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Will Teachers Implement Instruction Aligned to the Common Core State Standards?: Utilizing a Predictive Model

Audrey Lynn Harper

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WILL TEACHERS IMPLEMENT INSTRUCTION ALIGNED TO THE COMMON
CORE STATE STANDARDS?: UTILIZING A PREDICTIVE MODEL

A Dissertation
Presented to
The Faculty of the Educational Leadership Doctoral Program
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Doctor of Education

By
Audrey L. Harper

August 2017

WILL TEACHERS IMPLEMENT INSTRUCTION ALIGNED TO THE COMMON
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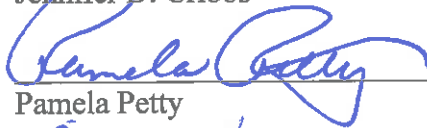
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Lisa C. Duffin, Director of Dissertation



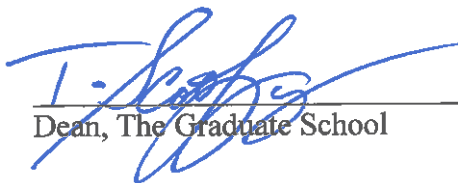
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The purpose of this study was to investigate the use of the Theory of Planned Behavior (TPB) as a predictive model for secondary (i.e., grades six through twelve) teachers' intent to implement instruction aligned to the Common Core State Standards. Two differing TPB models were investigated utilizing a regression analysis. The first model included TPB elements including attitude, subjective norms, and perceived behavioral control (i.e., self-efficacy) while the second model included two additional measures including perceived knowledge and accurate knowledge. Because a measure for secondary teachers' sense of efficacy for literacy instruction did not exist to measure the construct in the TPB theoretical model, a scale was created and an initial validation study was conducted on the scale. Overall, subjective norms were a significant predictor of secondary teachers' intent to implement literacy instruction across both TPB models. Sense of efficacy was a significant contributor in the original model, yet it did not demonstrate significance in the second model when knowledge was entered. Perceived knowledge was a significant predictor in the second model.

CHAPTER I: INTRODUCTION

While the Common Core State Standards (CCSS) were released in 2010, the idea and movement towards the creation of a set of standards that would be adopted across the United States started in the late 1980's (Rothman, 2012). To say that the development of a set of national standards for education in the United States has had a heated and troubled history is an understatement. In 1994, the National Education Standards Improvement Council (NEISC) was created by law and was intended to certify national and state standards. However, Congress eradicated the NEISC a year later even before members were appointed. The 2001 No Child Left Behind (NCLB) legislation also spurred the movement to develop national standards when critics realized that states were able to set their own levels of proficiency based upon their state standards that resulted in differing levels of academic expectations across the states. These differences were made highly evident from the National Assessment of Educational Progress (NAEP) results (Rothman, 2012).

However, the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA) decided in 2009 to persist in their efforts by creating national standards and spearhead the work including 48 states who agreed to participate (NGACBP & CCSSO, 2017; Rothman, 2012). While the federal government was omitted from the creation and work on the standards, education non-profit agencies such as Achieve, ACT, and the College Board were invited to participate. Teachers and leading experts in the field were also invited to participate. This invitational effort resulted in a standards development team that included a range of educational stakeholders. The standards were developed through several phases with feedback loops from some of the

nation's most prominent educational researchers. After completing the first task of creating a set of expectations for students at the end of their schooling that would signify that they were ready for college and/or a career, also known as the Anchor Standards, the second phase of the work began (Rothman, 2012). The next phase included a new and larger work team that would create grade-by-grade standards and receive feedback from additional groups including business representatives and classroom teachers. Outside of the creation and development team, the CCSSO and NGA assembled a validation team to validate the standards against research and international benchmarks. Once an initial draft was created, they were put out for public comment in September 2009 and again in March 2010 after revisions were made. During these two comment periods over 10,000 comments were received (NGACBP & CCSSO, 2017). The final version of the standards was released in June 2010.

Despite the planning of the CCSSO and NGA to remove the federal government from the process, the U.S. Department of Education (USDOE) found a way to tie themselves to the standards. In 2009, the USDOE offered states that were applying for Race to the Top grants 40 points on their application (out of 500) if they agreed to adopt the CCSS by August 2010 (Rothman, 2012). In the first round of applications, 40 states applied, and all but one state agreed to the standards. While many state officials argue that the rigor of the standards was a greater factor in their race to adoption (Kober & Rentner, 2011), the stigma of federal involvement has continued to haunt them in the media and with opposition groups (NGACBP & CCSSO, 2017).

An idea that started almost thirty years ago has now come to fruition, yet creating the standards was only half the battle. As of May 2017, 42 states, the Department of

Defense, four territories, and the District of Columbia have adopted the CCSS for ELA/Literacy (NGACBP & CCSSO, 2017). It is important to note that states may choose to add up to 15% more to the core; however, the focus of this study is on the original Common Core State Standards put forth by the CCSSO and NGA. While the standards were eagerly adopted by many state educational agencies, they have weathered a fierce storm in the media including attacks by politicians, religious organizations, parents, and even teachers. State standards may have faced these attacks individually in the past, yet having a set of national standards created the opportunity for those to join forces across the United States and present a united front.

Implementing the Standards

With such a tumultuous history surrounding the idea of a set of national standards, one begins to wonder what their fate will be. In fact, the first state to adopt the standards, Kentucky, has recently passed legislation that calls for the repeal of CCSS (KY SB.1, 2017). Is this a sign that CCSS will be another milestone in the history of national standards here in the United States? Policy makers began with the idea of creating “consistent, real-world learning goals and launched this effort to ensure all students, regardless of where they live, are graduating high school prepared for college, career, and life” (NGACBP & CCSSO, 2017, “Development Process”), yet the day-to-day implementation efforts for the CCSS rested on the shoulders of teachers across the nation. Teachers were involved in the writing of the standards and had the opportunity to weigh in during public feedback, but has anyone taken the time to investigate their perception of the standards and willingness to implement them? Policy makers might have been vested in this pursuit for decades, but what are the beliefs and attitudes of teachers?

Whether researchers are looking forward to determine how to refine efforts for implementing CCSS or whether they are looking backwards in retrospect to learn from implementation efforts for future endeavors, the current investigation should provide insight into the implementation efforts at the ground level from the teachers who are tasked with actually implementing the standards. Specifically, I sought to identify factors that may predict teachers' intentions to implement the CCSS for ELA/Literacy at the secondary level (i.e., grades 6 -12). By understanding the current state of teachers' perceptions toward the CCSS, sense of efficacy in implementing the CCSS, and perceptions of subjective norms to implement instruction aligned with the CCSS, educational agencies will be able to target their efforts and expenditures towards areas needed for effective implementation of these standards or other standards that may be developed in the near future.

For this investigation, there are two studies that build on each other. Within each study, there is an introduction, literature review, methods, and results section followed by a discussion of the findings. The first study involved creating and validating a scale to measure a secondary teacher's sense of efficacy for literacy instruction aligned with the CCSS for ELA/Literacy. The development of a new measure was important because a scale currently does not exist to measure this construct. In the second study, the efficacy scale was then combined with other measures—perceived subjective norms and attitudinal scales—to determine to what degree do a teacher's attitude, sense of efficacy, and perception of subjective norms relate to implementing literacy instruction that aligns with CCSS for ELA/Literacy. In addition to creating the scale and combining it with additional measures, further data were collected to evaluate the teachers' accurate and

perceived knowledge of the standards. A high sense of efficacy for implementing the standards does not mean that one has accurate knowledge of the standards (Tschannen-Moran, Hoy, & Hoy, 1998), and it is critical to determine if teachers have an understanding of the CCSS for ELA/Literacy. Therefore, I also wanted to investigate teachers' self-perception of knowledge to determine if it adds to the predictive model of implementing the standards because people tend to act on what they *think* they know and might not have an accurate self-appraisal of knowledge level (Bandura, 2009). Having actionable data from these studies will be beneficial to policy makers and agencies that support teachers working towards the goal of implementing the CCSS so that students in the United States have access to an education that seeks to prepare them to enter college and/or careers at the end of the K-12 experience.

CHAPTER II: STUDY ONE

Developing the Teacher Sense of Efficacy for Secondary Literacy Instruction

(TSESLI) Scale

Introduction

One of the universal goals of education is to teach students to be literate individuals, and teachers enter the classroom everyday on a mission to help realize this goal. With 126 million youth worldwide who are illiterate, teachers and educators need all the support that can be provided to them in their efforts to help make literacy accessible to everyone (UNESCO Institute for Statistics, 2014). Not only is it important for teachers to possess pedagogical and content knowledge necessary to design and implement instruction to aid their students in developing literacy skills, but they also need to hold positive self-perceptions (i.e., have a strong sense of self-efficacy) of their teaching abilities—generally and domain specifically.

Some may wonder why schools and educational agencies should care about teachers' perceptions of their abilities as long as they possess the knowledge necessary for instructional implementation. However, prior research indicates that teachers' beliefs impact practice and how policy is enacted in the classroom (Bardach, 1977; Elmore, 1979; McLaughlin, 1987; Palmer & Rangel, 2011; Van Meter & Van Horn, 1975). The general theory of self-efficacy from Bandura (1977) has been adapted to education yielding a widely accepted definition for a teacher's sense of efficacy belief as “a judgment of his or her capabilities to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context” (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998, p. 233). A teacher's sense of efficacy influences a

teacher's actions, but more critically, it can also affect the students in the classroom thereby having a compounding impact (Caprara, Barbaranelli, Steca, & Malone, 2006; Gibson & Dembo, 1984; Klassen & Tze, 2014; Ross, 1992). Teacher efficacy relates to the behavior of the teacher (Ross 1994; 1998), how much effort one puts forth, the goals set for oneself and one's students (Tschannen-Moran & Hoy, 2007; Tschannen-Moran & Woolfolk Hoy, 2001), and even teacher commitment (Chan, Lau, Lim, & Hogan, 2008; Somech & Bogler, 2002). Those with a higher sense of efficacy are less critical of students (Ashton & Webb, 1986), and they are open to new ideas and willing to experiment with methods in order to meet the needs of the students (Ashton & Webb, 1986; Gibson & Dembo, 1984; Guskey, 1988; Pan, Chou, Hsu, Li, & Hu, 2013; Stein & Wang, 1988; Tschannen-Moran & Hoy, 2007; Tschannen-Moran & McMaster, 2009; Tschannen-Moran & Woolfolk Hoy, 2001). It is important for those supporting educators (e.g., national teacher organizations, state educational agencies, local district leaders, and teacher preparation programs) in making literacy accessible to all students to begin to understand teachers' perceptions of their abilities to implement literacy instruction.

While there has been extensive research seeking to understand and measure a teacher's sense of efficacy in a general context (Ashton & Webb, 1986; Caprara, Barbaranelli, Borgogni, & Steca, 2003; Gibson & Dembo, 1984; Guskey, 1988; Ho & Hau, 2004; Klassen et al., 2009; Tschannen-Moran et al., 1998; Vieluf, Kunter, van de Vijver, 2013), the realm of understanding a teacher's sense of efficacy in domain specific instances is quite limited in scope. A general scale for teacher efficacy does not capture the distinctive task demands of literacy instruction. A predominantly accepted measure

at this time yields data for three factors: efficacy for classroom management, efficacy for student engagement, and efficacy for instructional strategies (Fives & Buehl, 2010; Klassen et al., 2009; Knoblauch & Woolfolk Hoy, 2008; Tschannen-Moran & Woolfolk Hoy, 2001), but it still is not specific enough in nature to capture the demands of content or domain areas.

Bandura (2006) argues that any scale that is created to measure perceived efficacy must be tailored to the area under investigation. Otherwise, the scale will yield ambiguous data that do not actually measure the demands of the task and situation. With this need to create domain specific measures also comes the warning that the items should not be so specific in nature that the scale is limited in use (Pajares, 1996). Therefore, the researcher must find the balance and appropriate grain size for the items on the scale so that they accurately represent the construct under investigation. At this time, two promising scales for evaluating teachers' self-efficacy for literacy instruction have been published within the last several years and are available for review (Rogers-Haverback & Parault, 2011; Tschannen-Moran & Johnson, 2011). However, neither of the two scales measures a teacher's sense of efficacy for literacy instruction for secondary level teachers that addresses the current demand teachers in the U.S. face—implementing the Common Core State Standards for English/Language Arts and Literacy (CCSS ELA/Literacy).

Due to the limited research in understanding a teacher's sense of efficacy for literacy instruction, the researcher sought to define and measure a teacher's sense of efficacy for literacy instruction at the secondary level based upon the instructional demands of the CCSS for ELA/Literacy. It is important to note here that the CCSS for

ELA/Literacy are internationally benchmarked against standards from Ireland, Finland, New Zealand, Australia, Canada, Singapore, and the United Kingdom (NGACBP & CCSSO, 2017, “Appendix A”). First, a teacher’s sense of efficacy for secondary (i.e. grades 6-12) literacy instruction is defined in this study as a teacher’s appraisal of personal capabilities to implement instruction aligned to the CCSS for ELA/Literacy to bring about desired outcomes (i.e. student’s mastery of the skills outlined in the standards) for all students. Defining the construct is beneficial, yet providing a measurement and reliable data to support teachers’ efforts is of more worth to the field. Hence, the purpose of this study was to design, test, and refine a scale to measure a teacher’s sense of efficacy for secondary literacy instruction aligned with themes outlined by the CCSS for ELA/Literacy.

Measuring Teacher Efficacy

The measurement of a teacher’s sense of efficacy has experienced a contentious history throughout the last several decades. The first study seeking to measure a teacher’s sense of efficacy took place in the mid-1970’s by RAND researchers (Armor et al., 1976) utilizing two questions in their survey. While this early work by RAND was grounded in Bandura’s (1977) theory of self-efficacy and Rotter’s (1966) locus of control theory, later researchers sought to improve upon this measurement of self-efficacy beyond the two-item scale. The work of Guskey (1982, 1988), Ashton et al. (1982), and Gibson and Dembo (1984) influenced research in self efficacy during the 1980’s and early 1990’s. While their pursuit to measure the construct for self-efficacy was noteworthy, it was plagued with several measurement concerns which Tschannen-Moran and colleagues (1998) discuss at great lengths. After noticing the limitations of previous

research, Tschannen-Moran and Woolfolk Hoy (2001) set out to create a new scale for measuring teacher efficacy that would yield valid and reliable scores. What came out of their initial three study efforts was the Ohio State Teacher Efficacy Scale (OSTES), which is now known as the Teachers Sense of Efficacy Scale (TSES).

The TSES is considered to be the most reliable and valid instrument that is available at this time for measuring a person's efficacy beliefs for teaching in general (Buehl & Fives, 2009; Klassen et al., 2009; Klassen, Tze, Betts, & Gordon, 2011). Klassen et al. (2009) concluded that the TSES was an acceptable measure of teacher efficacy across five countries based upon their findings of measurement invariance and evidence of reliability. It has also been a widely accepted measure of teacher efficacy used in many other international studies (e.g., Garvis & Pendergast, 2010; 2011; Klassen et al., 2008; Klassen & Chiu, 2010; Moe, Pazzaglia, & Ronconi, 2010; Pfitzner-Eden, 2016; Renner & Pratt, 2017; Ruys, Van Keer, & Aelterman, 2011). However, it does not capture the unique "courses of action required to successfully accomplish a specific teaching task in a particular context," such as literacy instruction which is necessary when developing a self-efficacy measure (Tschannen-Moran et al., 1998, p.233). In a recent literature review by Klassen and colleagues (2011), it was noted that 60% ($n = 130$) of the studies utilized a general measure for teaching efficacy. While these data provide some insight, they do not allow the field to have a more precise view of teaching efficacy in light of specific tasks such as literacy instruction. In fact, Klassen and colleagues (2011) reported that only 2% ($n = 4$) of the reviewed studies focused on language or literacy teaching self-efficacy. If international, state, and local educational agencies want teachers to put forth their best effort in designing instruction and implementing literacy instruction, then

it would be beneficial to measure and understand teachers' self-perceptions of their abilities to do so.

Measuring Self-Efficacy for Literacy Instruction

The pursuit to measure a teacher's sense of efficacy for literacy or reading instruction is not a new venture. Szabo and Mokhtari (2004) worked to create a Reading Teacher Efficacy Instrument (RTEI) for pre-service teachers. It was based upon the work of Gibson and Dembo (1984) and measured the following two constructs: "teacher candidates' feelings about their ability to teach reading," which they referred to as self-efficacy, and "their beliefs about their ability to impact students' reading development," which they referred to as outcome expectancy (Szabo & Mokhtari, 2004, p. 61).

Bandura (2006) makes a clear distinction that self-efficacy is quite different than outcome expectancy. That is, perceived self-efficacy is an estimation of one's current ability to perform a task in specific context, and outcome expectations are the conclusions regarding the outcomes that will result from the performance of a task in a specific context. Estimating the capability to perform an action is quite different than calculating the results of one's performance. Furthermore, Bandura (2006) indicates that self-efficacy scales should use the wording "can do" in lieu of "will do." The majority of the items included in the reading teaching self-efficacy sub-scale use the wording "will do." Therefore, this scale does not entirely adhere to Bandura's (2006) theory of self-efficacy, is designed for pre-service teachers in elementary reading courses, is limited in design to reading instruction without attention to other areas of literacy such as writing, and is not designed around the demands of the CCSS for ELA/Literacy at the secondary level.

While Szabo and Mokhtari (2004) worked to create a scale for reading teacher efficacy, others have been interested in adapting scales to investigate a teacher's sense of literacy instruction. For example, Cantrell and Hughes (2008) adapted items from teacher efficacy instruments developed by Woolfolk and Hoy (1990), Hoy and Woolfolk (1993), and Gibson and Dembo (1984) to utilize in their study of sixth through ninth grade content area teachers ($n = 22$). Wording of items from pre-existing scales was changed to reflect literacy demands including reading. Additional items from Goddard's (2002) collective efficacy scale were also added to the survey, and Cantrell and Hughes (2008) included items to assess three domains for efficacy of literacy instruction: general teaching efficacy (GTE; 12 items), personal teaching efficacy (PTE; 29 items), and collective teaching efficacy (CTE; 12 items). The scale items were primarily used to evaluate the study's professional development program's effectiveness, and the focus of the research was not on scale validation. The insight gained from the study sheds light onto possible ways to increase teachers' sense of efficacy for literacy instruction in the content areas, but it does not produce a valid and reliable instrument that should be used for future studies. In addition, the questions were designed prior to the adoption of the CCSS for ELA/Literacy and were adapted from teacher efficacy scales that are not congruent with the guidance put forth by Bandura (2006). Therefore, the items on the scale utilized by Cantrell and Hughes (2008) were not given consideration for the current study.

Like Cantrell and Hughes (2008) who began with scales by other researchers, Rogers-Haverback and Parault (2011) adapted the Teacher Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk Hoy, 2001) to measure reading teachers' sense of

efficacy. The TSES consists of three subscales (i.e., efficacy for classroom management, promoting student engagement, and using instructional practices); however, Rogers-Haverback and Parault (2011) omitted the efficacy for classroom management scale because they did not feel that it was pertinent to the task of teaching reading. They did adapt the other two scales—engagement and instructional practices—to be domain specific (i.e. providing reading instruction). For example, “how much can you use a variety of reading assessment strategies?” and “how much can you do to motivate students who show low interest in reading?” are two of the revised TSES items.

Rogers-Haverback and Parault (2011) concede that their Reading Teacher Sense of Efficacy Scale (RTSES) is limited. Although the RTSES takes into account motivation and assessment factors of teaching reading, no other literacy domains such as Speaking or Writing are represented in the scale. The CCSS for ELA/Literacy takes an integrated approach to literacy instruction in which the four domains (reading, writing, speaking and listening, and language) are interrelated. Therefore, to assess reading without attention to writing or speaking and listening skills is not congruent with the integrated model of literacy set forth by the CCSS for ELA/Literacy (NGACBP & CCSSO, 2017, “Key Design Considerations”). In summary, the RTSES does not measure the constructs that secondary teachers are tasked with in terms of literacy instruction under the CCSS and is not a useful tool to modify for future research because it itself is a modification of a highly reputable scale—the TSES.

The Teachers’ Sense of Efficacy for Literacy Instruction (TSELI) scale created by Tschannen-Moran and Johnson (2011) is an instrument designed to measure teachers’ efficacy beliefs for literacy instruction. When creating the TSELI, Tschannen-Moran and

Johnson (2011) set out to examine the subject-specific aspect of a teacher's sense of efficacy for literacy instruction. While the RTSES was constructed based upon the TSES, Tschannen-Moran and Johnson started with standards from national organizations for their scale creation instead of modifying the existing TSES. At the time of their research, the CCSS for ELA/Literacy were not in place across the United States. Instead, they looked to the National Council of Teachers of English/International Reading Association (1996) *Standards for English Language Arts* and the International Reading Association (2004) *Standards for Reading Professionals* to guide their item construction.

With an original pool of 33 items, Tschannen-Moran and Johnson (2011) set out to validate the scale with a sample of 648 teachers from 20 elementary schools and 6 middle schools. After they conducted an initial review of the items on the TSELI and reduced the scale down to 22 items, they noted that there are an unequal number of questions related to reading, language usage, and writing. Out of the 22 questions, 16 questions refer to reading, three refer to writing, two refer to language usage, and one refers to the integration of language arts components (Tschannen-Moran & Johnson, 2011). These domain areas do not equally represent the task demands of the CCSS for ELA/Literacy for teachers in grades 6-12. Of additional concern is the fact that the TSELI was validated utilizing a sample of elementary and middle school teachers, and it has not been validated for use at the secondary level for grades 9-12 (Tschannen-Moran & Johnson, 2011). Therefore, the TSELI could not be used to examine secondary teacher's self-efficacy for literacy instruction aligned with the CCSS for ELA/Literacy as the standards were not considered when constructing items and the questions do not

represent the instructional shifts necessary to implement the standards that are the primary task set before U.S. educators today.

With the overwhelming majority of United States adopting the internationally benchmarked CCSS, a new scale for secondary teachers' sense of efficacy of literacy instruction was warranted. The construction of the new scale needed to address the pedagogical demands required for students to meet the rigorous college and/or career readiness standards of the CCSS ELA/Literacy.

Creation of the Teacher Sense of Efficacy for Secondary Literacy Instruction (TSESLI) Scale

In order to generate items that would seek to measure a teacher's sense of efficacy for literacy instruction at the secondary level, the instructional shifts (Alberti, 2012/2013; NGACBP & CCSSO, 2010, "Key Shifts in English Language Arts") and introduction of the CCSS for ELA/Literacy (NGACBP & CCSSO, 2017, "Key Design Considerations") was used for guidance. The instructional shifts, or key instructional practices, represented the instructional tasks for secondary teachers providing literacy instruction.

CCSS and the Instructional Shifts. Student Achievement Partners (SAP), a non-profit organization founded by three prominent authors of the CCSS, advocate that there are three instructional shifts, or practices, needed to ensure proper implementation of the standards: (a) building knowledge through content-rich nonfiction; (b) reading, writing, and speaking grounded in evidence from text, both literary and informational; and (c) regular practice with complex text and its academic language (Achieve the Core, 2014). These same three shifts are also found on the CCSS website (NGACBP & CCSSO, 2010, "Key Shifts in English Language Arts"). Some of the statements include

multiple instructional recommendations, and the New York State Education Department (NYSED) parsed out the shifts articulated by Student Achievement Partners into six shifts: (a) balancing informational and Literary texts; (b) building knowledge in the disciplines through texts; (c) engaging students in reading and speaking that require text-based answers; (d) engaging students in writing from sources; (e) engaging students in a staircase of complex texts; and (f) focusing on academic vocabulary (New York State Education Department [NYSED], 2014). An alignment of the statements from the NYSED and CCSS is provided in Figure 1. For the purpose of this study, the six shifts from the NYSED guided the initial item construction due to their level of specificity in representing the multiple demands found within the three original shifts outlined by SAP and CCSS. By looking at the three original shifts then deconstructed into six, it could ensure that the newly created items addressed all requirements.

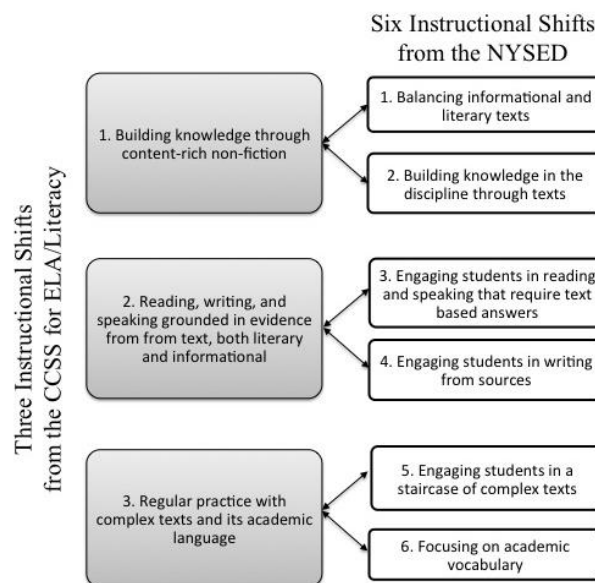


Figure 1. Alignment of NYSED six ELA/Literacy instructional shifts with CCSS three ELA/Literacy instructional shifts.

International Benchmarking. While the majority of the United States (i.e., 42 states, the Department of Defense, the District of Columbia, and four U.S. territories) has adopted the CCSS for ELA/Literacy, it is equally important to note that the shifts put forth by the CCSS capture trends that were prominent and noted in the validation committee’s review of other countries’ academic standards (NGACBP & CCSSO, 2017). First, it was noticed that standards in other nations address the range and type of texts students should read (e.g., England: Department of Education, 2014; Hong Kong: Curriculum Development Council and the Hong Kong Examinations and Assessment Authority, 2007) while some even put forth a sample text list with models of annotated texts (e.g., New Zealand; Ministry of Education, 2008) much like that in the CCSS for ELA/Literacy. The CCSS for ELA/Literacy advocate for a balance of informational and literary texts as well as regular practice with complex texts, which follows the international model of setting a standard for the range, quality, and complexity of texts (NGACBP & CCSSO, 2017, “Appendix A”). Secondly, reviewers from the validation study on the CCSS (NGACBP & CCSSO, 2017) noted that internationally, students are required to write in response to sources. Not only do the CCSS for ELA/Literacy address this principle, but they have also added the expectations that students should engage in text-based conversations. Lastly, it was noted that argumentative writing and informational/ explanatory writing are prioritized at the secondary level in other nations. For example, the National Secondary Curriculum in England asks that students write narrative and non-narrative texts for pleasure and informational purposes including arguments (Department of Education, 2014). In the Ontario Curriculum for grades nine and ten, students are expected to use knowledge of form and style to write in a variety of

styles including informational (Ministry of Education, 2007). The emphasis on informational and argumentative writing modes is noted in the “Key Design Considerations” provided with the standards and is represented in the CCSS for ELA/Literacy (NGACBP & CCSS0, 2017). In summary, the instructional shifts that accompany the CCSS represent international trends in literacy standards and instruction.

Item Construction. As noted above, the focus of item creation in this study was on the big ideas and overarching concepts behind the design and implementation of the standards represented in the shifts rather than on the granular specifics of grade level and disciplinary specific standards (Bandura, 2006; Pajares, 1996). By focusing at the conceptual level, items are more likely to represent the general requirements of literacy instruction that all teachers are charged with when implementing the standards. Most importantly, Bandura (2006) advocates that when creating a domain specific efficacy scale, it must be linked to criteria that determine the quality of functioning in that area. Thereby focusing on the instructional shifts for item creation, quality indicators put forth by the authors of the standards were used (NGACBP & CCSSO, 2017, “Key Shifts in English Language Arts”).

To begin the list of items for the scale, six to ten new questions per NYSED instructional shift were generated yielding a total of 44 items. Careful attention was taken to ensure that the language matched that of the standards. Items for each of the six NYSED instructional shifts were specifically constructed to represent both designing and implementing instruction for the standards. It was important that items were constructed to measure current capability using the word *can* as recommended by Bandura (2006). With the newness of the standards, many teachers are asked to create their own materials

for instruction due to the lack of available congruent resources. In other situations, schools or districts purchase curriculum and ask that teachers implement it accordingly. Thus, it was important that both roles—designing and implementing—were represented in the questions.

The list was carefully whittled down to ensure that the questions generated applied to all teachers in grades six through twelve and across content areas based upon the skills outlined in the standards and shifts. Thus, items that pertained to the first NYSED shift (i.e., incorporating a balance of literary and informational text) were eliminated as this shift applies primarily to teachers in elementary grades and English/Language Arts teachers. Disciplinary content teachers (i.e., social studies, science, career/technical education, etc.) are not charged with implementing instruction for literature; consequently they would not need to ensure a balance of literary and informational text. Since the scale was to be administrable to any secondary teacher regardless of content, the items for this shift were removed. Some questions were removed because the wording was awkward. Other questions were removed because they were too specific in nature representing the demands of individual standards and did not represent the general nature of the SAP instructional shifts. The result was a list of 37 questions.

The list of 37 created items was submitted to a panel of experts including teacher leaders, university professors, and state literacy consultants to review for content validity and editing. They were given a crosswalk of the two models of instructional shifts (see Figure 1) and asked to identify questions that they felt most likely represented the instructional shifts and demands of the standards for all teachers. The expert reviewers

provided feedback, and they concurred that developing instructional materials was a distinct task from implementing instruction. Therefore, both tasks were represented in the scale items. A university professor specializing in self-efficacy research reviewed the items and ensured that they adhered to Bandura's (2006) guidance for measuring self-efficacy. Items were further reduced and edited for the next phase of scale development resulting in the removal of two items.

An initial survey containing 35 items was field-tested using a brief cognitive field-testing interview with a small group of five teachers matching the sample criteria (i.e., secondary teacher of grades six through twelve in English/Language Arts, History/Social Studies, Science, and the Technical Subjects). The items were designed based upon the language of the CCSS for ELA/Literacy and NYSED/SAP instructional shifts, yet this is not always the language (e.g., staircase of complex texts, build knowledge in the discipline) that teachers in the field use. Thus, it was important to understand how practicing teachers would interpret the items before piloting and administering the scale to a larger group.

The focus group of teachers was asked to assess the clarity of the items, appropriateness of the items, and feasibility of administration. Focus group participants were also asked to consider the answer choices provided and certain terminology within the questions (e.g., complex texts, help my students). Their thinking about questions that addressed designing instruction and implementing instruction was also of great interest, so the focus group of teachers were asked, "When implementing the standards, do you think it is important to know how to design instruction aligned to the standards?" One teacher responded, "It is critically important. How else would you know how to adjust

instruction in your classroom?” Another teacher responded, “Designing instruction is crucial for an effective lesson with the students in *your* room—not someone else’s.”

When examining ways to phrase the questions for the scale to ensure that the items measured the implementation of the standards, teachers in the cognitive interview were asked, “How do you interpret the words ‘teach the standards,’ ‘help my students,’ and ‘provide instruction for?’” All teachers indicated that they preferred “help my students” in the wording because it acknowledged a demand of the task—considering the students and not merely addressing the standards in isolation. This thinking by the teachers is congruent with that of Tschannen-Moran, Hoy, and Hoy (1998) suggesting when measuring teaching efficacy consideration should be given to such factors of the teaching task including the students’ abilities and motivation.

In regards to the layout of the scale, the focus group suggested grouping the questions on the scale into two categories so that others would notice a difference in what they were being asked: implementing instruction versus designing instruction. Revisions were made based upon data gathered from the field test including wording changed for clarity and ease of understanding, and a final version consisting of 30 items was constructed for use in this study. Scale construction began with the intent to capture teachers’ sense of efficacy for literacy instruction aligned to the CCSS for ELA/Literacy at the secondary level, and the deconstructed version of the instructional shifts from NYSED were used to ensure that the multiple demands represented in the three shifts put out by SAP were captured. However, because the three instructional shifts from SAP are the ones posted on the CCSS website and are most widely accepted, the questions are aligned to the SAP and CCSS three shifts for future ease of use (see Table 2).

Methods

Participants

The participants were 168 secondary (grades 6-12) teachers from across the United States who provided instruction in English Language Arts, Science, Social Studies, History, Arts and Humanities, and Technical Subjects. Convenient sampling was utilized as participants self-selected to respond to the electronic survey that was advertised through social media and other forms of electronic communication.

Demographic data for the sample are represented in Table 1. The majority of the respondents teach in Kentucky ($n = 143$), yet the others ($n = 25$) teach in a range of states from Arizona, California, Georgia, Illinois, Minnesota, Missouri, New York, North Dakota, Ohio, South Dakota, Tennessee, and Washington. It is important to note that the percentages in Table 1 may not total 100% for a given category because a teacher may have multiple teaching responsibilities (e.g., teaches both Science and English/Language Arts) or may be assigned to provide instruction for multiple grade levels (e.g., teaches 6th, 7th, and 8th grades).

Table 1

Demographic Data

Characteristic	Total (<i>n</i> = 168)	Percent
Gender		
Male	28	16.7
Female	140	83.3
Ethnicity		
Hispanic/Latino	3	1.7
Non-Hispanic/Latino	165	98.2
Race		
Asian	1	0.5
Black/African-American	7	4.1
White	157	93.4
Grade-level assignments		
6 th	32	19.0
7 th	52	30.9
8 th	46	27.0
9 th	26	15.4
10 th	38	22.6
11 th	43	25.5
12 th	46	27.0
Instructional responsibilities		
English/Language Arts	97	57.7
Science	40	23.8
History/Social Studies	27	16.0
Arts and Humanities	9	5.0
Social Sciences	5	2.9
Career/Technical Education	17	10.0
Years of experience		
0 – 5 years	51	30.4
6 – 10 years	40	23.8
11-15 years	27	16.1
16-20 years	27	16.1
21-25 years	19	11.3
26-30 years	4	2.4
Highest degree attained		
Bachelor's	38	22.6
Master's	101	60.1
Rank 1/Specialist's	29	17.3

Measures

Demographics. Questions were generated to capture nine demographic variables. Three demographic variables were collected on instructional assignment: grade level taught, subject area(s) taught, and state of employment. If they did not teach in grades six through twelve, in one of the identified subject areas, and a state that implemented the Common Core State Standards, then the survey was ended. Other variables collected were ethnicity, race, age, gender, level of most recent awarded degree, and years of experience.

New Scale. The newly created Teacher Sense of Efficacy for Secondary Literacy Instructions (TSESLI) scale contained 30 items measuring a teacher's sense of efficacy for Literacy instruction at the secondary level aligned with the demands of the CCSS for ELA/Literacy instructional shifts. Participants were asked to consider the combination of their current ability, resources, and opportunity for each of the given statements when responding (Bandura, 2006). As with many self-efficacy scales, this scale was designed using a 9-point Likert scale with rating indicators being: 1—None at All, 3—Very Little, 5—Some Degree, 7—Quite a Bit, 9—A Great Deal. A full list of questions along with descriptive statistics can be found in Table 2.

Table 2

TSESLI Questions and Descriptive Statistics

Item #	Instructional Shift	To what extent can I ...	Mean	SD
1	Shift 3	Select texts for classroom instruction based upon quantitative measures (i.e. Lexile, computer generated measures based upon sentence length, word length or frequency)?	6.16	2.23
2	Shift 3	Select texts for classroom instruction based qualitative measures (i.e. those aspects measured by a human reader such as levels of meaning or purpose; structure; language conventionality and clarity; and knowledge demands)?	6.53	2.03
3	Shift 3	Select texts for classroom instruction based upon considerations of the reader and task (i.e. variables specific to particular readers such as motivation, knowledge, and experiences and variables specific to particular tasks such as purpose and the complexity of the task assigned and the questions posed)?	6.73	1.89
4	Shift 3	Determine if a student can understand and comprehend discipline specific complex texts?	6.90	1.31
5	Shift 3	Adjust instruction (not change texts) for students who are struggling with complex texts?	6.92	1.56
6	Shift 1	Help students learn literacy strategies to aid in comprehending a variety of text types specific to my discipline (e.g. scientific articles, career and technical manuals, primary or secondary historical documents, literature, etc.)?	6.86	1.60
7	Shift 1	Help students learn to analyze texts specific to my discipline?	7.37	1.43
8	Shift 1	Help students learn to develop an understanding of a concept or topic by reading multiple disciplinary texts?	6.96	1.43
9	Shift 3	Help students learn to use a range of strategies to understand unfamiliar words while reading?	7.07	1.45

10	Shift 3	Implement instruction using knowledge of your students' current vocabulary and the demands of the text?	6.95	1.43
11	Shift 2	Help students learn to engage in a range of conversations about texts?	7.01	1.50
12	Shift 2	Ask questions during instruction that require students to provide a text based response?	7.44	1.46
13	Shift 2	Ask questions during instruction that require students to make inferences based upon a text?	7.47	1.33
14	Shift 2	Help students learn to select and incorporate evidence from texts in their writing?	7.45	1.45
15	Shift 2	Help students learn to evaluate the argument and evidence in a complex text?	7.18	1.46
16	Shift 2	Help students learn to compare and contrast information presented in multiple complex texts?	7.16	1.38
17	Shift 2	Help students learn how to make an argument and support their claim with reasoning and evidence from texts?	7.49	1.39
18	Shift 2	Help students learn how to write from multiple sources about a single topic?	7.18	1.59
19	Shift 2	Help students learn to assess the credibility and accuracy of sources when gathering evidence for writing?	6.81	1.68
20	Shift 2	Provide specific feedback to your students to help them improve their writing in your disciplines?	7.05	1.66
21	Shift 3	Provide specific feedback to your students to help them improve their reading comprehension of complex texts?	6.72	1.60
22	Shift 2	Provide specific feedback to your students to help them engage in conversations about a text?	6.97	1.52
23	Shift 1	Design instruction that allows students to engage with a variety of text types specific to my discipline (i.e. literary and/or informational)?	7.08	1.59
24	Shift 1	Design instruction to help students learn literacy strategies aid in comprehending a variety of text types specific to my discipline (i.e. literary and/or informational)?	6.95	1.50

25	Shift 1	Design instruction to help students learn content from reading discipline specific texts?	7.10	1.37
26	Shift 3	Design instruction for all students centered on complex texts?	6.80	1.53
27	Shift 3	Design instruction to help students learn how to use a range of strategies to make meaning of unfamiliar words while reading?	7.01	1.49
28	Shift 3	Design instruction using knowledge of your students' current vocabulary and the demands of the text?	6.99	1.47
29	Shift 2	Design instruction to help students learn how to engage in evidence-based conversations about texts?	7.13	1.47
30	Shift 2	Design instruction to help students learn how to find evidence in a text that supports their argument, reflection, or analysis?	7.24	1.47

Note. Shift 1: Building knowledge through content-rich nonfiction; Shift 2: Reading, writing, and speaking grounded in evidence from text, both literary and informational; and Shift 3: Regular practice with complex text and its academic language.

TSES. The TSES Short Form (Tschannen-Moran & Woolfolk Hoy, 2001) was used to measure teachers' self-efficacy for general features of teaching and is comprised of 12 questions grouped into three subscales: Efficacy for student engagement (SE; 4 items), Efficacy for instructional strategies (IS; 4 items), and Efficacy for classroom management (CM; 4 items). Participants were asked to consider the combination of their current ability, resources, and opportunity for each of the given statements in their present position when responding. The three subscales can be used individually or can be combined to represent teaching efficacy as a unidimensional construct (Tschannen-Moran & Woolfolk Hoy, 2001). For this sample, I wanted to assess teaching efficacy as a unidimensional construct; thus, Cronbach's alpha for the entire 12-item short form of the TSES is $\alpha = .93$.

Procedure

Data were collected during October of 2015 through December of 2016 using an electronic survey platform. A small group of 11 teachers piloted the survey without the inclusion of the TSES to ensure feasibility and calculate an estimate of completion time. Because the pilot ran smoothly, survey notices were then advertised nationally through social media, national educational organizations, educational non-profit agencies, and state literacy organizations. Respondents self-selected to participate, thus convenience sampling was utilized. Due to a low response rate during the first six months of data collection, I incentivized participation for the last 100 participants with a five-dollar gift card.

Data Analysis

Using IBM SPSS 24, an exploratory factor analysis (EFA) utilizing principal axis factoring was conducted to reduce the number of items on the scale and to test a hypothesized factor structure for the TSESLI. A review of eigenvalues, a visual scree test, an inspection of the residual correlation matrix, and a parallel analysis were conducted during the EFA. For reliability analysis, Cronbach's alpha was calculated to determine internal consistency. The short form of the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) was administered, and the total score from the three subscales was computed and used to assess convergent validity of the constructed TSESLI using Pearson's r .

Results

An exploratory factor analysis, using principal axis factoring (PAF) and a Varimax rotation, was conducted on the 30-item TSESLI for $N = 168$ respondents to test

the hypothesized factor structure and reduce items for future validation studies. Gorsuch (1983) recommends five responses or participants for every measured variable; therefore having a maximum of five questions for the six latent variables made it necessary to obtain at least 150 participants. This criterion was met with 168 responses. Prior to conducting the PAF, the suitability of the data was examined. Inspection of the Pearson's *r* correlation matrix revealed the presence of many coefficients of .3 or above (Tabachnick & Fidell, 2013). The Kaiser-Meyer-Olin value was .944, which exceeds the recommended value of .6 (Kaiser 1970, 1974), and the Bartlett's Test of Sphericity (Bartlett, 1954) was significant ($p < .001$). Thus, the data were suitable for factor analysis.

A principal axis factoring revealed the presence of three factors with eigenvalues above 1 and that explained 69% of the total variance, with factor 1 explaining 58.8%; factor 2 explaining 6%; and factor 3 explaining 4.1%. Further inspection of the scree plot revealed a clear break between the first and second factors. As a third measure to determine the factor structure, a parallel analysis was conducted using Monte Carlo analysis (Watkins, 2000). The parallel analysis accounts for sampling error that might influence the measured variables, and it is a commonly used method to determine how many factors to retain in an EFA (Thompson, 2004). For this analysis, 30 variables were entered along with 168 participants and 100 replications (Tabachnick & Fidell, 2013). Table 3 provides a summary of the random eigenvalue generated from the parallel analysis (PA) with the initial value generated in the SPSS analysis. Based upon a review of these data, two factors were retained (Tabachnick & Fidell, 2013).

Table 3

Parallel Analysis Decision Matrix for Initial Exploratory Factor Analysis

Factor	Initial Eigenvalue	Parallel Analysis	Retain
Factor 1	17.64	1.90	Yes
Factor 2	1.83	1.76	Yes
Factor 3	1.26	1.66	No

Before making a final decision regarding which items should be retained, the factor matrix was reviewed (Table 4). Items 1, 2, 3, and 4 cross-loaded on Factor 2 (Table 4) at a value above .32 (Osborne & Costello, 2009) and below .6 (Field, 2009) indicating possible removal from the scale was needed. After a review of the questions in the survey, it was determined that items 1, 2, 3, and 4 clustered together around the construct of text complexity and choosing texts for instruction, and these items were removed for future analysis. References to complex texts are found in other items (e.g., items 15, 16, and 26), so the language from the instructional shift is still represented in the scale. In addition, item 20 and item 2 loaded on Factor 3 at a value above .32; however, Factor 3 was not supported to be retained based upon the PA. Item 20 also loaded on Factor 1 with a value above .6 and addressed giving feedback on writing which was not similar to the text selection Items 1, 2, 3, and 4. Osborne and Costello (2009) indicated that removing items and rerunning the EFA can help in further identifying the underlying factor structure. Therefore, Item 20 was retained for running a subsequent EFA to determine if its retention would be supported in a future analysis. In summary, Items 1-4 were identified as problematic items (Osborne & Costello, 2009) and were removed, and it was concluded to conduct another PAF with the remaining items.

Table 4

Factor Loadings for Initial Exploratory Factor Analysis of TSELI

Item	Factor 1	Factor 2	Factor 3
24	.862		
29	.848		
17	.838	-.308	
23	.833		
16	.824		
15	.813		
22	.813		
13	.811		
27	.806		
11	.793		
18	.787		
25	.785		
26	.784		
30	.783		
14	.772		
21	.769		
28	.767		
9	.765		
12	.759		
19	.733		
6	.730	.303	
8	.729		
7	.724		
10	.722		
5	.699		
20	.678		.346
4	.674	.368	
2	.656	.471	.340
3	.641	.480	
1	.471	.408	

Based upon initial findings from the first PAF, a second PAF with Varimax rotation was conducted for the now 26-item scale. The second PAF again revealed the presence of three factors with eigenvalues above 1 and explained 71.5% of the total variance with Factor 1 explaining 62.3%, Factor 2 explaining 5.25%, and Factor 3 explaining 3.9%. In this second analysis, a one-factor solution accounted for 62% of the variance (26 items) in contrast to the first analysis (30 items) where 58% of the variance was explained by a one-factor solution.

Further inspection of the scree plot revealed a clear break between the first and second component indicating that a one factor solution may be the best fit according to Cattell's (1966) scree test. Results from the Monte Carlo parallel analysis (Watkins, 2000) provided further support for a one-factor solution (Table 5).

Table 5

Parallel Analysis Decision Matrix for Second Exploratory Factor Analysis

Factor	Initial Eigenvalue	Parallel Analysis	Retain
Factor 1	16.21	1.80	Yes
Factor 2	1.37	1.68	No
Factor 3	1.02	1.58	No

When one factor was entered to be extracted, a review of the factor matrix (Table 6) indicated that all items loaded at a value above .6 in the analysis (Field, 2009; Osborne & Costello, 2009). Together the analyses suggest one factor structure is the best fit with the elimination of four items from the scale (i.e., Items 1, 2, 3, and 4).

Table 6

Factor Loadings for One Factor Solution Exploratory Factor Analysis of TSELI

Item #	Factor 1
24	.862
29	.848
17	.838
23	.833
16	.824
15	.813
22	.813
13	.811
27	.806
11	.793
18	.787
25	.785
26	.784
30	.783
14	.772
21	.769
28	.767
9	.765
12	.759
19	.733
6	.730
8	.729
7	.724
10	.722
5	.699
20	.678

The final one-factor scale contains 26 items that ultimately represent the three instructional shifts communicated by the authors of the standards (NGACBP & CCSSO, 2017, “Key Shifts in English Language Arts”): building knowledge in the discipline through content rich non-fiction (6 items); reading, writing, and speaking grounded in evidence from text, both literary and informational (13 items); regular practice with complex text and its academic language (7 items).

Reliability and Validity

Cronbach's alpha was calculated for TSESLI to determine internal consistency, thus yielding a value of $\alpha = .98$ indicating that the items demonstrate excellent internal consistency (George & Mallery, 2003). To determine the degree to which the TSESLI measured its intended construct of interest, it was hypothesized that the TSESLI should relate to a more general measure of teaching efficacy. In order to determine convergent validity for the TSESLI, means from the Teacher Sense of Efficacy Scale (TSES) ($M = 8.05$, $SD = 1.07$) and TSESLI ($M = 7.09$, $SD = 1.17$) were investigated using Pearson's r for 157 participants. There is a strong positive correlation between the two scales ($r = .575$, $p < .005$) (Cohen, 1988).

Discussion and Implications

Bandura (2006) stresses that a self-efficacy instrument must capture the demands of the task and situation, and there is no one-size-fits-all measurement for self-efficacy. The same holds true for teaching efficacy. While numerous validation studies have indicated the strong reliability and validity of the TSES on a global scale (Buehl & Fives, 2009; Duffin, French, & Patrick, 2012; Klassen et al., 2009; Klassen, Tze, Betts, & Gordon, 2011; Poulou, 2007), the scale does not capture the literacy demands that secondary teachers face on a daily basis. Other researchers (Rogers-Haverback & Parault, 2011; Szabo & Mokhtari, 2004; Tschannen-Moran & Johnson, 2011) have sought to develop a scale to measure a teacher's sense of efficacy for literacy or reading instruction. However, the adoption of the CCSS for ELA/Literacy in 44 states across the United States has warranted the creation of a new scale to align with current standards and to represent the instructional demands before the majority of secondary teachers

across this nation and represent those from other nations around the world (NGACBP & CCSSO, 2017, “Appendix A”).

The purpose of this study was to create a new measure for a teacher’s sense of efficacy for secondary literacy instruction aligned to the CCSS for ELA/Literacy. Findings from an exploratory factor analysis suggest that the TSESLI is a viable 26-item measure capturing the unidimensional teaching-efficacy construct for literacy instruction at the secondary level (i.e., grades 6 through 12). The items represent instructional shifts that are articulated and commonly communicated by the authors of the standards (NGACBP & CCSSO, 2017, “Key Shifts in English Language Arts”): building knowledge in the discipline through content rich non-fiction (6 items); reading, writing, and speaking grounded in evidence from text, both literary and informational (13 items); regular practice with complex text and its academic language (7 items). It was hypothesized that a general measure of teaching efficacy should be related to a more domain specific teaching efficacy measure, and there was a strong correlation ($r = .575, p < .005$) between the TSES and the TSESLI. Therefore, this hypothesis was confirmed.

Together the findings suggest the TSESLI measures teachers’ sense of efficacy for literacy instruction at the secondary level and should be used to further investigate the sources that contribute to teachers’ sense of efficacy for literacy instruction. Prior to investigating antecedents, researchers should begin further validation studies to confirm the factor structure proposed in this analysis. A confirmatory factor analysis should be conducted with a variety of populations including both English/Language Arts teachers and disciplinary content teachers at the secondary level. Because the CCSS for ELA/Literacy are internationally benchmarked (NGACBP & CCSSO, 2017, “Appendix

A”), it is important to validate this instrument outside the United States as well. Much of the teacher efficacy research has taken place in the United States, and it is important to understand how teacher beliefs operate in a variety of cultural and national settings (Klassen et al., 2011). In this study, pre-service teachers were not included in the sample and this population should be considered for future validation studies to determine if a one-factor solution is the best-fit model for the scale.

Validation of the scale is important, but it should also be paired with additional items to investigate the antecedents that contribute to efficacy beliefs in literacy instruction. What type of contextual factors affects a teacher’s perceived self-efficacy for Literacy instruction (e.g., instructional assignments, principal support)? What specific type of experiences will aid teachers in increasing their perceptions of their abilities (e.g., job-embedded coaching, professional learning experiences, peer observations)? How can school, district, and national agencies seek to support teachers in this endeavor based upon the findings (e.g., professional learning supports)? Of even more interest is to compare the efficacy beliefs of teachers in the United States to those around the world who are seeking to achieve similar literacy goals: having students write from texts, engage in literacy practices with a range of texts, and engage in writing argumentative and informational/explanatory compositions (NGACBP & CCSSO, 2017, “Appendix A”). Examining the experiences that contribute to the development of efficacy beliefs in Literacy in respective countries is critical for teachers and students in a global society.

Limitations

This study has a number of limitations that should be considered when interpreting results. Because the participants self-selected to respond to the survey and

some were even compensated for their participation, the teachers who volunteered to respond could answer in a way that is uniquely different from those who chose not to participate. The majority of the respondents ($n = 143$) were from Kentucky, and their responses could differ significantly from teachers who provide instruction in other states with varying levels of implementation and support for the CCSS for ELA/Literacy.

Conclusion

The field of teacher efficacy measurement and research has expanded from the initial two items generated by the RAND researchers (Armor et al., 1976) in the 1970's, yet there is still room to grow. It is important to understand teaching efficacy in a general sense, however it is especially imperative to understand teaching efficacy in domain-specific areas. As the field of teacher efficacy research expands, it is critical for new scale development and refinement to follow the guidance and theory of Bandura (1977; 1997; 2006) so that there is congruence between the measures and theoretical basis (Klassen et al., 2011). By providing the field with a valid and reliable scale, the educational community and researchers can begin to understand teachers' sense of efficacy for literacy instruction and the sources that impact their beliefs. Having an understanding of this construct and the sources that affect it, ways to support teachers in their daily efforts to reach the educational outcomes that they seek can be designed. After all, being literate is a universal educational goal, and teachers need all the support that can be provided to them.

CHAPTER III: STUDY TWO

Supporting Teachers in their Implementation of the Standards:

The Power of Teacher Beliefs

Introduction

In November of 2007, state educational chief officers started discussing the opportunity to collaborate on a set of common academic standards for the United States (NGACBP & CCSSO, 2017, “Development Process”). This idea finally came to fruition when the National Governors Association and the Council of Chief State School Officers released the Common Core State Standards (CCSS) in Mathematics and English Language Arts and Literacy in History/Social Studies, Science and Technical Subjects (ELA/Literacy) in 2010. The release of the new standards opened the doorway for state educational agencies to adopt the CCSS as their state-approved academic standards and incited a national movement in educational reform. As of May 2017, 42 states and the District of Columbia have adopted, in some manner, the standards for ELA/Literacy (NGACBP & CCSSO, 2017). For the past six years, educators around the United States have worked on implementing the CCSS while educational agencies worked to provide an assortment of training and support centered on interpreting and putting the new standards into practice (Southern Regional Education Board [SREB], 2014).

Although state level governing bodies made the decision to adopt the standards, set timelines for implementation, and provided resources to support implementation, it is the day-to-day decisions that teachers make in the classroom that ultimately determine whether or not implementation efforts are successful (Berman & McLaughlin, 1978). Some might wonder why local and state education agencies would be interested in

teachers' intentions to deliver instruction that is aligned with the CCSS since it is part of a teacher's job responsibilities to teach to standards adopted by the state governing body. However, requiring a behavior as a job responsibility does not equally translate into the performance of the required behavior by the employee (McLaughlin, 1987). When a teacher closes the door to the classroom, she is left to do what she believes is in the best interest of her students. Sometimes what is believed to be educationally beneficial by the teacher is not actually what is in line with the current educational policy (Norwich, 1994).

Therefore, policy implemented in the field is a result of multiple interpretations and local appropriations, and the individual—the teacher in this case—acts as an individual sense-maker in the process (Coburn, 2001; Coburn, 2004; Klein, 2001; Leithwood, Steinbach, & Jantzi, 2002; Spillane, Reiser, & Reimer, 2002; Weick, 1995). The teachers, and others in the system, engage in an ongoing process of negotiating meaning and making interpretations, which eventually informs decisions and actions taken (Bardach, 1977; Elmore, 1979; Palmer & Rangel, 2011; Van Meter & Van Horn, 1975). They receive information about the policy from a variety of sources including state educational agencies, political organizations, religious groups, and social media (Henderson, Peter, & West, 2016; SREB, 2014). Teachers are left to make personal meaning of the policy and implications for implementation based upon their own contextual factors and experiences thus developing personal beliefs and values about the policy that affect day-to-day decision-making (Leithwood, Steinbach, & Jantzi, 2002; McLaughlin, 1987). Therefore, how teachers implement the standards is dependent on these various factors including their knowledge of the standards, which might be vastly different than that of the governing body that adopted them (Palmer & Rangel, 2011).

Not only are educators individual meaning-makers in the system, but they also operate in a context of public education that is far from steady and is often times characterized as chaotic. In addition to making meaning of the policy, teachers are surrounded by a system that can be seen as having overlapping goals, sending mixed messages to differing groups within the system, and putting forth mandates that are not well received (Lane & Hamann, 2003). Teachers try to determine what is expected of them by looking to school administration, other teachers in their building, and even the public. The result of this individual sense making yields variations of implementation between and within levels and groups in the system. Consequently, because of education's ever-changing nature and lack of stability, almost no implementation effort is ever executed as designed (Fullan, 1999). Without fail, there are always unintended consequences that arise. Nonetheless, policy makers begin the journey of implementation with hope that their efforts will improve students' educational experiences for the better (Eisenhart, Cuthbert, Shrum, Harding, 2009).

If the success or failure of policy implementation is dependent upon the day-to-day actions of the teacher, then where is the teaching populace now with the implementation of a new set of standards? After six years of enactment, teachers have encountered a number of variables that ultimately influence their perception and willingness to carry out the behaviors identified for implementing the CCSS. The Theory of Planned Behavior (TPB) is a lens through which to examine these variables. TPB proposes that a teacher's attitude, perceived subjective norm, and degree of behavioral control (i.e., self-efficacy) might explain implementation of the standards (Fishbein & Ajzen, 2010). In addition, a teacher's knowledge of the standards could also play a role

in this prediction (Ajzen et al., 2011). Therefore, this study sought to investigate the degree to which these specific factors (i.e., attitude, subjective norm, self-efficacy, and knowledge) affect teachers' intentions to implement the CCSS for ELA/Literacy in their classrooms.

Various researchers (Murphy & Haller, 2015; Nadelson, Pluska, Moorcroft, Jeffrey, & Woodward, 2014; Troia & Graham, 2016) have sought to understand and quantify various determinants related to the TPB (Fishbein & Ajzen, 2010) and literacy implementation, yet no research thus far has incorporated all three determinants into one study in order to generate a predictive model for secondary literacy instruction aligned to CCSS for ELA/Literacy. Recent national surveys investigated teachers' general perceptions and attitudes towards the CCSS (Editorial Projects in Education Research Center, 2013; Education Week Research Center, 2014; Henderson & Peterson, 2014; 2016), but they were not combined with other measurements included in the TPB. While state agencies might advocate that there is a strong subjective norm to perform the intended behavior from their vantage point, it is important to understand the perception of the field of teaching in light of accountability measures and continued policy implementation efforts. Therefore, this study and survey of teachers was designed to investigate the following research questions:

1. To what extent does a teacher's sense of efficacy, perception of subjective norms, and attitude towards the standards predict implementation of the standards?

2. To what extent does a teacher's knowledge (actual and perceived) of the standards, when added to the TPB model, aid in predicting implementation of the standards?

Instructional Shifts

Before delving into the theoretical framework that supports this investigation, it is important to clarify what implementation of the standards at the secondary level entails. What do policy makers envision as key practices that would signify effective implementation of the standards? There are three instructional shifts, or instructional practices, detailed on the CCSS website that are critical to implementation of the standards: (a) building knowledge through content-rich nonfiction; (b) reading, writing, and speaking grounded in evidence from text, both literary and informational; and (c) regular practice with complex text and its academic language (NGACBP & CCSSO, 2017). The New York State Education Department (NYSED) further parsed out the three shifts articulated by the CCSS into six shifts for greater clarity: (a) balancing informational and Literary texts; (b) building knowledge in the disciplines through texts; (c) engaging students in reading and speaking that require text-based answers; (d) engaging students in writing from sources; (e) engaging students in a staircase of complex texts; and (f) focusing on academic vocabulary (NYSED, 2014). An alignment of the shifts from the NYSED and CCSS is provided in Figure 1. For this study, the six shifts to describe the characteristics of the intended behavior—implementing the CCSS for ELA/Literacy at the secondary level (i.e., grades 6 – 12)—were used.

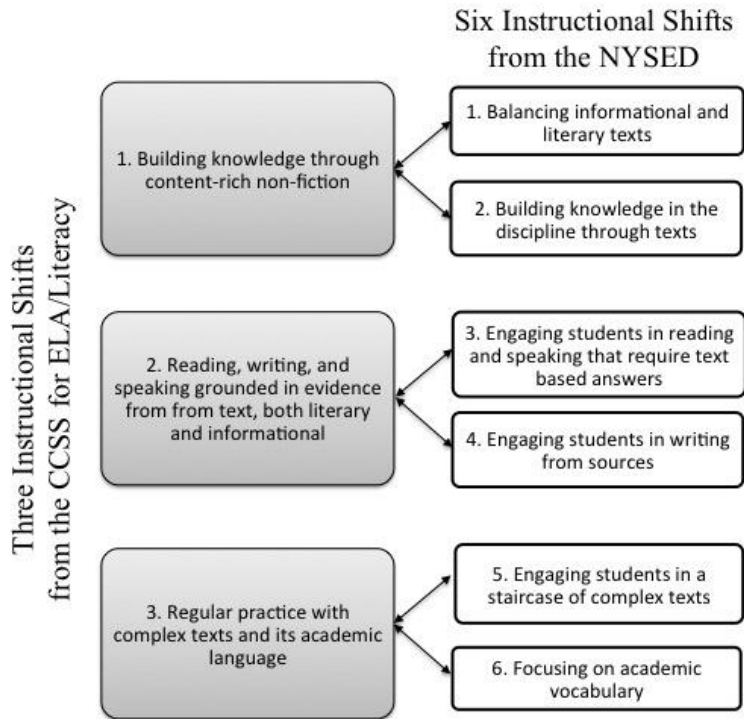


Figure 1. Alignment of NYSED six ELA/Literacy instructional shifts with CCSS three ELA/Literacy instructional shifts.

As described by Alberti (2012/2013), shift one asks that teachers ensure a balance of literary and informational texts for their students to engage with during classroom instruction across the school day. Therefore, literacy is a shared instructional task for all teachers. This shift is based upon the demands of post-secondary college and career preparation programs and is reflected in the division of the Reading standards into two categories: Informational and Literature. Shift two builds upon the first shift, and articulates the role for content area teachers in developing the students' literacy skills. Instead of *providing* content to students, the teacher's purpose is now to help students *build knowledge* through engaging with content-rich informational texts. Shifts three and four ask that teachers engage students in experiences where they provide evidence in speaking and writing from texts that they are reading. This is often a sharp

contrast to the previously prevalent narrative and informative writing that draws upon students' experiences and prior knowledge. While shifts three and four might appear to be one in the same, they are different in the outcomes that they expect from the students and instructional practices required to implement them. One requires writing instruction while the other requires instruction in engaging in collaborative conversations—two distinct instructional approaches. Shift five marks a key change that differentiates the ELA/Literacy CCSS from previous state standards—the emphasis on consistent practice with complex text (Alberti, 2012/2013). The standards provide a great deal of information in accompanying documents that further explain and define text complexity across the grade levels. Shift six notes the importance of academic vocabulary instruction, which should be designed in conjunction with the texts that are selected for reading and/or writing. Teacher must make instructional decisions about the vocabulary to teach in conjunction with their knowledge of the students and of the text.

The instructional approaches outlined in the shifts represent changes in pedagogy that the authors of the CCSS deem necessary to support students in meeting the requirements of the standards (NGACBP & CCSSO, 2017, “Key Shifts in English Language Arts”). However, it is important to remember that the standards are indifferent about pedagogy since they merely articulate outcomes and the shifts are only recommendations. Therefore, teachers across the United States are left to make the decision as to how they will implement the standards class-by-class and day-by-day. Teachers have two choices: they must either design curriculum for their students or adopt curriculum written by someone else that they feel is aligned to the standards. Either way,

they are making decisions and interpretations that affect the outcome of the policy implementation (i.e., CCSS implementation).

Theory of Planned Behavior

In psychology, the TPB is designed to “predict and explain human behavior in specific contexts” (Ajzen, 1991, p.181). According to the TPB, performance of a given behavior is a function of three conceptually distinct and independent factors: attitude, perceived subjective norm, and degree of perceived behavioral control (Ajzen, 1991). The three determinants -- one’s attitude toward the behavior, subjective norms, and perceived behavioral control -- are formed and based upon a given set of beliefs (See Figure 2). Attitudes are formed based upon behavioral beliefs (i.e., beliefs about the likely consequences or outcomes of the intended behavior); subjective norms are based upon normative beliefs (i.e., beliefs about the extent to which important others want an individual to perform the behavior); and perceived behavioral control is based upon control beliefs (i.e., beliefs about one’s ability to perform a given behavior). Thus, the impact of beliefs on intentions is mediated by the three determinants. While people may hold multiple beliefs, those that readily come to mind, also known as salient beliefs, are those that influence attitudes, perceived subjective norms, and perceived behavioral control. Although these three beliefs are represented as distinct entities, it is important to note that overlap is possible. For example, individuals are unlikely to have a positive attitude toward a behavior that they believe is beyond their control, and they might believe that others would not expect them to perform the behavior if it is beyond their perceived capabilities (Fishbein & Ajzen, 2010). Therefore, it is believed that while the categories are distinct, they are likely to exhibit interdependence among the determinants.

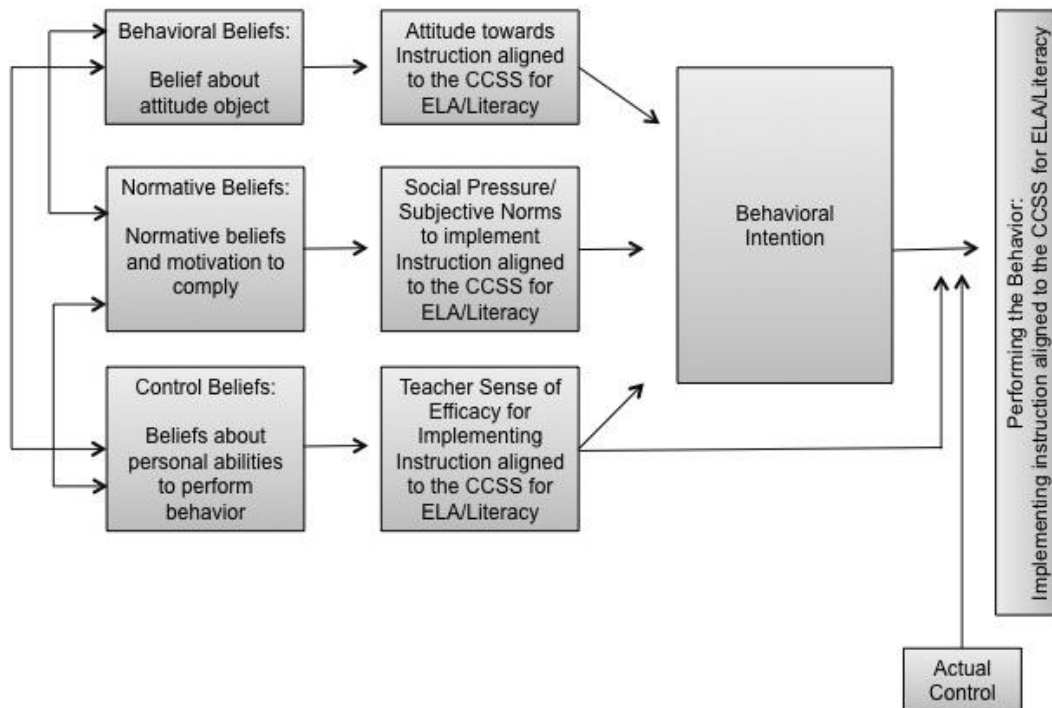


Figure 2. TPB for implementation of CCSS for ELA/Literacy.

The TPB has been applied in numerous educational studies. For example, Haney, Czerniak, and Lumpe (1996) applied the TPB to an analysis of teacher belief structures regarding science reform efforts in Ohio and found that teacher's attitudes towards implementation of the Ohio Science Model influenced teacher's intentions more than the other factors of the theoretical model. In a comparison of three attitude-behavior models (i.e., Theory of Reasoned Action, Theory of Trying, and The Theory of Planned Behavior) examining science teachers' environmental risk education intentions, it was concluded that the TPB model explained 28% of the variance in predicting the teachers' intentions (Zint, 2002). In addition to the application of the theory in science education, it has also been applied in areas such as physical education. Researchers examined the ability of the TPB and Self-efficacy theory to predict teachers' perceived behavioral intention to teach physically active physical education lessons (Martin & Kulinna, 2004).

They found that the TPB accounted for 59% of the variance in intention to perform the behavior, and attitude was the most significant determinant as it contributed 49% of the variance. A comprehensive review of the use of the TPB can be found in the literature (Armitage & Conner, 2001; Notani, 1998; Ravis & Sheeran, 2003; Schulze & Wittmann, 2003).

Attitude

Attitude refers to the degree to which one has a favorable or unfavorable assessment of the behavior to be performed (Ajzen, 1991). In this study, the attitude object is implementing instruction that aligns with the CCSS for ELA/Literacy. When teachers have direct experience with implementation of the CCSS for ELA/Literacy, they form beliefs that are referred to as descriptive beliefs (Fishbein & Ajzen, 1975). Not all teachers have had the opportunity to implement the CCSS in their classroom, and thusly they may form their beliefs solely from outside sources. Additionally, teachers who have formed beliefs on observations may also form informational beliefs when they accept information from outside sources such as other teachers, experts in the field, or other resources. With the availability of material on the internet regarding the CCSS, teachers have access to an overabundance of information regarding implementation of the CCSS. Lastly, teachers may form beliefs about implementation of the CCSS through a series of inferences. For example, if teachers hold a negative or positive belief about the CCSS, then they may infer that same belief to the implementation of the CCSS.

At the time this study was conducted, *Education Next* released the results of its 2015 investigation regarding teachers' perceptions of the standards. *Education Next* gathered responses from K-12 teachers ($n = 693$) across the United States and found that

40% of teachers supported CCSS use in their state while 50% opposed use of the standards (Henderson et al., 2016). It is interesting to note that half of the teachers did not support the educational standards they are being asked to implement. If they do not support them, are they even implementing them? Additionally, when asked if the CCSS implementation had a generally positive or negative impact on schools, 32% of teachers replied positively while 49% responded negatively. The teachers in the *Education Next* survey did not indicate about their personal implementation but rather made a more global appraisal of the impact of the standards. Because almost half felt negatively about implementation efforts, it would cause one to wonder if the teachers would implement something that they believed would bring about negative results.

Subjective Norms

Subjective norms are an additional factor in the model of the TPB and refer to the perception of social pressure to either perform the behavior or not which affect one's intention to perform a specified behavior (Fishbein & Ajzen, 2010). It is critical to note that this factor is based upon one's perception and may not reflect what the perceived group actually wants the individual to perform or not perform. Subjective norms are comprised of both injunctive and descriptive norms (Fishbein & Ajzen, 2010). Injunctive norms are those in which one perceives what should or should not be done regarding an identified behavior (Fishbein & Ajzen, 2010). For example, teachers formulate beliefs about what is acceptable or unacceptable behavior in regards to implementing the standards from a variety of sources that may include an administrator. However, sometimes individuals make assumptions about normative pressures from inferences about the actions of important others. That is to say, sometimes individuals look to

others to determine what they are doing or are not doing in order to come to a conclusion as to what is the expected behavior. For example, teachers may look to other colleagues or teachers viewed as exemplary to make assumptions about whether or not they are implementing the standards in their classroom. Based upon these observations, they create beliefs about what is or is not acceptable behavior. Therefore, descriptive norms, or the perception that others are performing or not performing an identified behavior, are also included in the theoretical model to reflect total social pressure (Fishbein & Ajzen, 2010).

Teachers take in information from a variety of sources as they formulate their beliefs and perception regarding the social pressure to implement instruction aligned to the Common Core. Because teachers operate and function in a public domain, they may feel pressured to perform the behavior for which the public demands. In the 2015 *Education Next* study that included a survey of 3,390 adults about the CCSS and other educational policies, 49% of the public supported CCSS implementation while 35% opposed the CCSS (Henderson et al., 2016). Pressure from the public is not the only source of social pressure that teachers encounter. With the onset of new assessments aligned to the CCSS, teachers might believe that administrators, state and local agencies, and parents want them to implement literacy instruction aligned to the CCSS ELA/Literacy due to school accountability measures (Murphy & Haller, 2015; Nadelson, Pluska, Moorcroft, Jeffrey, & Woodward, 2014; Troia & Graham, 2016). Therefore, they would be rewarded for performing the behavior or experience a punishment for not performing the behavior, which would theoretically be evident by test scores that

measure students' abilities in regards to the standards. In fact, this is the case for teachers whose evaluations are tied to students' test scores.

Teachers experience social pressure to implement or not implement instruction aligned to the standards from a variety of sources. This information might come from leading experts (Ekvall, 2013; Porter-Magee, 2012), the public (Bowdon, 2015), what they see others doing, fear of sanctions from a group, or anticipation of rewards from a group (McLaughlin, 1987; Varlas, 2012). Thus, teachers' perceived social pressure to implement instruction aligned to the CCSS for ELA/Literacy (i.e., subjective norms) should be measured to determine if it is a key factor in predicting a teacher's intention to enact the CCSS for ELA/Literacy instruction.

Perceived Behavioral Control (Self-Efficacy)

Perceived behavioral control refers to the personal control that one believes to have over performing the intended behavior, or confidence in one's ability to perform the intended behavior. In the theoretical model of the TPB, perceived behavioral control is a factor in both predicting intentions and actions (Ajzen, 1991). Because perceived behavioral control is accounted for twice in the model, it is important to understand how the factor functions at each interval of the model. When seeking to determine intentions to perform a behavior, individuals estimate their capability to perform a given behavior. Once intentions to perform the behavior are estimated, individuals consider their actual behavioral control and their perceived behavioral control when deciding to perform a given behavior. If intentions are held constant, it is believed that as perceived behavioral control increases so will the likelihood of the performance of the behavior (Ajzen, 1991).

Because Ajzen (1991) contends that perceived behavioral control is most compatible with Bandura's concept of self-efficacy, this study used a teacher's sense of efficacy of literacy instruction aligned to the CCSS for ELA/Literacy in the theoretical model for the TPB. I define a teacher's sense of efficacy for secondary (i.e. grades 6-12) literacy instruction as a teacher's appraisal of personal capabilities to implement instruction aligned to the CCSS for ELA/Literacy to bring about desired outcomes (i.e. student's mastery of the skills outlined in the standards) for all students (Harper, Duffin, Cribbs, Petty, & Norman, 2017). A teacher's sense of efficacy not only influences a teacher's actions, but it can also affect the students' achievement in the teacher's classroom thusly having a significant impact (Caprara, Barbaranelli, Steca, & Malone, 2006; Gibson & Dembo, 1984; Klassen & Tze, 2014; Ross, 1992). Teachers' efficacy levels can affect the effort they put forth, the goals that they set for themselves and their students, and ultimately their behavior (Ross 1994; 1998; Tschannen-Moran & Hoy, 2007; Tschannen-Moran & Woolfolk Hoy, 2001). When teachers have a higher sense of efficacy, they are less critical of students, open to new ideas, and more willing to experiment with teaching methods to help support students (Ashton & Webb, 1986; Gibson & Dembo, 1984; Guskey, 1988; Pan, Chou, Hsu, Li, & Hu, 2013; Stein & Wang, 1988; Tschannen-Moran & Hoy, 2007; Tschannen-Moran & McMaster, 2009; Tschannen-Moran & Woolfolk Hoy, 2001).

In general, when people are considering their level of self-efficacy, they are going to think about two things: the requirements of the task and their personal competency level in regards to the task (Bandura, 1986). Therefore, self-efficacy is not a fixed perception because it is context specific and includes consideration of situational and

environmental factors that affect performance. When thinking about the requirement of the task, teachers think about variables such as the availability of resources, the students involved, school leadership, and collegial support (Tschannen-Moran & Hoy, 2007; Tschannen-Moran & Johnson, 2011). A person may have high efficacy beliefs in her abilities to teach writing, yet she may hold differing self-efficacy beliefs depending upon the contextual situation (e.g. teaching students who are eager to learn writing in comparison to teaching those who are not interested in learning to write). Possessing the skills necessary to execute the course of action is different than being able to use them under diverse circumstances, and this distinction is the crux of perceived self-efficacy and what separates it from other theories that may predict behavior.

Knowledge and Behavioral Intent

Self-efficacy is a mediating variable between knowledge and action, but one cannot assume that a high level of knowledge will result in a high level of self-efficacy or performance of a given behavior (Ajzen, Joyce, Sheikh, & Cote, 2011; Bandura, 1986; Fives, 2003; Raudenbush, Rowan & Cheong, 1992). Because a person has the knowledge necessary to perform an action, it is not a guarantee that the action will be performed. Reeves (2006) refers to this concept in educational reform as the knowing-doing gap. Also, because a person has a higher sense of efficacy, it cannot be assumed that the person has a high level of knowledge necessary to perform the action. Previous researchers (Ajzen et al., 2011; Silver Wallace, 2002) have found mixed results when accounting for knowledge in the predictive model according to the TPB. Therefore, I was interested in determining if the *accuracy* of knowledge of the standards would add to the predictive model by using an objective measure to assess teachers' content knowledge

of the CCSS (see Figure 3). Likewise, teachers' *self-perceived* level of knowledge of the standards was also included in the model because several recent studies (Murphy & Haller, 2015; Nadelson, Pluska, Moorcroft, Jeffrey, & Woodward, 2014; Troia & Graham, 2016) have also used self-appraisal as a means of determining teachers' level of knowledge of the standards in their analysis.

Since many professional learning experiences focus on developing the knowledge level of the teacher in regards to the standards (SREB, 2014), it would be interesting to determine if *accuracy* of knowledge was a better predictor of implementation intentions than *self-perception* of knowledge (or vice versa). Research indicates that a teachers' self-perception of knowledge could be considered a belief or "knowledge or ideas accepted by an individual as true or as probable" (Evans, Fox, Cremaso, & McKinnon, 2004, p.303). Furthermore, a teacher's belief about implementing strong literacy instruction could be an important factor in influencing classroom instruction (Charlesworth, Hart, Burts, & Hernandez, 1991; Hoy, Davis, & Pape, 2006; Pajares, 1992; Richardson, 1996). Thus, could a teacher's self-perception of knowledge be more powerful than knowledge accuracy in predicting implementation efforts CCSS for ELA/Literacy? After all, a teacher may believe that she has a high level of knowledge of the standards (i.e., self-perception of knowledge appraisal), yet she may or may not have an accurate understanding of them.

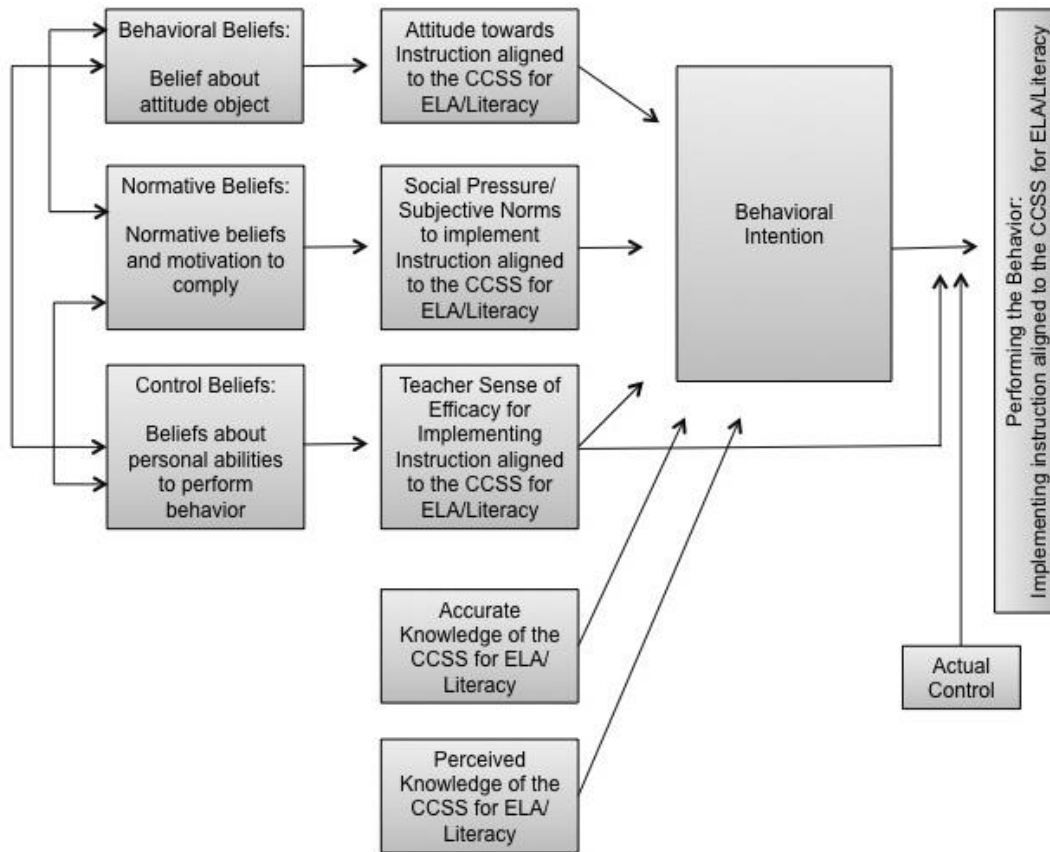


Figure 3. TPB for implementation of CCSS for ELA/Literacy with added knowledge variables.

Methods

Participants

The 168 participants were teachers at the secondary (grades 6-12) level who provided instruction in English Language Arts, Science, Social Studies, History, Arts and Humanities, and Technical Subjects from across the United States. While the majority of the respondents teach in Kentucky, others did respond who teach in a range of states (i.e., Arizona, California, Georgia, Illinois, Minnesota, Missouri, New York, North Dakota, Ohio, South Dakota, Tennessee, and Washington). The percentages in Table 1 may not total 100% for a given category because a teacher may have multiple teaching

responsibilities (e.g., teaches both Science and English/Language Arts) or grade levels assignments (e.g., teaches 6th, 7th, and 8th grades).

Table 1

Demographic Data

Characteristic	Total (<i>n</i> = 168)	Percent
State of Employment		
Kentucky	143	85.1
Other	25	14.9
Gender		
Male	28	16.7
Female	140	83.3
Ethnicity		
Hispanic/Latino	3	1.7
Non-Hispanic/Latino	165	98.2
Race		
Asian	1	0.5
Black/African-American	7	4.1
White	157	93.4
Grade-level assignments		
6 th	32	19.0
7 th	52	30.9
8 th	46	27.0
9 th	26	15.4
10 th	38	22.6
11 th	43	25.5
12 th	46	27.0
Instructional responsibilities		
English/Language Arts	97	57.7
Science	40	23.8
History/Social Studies	27	16.0
Arts and Humanities	9	5.0
Social Sciences	5	2.9
Career/Technical Education	17	10

Years of experience		
0 – 5 years	51	30.4
6 – 10 years	40	23.8
11-15 years	27	16.1
16-20 years	27	16.1
21-25 years	19	11.3
26-30 years	4	2.4
Highest degree attained		
Bachelor's	38	22.6
Master's	101	60.1
Rank 1/Specialist's	29	17.3

Measures

Demographics. Nine demographic variables were measured in this study including three demographic variables regarding the teacher's instructional assignment: grade level taught, subject area(s) taught, and state of employment. Other variables collected represented ethnicity, race, age, gender, level of most recent awarded degree, and years of experience. Teachers responding to the survey needed to meet three criteria: currently teaching in a grade level from six through twelve, currently teaching one of the identified subject areas (see Instructional Responsibilities in Table 1), and currently teaching in a state that implemented the Common Core State Standards. If the participants did not meet these criteria, the survey ended.

Measurement of Attitudes. Teachers' attitudes towards implementation of the CCSS for ELA/Literacy was assessed with eight statements utilizing belief-based measures of attitudes, which has a long history in the field and serves as an accepted method of measuring attitudes (Fishbein & Ajzen, 2010). The eight opinion statements included a seven-point Likert scale in which respondents indicated their level of

agreement ranging from 1 (Strongly Agree) to 7 (Strongly Disagree) (Fishbein & Ajzen, 2010). Questions that indicated a negative attitude towards the standards were reverse coded (e.g., “I believe that I know what is best for my students; I do not need the standards to plan or guide my instruction”), so when a participant indicated she strongly agreed with this statement, the value would be reverse coded from a 1 to a 7. Then, the 1 through 7 Likert scale was converted to bipolar scoring (i.e., +3 to -3) to arrive at a value for each response depending upon the positive (i.e., +3) or negative (i.e., -3) nature of the statement. A quantitative measure was derived to determine if the respondent holds a negative or positive attitude towards the CCSS.

Using IBM SPSS version 24, the eight items were subjected to an exploratory factor analysis (EFA) applying principal axis factoring (PAF) and a Varimax rotation. The analysis revealed two components, which explained 67.5% of the variance. When reviewing the factor matrix, two items—one from each factor—had a value below .6 (Field, 2009) indicating I needed to consider removing them from their respective scales, and I removed them. Results from a Parallel Analysis confirmed the two-factor solution with three items per sub-scale. The Positive Attitude sub-scale items measure positive beliefs about the instructional value of the standards for post-secondary college, career, and workforce readiness of students. For example, one item states, “I believe that implementing instruction aligned to my state standards for English/Language Arts and Literacy is what is best for all students.” On the other hand, the Negative Attitude sub-scale items measure negative beliefs about the value of the standards. For example, one item states, “I believe implementing my state standards for English/Language Arts and Literacy will NOT help my students to learn important skills.” Fishbein and Ajzen (2010)

recommend entering one value for attitude into the statistical analysis, so the two subscales were combined for one overall attitudinal score value with a scale range of -3 to +3. Cronbach's alpha for the scale was $\alpha = .75$.

Measurement of Subjective Norms. While injunctive norms are typically those that are measured in regards to the TPB, a small number of studies have also sought to assess descriptive norms (Fishbein & Ajzen, 2010). I created six normative items to measure subjective norms and to determine their significance in predicting implementation of the CCSS for ELA/Literacy. Three items assessed injunctive norms (e.g., "I believe that my school administration has the expectation that I will implement instruction that is aligned to my state standards for English/Language Arts and Literacy"), while three items assessed descriptive norms (e.g., "I believe that most teachers who I view as exemplary teachers implement instruction that is aligned to the state standards for English/Language Arts and Literacy"). I utilized a question and scaled response choice format for this study with a seven-point Likert scale ranging from 1 (Strongly Agree) to 7 (Strongly Disagree). Mean-level scale scores were used as a quantitative value for the construct, and the value was used to determine the predictive validity of subjective norms in the theoretical model proposed. Fishbein and Ajzen (2010) advocate that subjective norms include both injunctive and descriptive norms. Therefore, the six items were subjected to an exploratory factor analysis (EFA) using IBM SPSS version 24 to determine the factor structure of the scale. When reviewing the factor matrix, it was noted that one injunctive norm item, though it loaded on the single factor, had a value below .6 (Field, 2009) indicating I needed to consider removing it from the scale. Results from a Parallel Analysis confirmed the one-factor solution. The

one-factor solution explained 76.6% of the variance with the removal of the one item. Cronbach's alpha for the five item scale is $\alpha = .92$.

Measurement of Teaching Efficacy for CCSS for ELA/Literacy. To capture this construct, I utilized the Teacher Sense of Efficacy for Secondary Literacy Instruction (TSESLI) scale. The TSESLI has undergone initial validation that measures teachers' sense of efficacy for implementing the CCSS for ELA/Literacy at the secondary level (Harper et al., 2017). The scale contains 26 items that represent the three instructional shifts communicated by the authors of the standards (CCSSO, "Key Shifts in English Language Arts," 2017): building knowledge in the discipline through content rich non-fiction (6 items); reading, writing, and speaking grounded in evidence from text, both literary and informational (13 items); regular practice with complex text and its academic language (7 items). Participants were asked to consider the combination of their current ability, resources, and opportunity for each of the given statements when responding using a 9-point Likert scale with rating indicators being: 1—None at All, 3—Very Little, 5—Some Degree, 7—Quite a Bit, 9—A Great Deal. Cronbach's alpha for the entire 26-item scale is $\alpha = .98$ demonstrating excellent internal consistency (George & Mallery, 2003). The scale demonstrates convergent validity in that there is a strong positive correlation ($r = .575, p < .0005$) between the TSESLI and the TSES, which is used as a general measure for teacher efficacy (Cohen, 1988). For a full list of items, please refer to Harper, Duffin, Cribbs, Petty, and Norman (2017).

Measuring Knowledge of the CCSS for ELA/Literacy. When referring to the degree of knowledge that an individual has in regards to the CCSS for ELA/Literacy, I was interested in the *accuracy* of the information more so than the *amount* of information

known (Ajzen et al., 2011). Therefore, I designed 10 questions to evaluate a teachers' general level of knowledge of the standards to arrive at a summative score with a range from 0 (0% of accurate knowledge) to 10 (100% of accurate knowledge). The questions were designed to determine if the teacher has a basic level of understanding about the CCSS for ELA/Literacy and three instructional shifts. I used the three instructional shifts that are posted on the CCSS website for the design because they are the most widely publicized version. In the measure, two items measured knowledge of the first instructional shift (e.g., "My state standards for English Language Arts and Literacy articulate that students should learn discipline specific content through reading and writing."). One item measured the second instructional shift (e.g., "My state standards for English Language Arts and Literacy ask that students be able to provide evidence from texts in their writing."), and three items measured the third instructional shift (e.g., "How is text complexity defined according to my state standards?"). I was also interested in general knowledge of the standards, so two items focused on information such as modes of writing identified in the standards. By asking 10 questions, I was able to include items that would check for understanding of the instructional shifts and general knowledge of the standards, yet I was also able to incorporate items ($n = 2$) that would indicate that there were misconceptions about the standards (e.g., standards indicate *how* a skill or topic should be taught). I was cognizant of the time demand that the questionnaire would take to answer given the additional scales, and ten questions would allow me to gather relevant data for this study without overburdening the participant. Level of knowledge of the standards was then incorporated into the predictive model to

determine its contribution for predicting teachers' intent to implement the standards (again, see Figure 3).

Additionally, I wanted to capture a measure of *perceived knowledge* as this measurement has been used in other studies (Figuroa Murphy & Haller, 2015; Nadelson, et al., 2014; Troia & Graham, 2016). One question was provided, which asked participants to rate their level of knowledge of their state literacy standards (i.e., "On a scale of 1 (not familiar) to 10 (very familiar), I would rate my level of knowledge of my state English Language Arts/Literacy Standards as a level:"). A single-item measure in psychological research is often treated with suspect, yet this one item was sufficient to capture the global construct I sought to measure while alleviating excess time taking the survey. Additionally, previous researchers have noted that single-item measures as compared to multi-item measures can be useful when seeking to capture a holistic impression or rating (Wanous, Reichers, & Hudy, 1997; Youngblut & Casper, 1993). Perceived level of knowledge of the standards was then incorporated into the predictive model to determine its contribution for predicting teachers' intent to implement the standards (see Figure 3).

Measuring Intent to Perform the Behavior. Typically when applying the TPB, one would measure intent to perform the behavior and follow up after an amount of time to determine if the behavior was implemented. Fishbein and Ajzen (2010) found in their analysis of individual studies that prediction of past behavior often did not differ from predictions of future behavior, or intent, and Perugini and Bagozzi (2004) argue that recency of a performed behavior may serve as an indirect indicator that intention has been activated and is positively associated with future performance. Because I did not

have the ability to follow up with the teachers after the survey to determine if they had indeed implemented the behavior, I utilized a reflective measure of past behavior: “During the past five instructional days, I have implemented instruction aligned to the ELA or Literacy standards in my state for ___% of the time during which I provided instruction” (Beck & Ajzen, 1991). Teachers reflected upon the instruction that they provided within the past five instructional days and made an estimate regarding the amount of time that they provided literacy instruction ranging from 0% to 100% in 10% increments with an option of “I don’t know.” Scores ranged from 1 to 10 starting with a value of 1 given for 0-10% through a value of 10 given for 90-100% of time implementing the standards during the past five instructional days. In the analysis, I excluded data from teachers ($n = 16$) who responded, “I don’t know” because they were unable to provide a self-estimate regarding percent of time implementing the standards. Additionally, I did not want to erroneously inflate the data through imputation.

Procedure

During October of 2015 through December of 2016, data were collected using an electronic survey platform. Survey notices were advertised nationally through social media, national educational organizations, educational non-profit agencies, and state literacy organizations. Convenience sampling was utilized as participants self-selected to respond. I incentivized participation with a five-dollar gift card for the last 100 participants after a low response rate within the first six months of data collection.

Data Analysis

Using IBM SPSS 24, an exploratory factor analysis (EFA) utilizing principal axis factoring was conducted to test the factor structure and possibly reduce the number of

items on the attitudinal and perceived norms scales. A review of eigenvalues, a visual scree test, an inspection of the residual correlation matrix, and a parallel analysis were conducted during the EFA. For reliability analysis, Cronbach's alpha was calculated to determine internal consistency. Descriptive statistics were also generated for all scales and measures entered into the analyses including mean, standard deviation, range, minimum scores, and maximum scores.

After initial validation of the scales was performed and items were reduced, mean scores for each scale were generated to utilize in the simultaneous regression analysis to test the predictive model of the Theory of Planned Behavior. A second regression analysis was conducted to test the predictive model of the Theory of Planned Behavior with the additional values for perceived and actual knowledge of the standards. Because this study sought to test two theoretical models, I needed to conduct two different simultaneous regressions where all variables were forced into the model at once (Field, 2009). Data were inspected, including correlations, collinearity tolerance, VIF statistic, plot inspections, and Cook's distance, to ensure that there were no violations of assumptions (Field, 2009). The model summary was examined to determine the amount of variance in the dependent variable explained by the model, and Beta standardized coefficients were reviewed to compare the contribution of each independent variable to the model. Then, significance values were examined to determine if a statistically significant and unique contribution was made to the model by the independent variables. The effect size for the overall regression models were evaluated by R , R^2 , and adjusted R^2 values. The semipartial correlation coefficients (sr^2) were examined to understand the total variance in the dependent variable that was uniquely explained by the statistically

significant variables. Power was calculated examining the ratio of N (number of cases) to k (number of predictors) in which $N > 50 + 8k$ for test of multiple R and $N > 104 + k$ tests of significance for individual predictors (Tabachnick & Fidell, 2013). For the first regression analysis, minimum requirements were met for multiple R [$152 > 50 + 8(4)$] and individual predictors ($152 > 104 + 4$). For the second regression analysis, minimum requirements were met for multiple R [$152 > 50 + 8(6)$] and individual predictors ($152 > 104 + 6$). After conducting the two simultaneous regression analyses, a backwards deletion regression analysis was performed in which non-significant IVs were removed to determine the best predictive model based upon the IVs measured in this study (Tabachnick & Fidell, 2013).

Results

Descriptive Statistics. Descriptive statistics were calculated for each of the measures used in the regression analyses (see Table 2). Independent variables that generated mean scores entered into the regression analyses include: Attitude, Normative Beliefs, and TSESLI. An independent variable that generated a total sum score included Accurate Knowledge. Two other independent variables included a single item measure: Percent of time implementing instruction aligned to the CCSS for ELA/Literacy within the past five days and Perceived Knowledge.

Regression Analysis. Two different simultaneous regression analyses were conducted to examine the relationship between the percent of instruction (i.e., 0-100%) provided aligned to the CCSS for ELA/Literacy implemented within the last five days and various potential predictors. The first regression analysis examined the relationship between the percent of instruction provided that aligned with the standards implemented

within the last five days and the three constructs in the Theory of Planned Behavior (i.e., attitude, perceived norms, and teaching efficacy). Because attitude ($M = .56$, $SD = 1.37$) did not correlate ($r = .009$, $p = .46$) with the dependent variable (the % of time implementing the standards in the past five days), it was removed from the regression analysis (Tabachnick & Fidell, 2013). The results of the regression (see Table 3) indicated that the two TPB predictors explained 14% of the variance (adjusted $R^2 = 0.14$, $F(2, 149) = 13.30$, $p < .000$). Normative beliefs ($\beta = -0.16$, $p < .05$) and sense of efficacy for literacy instruction ($\beta = 0.31$, $p < .05$) were significant predictors of level of implementation reported by teachers.

The second regression analysis examined the relationship between the percent of instruction provided that aligned with the standards implemented in the last five days and two of the three constructs in the Theory of Planned Behavior (i.e., perceived norms and teaching efficacy) with the addition of perceived and accurate level of knowledge. Attitude was again removed from the regression analysis due to its non-existent correlation to the dependent variable. The results of the second regression (see Table 4) indicated that the two TPB predictors plus perceived and accurate knowledge explained 23% of the variance (adjusted $R^2 = 0.23$, $F(4, 147) = 11.94$, $p < .000$). Normative beliefs ($\beta = -0.16$, $p < .05$) and perceived level of knowledge ($\beta = 0.28$, $p < .05$) were significant predictors of level of implementation reported by teachers.

The backwards deletion regression analysis started with the model evaluated in the second simultaneous regression as described above (see Table 5 Model 1). The first IV to be removed from the model was accurate knowledge because it was non-significant and contributed the least to the model (see Table 5 Model 2). The results of the

regression analysis for Model 2 (see Table 5) indicated that the two TPB predictors plus perceived knowledge explained 22% of the variance (adjusted $R^2 = 0.22$, $F(3, 148) = 15.17$, $p < .000$). In the subsequent regression analysis, both accurate knowledge and self-efficacy for literacy instruction were removed because they were both non-significant IVs (see Table 5 Model 3). The results of the regression analysis for Model 3 (see Table 5) indicated that normative beliefs and perceived knowledge explained 21% of the variance (adjusted $R^2 = 0.21$, $F(2, 149) = 21.11$, $p < .000$).

Table 2

Summary of Descriptive Statistics of Measures Used in Regression Analyses (N = 152)

	# of items	Range of Possible Scores per Item	Minimum	Maximum	Range	Mean	SD
% of Time Implementing Instruction Aligned to the CCSS for ELA/Literacy during the past 5 days*	1	1 (0-10%) to 10 (91-100%)	1.00	10.00	9.00	7.39	2.77
Attitude Mean Scale Score	6	-3 (Negative Attitude) to 3 (Positive Attitude)	-.65	1.24	1.90	0.56	1.37
Normative Beliefs Mean Scale Score	5	1 (Strongly Agree) to 7 (Strongly Disagree)	1.00	7.00	6.00	2.36	1.28
TSESLI Mean Scale Score	26	1 (None at All) to 9 (A Great Deal)	4.04	9.00	4.96	7.16	1.12
Accurate Knowledge Total Sum Score	10	0 (0% answered correctly) to 10 (100% answered correctly)	1.00	7.00	6.00	4.41	1.33
Perceived Knowledge Rating	1	1 (not familiar) to 10 (very familiar)	2.00	10.00	8.00	7.43	2.20

Note. The percent of time implementing the standards ($M = 7.39$) indicates that teachers reported implementing instruction aligned to the standards approximately 70% of the time during the past five days..

Table 3

Summary of First Regression Analysis Predicting % of Instruction Implemented in the Last 5 Days (N = 152)

	% of Implementation ^a	Normative Beliefs ^b	Self-Efficacy Literacy Instruction ^c	B	B	sr ²
Normative Beliefs	-0.25			-0.35**	-0.16	0.02
Self-Efficacy Literacy Instruction	0.36	-0.28		0.77**	0.31	0.09
			Intercept=	3.70		
						$R^2 = .15$
						Adjusted $R^2 = .14$
						$R = .39**$

Note: ** $p < .05$

Table 4

Summary of Second Regression Analysis Predicting % of Instruction Implemented in the Last 5 Days (N = 152)

	% of Implementation a	NB ^b	SELI ^c	Ak ^d	Pk ^e	B	β	sr ²
Normative Beliefs (NB)	-0.25					-0.34**	-0.16	0.02
Efficacy Literacy (SELI)	0.36	-0.28				0.34	0.21	
Accurate Knowledge (AK)	0.30	-0.10	0.28			0.24	0.11	
Perceived Knowledge (PK)	0.43	-0.15	0.43	0.47		0.36**	0.28	0.05
					Intercept =	3.05	$R^2 = .26$ Adjusted $R^2 = .23$ $R = .50^{**}$	

Note. ** $p < .05$

Table 5

Summary of Backwards Elimination Regression Analyses Predicting % of Instruction Implemented in the Last 5 Days (N = 152)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	β	sr ²	<i>B</i>	β	sr ²	<i>B</i>	β	sr ²
Normative Beliefs	-0.34**	-0.16	0.02	-0.35**	-0.16	0.03	-0.41**	-0.19	0.04
Self-Efficacy for Literacy Instruction	0.34	0.21		0.36	0.14				
Accurate Level of Knowledge	0.24	0.11							
Perceived Level of Knowledge	0.36**	0.28	0.05	0.42**	0.34	0.10	0.51**	0.40	0.17
<i>R</i> ²	0.26			0.24			0.22		
Adjusted <i>R</i> ²	0.23			0.22			0.21		
<i>R</i>	0.50**			0.49**			0.47**		

Note. Model 2 removes Accurate Level of Knowledge from analysis. Model 3 removes both Accurate Level of Knowledge and Self-Efficacy for Literacy Instruction from the analysis.

** $p < .05$

Discussion and Implications

Policy makers often start with grand intentions of changing the classroom experience for students when they embark upon implementation of a reform effort, and it was no different when the majority of states set out to improve college and career readiness for students graduating high school by adopting the CCSS for ELA/Literacy (Rothman, 2012). Now after six years, it is time to review the work that has taken place thus far and determine if the classroom experience for students across the United States has actually changed.

First, it is important to determine if teachers are implementing the CCSS for ELA/Literacy, and what factors affect their decision to implement the policy initiative. According to the mean scale score, teachers reported that they implemented the standards approximately 70% of the time during the past 5 instructional days. Furthermore, teachers' mean-level TSELI scores (i.e., self-efficacy) suggest that they believe they can do "quite a bit" to affect student learning through their own efforts implementing literacy instruction aligned to the standards at the secondary level. Overall, teachers were agnostic in regards to their attitudes towards standards neither agreeing nor disagreeing with the positive and negative statements. While teachers' attitudinal beliefs were indifferent, their subjective normative beliefs were more positively charged indicating that teachers agreed that others, including administration and other teachers, wanted them to implement the standards.

The Theory of Planned Behavior (Fishbein & Ajzen, 2010) provided a guide to determine factors that would predict a teacher's level of implementation of the CCSS for ELA/Literacy. In the initial investigation, attitude, perceive norms, and self-efficacy

were included in a simultaneous regression analysis. In the TPB model, self-efficacy was the strongest predictor of implementation (i.e., made the largest significant contribution to the regression model) followed by normative beliefs. If the goal of policy makers is to improve student achievement (i.e., college and career readiness rates) by implementing the CCSS for ELA/Literacy, then improving teachers' self-efficacy beliefs for literacy instruction is a step in the right direction. Previous researchers (Moore & Esselman, 1992; Anderson, Greene & Loewen, 1988; Watson, 1991) noted that students of teachers with higher self-efficacy ratings performed better on standardized assessments of achievement than their peers who were taught by teachers with lower self-efficacy beliefs. Teachers with lower self-efficacy ratings have been related to lower expectations of students (Bamburg, 1994), and teacher self-efficacy levels have been found to be related to student self-efficacy levels (Anderson, Greene, & Loewen, 1988). While the research has been limited regarding the impact of teacher's self-efficacy for literacy instruction on student learning outcomes and experiences, several studies have noted the positive impact (Ashton & Webb, 1986; Gibson & Dembo, 1984; Graham, Harris, Fink-Chorzempa, & MacArthur, 2001; Meijer & Foster, 1988; Podell & Soodak, 1993; Soodak & Podell, 1993; Timperley & Phillips, 2003). Future reform efforts should focus on increasing teacher self-efficacy for literacy instruction in order to improve implementation efforts, while future research should investigate the impact of teacher self-efficacy for literacy instruction at the secondary level on student outcomes.

In the second regression analysis using TPB and two additional variables—accurate level of knowledge and perceived level of knowledge—perceived level of knowledge made the largest contribution followed by normative beliefs. However, self-

efficacy for literacy instruction at the secondary level was no longer significant in this model. Since perception of knowledge is based on a self-evaluation of capability like self-efficacy, the unique variance attributed to self-efficacy for literacy instruction in the first model could have easily been consumed by the more general self-perception of knowledge variable in the second model offering no unique explanatory power (Tabachnick & Fidell, 2013). On the contrary, normative beliefs were consistently significant across the two models. The TPB follows the thinking of French and Raven (1959) that delineate the five types of power (i.e., reward, coercive, legitimate, expert, and referent) that may allow others to exert influence on one's behavior. If a person believes that the social agent (e.g., principal or administrator) has the ability to reward the given behavior (e.g., a positive performance evaluation), then one complies because of reward power. On the contrary, one may experience coercive power when the social agent is thought to have the ability to dole out punishment (e.g., a negative performance evaluation) related to the behavior. Sometimes individuals experience pressure to comply because they want to be like the identified social agent, and in this case, they experience referent power. Other times, one may comply because of perceived expertise of the social agent, which is known as expert power, or because the person believes that the social agent has the right to prescribe the behavior due to her position in the group or society, which is known as legitimate power.

Teachers indicated that they believed their school administration wanted them to implement the standards, and they also believed colleagues and exemplary teachers were thought to be implementing the standards. During the time of the study, teacher evaluations were a heated topic across the United States because of Elementary and

Secondary Education Act (ESEA) waivers that mandated that student growth scores be included in a teacher's performance rating (Kanes, Owens, Marinell, Thal, & Staiger, 2016; U.S. Department of Education, 2012). In addition, students' scores on standardized tests aligned to the CCSS for ELA/Literacy were used in school and district ratings across the United States (Kanes et al., 2016). Perhaps teachers were sensing the pressure to implement the standards in an effort to achieve higher performance evaluations based upon students' standardized test scores associated with the standards. Consequently, sanctions (e.g., poor performance ratings and school ratings) might have been imposed if the behavior was not implemented. Overall for policy makers, these findings are positive in the fact that if teachers believe that important others (e.g., administrators, peers) want them to implement the standards, they are more likely to do so. For current implementation efforts, these findings signal that there is consistency from what policy makers expect (i.e., implementing the standards) and the expectations of principals and colleagues.

In previous research (Darling-Hammond, 1996, 1997, 2000; Darling-Hammond & Sykes, 1999), policy implementation efforts have also been impacted by teachers' knowledge level. Knowledge of a behavior can be a factor individuals consider when estimating their ability to perform a task in a given context. I found that *accuracy* of knowledge was not a significant predictor as compared to the teacher's *self-perceived* level of knowledge. Bandura (1993, 2009) advocates that people act upon the belief of what they *think* they can do. If teachers *think* they know the standards, they might be more willing to enact the behavior because they think they know what it should look like in the classroom. This finding is extremely intriguing because funding and support

efforts at the state and local level often focus on improving the accurate knowledge of educators (SREB, 2014).

Overestimation of one's knowledge is not a new phenomenon. In a study investigating teachers' knowledge level of phonics (Cunningham, Perry, Stanovich, & Stanovich, 2004), teachers tended to overestimate their knowledge and skill levels. Do teachers need to have an accurate appraisal of their skill level? Bandura (1997) would argue not necessarily; sometimes overestimation can cause one to put forth more effort or persist longer with a task, and would the public and educational community not want teachers to put forth more effort and persist longer? However, Cunningham and colleagues (2004) argue that the ability to self-calibrate in regards to domain knowledge is essential to future professional learning and improving one's practice. Therefore, how in-depth does the teacher need to know the standards in order to provide effective instruction to aid students in mastering the skills outlined in the CCSS for ELA/Literacy? What was missing from the analysis was the impact of instruction from the participants on student achievement scores, which would be the next logical investigation. However, in this study, I was seeking to determine factors that affect the percent of time implementing the standards, and self-perceived knowledge was a significant predictor.

What do these findings across the two models mean for policy implementation efforts? Simply stated, beliefs matter. From my research, I conclude that teacher beliefs should be considered when providing professional learning experiences and supports for any new initiative as well as monitoring the impact and success of it. Fullan (1985) contends that changes in attitudes, beliefs, and understanding typically follow rather than precede changes in behavior, while Thompson (1992) proposes that the relationship

between beliefs and practice is a two-way relationship. Therefore, teachers with higher levels of implementation may have higher self-efficacy beliefs, normative beliefs, and perceived level of knowledge of the standards because of their experiences implementing them, and they may be more willing to implement them because of their attitudes, beliefs, and understanding. Investigating the antecedents or factors impacting beliefs would prove beneficial for policy makers, researchers, and local educational agencies that support teachers.

As state educational agencies continue to move forward with implementation of the CCSS or begin a new venture by designing and implementing a new set of standards, it would be beneficial to consider teachers' beliefs and their impact on implementation efforts. Inviting teachers into policy conversations and implementation efforts at the leadership level can bridge the divide between what is mandated and what is implemented. Further investigations involving the relationship between teacher beliefs and policy implementation are also warranted if policy makers wish to improve their efforts. In the end, teachers and policy makers are both seeking to obtain the same goal: improving the educational experience for students in classrooms.

CHAPTER IV: CONCLUSIONS AND RECOMMENDATIONS

In this dissertation, I investigated teachers' intentions to implement the Common Core State Standards for English/Language Arts and Literacy (CCSS for ELA/Literacy) using the Theory of Planned Behavior (TPB). In order to conduct this investigation, I needed to construct a scale to measure a teacher's sense of efficacy for implementing the standards to incorporate into the TPB model. This first journey led to the creation of the Teacher Sense of Efficacy for Secondary Literacy Instruction (TSESLI) scale that is based upon the instructional shifts, or pedagogical approaches necessary for implementation, of the CCSS for ELA/Literacy. The instructional shifts are representative of educational outcomes outlined in numerous international standards (e.g., Canada; "The Ontario Curriculum: English," 2007; England; "The national curriculum in England," 2014; Hong Kong; "English language education key learning area," 2007; New Zealand; "The English language learning progressions," 2008); therefore, the scale has merit to be further evaluated and used in contexts outside of the United States. At this time, a sense of efficacy scale does not exist for secondary literacy instruction, and this scale is built upon the foundational work in the field of self-efficacy and teacher efficacy by Bandura (1977; 1997; 2006) and Tschannen-Moran and Woolfolk Hoy (2001). It contributes to the limited field of domain specific teacher efficacy research, yet it should be subjected to further validation and reliability studies.

In the initial validation study of the instrument, I was limited to conducting an exploratory factor analysis and did not have the opportunity to conduct a confirmatory factor analysis to confirm the proposed factor structure. I also did not have the opportunity to test for reliability using a test-retest method. In future research, a

confirmatory factor analysis and test-retest method to assess reliability should be undertaken. Also, the sample drew heavily from Kentucky teachers and future investigations should seek to have a more representative sample across the United States.

The creation of the TSESLI scale did allow for the application of the TPB and investigation regarding teacher implementation of the CCSS for ELA/Literacy in grades six through twelve. Based upon previous research (Haney, Czerniak, & Lumpe, 1996; Martin & Kulinna, 2004), I hypothesized that attitude would be a significant predictor of teachers' implementation of the standards along with self-efficacy levels. However, I was unable to incorporate attitudinal beliefs into the regression analyses because the scale score minimally correlated with the dependent variable (i.e., percent of time implementing instruction). One of the complexities in measuring attitudes is creating statements that will elicit salient beliefs about an intended behavior (Fishbein & Ajzen, 2010). From the findings, teachers' attitudes towards the standards were not strongly negative or positive thus reflecting an indifferent stance. Perhaps the statements used in the scale did not address beliefs that would impact implementation of the behavior. In future studies, revision of the attitudinal items is recommended to more accurately measure attitude towards implementing the standards. Instead of attitudes being a significant predictor, normative beliefs demonstrated significance across both models. Did teachers feel pressure to implement the standards from their principals, administrators, or other teachers in their building? Did these normative beliefs outweigh any personal attitudes or beliefs about the standards leading to increased implementation?

Subjective norms, or normative beliefs, refer to the perception of social pressure to either perform the behavior or not, and it is critical to note that this factor is based

upon one's perception and may not reflect what the behavior the perceived group actually wants the individual to enact (Fishbein & Ajzen, 2010). Subjective norms can also be influenced when rewards or punishments are or are not attached to the behavior.

Teachers might believe that administrators, state and local agencies, and parents want them to implement literacy instruction aligned to the CCSS ELA/Literacy for a variety of reasons including school accountability measures. Teachers may be rewarded for performing the behavior (i.e., implementing the standards) or experience a punishment for not performing the behavior, which would theoretically be evident by test scores that measure students' abilities in regards to the standards. For example, Tiverton, Rhode Island voted to delay testing related to the implementation of the CCSS (Borg, 2014).

Teachers in that area might not feel as much pressure to implement the standards because there will not be public reporting on student mastery of the standards as opposed to other states who are implementing CCSS-based assessments at the present time and publicly reporting data at the school and district levels. In Kentucky, where the majority of the respondents from this survey are employed, the state, district, and school all publicly report student achievement data on their report cards aligned to the CCSS. Could this have influenced teachers' ratings on subjective norms?

What would be interesting to know more about is why teachers believe that others want them to implement the standards. Is it out of fear of sanctions from low test scores or seeking recognition for high test scores associated with the CCSS? Is it because the administrators and other teachers believe it is best for all students? A qualitative analysis including interviews would add more to the interpretation of the data in this study and help to contribute to the literature that is typically quantitatively laden. After all, the

education community wants what is best for students whether that means that high test scores are an outcome of the learning experiences or not.

While normative beliefs were significant in both regression analyses, self-efficacy was not. In the first regression analysis that was based upon the TPB (i.e., subjective norms and self-efficacy), self-efficacy was a significant predictor of the behavior. However, in the second model when accurate knowledge and perceived knowledge were added, self-efficacy was no longer significant. Instead, perceived knowledge was a significant predictor even more so than normative beliefs. Bandura (2009) argues that people act upon what they *think* they can do in a given context. Therefore, individuals make appraisals about the knowledge they have of how to perform the given behavior and considerations of the task to formulate a self-efficacy belief. In essence, both constructs ask individuals to consider their knowledge level when making the appraisal. Consequently, the two measures might have been too similar in nature, and one variable absorbed the variance in the other. In the review of the correlation matrix during the regression analysis, I noted that the two items—self-efficacy and perceived knowledge—were moderately correlated, $r = .50, p < .05$. The goal of a regression analysis is to identify the fewest independent variables (IVs) necessary to predict a dependent variable (DV) when the IVs are uncorrelated with each other yet strongly correlated with the DV (Tabachnick & Fidell, 2013). Because the IVs are correlated, the findings are not that straightforward. Further investigation is needed to examine the relationship between perceived knowledge and self-efficacy appraisals. Additionally, investigating specific sources or antecedents that contribute to self-efficacy appraisals for secondary literacy instruction would provide further insight.

Also, I asked teachers the percent of time they implemented the standards within the last five days, and I did not account for the results of their instruction (i.e., did they help students learn the skills) or have a measure to know if their instruction was actually aligned to the standards. That is to say, teachers may have reported delivering instruction aligned to the standards, but I did not have observational data to confirm their self-report or student achievement data to analyze the impact of their instruction. The data collected were self-reported, and while it is practical for data collection, there are also threats to validity that should be considered when making interpretations from the data (Fishbein & Ajzen, 2010). Palhaus and Vazire (2007) provide detail on several concerns of self-reported data. When reporting past behavior, participants may provide over or underestimations unintentionally—especially when the behavior occurred in the distant past. In this study, participants were asked to reflect back on the last five instructional days in an effort to mitigate this concern. On the contrary, sometimes participants have self-presentation concerns and choose not to report past behavior accurately even though confidentiality is ensured (Fishbein & Ajzen, 2010; Palhaus & Vazire, 2007). If the behavior is socially desirable, they may overestimate compared to underestimating socially undesirable behavior. Future researchers should consider repeating this analysis with observational data and student achievement results to add to the understanding.

This investigation grouped all secondary teachers into one large group for the analysis. I did not investigate differences in instructional assignment or years of experience. Typically, it is assumed that English/Language Arts teachers would implement literacy instruction more frequently than content area teachers, and new teachers may have received more support in implementing the standards in their teacher

preparation programs compared to teachers currently in the field. Therefore, future investigations should consider these questions: 1) Is there a relationship between instructional assignment (i.e., English/Language Arts vs. other content areas) and years of experience on the level of knowledge of the standards? 2) Is there a relationship between instructional assignment (i.e., English/Language Arts vs. other content areas) and years of experience on self-efficacy for literacy instruction? 3) Is there a relationship between instructional assignment (i.e., English/Language Arts vs. other content areas) and years of experience on percent of reported time implementing the standards? 4) Do predictive TPB models of implementation differ depending on instructional assignment (i.e., English/Language Arts vs. other content areas) and years of experience with and without knowledge (i.e., accuracy and perceived)?

Generally, teachers in this study reported they are implementing the standards on a regular basis, have a high sense of efficacy for implementing the standards, and know the standards fairly well. However, when teachers were asked ten questions about the standards to determine their accurate knowledge level, the mean response for the group was less than half of the questions correctly answered. This lack of content accuracy sent up a red flag based upon their self-report data that indicated that they felt they knew the standards fairly well. Next steps in this line of inquiry should investigate the relationship between teachers' self-perceived level of knowledge and actual level of knowledge of the standards and impact on student achievement. How well do teachers need to know the standards in order to provide effective literacy instruction? Is knowing the standards a prerequisite for effective literacy instruction? Where should resources be directed to assist teachers in their efforts to deliver quality educational experiences for students to

ensure they are college and/or career-ready? Findings from this project would suggest investing some of those assets on experiences that would build teacher beliefs and knowledge of the standards.

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APPENDIX A: IRB Letter of Approval and Stamped Consent Document



*INSTITUTIONAL REVIEW BOARD
OFFICE OF RESEARCH INTEGRITY*

DATE: September 9, 2015

TO: Audrey Harper
FROM: Western Kentucky University (WKU) IRB

PROJECT TITLE: [710231-1] Predicting Teachers' Intentions to Implement Common Core State Standards for English Language Arts and Literacy using the Theory of Planned Behavior

REFERENCE #: IRB 16-054
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: September 9, 2015
EXPIRATION DATE: August 30, 2016
REVIEW TYPE: Expedited Review

Thank you for your submission of New Project materials for this project. The Western Kentucky University (WKU) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by an *implied* consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of August 30, 2016.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Paul Mooney at (270) 745-2129 or irb@wku.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Western Kentucky University (WKU) IRB's records.

WESTERN KENTUCKY UNIVERSITY

Institutional Review Board
Continuing Review Report

If this is your third year for your Continuing Review Request, please complete a new application.
Otherwise, DO NOT include the complete application in describing
modifications and requests for additional time to collect data.

Name of Project: Predicting Teachers' Intentions to Implement Common Core State Standards for
English Language Arts and Literacy using the Theory of Planned Behavior

Name of Researcher: Audrey Harper and Dr. Lisa Duffin

Department: Department of Educational Administration, Leadership, and Research ; Dept. of Psychology

How many total subjects have participated in the study since its inception? #87

How many subjects have participated in the project since the last review? #87

Is your data collection with human subjects complete? [] Yes X No

- 1. Has there been any change in the level of risks to human subjects?
2. Have informed consent procedures changed so as to put subjects above minimal risk?
3. Have any subjects withdrawn from the research due to adverse events or any unanticipated risks/problems?
4. Have there been any changes to the source(s) of subjects and the Selection criteria?
5. Have there been any changes to your research design that were not specified in your application...
6. Has there been any change to the way in which confidentiality of the Data is maintained?
7. Is there desire to extend the time line of the project?



On what date do you anticipate data collection with human subjects to be completed? December 2016

#2 Change in Informed Consent:

Because participants have indicated a reluctance to include their full name on the consent form on the electronic questionnaire, we would like to change informed consent form. In lieu of the participant typing their name, we would like to have the participant give consent by continuing with the survey(see highlighted language below).

#5 Change in Research Design

In the original version of the study, participants were not compensated for their participation. Due to a lack of participation, the researcher will offer an incentive to participants. Every teacher who meets the sample criteria and completes the survey by answering all questions will be given the opportunity to receive a five dollar gift card to Starbuck's. Upon completing the online survey, participants will be directed to a form to complete in which they provide their school email address indicating that they agree to receive an electronic gift card for compensation. Gift cards will not be emailed to personal accounts to prevent non-teacher responses. This will be communicated to participants before completing the survey. Gift cards will be emailed at least on a weekly basis once the data have been verified as complete. All gift card awarding emails will be sent through the following email account: TPB2016@wku.edu. A log of sent emails will be kept on file with other secure data as outlined in the IRB proposal.

This has been noted in the informed consent document below (see highlighted language).

WKU IRB# 16-054
Approval - 8/15/2016
End Date - 12/31/2016
Expedited
Original - 9/9/2015

INFORMED CONSENT DOCUMENT

Project Title: Common Core State Standards for English Language Arts and Literacy
Investigator: Dr. Lisa C. Duffin at Lisa.Duffin@wku.edu.

You are being invited to participate in a research study being conducted by Dr. Lisa C. Duffin at Western Kentucky University. You were selected to participate in this study because you are a teacher of students in grades six through twelve in the areas of: English/Language Arts, History/Social Studies, Sciences, or Career and Technical Education. The University requires that you give your agreement to participate in this project.

The purpose of this research study is gain a better understanding of the implementation of the English/Language Arts and Literacy standards in your state. If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey/questionnaire will ask about your current ability, resources, and opportunity to implement literacy instruction in your discipline as well as your opinion on several other statements related to Literacy instruction. It will take you approximately 25 minutes to complete.

We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach of confidentiality is always possible. To the best of our ability your answers in this study will remain confidential. We will minimize any risks by removing personal identifiers and replacing them with unique codes in the data sets. You may not photograph, publish on the internet, copy, or in any way reproduce any of the confidential information included in this study.

You may not directly benefit from this research; however, we hope that your participation in the study may aid in understanding the implementation of the English/Language Arts and Literacy standards.

Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

If you have questions about this project or if you have a research-related problem, you may contact the researcher(s), Dr. Lisa C. Duffin at Lisa.Duffin@wku.edu.

“I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO PARTICIPATE IN THIS PROJECT. By entering my full name below and moving forward in the survey, I give my consent for the research team to use the information provided in the survey in their research.”

First Name: Middle Name: Last Name:

Continue



THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY
THE WESTERN KENTUCKY UNIVERSITY INSTITUTIONAL REVIEW BOARD
Paul Mooney, Human Protections Administrator
TELEPHONE: (270) 745-2129

WKU IRB# 16-054
Approval - 9/9/2015
End Date - 8/30/2016
Expedited
Original - 9/9/2015

INFORMED CONSENT DOCUMENT

Project Title: Common Core State Standards for English Language Arts and Literacy
Investigator: Dr. Lisa C. Duffin at Lisa.Duffin@wku.edu.

You are being invited to participate in a research study being conducted by Dr. Lisa C. Duffin at Western Kentucky University. You were selected to participate in this study because you are a teacher of students in grades six through twelve in the areas of: English/Language Arts, History/Social Studies, Sciences, or Career and Technical Education. The University requires that you give your agreement to participate in this project.

The purpose of this research study is gain a better understanding of the implementation of the English/Language Arts and Literacy standards in your state. If you agree to take part in this study, you will be asked to complete an online survey/questionnaire at two different points in time. This survey/questionnaire will ask about your current ability, resources, and opportunity to implement literacy instruction in your discipline as well as your opinion on several other statements related to Literacy instruction. It will take you approximately 25 minutes to complete. Upon completion of the survey today, you will receive a request to complete a similar survey within two weeks. Your participation in both waves of the study is vital.

We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach of confidentiality is always possible. To the best of our ability your answers in this study will remain confidential. We will minimize any risks by removing personal identifiers and replacing them with unique codes in the data sets. You may not photograph, publish on the internet, copy, or in any way reproduce any of the confidential information included in this study.

You may not directly benefit from this research; however, we hope that your participation in the study may aid in understanding the implementation of the English/Language Arts and Literacy standards.

Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

If you have questions about this project or if you have a research-related problem, you may contact the researcher(s), Dr. Lisa C. Duffin at Lisa.Duffin@wku.edu.

"I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO PARTICIPATE IN THIS PROJECT. By entering my full name below and moving forward in the survey, I give my consent for the research team to use the information provided in the survey in their research."

First Name: Middle Name: Last Name:

Email Address:

Continue



THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY
THE WESTERN KENTUCKY UNIVERSITY INSTITUTIONAL REVIEW BOARD
Paul Mooney, Human Protections Administrator
TELEPHONE: (270) 745-2129

WKU IRB# 16-054
Approval - 9/9/2015
End Date - 8/30/2016
Expedited
Original - 9/9/2015

APPENDIX B: Full survey

Consent

INFORMED CONSENT DOCUMENT

Project Title: Standards for English Language Arts and Literacy
Investigator: Dr. Lisa C. Duffin at Lisa.Duffin@wku.edu.

You are being invited to participate in a research study being conducted by Dr. Lisa C. Duffin at Western Kentucky University. You were selected to participate in this study because you are a teacher of students in **grades six through twelve** in the areas of: **English/Language Arts, History/Social Studies, Sciences, or Career and Technical Education**. The University requires that you give your agreement to participate in this project.

The purpose of this research study is gain a better understanding of the implementation of the English/Language Arts and Literacy standards in your state. If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey/questionnaire will ask about your current ability, resources, and opportunity to implement literacy instruction in your discipline as well as your opinion on several other statements related to Literacy instruction. It will take you approximately 15 minutes to complete.

We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach of confidentiality is always possible. To the best of our ability your answers in this study will remain confidential. **We will minimize any risks by removing personal identifiers and replacing them with unique codes in the data sets.** You may not photograph, publish on the internet, copy, or in any way reproduce any of the confidential information included in this study.

I understand that I am eligible to receive a \$5 gift card to Starbuck's as an incentive for my completion of this survey and that I must provide my school email address to receive this incentive.

Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.

Your continued cooperation with the following research implies your consent.

If you have questions about this project or if you have a research-related problem, you may contact the researcher(s), Dr. Lisa C. Duffin at Lisa.Duffin@wku.edu.

"I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO PARTICIPATE IN THIS PROJECT. By moving forward in the survey, I give my consent for the research team to use the information provided in the survey in their research."

Demographic Questions (All Participants)

Grade Level (s) Currently Teaching:

6th

- 7th
- 8th
- 9th
- 10th
- 11th
- 12th
- I do not teach students in grades 6 through 12.

My state of employment is:

My ethnicity is:

Hispanic/Latino

Non- Hispanic/Non-Latino

My race is:

-
- American Indian/Alaskan Native
 - Asian
 - Black/African American
 - Native Hawaiian/Other Pacific Islander
 - White
 - Other

My age is:

My gender is:

-
- Male
 - Female

The level of my most recent awarded degree is:

-
- Bachelor's
 - Master's
 -

- Specialist/Rank I
- Doctorate

My years of experience as a teacher:

- 0-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21-25 years
- 26-30 years
- 30+ years

Subject area(s) that I am currently teaching:

- English Language Arts
- Sciences
- History/Social Studies
- Art and Humanities
- Social Sciences
- Career and Technical
- None of the listed fields

Non-ELA Teachers (1 Demographic and Level of Knowledge)

On a scale of 1 (not familiar) to 10 (very familiar), I would rate my level of knowledge of my state Literacy Standards as a level:

	Not Familiar							Familiar		
	1	2	3	4	5	6	7	8	9	10
Literacy Standards Knowledge										

What are the strands outlined in my state standards for Literacy in History/Social Studies and the Technical Subjects?
(Please select any that apply)

- Speech

- Writing
- Speaking and Listening
- Conventions
- Craft and Structure
- Research
- Comprehension and Collaboration
- Language
- Reading
- Vocabulary Acquisition and Use

What are the modes of writing outlined in my state standards for Literacy in History/Social Studies and the Technical Subjects?
(Please select any that apply)

- Narrative
- Descriptive
- Argumentative
- Poetry
- Creative Writing
- Persuasive
- Expository
- Informative/Explanatory

ELA Teachers (1 Demographic and Level of Knowledge)

On a scale of 1 (not familiar) to 10 (very familiar), I would rate my level of knowledge of my state English Language Arts Standards as a level:

	Not Familiar					Familiar				
	1	2	3	4	5	6	7	8	9	10
English Language Arts Standards Knowledge										

The following questions are used to help the research team gain a further understanding of statewide implementation efforts of the English Language Arts and Literacy standards.

What strands are outlined in my state standards for English Language Arts?
(Please select any that apply)

- Speech
- Writing
- Speaking and Listening
- Conventions
- Craft and Structure
- Research
- Comprehension and Collaboration
- Language
- Reading
- Vocabulary Acquisition and Use

What are the modes of writing outlined in my state standards for English Language Arts?
(Please select any that apply)

- Narrative
- Descriptive
- Argumentative
- Poetry
- Creative Writing
- Persuasive
- Expository
- Informative/Explanatory

Level of Know. (All Participants)

My state standards for English Language Arts and Literacy advocate that students should read at least 50% informational texts and 50% literary texts in the English classroom.

- Disagree
- Agree

How is text complexity defined according to my state standards?
(Please select any that apply)

-

Lexile Level or other Quantitative Measures

- Considerations of the meaning, structure, or purpose of the text (i.e., Qualitative Measures)
- Considerations of the Reader and Task that include motivation, knowledge, and experience of the reader
- None of the Above

My state standards for English Language Arts and Literacy articulate that students should learn discipline specific content through reading and writing.

- Disagree
- Agree

My state standards for English Language Arts and Literacy ask that students be able to provide evidence from texts in their writing.

- Disagree
- Agree

When choosing words for vocabulary instruction, it is important not to stray away from the list provided in the text book for the given story or chapter. The publishers know which words are important for instruction for all students.

- Disagree
- Agree

My state standards for English Language Arts and Literacy define what all students are expected to know and be able to do, not how teachers should teach.

- Disagree
- Agree

If asked, I could define for another teacher what Tier I, Tier II, and Tier III words are and how to identify them.

- Disagree
- Agree

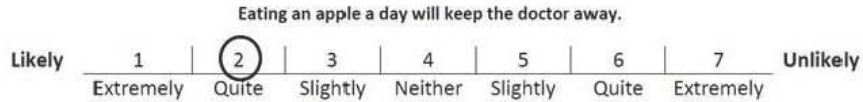
Using technology is a major instructional shift advocated by my state English Language Arts and Literacy Standards.

- Disagree
- Agree

Attitudinal Questions

Many questions in this survey make use of rating scales with 7 places.
You are to circle the number that best describes your opinion. Please only circle one number and answer all questions.

For example, if you were asked to rate "Eating an apple a day will keep the doctor away" on such a scale, the 7 places should be interpreted as follows:



If you think that that eating an apple a day is *quite likely* to keep the doctor away, you would circle the number 2 (see above).

I believe that I know what is best for my students; I do not need the standards to plan or guide my instruction.

	1	2	3	4	5	6	7	
Strongly Agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Disagree

I believe that implementing instruction aligned to my state standards for English/Language Arts and Literacy is what is best for **all students**.

	1	2	3	4	5	6	7	
Strongly Agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Disagree

I believe that implementing instruction aligned to my state standards for English/Language Arts and Literacy is what is best for **students who plan to enter COLLEGE after graduation**.

	1	2	3	4	5	6	7	
Strongly Agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Disagree

I believe that implementing instruction aligned to my state standards for English/Language Arts and Literacy is what is best for **students who plan to enter the WORKFORCE immediately after graduation**.

	1	2	3	4	5	6	7	
Strongly Agree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Disagree

I believe that the people who wrote my state standards for English/Language Arts and Literacy have no idea what it is like to teach in today's classroom.

1 2 3 4 5 6 7
Strongly Agree | | Strongly Disagree

I believe that implementing instruction aligned to my state standards for English/Language Arts and Literacy will help my students to **do well on state assessments.**

1 2 3 4 5 6 7
Strongly Agree | | Strongly Disagree

I believe that implementing my state standards for English/Language Arts and Literacy will NOT help my students **to learn important skills.**

1 2 3 4 5 6 7
Strongly Agree | | Strongly Disagree

I believe that implementing the standards is a waste of time. There are other things that my students need to be learning.

1 2 3 4 5 6 7
Strongly Agree | | Strongly Disagree

Norms

I believe that my school administration has the expectation that **I will IMPLEMENT instruction** that is aligned to my state standards for English/Language Arts and Literacy.

1 2 3 4 5 6 7
Strongly Agree | | Strongly Disagree

I believe that my school administration has the expectation that **I will DESIGN instruction** that is aligned to my state standards for English/Language Arts and Literacy.

1 2 3 4 5 6 7
Strongly Agree | | Strongly Disagree

Thinking about people outside of education whose opinion I value (e.g. friends, parents, family members, political leaders), I believe they have the expectation that I should implement instruction that is aligned to my state standards for English/Language Arts and Literacy.

1 2 3 4 5 6 7

Strongly Agree | | Strongly Disagree

I believe that **most teachers who I view as exemplary teachers** implement instruction that is aligned to the state standards for English/Language Arts and Literacy.

1 2 3 4 5 6 7

Strongly Agree | | Strongly Disagree

I believe that **my colleagues design instruction** that is aligned to the state standards for English/Language Arts and Literacy.

1 2 3 4 5 6 7

Strongly Agree | | Strongly Disagree

I believe that **most teachers in my district whose work I respect** implement instruction that is aligned to the state standards for English/Language Arts and Literacy.

1 2 3 4 5 6 7

Strongly Agree | | Strongly Disagree

During the **past 5 instructional days**, I have implemented instruction aligned to the ELA or Literacy standards in my state for ____% of the time during which I provided instruction.

Self-Efficacy Items

This questionnaire is designed to help us gain a better understanding of the implementation of the English/Language Arts and Literacy standards in your state.

Directions: Please indicate your opinion about each of the questions by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum.

Please respond to each of the questions by considering the combination of your *current* ability, resources, and opportunity to do each of the following in your present position.

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
--	-------------	-------------	-------------	-------------	--------------

1 2 3 4 5 6 7

Strongly Agree | | Strongly Disagree

I believe that **most teachers who I view as exemplary teachers** implement instruction that is aligned to the state standards for English/Language Arts and Literacy.

1 2 3 4 5 6 7

Strongly Agree | | Strongly Disagree

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1 2 3 4 5 6 7

Strongly Agree | | Strongly Disagree

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To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
--	-------------	-------------	-------------	-------------	--------------

Select texts for classroom instruction based upon quantitative measures (i.e. Lexile, computer generated measures based upon sentence length, word length or frequency)?

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Select texts for classroom instruction based upon qualitative measures (i.e. those aspects measured by a human reader such as levels of meaning or purpose; structure; language conventionality and clarity; and knowledge demands)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Select texts for classroom instruction based upon considerations of the reader and task (i.e. variables specific to particular readers such as motivation, knowledge, and experiences and variables specific to particular tasks such as purpose and the complexity of the task assigned and the questions posed)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Determine if a student can understand and comprehend discipline specific complex texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Adjust instruction (not change texts) for students who are struggling with complex texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn literacy strategies to aid in comprehending a variety of text types specific to my discipline (e.g. scientific articles, career and technical manuals, primary or secondary historical documents, literature, etc.)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn to analyze texts specific to my discipline?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn to develop an understanding of a concept or topic by reading multiple disciplinary texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn to use a range of strategies to understand unfamiliar words while reading?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Implement instruction using knowledge of your students' current vocabulary and the demands of the text?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn to engage in a range of conversations about texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Ask questions during instruction that require students to provide a text based response?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Ask questions during instruction that require students to make inferences based upon a text?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn to select and incorporate evidence from texts in their writing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Help students learn to evaluate the argument and evidence in a complex text?

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn to compare and contrast information presented in multiple complex texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn how to make an argument and support their claim with reasoning and evidence from texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn how to write from multiple sources about a single topic?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Help students learn to assess the credibility and accuracy of sources when gathering evidence for writing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Provide specific feedback to your students to help them improve their writing in your disciplines?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Provide specific feedback to your students to help them improve their reading comprehension of complex texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Provide specific feedback to your students to help them engage in conversations about a text?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Design instruction that allows students to engage with a variety of text types specific to my discipline (i.e. literary and/or informational)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Design instruction to help students learn literacy strategies aid in comprehending a variety of text types specific to my discipline (i.e. literary and/or informational)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Design instruction to help students learn content from reading discipline specific texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
--	-------------	-------------	-------------	-------------	--------------

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Design instruction for all students centered on complex texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Design instruction to help students learn how to use a range of strategies to make meaning of unfamiliar words while reading?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Design instruction using knowledge of your students' current vocabulary and the demands of the text?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Design instruction to help students learn how to engage in evidence-based conversations about texts?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent can you ...

	None at All	Very Little	Some Degree	Quite a Bit	A Great Deal
Design instruction to help students learn how to find evidence in a text that supports their argument, reflection, or analysis?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Teacher Sense of Efficacy Scale Short Form

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.

	Nothing	(2)	Very Little	(4)	Some Influence	(6)	Quite a Bit	(8)	A Great Deal
How much can you do to control disruptive behavior in the classroom?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Nothing	(2)	Very Little	(4)	Some Influence	(6)	Quite a Bit	(8)	A Great Deal
How much can you do to motivate students who show low interest in school work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Nothing	(2)	Very Little	(4)	Some Influence	(6)	Quite a Bit	(8)	A Great Deal
How much can you do to get students to believe they can do well in school work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Nothing	(2)	Very Little	(4)	Some Influence	(6)	Quite a Bit	(8)	A Great Deal
How much can you do to help your students value learning?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Nothing	(2)	Very Little	(4)	Some Influence	(6)	Quite a Bit	(8)	A Great Deal
To what extent can you craft good questions for your students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Nothing	(2)	Very Little	(4)	Some Influence	(6)	Quite a Bit	(8)	A Great Deal
How much can you do to get children to follow classroom rules?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much can you do to calm a student who is disruptive or noisy?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How well can you establish a classroom management system with each group of students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much can you use a variety of assessment strategies?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent can you provide an alternative explanation or example when students are confused?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much can you assist families in helping their children do well in school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Nothing	(2)	Very Little	(4)	Some Influence	(6)	Quite a Bit	(8)	A Great Deal
How well can you implement alternative strategies in your classroom?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Incentive Option

If you would like to receive a **\$5 gift card to Starbucks** as our way of saying "Thank You!" for completing the survey, please enter your school email address below. This email address will not be stored with your survey response data.

Gift cards will not be emailed to personal accounts. (We have to make sure that you are a teacher. People will do crazy things for a free Starbucks card.)

Please add TPB2016@wku.edu to your email contact list to ensure that you receive the eGift Card code in your inbox. You can expect to receive this email within 7 days.

We are excited you agreed to participate in the study, but please note that you are *only eligible to receive one gift card*. Feel free to share the survey link with a friend so that s/he can earn one.

If you do not want the gift card or do not want to provide your school email address, please leave the text box blank and continue.