel inundated with high-stakes testing. |
| | too much high-stakes testing | |