AN EXPLORATORY ANALYSIS OF NORTH DAKOTA TEACHERS' ATTITUDES

TOWARD AND IMPLEMENTATION OF THE COMMON CORE STATE STANDARDS:

RECOMMENDATIONS FOR PROFESSIONAL DEVELOPMENT PROVIDERS

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An Exploratory Analysis of North Dakota Teachers' Attitudes Toward and
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The Supervisory Committee certifies that this ***disquisition*** complies with North Dakota

State University's regulations and meets the accepted standards for the degree of

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ABSTRACT

Increases in global competition for student achievement have led to drastic changes within the field of education. In recent decades educational reforms such as No Child Left Behind (NCLB) and Race to the Top have placed a stronger emphasis on standardized testing and increased accountability for schools to promote student achievement with limited success. This has led to a state-initiated overhaul of previous educational standards in favor of a set of more rigorous, internationally benchmarked standards in math and English Language Arts (ELA) known as the Common Core State Standards (CCSS). Since 2010, adoption of the Common Core State Standards across the United States has left teachers and school districts scrambling to unpack, align, and add the new standards to their existing curricula. The author examined North Dakota teachers' attitudes and preparedness to teach using the Common Core State Standards providing recommendations for professional development providers.

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DEDICATION

I would like to dedicate this paper to my family. Thank you for always believing in me and instilling in me the value of education. I could not have made it this far in life without your never-ending love and support. I am truly blessed to have such a great support system in my life.

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LIST OF ABBREVIATIONS

AVID..........................Advancement Via Individual Determination

ANOVA ....Analysis of Variance

CCSS..........................Common Core State Standards

CCSSO.......................Council of Chief State School Officers

CTE............................Career and Technical Education

DPI ....Department of Public Instruction

ELA............................English Language Arts

ELL ....English Language Learners

IEP.............................Individualized Education Plan

K-12 ....Kindergarten through 12th Grade

NGA...........................National Governors Association

NCLB.........................No Child Left Behind

ND..............................North Dakota

NDCTE ....North Dakota Council of Teachers of English

NDCTM ....North Dakota Council of Teachers of Mathematics

NDSTA ....North Dakota Science Teachers Association

NDSS ....North Dakota State Standards

PARCC ....Partnership for Assessment of Readiness for College and Careers

PD ....Professional Development

PLC ....Professional Learning Community

REA............................Regional Education Association

SBAC ....Smarter Balanced Assessment Consortium

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CHAPTER ONE. INTRODUCTION

Standards-based education has been at the forefront of educational reform since the publication of *A Nation at Risk* in 1983 and the enactment of the No Child Left Behind Act in 2001. In recent decades the crux of many educational reforms has been at decreasing student achievement gaps between American students and the rest of the world as well as within American schools. Standards-based education, which identifies learning objectives and benchmarks that students should know and be able to do at each grade level, has been proposed as a potential solution to help narrow these gaps. The passing of No Child Left Behind (NCLB) paved the way for standards-based education placing increased emphasis on high-stakes testing for student achievement. Under this act accountability for student achievement was largely placed on the states, which often held different standards for level of proficiency. Many teachers and school administrators expressed frustration and displeasure with NCLB as they felt it was penalizing schools with larger, more diverse student populations. Although, states were allowed to set their own benchmarks, many schools, including traditionally high-performing schools, failed to make progress towards 100% proficiency as expected by NCLB in the year 2013-2014.

The No Child Left Behind Act represents one major attempt at increasing the accountability of schools in regard to student achievement. Although, NCLB was largely unsuccessful in regard to improving student achievement, the act did provide foundation for the next ground-breaking educational reform – development and implementation of the Common Core State Standards (CCSS). The Common Core State Standards represent a state-led overhaul of the previous state educational standards for student achievement. Proposed in this reform include standards across grades K-12 in the subjects of English language arts (ELA) and math. These standards were created in an attempt to replace and amend previous state-level standards

with standards that are more rigorous and applicable to students' lives. Ultimately, the goal behind the Common Core State Standards is to "ensure students are prepared for today's entry-level careers, freshman-level college courses, and workforce training programs" (What Parents Should Know, 2015).

Statement of the Problem

Currently, forty-three states in the US have adopted the Common Core State Standards, with plans of full implementation in either the 2013-2014 or 2014-2015 academic years (Standards in Your State, 2015). As states have begun to implement the CCSS, teachers and other school administrators have been faced with the challenge of unpacking and deconstructing these new standards. This dramatic change in the field of education has prompted many teachers and administrators to seek guidance to ensure their curriculums and instructional strategies are in alignment with the Common Core standards. As a result, national, regional, state, and local educational associations are being called upon to provide professional development (PD) training on how to implement the new standards within instruction. As schools continue to adopt and implement the new standards within their curriculum, it is important to assess whether teachers and other support personnel are receiving the professional development training and support they need to implement the Common Core State Standards effectively.

Purpose of the Study

The purpose of this study is to examine North Dakota teachers' attitudes and level of preparedness to implement the Common Core State Standards into their instructional practice. By analyzing teachers' attitudes, level of preparedness, and perceived barriers to implement the Common Core State Standards, this research study will attempt to provide educational stakeholders with information to guide future professional development activities. Specifically,

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this research study will analyze the results of a professional development survey administered to teachers in southeastern North Dakota during the spring of 2014. The intention of this study is to provide an in-depth analysis of the results of the professional development survey as well as to provide recommendations to professional development providers regarding Common Core State Standards implementation. This study is conducted in collaboration with an upper-Midwest regional education association known as the South East Education Cooperative (SEEC).

Research Questions

The primary research question to be answered throughout this study is "*What are North Dakota teachers' attitudes towards and implementation of the Common Core State Standards?*" This question will be examined as a synthesis of six related secondary research questions:

1) What are North Dakota teachers' perceptions of the Common Core State Standards?

2) What are North Dakota teachers' experiences regarding Common Core State Standards professional development training?

3) What Common Core State Standards resources are North Dakota teachers aware of?

4) What resources do North Dakota teachers perceive they need to feel prepared to teach using the Common Core State Standards?

5) What are North Dakota teachers' perceptions of implementation of the Common Core State Standards?

6) In what ways do North Dakota teachers report changing their instructional practice as a result of implementing the Common Core State Standards?

Answers to these six research questions will provide a more in-depth understanding of North Dakota teachers' experiences, attitudes, and needs as they implement the Common Core State Standards into their instructional practice.

Significance of the Study

The intention of this study is to be exploratory and descriptive in nature. This study is significant in that it will provide educators and educational stakeholders with information surrounding teachers' perceptions and experiences as they implement the Common Core State Standards. Teachers are the individuals who are primarily responsible for administering curriculum and facilitating educational opportunities for students. It is crucial that teachers have a clear understanding of the curriculum changes that are occurring as a result of the transition to the Common Core State Standards, and that teachers have the knowledge and skills to be able to implement these changes into their instructional practice. Although, findings from this study focused on a small, regional sample of the entire teaching population in the United States, the findings from this study may open up conversations between schools, school districts, and regional educational associations regarding CCSS implementation. Optimally, professional development providers will be able to collaborate and discuss on what has and has not been successful in regard to CCSS professional development training and implementation of the new standards. As service providers become more knowledgeable about the needs of the educators they serve, they may be more able to adapt their trainings to reflect the needs of those served.

Delimitations

There are some important delimitations that must be addressed prior to analyzing the current study. The first delimitation is that this study is being conducted on a non-random regional sample of teachers in the upper-Midwest. Findings from this study are generally applicable to teachers and schools within the southeastern region of North Dakota, but are not intended to be specific to individual teachers or school districts. As a result of the restricted sample used in this study, findings may not be generalizable to schools outside of this region.

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Secondly, the researcher used data from a pre-existing dataset. This will limit any causal conclusions that may be interpreted from the results of this study. Findings from this study are intended to be primarily descriptive in nature with few inferential statistics being performed on the data.

The third delimitation stems from the data collection process. The data come from a pre-existing dataset that did not include potentially useful demographic information such as who participated in the study, how many years of experience teachers have in the classroom, and size of the school district where one teaches. Due to the lack of this information, the generalizability of these results to teachers outside of the sample population may be limited.

CHAPTER TWO. LITERATURE REVIEW

This section will provide an in-depth exploration of relevant literature for the current study. Specifically, this section will address the development of the Common Core State Standards as well as teachers' perceptions regarding them. This section will also include a review of the professional development literature identifying what makes professional development effective versus ineffective. Lastly, this section will highlight previous research related to teachers' perceptions regarding Common Core State Standards professional development training as well as teachers' current implementation of the Common Core standards into their instructional practice.

Common Core State Standards Development

The development of the Common Core State Standards began in 2009 as a result of collaborative efforts from members of the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO) (Development Process, 2015). State leaders, governors, and education commissioners from 48 states and the District of Columbia sought to create standards that would support all students in graduating from high school both college and career ready. Although, states already had their own existing standards in place identifying what students should know and be able to do after each passing grade, there was a lack of consistency and standardization across states. Colleges and businesses were receiving high school graduates with varying levels of knowledge and ability, many who lacked necessary knowledge and skills to be successful. The creation of the Common Core State Standards represent an effort by educators to decrease the gaps in achievement of high school students in the United States by providing standards that are transparent and universal across schools and state lines.

Beginning in 2010, state educational departments across the United States were able to review and adopt the Common Core State Standards as a replacement for their previous state standards. The initial goal of the Common Core State Standards initiative was to have all participating states fully implement the Common Core standards into their curricula by the academic year 2013-2014 (Common Core Timeline, 2013). As of June 2014, 42 states and the District of Columbia adopted and indicated plans on implementing the CCSS in both math and English language arts during the next few years. Minnesota elected to adopt the Common Core standards in English language arts, but did not adopt the standards in math. Four states, Alaska, Nebraska, Texas, and Virginia, never indicated plans to adopt the Common Core standards, but instead have incorporated their own equivalent standards based on the Common Core. Indiana, Oklahoma, and South Carolina initially indicated plans to adopt the CCSS, but later withdrew their plans to adopt. As states continue to debate whether or not to adopt the CCSS, those who have elected to adopt the standards have begun the process of implementation. Although, most adopting states reported plans for full implementation of the standards by the 2013-2014 academic year, some states have elected to implement the standards incrementally over time.

Two state-led consortia, Partnership for Assessment of Readiness for College and Careers (PARCC) and Smarter Balanced Assessment Consortium (SBAC), have been organized to develop assessments related to the Common Core State Standards. States indicating adoption of the Common Core standards had the opportunity to field test assessments created by either consortium during the spring of 2013 for possible use in the future. States electing to adopt the standards have generally aligned with either PARCC or SBAC, although some states have elected to become members of both consortia. As of February 2011, 14 states and the District of Columbia had become members of PARCC, 20 states had become members of SBAC, and 11

states had become members of both consortia (Common Core Assessment Consortia, 2011).

Assessments from both consortia are expected to be available to schools in participating states

during the spring of the 2014-2015 academic year.

<p align="center">**Teachers' Perceptions Regarding the Common Core State Standards**</p>

Much of the emphasis behind the Common Core State Standards initiative has been on

the development, review, and the eventual adoption and implementation of the standards by

states across the nation. Despite the majority of states indicating adoption of the standards and

plans for full implementation, this does not mean that all teachers have accepted the Common

Core State Standards. As implementation becomes the next step in the process of this dramatic

educational reform, it is important to assess how prepared schools, especially teachers, are to

implement the standards in their instruction. Unfortunately, very little empirical research has

been conducted analyzing teachers' attitudes and implementation of the Common Core State

Standards. Much of the research highlighted within this section is based on non-empirical

opinion polls and reports conducted by educational organizations.

The Education Week Research Center has been attempting to track teachers' perspectives

regarding the Common Core State Standards over time as states begin to adopt and fully

integrate them into their curriculum (From Adoption to Practice, 2014). Tracking is being done

through the use of an online survey examining educators' perspectives regarding their

"familiarity with the standards and aligned assessments; curricular resources; professional

development and training; preparedness for the new standards and assessments; and their impact

on classroom instruction and student learning" (From Adoption to Practice, 2014, p. 3). Based

on results from a survey conducted by Education Week during the 2013-2014 school year, 84%

and 94% of teachers surveyed reported general familiarity with the Common Core State

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Standards in math and English language arts, respectively. Familiarity levels dropped to 56% in math and 65% in ELA when participants were asked to indicate their level of familiarity with the PARCC or SBAC assessments regarding these subjects. It is important to note that field tests for the assessments of both consortia were conducted during the spring of 2013, months prior to the Education Week survey. When participants were asked to indicate their beliefs about the Common Core standards, approximately two-thirds of teachers reported that the standards would help them to improve their instructional practice as well as improve student learning.

Familiarity and beliefs represent a few factors that can influence a teachers' likelihood to implement the Common Core State Standards. Another influential factor that may play a large role on implementation is teachers' perceived level of preparedness to teach using the standards. In the survey administered by the Education Week Research Center, 76% of teachers indicated feeling at least moderately or somewhat prepared to teach their students using the CCSS (From Adoption to Practice, 2014). This number decreased when it came to teaching student populations with more complex or diverse needs, including English language learners (46%) and students with disabilities (49%). These groups of students often provide additional challenges for teachers, highlighting the importance in examining whether the new standards account for students of varying knowledge or ability levels.

When teachers were asked to rate their school's preparedness to implement the Common Core standards into instructional practice, 66% of respondents indicated their school as being at least moderately or somewhat prepared (From Adoption to Practice, 2014). Although, it was expected that all CCSS-adopting states fully implement the standards by the academic year 2013-2014, states and school districts across the nation are at varying levels of preparedness to implement the standards. One way for schools and educators to increase their level of

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preparedness to implement the Common Core standards into their curriculum and instruction is through professional development training.

<div align="center">**Professional Development**</div>

Professional development in education is defined by the National Staff Development Council as a "…comprehensive, sustained and intensive approach to improving teachers' and principals' effectiveness in raising student achievement" (Definition of Professional Development, 2014, p. 1). Professional development may come in a variety of different forms ranging from brief one-hour webinars to week-long workshops. Professional development can be administered through study groups, mentoring experiences, classroom observations, and formal or informal discussions (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009). Just as professional development is delivered in a number of different formats and settings, the topics and activities covered in these trainings is far-reaching. Trainings can conceivably cover any topic related to education from classroom management strategies to educational philosophies, however, the topic of professional development generally relates to one of five different strategies: "immersion, examining practice, curriculum development, curriculum implementation, and collaborative work" (Huffman, Thomas, & Lawrenz, 2003, p. 379). Amidst the wide array of opportunities to develop one's instructional practice and increase student achievement, the over-arching goal of professional development is to provide educators with the knowledge and skills they need to enhance the educational experience for students, teachers, and educational professionals.

Educators are strongly encouraged, and often required, by schools and school districts to attend professional development training. However, merely attending professional development training does not mean that one's instructional practice will automatically be improved. When

done correctly, professional development training can be a very enriching experience for educators; however, when done incorrectly professional development training is often regarded as a waste of time and resources that takes teachers' time away from their students and classrooms. To illustrate this point, Darling-Hammond et al. (2009) found that although over 90% of teachers had received professional development training, "Nearly half of all U.S. teachers are dissatisfied with their opportunities for professional development" (p. 21). Fortunately, considerable research has been conducted in recent years examining what makes professional development effective.

Effective Professional Development

Effective professional development generally results in a change in an individual's knowledge, attitudes, and/or practices (Sparks, 2002). For some it may bring a new awareness surrounding a particular topic or issue, and for others it may provide an additional tool to their instructional repertoire. This new awareness or instructional skill may lead to a subtle, incremental change in the way a teacher provides instruction to their students. However, for professional development to be truly effective, it needs to result in what Sparks (2002) terms a "deep change." Deep changes not only stem from the acquisition new knowledge or skills, but also result in transformations of an educator's beliefs about teaching and learning. "It requires new ways of thinking and behaving…that is major in scope, discontinuous with the past, and generally irreversible" (Sparks, 2002, p. 22). For deep change to occur there needs to be a system-wide vision or goal for change. Teachers, principals, administrators, and other school support personnel must be on the same page in creating a culture that is welcoming towards change. Without sharing the same vision or goal for change, the change process may be met with roadblocks and potentially failure.

Many educators recognize the importance of professional development for school improvement. However, this attitude is largely not reflected in school management decisions. McRobbie (2000) illustrates this point stating that "…well over half of U.S. teachers get less than a day's worth of professional development annually, as contrasted with teachers in many other countries who work on professional development for 10-20 hours a week" (p. 6). This difference in the amount of time devoted to professional development may be a significant factor when it comes to understanding differences in student achievement nationally and internationally. Sparks (2002) goes on to report findings from a survey conducted by the National Center for Educational Statistics that over half of US teachers are not allowed release time for professional learning activities, and roughly one quarter of teachers did not receive "…support, time, or credit for professional development" (p. 24). Based on these findings, it appears that although professional development is regarded as an important practice to teacher development, this attitude has yet to become a system-wide focus in schools.

Not only must professional development be a system-wide commitment, but research suggests that for professional development to be effective, "…it must be ongoing, intensive, and connected to practice" (Darling-Hammond et al., 2009, p. 9). With more time devoted to professional development, teachers are able to practice skills and solicit feedback from other educators. Despite research recommending ongoing, sustained professional development for teachers, Gulamhussein (2013) indicates that "…one-time workshops are the most prevalent model for delivering professional development. Yet, workshops have an abysmal track record for changing teacher practice and student achievement" (p. 2). Illustrating this point, Darling-Hammond et al. (2009) found that over 90% of US teachers had participated in professional learning or development via short-term conferences or workshops. Other forms of professional

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development including attending university courses and making observational visits to other schools were reported by a third of teachers or less. Based on these findings, it appears that although the need for ongoing professional development has been established, this practice has not been adopted by a vast majority of teachers.

Another major emphasis within the effective professional development literature is that training must be focused on student achievement and specific content as it relates to instructional practice. "Research suggests that professional development is most effective when it addresses the concrete, everyday challenges involved in teaching and learning specific academic subject matter, rather than focusing on abstract educational principles or teaching methods taken out of context" (Darling-Hammond et al., 2009, p. 10). Similar to the notion in which students have difficulty learning about content that does not apply to their lives, teachers are less likely to improve their practice if professional development does not apply to their work in the classroom. Wei, Darling-Hammond, Andree, Richardson, and Orphanos (2009) recommend that "For substantial change to occur, curriculum, assessment, standards, and professional learning should be seamlessly linked in order to avoid disjunctures between what teachers learn in professional development and what they are able to implement in their classrooms and schools" (p. 6). One way to avoid these disjunctures is by providing hands-on activities during professional development trainings. Hands-on activities allow teachers to practice the skills they have learned with other professionals as well as discuss how these skills may translate to different classrooms, age groups, or settings. Teachers also cite benefits from professional development trainings that allow participants to identify concepts and skills they want their students to learn, including areas which give students the most trouble (Darling-Hammond et al., 2009). This opens up valuable opportunities for modeling, coaching, and in-depth discussions.

Piggybacking on the recommendation that professional development should provide hands-on activities for teachers to practice and evaluate their knowledge and skills, professional development should also foster a strong collaborative atmosphere among teachers (Darling-Hammond et al., 2009). Teachers that continually work in isolation may have difficulty viewing their practice from an outside or external perspective. Professional development such as observing other teachers in their practice or having other teachers observe one's own practice can lead to valuable insights and constructive feedback towards improved instruction.

Professional learning communities (PLCs) are another collaborative technique often utilized by teachers to improve their practice. Professional learning communities are defined by Reichstetter (2006) as "team members who regularly collaborate toward continued improvement in meeting learner needs through a shared curricular-focused vision" (p. 1). Typically, PLCs are conducted by teachers of similar content areas or grade levels, and are hosted within their school or educational environment. Because PLCs are commonly composed of teachers within the same school, teachers are able to focus on problems or issues that relate to their educational environment. Professional learning communities have been shown to be successful in helping improve a number of measures of student outcomes and achievement including reduced student absenteeism and dropout, increased achievement for low and middle-income students, and significant gains in math, history, science, and reading (Darling-Hammond et al., 2009).

Teachers' Perceptions Regarding CCSS Professional Development Training

Taking into account all of the factors related to fostering effective professional development, it is important to examine how teachers perceive the professional development training they receive (if they receive any at all), and what kind of impact it has on their instructional practice. Findings from a survey conducted by the Education Week Research

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Center indicate that 87% of teachers and teaching specialists had received professional development training regarding the Common Core standards (From Adoption to Practice, 2014). Although a majority of teachers reported receiving CCSS professional development training, 68% reported a desire for more training. An additional 10% of survey respondents indicated they had not received professional development training regarding the standards, but would welcome receiving such training. Despite the majority of teachers surveyed reporting having received CCSS professional development training, there continues to be a large need amongst educators for additional training regarding the Common Core State Standards.

It is not only important to examine whether educators have received CCSS professional development training, but it is also important to assess the length and focus of these trainings. Findings from the Education Week Research Center survey indicate that over 80% of teachers had received at least two days' worth of CCSS professional development training (From Adoption to Practice, 2014). In regard to the topics highlighted during the CCSS trainings, over half of surveyed teachers cited the standards in ELA and math as being the primary focus. Alignment of the new standards with the previous standards was also reported by a majority of teachers receiving CCSS professional development training. Given that many states were just beginning to implement the standards in their schools or were still in the process of planning implementation at the time of the study, it is understandable that most professional development trainings were targeted towards unpacking an aligning the new standards with the previous state standards. Lesser focus was placed on obtaining curriculum resources and materials assessments created by the multi-state consortia, and teaching specific groups of students using the CCSS.

The type of professional development training that teachers have received may also provide a differential impact on their perceived level of support and preparedness to teach using

the Common Core State Standards. The most helpful forms of professional development training cited by respondents to the Education Week Research Center survey included collaborative planning time with colleagues, professional learning communities, and structured, formal training (From Adoption to Practice, 2014). Although, formal, structured professional development training is deemed as helpful by a majority of teachers, it appears that collaboration with colleagues and other educational professionals is the most helpful activity for teachers.

Implementation of the Common Core State Standards

For many states across the nation, implementation of the Common Core State Standards has already taken place. Findings from a survey conducted by the Center on Education Policy cited in Rentner and Kober (2014a) indicate that "more than 80% of districts in CCSS-adopting states report that they have already begun teaching math and ELA curricula aligned to the Common Core, while just over 10% will begin teaching such curricula in school year 2014-15 or later" (p. 2). Although, implementation of the Common Core standards appears to be high, just one third of school districts report CCSS-aligned curricula being utilized within all schools in their district during the 2013-2014 academic year. Another third of school districts expect to implement the CCSS curriculum in all schools during the 2014-2015 school year, with the remaining school districts indicating 2015-2016 or later. Based on these findings, it appears that school districts and states have varying plans in place in regard to CCSS implementation.

When it comes to adopting and implementing major changes (such as educational reform), the process can be delayed or prevented for several different reasons. More often than not, the change process is halted by the lack of adequate funding, resources, or support. Outside of these challenges, one of the most frequently cited issues is lack of time. Rentner and Kober (2014b) found in a national survey of school leaders that over 90% of districts reported time-

related challenges in regard to CCSS implementation. Due to the fact that funding related to student achievement scores is at stake, many school districts are feeling rushed to implement the standards within their schools before they have thoroughly reviewed and adapted their curriculum to meet the standards.

In lieu of the challenges to implement the Common Core State Standards, teachers and school districts have been asked to provide feedback about what would help them feel more prepared to make the transition. Nearly 75% of teachers indicate more planning time would be helpful in preparing to teach using the Common Core standards (From Adoption to Practice, 2014). Access to aligned curriculum resources, aligned assessments, and more collaboration time with colleagues were also cited by a majority of teachers participating in the Education Week Research Center survey. At this stage in the implementation process, it appears that the most helpful resources to help teachers feel more prepared to teach using the Common Core standards are more time with the standards and information.

It has been established from previous studies and research regarding professional development highlighted in earlier sections that there continues to be a large need for professional development surrounding the Common Core State Standards. The question is not simply whether or not teachers are receiving CCSS professional development training, it is how much and what kind they are receiving. This study sought to identify the attitudes, level of preparedness, and needs of teachers in southeastern North Dakota as they implement the Common Core State Standards. These findings will be used to provide information to professional development providers as a guide for future professional development activities related to implementing the Common Core State Standards.

CHAPTER THREE. METHODS

The intention of this study is to provide descriptive information based on teachers'

responses to the online PD Teacher Survey administered by the North Dakota Department of

Public Instruction (DPI). The PD Teacher Survey assessed North Dakota teachers' attitudes and

experiences as they transition to teaching with the Common Core State Standards. Findings

from the PD Teacher Survey will be used to provide recommendations to professional

development providers on how to guide future professional development activities related to the

Common Core State Standards. Data used in this study was obtained from a pre-existing dataset

of North Dakota teachers' responses to the PD Teacher Survey administered in the spring of

2014.

Setting

The PD Teacher Survey was conducted in school districts throughout the state of North

Dakota. Eligible school districts for this study included those in rural communities (e.g.

Enderlin, Kindred) and cities (e.g. Fargo, West Fargo, Jamestown) within the service area of the

South East Education Cooperative (SEEC). The South East Education Cooperative is a regional

education association (REA) which provides educational services to 43 participating school

districts throughout southeastern North Dakota. Of the 43 districts within the SEEC service area,

five districts (Fargo, West Fargo, Jamestown, Valley City, and Wahpeton) are based out of larger

cities with high school populations greater than 325 students. The remaining school districts are

located in smaller, rural communities with high school enrollments of less than 325 students.

Participants

The eligible population of participants in this research study included all teachers and

school support personnel teaching in school districts within the service area of the South East

Educational Cooperative (SEEC) in southeastern North Dakota during the spring of 2014.

Eligible participants in this study included all K-12 educators who completed the PD Teacher

Survey administered by the North Dakota Department of Public Instruction. A total of 656

teachers met the minimum criteria of reporting the grade level(s) they teach and/or the content

area(s) they teach on the survey instrument. Teachers of traditional subjects (e.g. math, history,

science, music, physical education, foreign language) and teacher support personnel (e.g. special

educators, Title I, alternative educators) were included in the sample of eligible participants.

Twenty-five participants were screened out of the sample population as they did not indicate

teaching a traditional academic subject or being teacher support personnel. Positions of

individuals screened out of the sample population include school counselors, administrators,

speech-language therapists, student performance strategists, and those working in the district

office. This left the researcher with a total sample of 631 teachers and teacher support personnel.

Participants were broken down into groups based on the grade level(s) and content

area(s) they taught. Examining participants by grade level taught, it appears that the majority of

teachers surveyed taught at the secondary level. The most frequently cited grade levels taught by

teachers surveyed were 11th-12th grade (40.4%) followed by 6th-8th (39.3%) and 9th-10th (38.8%)

as shown in Table 1. Due to the fact that participants were able to select multiple grade levels

they teach, the frequencies and percentages across groups exceeded the total number of

respondents surveyed. Participants were further classified according to school level(s) taught

into groups of elementary (K-5th), middle (6th-8th), and high school (9th-12th) teachers. The

largest group represented was elementary teachers with 46.3% of respondents followed by high

school (44.4%) and middle school (39.1%) teachers. Based on the grade levels teachers taught,

individual participants may be represented in multiple school level categories.

Table 1.

Demographic Information – Grade Level Taught

Grade Level Taught	Frequency	Percent
K-1st	172	27.3%
2nd-3rd	159	25.3%
4th-5th	147	23.4%
6th-8th	247	39.3%
9th-10th	244	38.8%
11th-12th	254	40.4%
Did Not Indicate	2	0.3%

Note. n = 631. Percentages do not add up to 100% due to the fact that respondents could indicate multiple grade levels taught.

Table 2.

Demographic Information – Content Area Taught

Content Area Taught	Frequency	Percent
Elementary	236	37.4%
English language arts/literacy	125	19.8%
Math	124	19.7%
Special Education	79	12.5%
Science	76	12.0%
Social Studies	74	11.7%
Career and Technical Education (CTE)	54	8.6%
Physical Education/Health	31	4.9%
Title I	26	4.1%
Library/Media	24	3.8%
English Language Learners (ELL)	18	2.9%
Other	55	8.7%
Did Not Indicate	5	0.8%

Note. n = 631. Percentages do not add up to 100% due to the fact that respondents could indicate more than one content area taught.

The sample was also broken down by content area taught. Based on teachers' responses the most frequently cited content areas taught included elementary (37.4%), English language arts/literacy (19.8%), and math (19.7%). A full breakdown of the content areas taught by survey

participants is provided in Table 2. Examples of content areas taught that fell within the "other" category included music, art, foreign or world language, family and consumer science, business, theater, remedial reading, deaf and hard of hearing, AVID, and alternative education. Participants were further classified by whether they taught in a CCSS-tested content area (elementary, ELA, math) or non-CCSS-tested content area. Based on this criteria, 61.3% of teachers surveyed reported teaching in a CCSS-tested content area, 37.9% in a non-CCSS-tested content area, and 0.8% of respondents did not indicate the content area they taught.

Survey respondents were also asked to report the school district in which they teach. Individual responses for this item were removed from the results shared with the researcher to protect the identity of the survey takers. Many school districts in the sample population are very small, and some content areas may have only one teacher for the district or region, making the participant potentially identifiable. A total of 342 (54.2%) teachers identified the school district where they teach representing 25 districts within the SEEC service area. Twenty of the school districts represented by teachers surveyed were small districts with high school enrollments of 324 students or less. Although, the number of small school districts represented outnumbered the number of large school districts, a majority of teachers (62.9%) surveyed indicated teaching in one of the five large school districts. It is important to recognize that 289 (45.8%) participants in the PD Teacher Survey did not identify the school district where they taught.

<div align="center">

Instrument

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The PD Teacher Survey used in this study is based heavily on the Common Core Feedback Tool. The Common Core Feedback Tool is a self-administered online survey instrument which was developed by three educational organizations; Achieve, the U.S. Education Delivery Institute, and Education First. The Common Core Feedback Tool is

comprised of 41 questions targeting educators' support, awareness, and understanding of the Common Core State Standards, exposure to and satisfaction with CCSS resources, level of communication and outreach surrounding the Common Core standards, challenges and potential solutions for implementing the CCSS, and changes in instructional practice as a result of the new standards. Questions in the survey instrument represent a mixture of selected response (e.g. multiple choice, select all that apply) and open response items allowing respondents to report their experiences, perceptions, and to make any clarifications. Participants were also requested to provide demographic information including their school district, grade level(s) taught, and content area(s) taught. A copy of the PD Teacher Survey instrument is provided in Appendix A.

The Common Core Feedback Tool was developed as a tool for state educational leaders to assess "the provision of professional development, the creation of instructional materials, the development of new assessment systems, or other functions" (Feedback Loops for Common Core, 2014, p. 3). It was released for use by schools and school districts in June 2012 as part of the American Diploma Project. The Common Core Feedback Tool was designed for "voluntary use by state education agencies as they create feedback loops to monitor CCSS implementation efforts" (Common Core Feedback Tool, 2014, p. 1). The feedback tool may be used collaboratively by state and regional education agencies as they discuss possible differences across schools or regions, as well for discussing strengths and weaknesses of specific professional development trainings.

Procedures

The PD Teacher Survey was sent to all public administrators in the state of North Dakota by the North Dakota Department of Public Instruction (DPI) in January of 2014. Public administrators were asked to distribute the surveys to teachers within their schools. Participants

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were able to access and complete the survey online at their own leisure. The survey was open

for multiple months to allow for maximum participation. The survey was closed to participants

after conclusion of the spring semester. Due to precautions surrounding participant anonymity

the survey instrument did not ask participants to provide their names. Instead, participants were

asked to indicate which school district they teach in, allowing for discrimination between

districts and regional educational associations. Identifications of school district taught in were

stripped from individual participants' responses and reported in aggregate to protect participant

anonymity. The dataset used by the researcher included data from all participants completing the

survey who indicated teaching in a school district within the jurisdiction of the South East

Educational Cooperative in southeastern North Dakota.

Validity

Currently, no formal research has been conducted assessing the reliability and validity of

the Common Core Feedback Tool. Based on the fact that the Common Core Feedback Tool was

developed by experts from three national educational organizations (Achieve, the U.S.

Educational Delivery Institute, and Education First) it is reasonable to make a case that the

instrument does exhibit content validity. Survey items were developed through cognitive

interviewing by content experts and appear to measure intended constructs, such as teachers'

attitudes and perceptions regarding the Common Core State Standards, CCSS professional

development training, and teachers' experiences implementing the new standards into practice.

To the extent that an instrument is valid if it "measures what it is designed to measure and

accurately performs the function(s) it is purported to perform" the researcher believes that the

Common Core Feedback Tool is a valid measure for assessing teachers' perceptions and

experiences regarding CCSS implementation (Patten, 2007, p. 61).

Data Collection and Analysis

The researcher obtained the dataset from the PD Teacher Survey administered to North Dakota teachers from the South East Education Cooperative. Raw data was exported into a Microsoft Excel spreadsheet for data cleaning and analysis. Participants who did not report both the grade level(s) and the content area(s) they taught were excluded from analysis. Participants were also excluded if they did not indicate teaching a traditional subject (e.g. math, English, history, science, music, physical education, foreign language) or were not in a primary teaching role. Data were analyzed overall across all respondents as well as by school level and content area taught. School level taught was classified according to three categories: elementary (K-5th), middle (6th-8th), and high school (9th-12th). Content areas taught were classified according to whether participants taught in a CCSS-tested or non-CCSS-tested content area. Subjects taught that fell within the CCSS-tested category included elementary, English language arts (ELA), and math. Any subject outside of these three fell within the non-CCSS-tested category. Comparisons were made between those who teach elementary, ELA, math, and those outside of CCSS-tested content areas, as well as between those in CCSS-tested (regardless of subject) and non-CCSS-tested content areas. Descriptive statistics (e.g. frequencies, percentages) were calculated for closed-ended survey items. Inferential statistical tests including one-way ANOVAs were calculated on related survey items. Open response questions were analyzed thematically for trends. Survey items were grouped for analysis and reported according to their relevance to the six secondary research questions. A categorization of the survey items that relate to each secondary research question is provided in Appendix B.

CHAPTER FOUR. RESULTS

This section will present findings from the PD Teacher Survey as they pertain to each secondary research question. The six secondary research questions that provide the backbone for the current research study include the following:

1. What are North Dakota teachers' perceptions of the Common Core State Standards?

2. What are North Dakota teachers' experiences regarding Common Core State Standards professional development training?

3. What Common Core State Standards resources are North Dakota teachers aware of?

4. What resources do North Dakota teachers perceive they need to feel prepared to teach using the Common Core State Standards?

5. What are North Dakota teachers' perceptions of implementation of the Common Core State Standards?

6. In what ways do North Dakota teachers report changing their instructional practice as a result of the Common Core State Standards?

Results will be presented as an analysis of the entire sample surveyed, as well as by school level taught and content area taught when applicable.

Research Question 1: Teachers' Perceptions of the CCSS

Before recommendations for future professional development activities can be made, it is important to gauge North Dakota teachers' perceptions and attitudes towards the Common Core State Standards. Questions that targeted teachers' attitudes and perceptions included those that assessed their beliefs in the Common Core State Standards (specifically whether the standards would help them to improve student learning), their perceived benefits and non-benefits of the standards, and their perceived differences between the CCSS and previous state standards.

Beliefs in Improved Student Learning

Participants were asked to rate their level of agreement or disagreement with the

following statement: "I believe the new North Dakota State Standards (NDSS) in English

language arts (ELA) and math (Common Core) will help ME to improve student learning for the

majority of students I serve." Ratings for this question were based on a 4-point Likert-type item

ranging from "strongly disagree" to "strongly agree" with an additional option of "I don't

know." A total of 626 (99.2%) teachers responded to this survey item. Of those responding to

this survey item, a majority of teachers showed support for the Common Core standards as 318

(50.8%) respondents indicated "agree" and 63 (10.1%) indicated "strongly agree" (Figure 1).

Nearly as many teachers reported not knowing whether the new standards would help teachers

improve student learning as those who believed they would not help improve student learning.
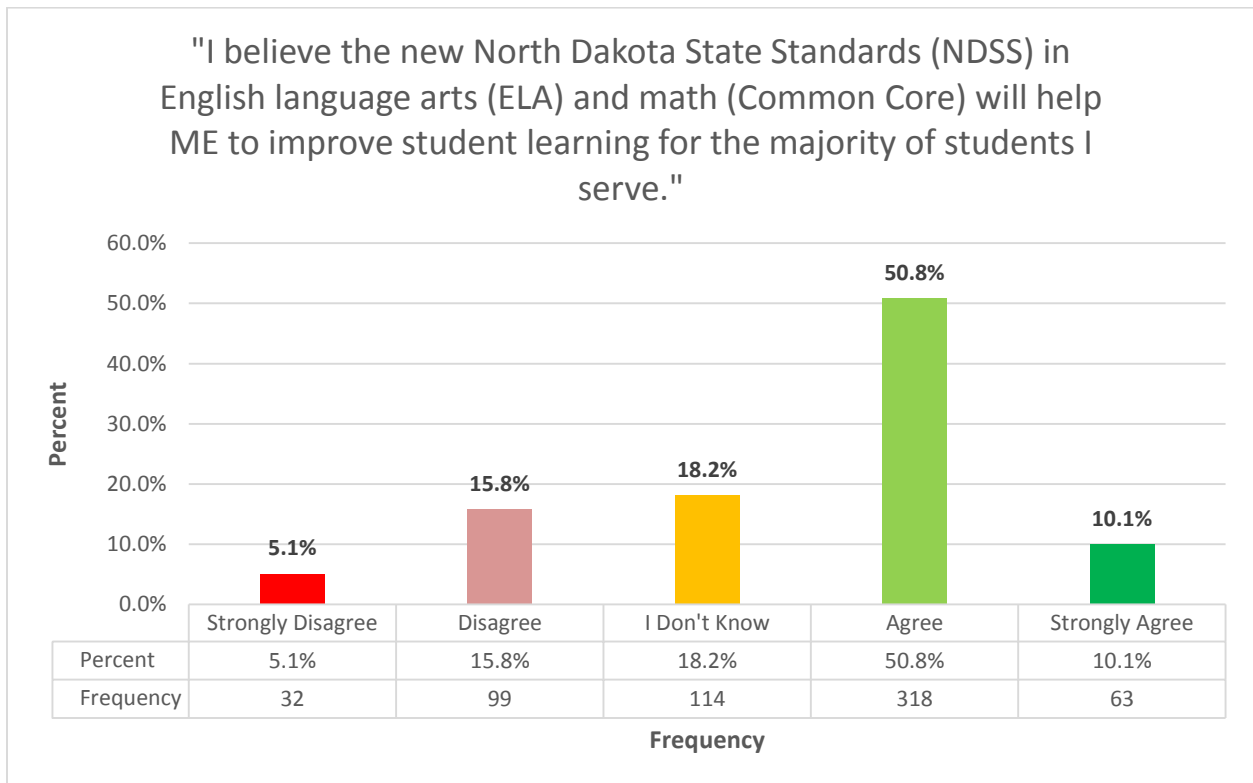
Figure 1. Beliefs in Improved Student Learning. *n* = 626.

Looking at whether differences existed among elementary, middle, and high school teachers in the belief that the CCSS will help teachers to improve student learning, it appears that there were only slight non-significant differences. Elementary level teachers were approximately 7% more likely to indicate agreement that the new standards would help them to improve student learning compared to middle school and high school level teachers (Figure C.1.). High school teachers were most likely to disagree or strongly disagree that the new standards would help them to improve student learning at 25%. High school teachers were also the group most likely to report not knowing if the standards would help them to improve student learning at 22.9%.

Making comparisons between teachers in CCSS-tested and non-CCSS-tested content areas, it appears that teachers in CCSS-tested subjects were more likely to show support for the belief that the new standards would help them to improve student learning than those who did not teach in CCSS-tested subjects. Teachers of elementary subjects were the most likely to indicate agreement or strong agreement with this belief at 73.3% followed by math teachers (66.4%) and ELA teachers (63.2%) as shown in Figure C.2. In comparison, just under half (48.8%) of teachers in non-CCSS-tested content areas reported agreement with this the belief. Comparing teachers in CCSS-tested content areas (regardless of subject) with those in non-CCSS-tested content areas, the difference was still evident. Teachers in CCSS-tested content areas were 20.0% more likely to indicate agreement with the belief compared to teachers in non-CCSS-tested content areas (Figure C.3.).

Benefits of the Common Core State Standards

Another survey question which addressed North Dakota teachers' perceptions regarding the Common Core State Standards asked participants to identify reasons in which the new standards would benefit the majority of students they serve. Participants were able to select as

many responses as applicable from a list of proposed benefits which included better preparing

students for college, giving students the opportunity to master key competencies, and helping

educators focus on what is most important, as well as others. Due to the nature of the question

format it was impossible to differentiate respondents who indicated no benefits associated with

the Common Core State Standards with those who skipped the question entirely. A total of 355

(56.3%) teachers surveyed cited at least one benefit for the Common Core State Standards.

Table 3.

Identified Benefits of the Common Core State Standards

Benefit of the Common Core State Standards	Respondents Indicating at Least 1 Benefit ($n = 355$)	
	Freq.	Percent
They will help educators focus on what is most important	247	69.6%
They will help my school system ensure that our standards are vertically-aligned from Kindergarten through grade 12 and beyond	218	61.4%
They will give students the opportunity to master key competencies, rather than just being superficially exposed to them	209	58.9%
They will provide students a clearer understanding of what they must know in order to succeed	195	54.9%
They will help educators better prepare students for college	179	50.4%
They will help educators better prepare students to compete in the workforce	143	40.3%
They will provide educators a manageable amount of curricular area to teach in a school year	98	27.6%
They will ensure that a high school diploma has meaning	83	23.4%
Other	13	3.7%

Note. Percentages do not add up to 100% due to the fact that respondents could select multiple benefits for the Common Core State Standards.

The most frequently cited benefit for the Common Core State Standards reported by

teachers was that "They will help educators focus on what is most important" with 69.6% of

respondents (Table 3). Other benefits cited by at least 50% of those indicating benefits for the

CCSS included ensuring vertical alignment of standards from K-12 and beyond, giving students opportunities to master key competencies, providing students a clearer understanding of what they need to know to succeed, and helping educators better prepare students for college. The least commonly cited benefits included ensuing a high school diploma has meaning (23.4%) and providing educators a manageable amount of curriculum to teach in a year (27.6%). The full list of benefits cited by survey respondents is provided in Table 3. Additional benefits proposed by teachers surveyed not listed in the survey question included students being "more likely to succeed in other curricular areas if their reading/math skills are met" and general support such as providing "…students with a better education overall."

The researcher was also interested in examining whether differences in perceived benefits of the Common Core standards existed based on teachers' level of schooling taught (elementary, middle, and high school). Looking at the data for each of these groups it appears that for all three groups the most commonly cited benefit for the Common Core standards included helping educators focus on what is most important (Table 4). The second most often cited benefit differed for each of the three groups of teachers. Elementary school teachers cited support for the vertical alignment of the standards across grades K-12; whereas, middle school teachers indicated support that the new standards will give students the opportunity to master key competencies, and high school teachers felt that the new standards will help educators better prepare students for college. The full breakdown of benefits for the Common Core State Standards cited by elementary, middle, and high school teachers is included in Table 4.

Comparing the benefits of the Common Core standards cited between teachers who teach in elementary, ELA, math, and those outside of these subjects, survey findings show that those in CCSS-tested content areas were more likely to cite benefits of helping educators to focus on

what is most important, ensuring standards are vertically aligned from K-12, and giving students opportunities to master key competencies compared to those teaching in non-CCSS-tested subjects (Figure C.4.). When comparing teachers of CCSS-tested content areas with teachers of non-CCSS-tested content areas (regardless of subject taught) the most commonly cited benefits for the Common Core standards for both groups were helping educators focus on what is most important and ensuring standards are vertically-aligned from K-12 as shown in Figure C.5. The only benefits cited by a greater percentage of teachers in non-CCSS-tested content areas were in helping educators better prepare students for college and for the workforce.

Table 4.

Identified Benefits of the Common Core State Standards by School Level Taught

Benefit of the Common Core State Standards	Elem. ($n = 185$)	Middle ($n = 141$)	High ($n = 137$)
They will help educators focus on what is most important	**74.1%[1]**	**66.7%[1]**	**65.0%[1]**
They will help my school system ensure that our standards are vertically-aligned from Kindergarten through grade 12 and beyond	**65.4%[2]**	**58.2%[3]**	**57.7%[3]**
They will give students the opportunity to master key competencies, rather than just being superficially exposed to them	**64.3%[3]**	**58.9%[2]**	50.4%
They will provide students a clearer understanding of what they must know in order to succeed	54.1%	53.2%	49.6%
They will help educators better prepare students for college	45.9%	48.9%	**60.6%[2]**
They will help educators better prepare students to compete in the workforce	39.5%	46.8%	42.3%
They will provide educators a manageable amount of curricular area to teach in a school year	30.3%	25.5%	16.8%
They will ensure that a high school diploma has meaning	20.0%	21.3%	25.5%

Note. Percentages do not add up to 100% due to the fact that respondents could select multiple benefits for the Common Core State Standards. Percentages are based on the total number of respondents in each group that indicated at least one benefit for the Common Core State Standards. The top three benefits of the Common Core State Standards cited by each group are bolded and labeled with superscripts.

Non-Benefits of the Common Core State Standards

Not only is it important to look at teachers' perceived benefits for the Common Core

State Standards, it is important to look at their perceived non-benefits as they may play an

influential role in how teachers implement the standards into their instructional practice.

Participants were able to select as many as applied from a list of proposed non-benefits which

included the previous standards being better than the new standards, the new standards being too

rigorous, and the new standards embracing a "one size fits all" approach, just to name a few.

Because of the nature of the question format it was not possible to differentiate between

participants who indicated zero non-benefits associated with the Common Core standards and

those who skipped the question entirely. A total of 166 (26.3%) participants identified at least

one non-benefit for the Common Core State Standards.

The most frequently cited non-benefit for the CCSS by teachers surveyed was "The new

standards embraces 'one size fits all' approach that will not help many students I teach" with

56.6% of respondents (Table 5). Other frequently cited non-benefits by teachers surveyed

included the standards lacking the flexibility to help students who are not at grade level and the

standards being too rigorous for many of the students they teach. The least commonly cited non-

benefit for the Common Core standards was the belief that the previous standards are better than

the new ones (15.7%). Additional non-benefits not listed in the survey question identified by

teachers included lack of specificity of the new standards stating that "the standards, especially

set forth in common core, are not specific" and the new standards not being developmentally

appropriate. Teachers also reported concerns with learning gaps as they transition to the new

standards, lack of time to teach the standards, and the standards' lack of applicability to other

subjects. A full breakdown of the non-benefits cited by survey respondents is shown in Table 5.

Table 5.

Identified Non-Benefits of the Common Core State Standards

Non-Benefit of the Common Core State Standards	Respondents Indicating at Least 1 Non-Benefit (*n* = 166)	
	Freq.	Percent
The new standards embraces "one size fits all" approach that will not help many students I teach	94	56.6%
The standards do not provide educators the flexibility to help students who are not at grade level	83	50.0%
The new standards are too rigorous for many of the students I teach	59	35.5%
The new standards exclude important concepts that students should learn	46	27.7%
Our previous state standards were better than the new ones	26	15.7%

Note. Percentages do not add up to 100% due to the fact that respondents could select multiple non-benefits for the Common Core State Standards.

Table 6.

Identified Non-Benefits of the Common Core State Standards by School Level Taught

Non-Benefit of the Common Core State Standards	Elem. (*n* = 66)	Middle (*n* = 71)	High (*n* = 75)
The new standards embraces "one size fits all" approach that will not help many students I teach	**50.0%[1]**	**52.1%[1]**	**58.7%[1]**
The standards do not provide educators the flexibility to help students who are not at grade level	**39.4%[2]**	**49.3%[2]**	**53.3%[2]**
The new standards are too rigorous for many of the students I teach	**34.8%[3]**	**40.8%[3]**	**26.7%[3]**
The new standards exclude important concepts that students should learn	24.2%	23.9%	25.3%
Our previous state standards were better than the new ones	10.6%	14.1%	21.3%

Note. Percentages do not add up to 100% due to the fact that respondents could select multiple non-benefits for the Common Core State Standards. Percentages are based on the total number of respondents in each group that indicated at least one non-benefit for the Common Core State Standards. The top three non-benefits of the Common Core State Standards cited by each group are bolded and labeled with superscripts.

Breaking the non-benefits of the Common Core standards down by school level taught, middle and high school level teachers were more likely to report non-benefits than elementary teachers (Table 6). Across each of these groups, regardless of school level taught, the most commonly cited non-benefits for the CCSS included the new standards embracing a "one size fits all" approach and their lack of flexibility to help students who are not at grade level.

Examining for differences in non-benefits cited between teachers in CCSS-tested and non-CCSS-tested content areas, educators who did not teach in CCSS-tested content areas were less likely to cite non-benefits for the Common Core standards. The only category where non-CCSS-tested teachers were more likely to cite a non-benefit compared to those teaching in CCSS-tested subjects was in the new standards embracing a "one size fits all" approach (Figure C.6.). Among those who teach elementary, ELA, and math, there were few differences in regard to reported non-benefits for the CCSS. The only non-benefit where a noteworthy difference existed between the groups was for the belief that the standards do not provide the flexibility to help students not at grade level. Math teachers were approximately 20% more likely to report this as a non-benefit compared to teachers of elementary subjects or ELA.

When comparing teachers of CCSS-tested subjects (regardless of subject taught) with teachers of non-CCSS-tested subjects the most commonly cited non-benefits of the CCSS for both groups were the new standards embracing a "one size fits all approach" and the new standards lacking flexibility to help students who are not at grade level (Figure C.7.). The only non-benefit cited by a greater percentage of teachers in non-CCSS-tested content areas was the new standards embracing a "one size fits all" approach. On the other hand, those in CCSS-tested subjects were more likely to cite the standards as lacking flexibility to help students who are not at grade level and the new standards being too rigorous for the students they teach.

Perceived Difference Between CCSS and the Previous State Standards

Outside of gauging teachers' level of support for the Common Core State Standards, it is important to understand how teachers perceive the new standards in relation to the previous state standards. One survey question asked participants to compare the CCSS and previous state standards by judging whether the new standards are better, worse, or equal in nature. A total of 564 (89.4%) teachers responded to this survey item. Overall, two-thirds of teachers in SEEC school districts surveyed indicated believing that the new standards are better than the previous standards in ELA and math (Figure 2). Additionally, 9.9% of teachers believed the new and old standards to be the same, 2.8% believed the new standards to be worse, and 20.4% did not know.

"How would you describe the difference between the state's previous standards and the new standards in ELA and math?"

	New < Old	New = Old	New > Old	I don't know
Percent	2.8%	9.9%	66.8%	20.4%
Frequency	16	56	377	115

Perceived Difference Between New and Old Standards
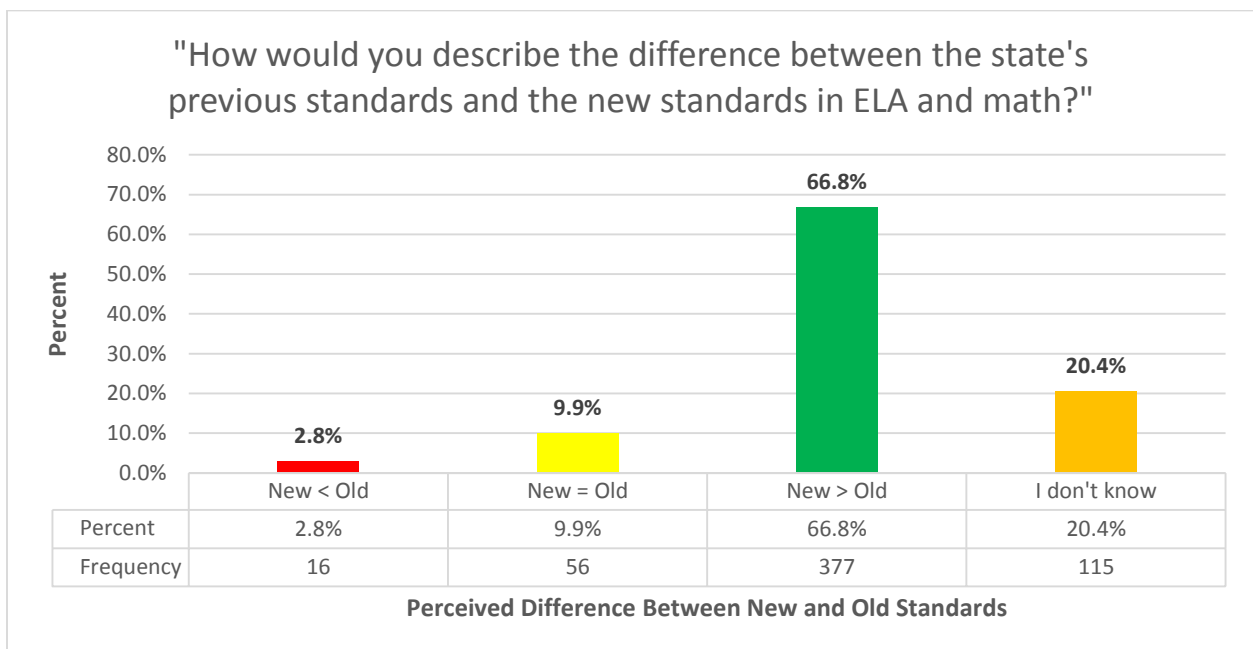
Figure 2. Perceived Difference Between CCSS and the Previous State Standards. *n* = 564.

Examining for differences in perceptions regarding the difference between the CCSS and previous state standards, the data show that as grade level taught increased the less likely teachers were to believe that the Common Core standards are better than the previous state standards (Figure C.8.). Elementary teachers were the most supportive of the new standards as they were 7% more likely than middle school teachers and 20% more likely than high school

teachers to indicate that the new standards were better than the previous standards. On the other hand, high school teachers were the most likely to believe the new standards are worse than the previous standards, equal to the previous standards, and not know if there is a difference as compared to middle and elementary school teachers.

When comparing those who teach in CCSS-tested content areas and those who do not, the data show that those who do not teach in CCSS-tested content areas were less likely to believe the new standards are better than the previous standards (Figure C.9.). Subsequently, those who do not teach in a CCSS-tested subject were approximately 25% more likely to report not knowing whether there is a difference between the new and old standards compared to those teaching in CCSS-tested content areas. Very few differences were found between teachers of elementary, ELA, and math. The only notable difference found was that ELA teachers were approximately 10% more likely than elementary and math teachers to rate the CCSS and previous state standards as the same and 10% less likely to rate the new standards as better than the previous standards. Regardless of subject taught, those who teach in CCSS-tested subjects were 21% more likely to believe the new standards are better than the previous state standards compared to teachers outside of CCSS-tested content areas (Figure C.10.).

Research Question 2: Teachers' Perceptions Regarding CCSS PD Training

The PD Teacher Survey not only assessed teachers' perceptions of the new standards, but also their perceptions regarding professional development training targeting the new standards. Questions in the survey aimed at assessing teachers' level of participation in CCSS professional development training, what type of trainings teachers had received, who provided the professional development training teachers had received, as well as teachers' perceptions regarding CCSS professional development training quality.

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Participation in CCSS Professional Development Training

In the PD Teacher Survey, teachers were asked to indicate whether or not they have received professional development training specific to the Common Core standards in ELA or math. A total of 422 (66.9%) of teachers responded to this survey item. Based on the 422 responses to this question, 254 (60.2%) North Dakota teachers in the SEEC district reported receiving professional development training specific to the Common Core State Standards (Figure 3). Of the 168 teachers who had not participated in CCSS professional development training, 82 (48.8%) were teachers outside of CCSS-tested content areas. No notable differences were found in regard to participation in CCSS professional development training between elementary, middle, and high school teachers (Figure C.11.).
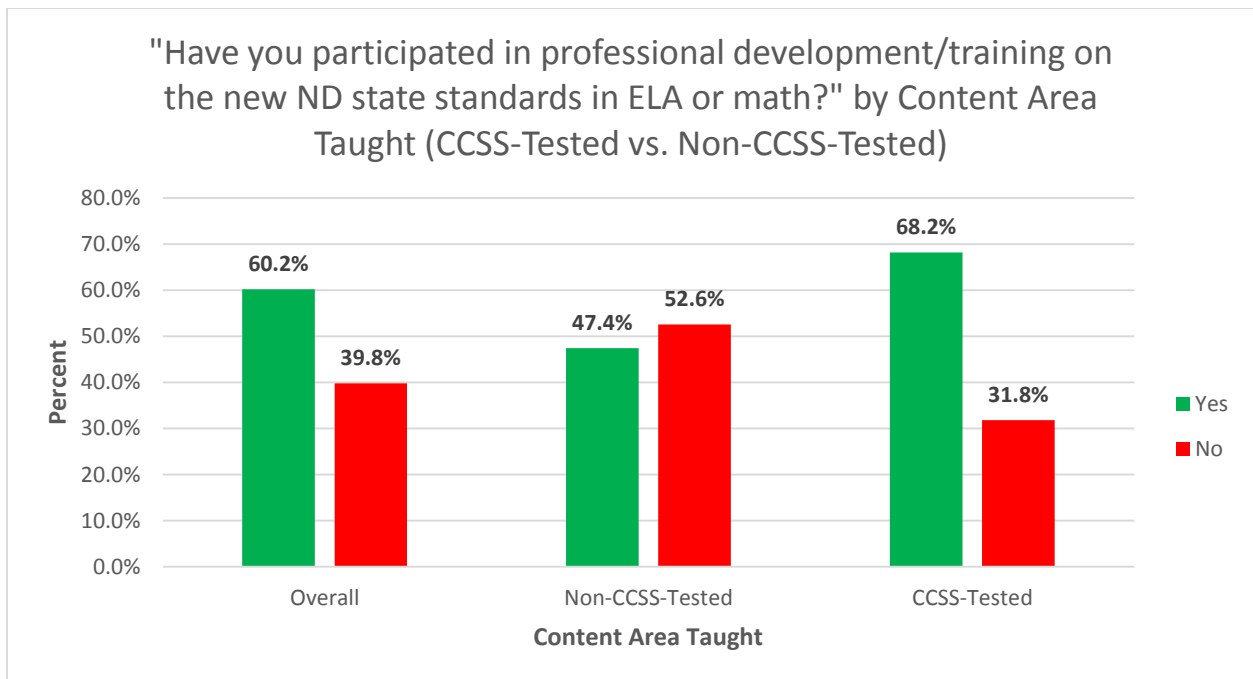
Figure 3. Participation in CCSS Professional Development Training by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{overall} = 422$; $n_{non\text{-}ccss} = 156$; $n_{ccss} = 264$.

When comparing participation in CCSS professional development training between teachers in CCSS-tested content areas and those in non-CCSS-tested content areas, the data show that teachers in CCSS-tested content areas were generally more likely to have participated in

CCSS professional development training than teachers in non-CCSS-tested content areas (Figure C.12.). Between elementary, ELA, and math teachers, ELA teachers were approximately 10% more likely to have participated in CCSS professional development training.

Comparing teachers in CCSS-tested content areas (regardless of subject taught) and those in non-CCSS-tested content areas, teachers in CCSS-tested content areas were 20.8% more likely to have participated in CCSS specific professional development training (Figure 3). Slightly over two-thirds (68.2%) of teachers in CCSS-tested content areas had participated in CCSS professional development training compared to just under half (47.4%) of teachers in non-CCSS-tested content areas.

Type of Professional Development Training Received

The PD Teacher Survey not only assessed whether or not teachers had participated in CCSS professional development training, but also what types of training they had received. Teachers were able to select all that applied from a list of different training types including one-day trainings, multi-day trainings, online webinars or videos, job-embedded training or coaching within one's school, and professional learning communities (PLCs). A total of 252 (99.2%) out of the 254 teachers indicating having received professional development training on the Common Core standards identified the type(s) of training they had received. Based on the survey data, the most frequent types of training received were one-day training opportunities (54.8%) followed by multi-day training opportunities (41.7%) as depicted in Table 7.

Across school levels taught, the most common type of training attended was a one-day training opportunity (Figure C.13.). As school level taught increased, the percentage of teachers attending one-day trainings decreased. Conversely, as school level taught increased, the percentage of teachers attending multi-day trainings increased. Outside of one-day and multi-

day trainings, elementary teachers were more likely than middle and high school teachers to receive professional development through job-embedded coaching or training and through online webinar or video.

Table 7.

Type of Professional Development Training Received

Type of Professional Development Training	Respondents Indicating Participation in PD Training (*n* = 252)	
	Freq.	Percent
One-day training opportunity	138	54.8%
Multi-day training opportunity	105	41.7%
Professional learning community (PLC)	90	35.7%
Job-embedded training or coaching within my school	60	23.8%
Online webinar or video	16	6.3%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate receiving multiple different types of professional development training.

Few differences were found among the types of professional development training received by teachers when analyzed by content area taught. Teachers of elementary subjects were slightly more likely to have received one-day professional development trainings; whereas, ELA and math teachers were more likely to have engaged in multi-day training opportunities (Figure C.14.). Comparing those teaching in CCSS-tested content areas (regardless of subject taught) with those in non-CCSS-tested content areas, those in CCSS-tested content areas were slightly more likely to have received each type of PD training (Figure C.15.).

Provider of CCSS Professional Development Training

Teachers participating in CCSS professional development training were also asked to indicate who provided the training they had received. Respondents were able to select all that applied from a list of providers which included a staff member from their school or district, the

ND Department of Public Instruction, a regional education association, as well as others. The

most commonly cited providers of CCSS professional development training by teachers

surveyed were staff members from their school or district (59.9%) and professional development

providers brought in by their school district (38.5%) as shown in Table 8 below. Professional

development provided by an REA was cited by approximately one in six teachers who indicated

receiving CCSS professional development training. A full breakdown of the providers of CCSS

professional development training for teachers surveyed is included in Table 8.

Table 8.

Provider of CCSS Professional Development Training

Provider of CCSS Professional Development Training	Respondents Indicating Participation in PD Training ($n = 252$)	
	Freq.	Percent
A staff member from my school or district	151	59.9%
A professional development provider brought in by my school district	97	38.5%
Regional Education Association (REA)	42	16.7%
The ND Department of Public Instruction	27	10.7%
An independent professional development provider	19	7.5%
ND United	14	5.6%
State Association (NDCTE, NDCTM, NDSTA, etc)	6	2.4%
I don't know	20	7.9%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate multiple
different providers of professional development training.

Professional Development Training Quality

Participants were asked to report their level of agreement or disagreement with the

following statement regarding professional development training: "In general, the training I have

received around the new NDSS in ELA and math has been of high quality. I have learned a great

deal of information that has helped me improve my practice." Ratings for this question were

based on a 4-point Likert-type item ranging from "strongly disagree" to "strongly agree" with an additional option of "I don't know." A total of 252 (99.2%) teachers who had received CCSS professional development training responded to this item. Nearly two-thirds of respondents indicated the training they had received was of high quality as 144 (57.1%) teachers agreed, and 17 (6.7%) strongly agreed with the statement (Figure 4). Close to 30% of teachers receiving CCSS professional development training disagreed or strongly disagreed with the statement believing the training was not of high quality or did not help them improve their practice, and an additional 6.7% of respondents reported not knowing whether the training was of high quality.

"Choose the answer that most closely reflects your opinion. In general, the training I have received around the new NDSS in ELA and math has been of high quality. I have learned a great deal of information that has helped me improve my practice."

	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
Percent	5.6%	23.8%	6.7%	57.1%	6.7%
Frequency	14	60	17	144	17

Level of Agreement/Disagreement

Figure 4. Quality of CCSS Professional Development Training. *n* = 252.

Across school levels taught, elementary teachers were nine percent more likely to agree or strongly agree that the training was of high quality compared to middle or high school teachers (Figure C.16.). On the other hand, middle and high school teachers were nine percent more likely to disagree or strongly disagree that the professional development they received was of high quality.

Examining for differences in perceived CCSS professional development training quality between those in CCSS-tested and non-CCSS-tested content areas, a majority of respondents in each group expressed agreement that the training they received was of high quality (Figure C.17.). Very few differences were found between groups except elementary teachers were 7.4% and 10.4% more likely than teachers of math and ELA, respectively, to agree that the training was of high quality. On the other hand, English language arts teachers were slightly more likely than the other groups to disagree that the training they received was of high quality.

Comparing teachers in CCSS-tested content areas (regardless of subject taught) and those teaching in non-CCSS-tested content areas, a majority of respondents in each group agreed that the professional development training they received was of high quality. Teachers in CCSS-tested content areas were 5.3% more likely to agree and 3.7% more likely to strongly agree that the training they received was high quality compared to teachers in non-CCSS-tested content areas (Figure C.18.).

Perceived Difference in Standards Based on PD Participation

The researcher was also interested in whether differences existed in teachers' perceptions regarding the difference between the CCSS and previous state standards based on participation in CCSS professional development training. No differences were found between those who had and had not participated in CCSS professional development training in regard to the new standards being rated as worse or the same as the previous state standards (Figure C.19.). However, those who had participated in CCSS professional development training were 15.3% more likely to rate the new standards as being better than the old standards. This difference was significant when a one-way analysis of variance (ANOVA) was calculated between the two groups, $F(1, 415) = 11.51$, $p = .001$. Nearly 30% of those who reported not receiving CCSS

professional development training did not know if there was a difference between the new and old standards compared to under 10% of those who received CCSS professional development training. Of those who indicated not knowing whether a difference exists who had not received professional development training, roughly 70% were teachers of non-CCSS-tested subjects.

Preparedness to Teach Using CCSS Based on PD Participation

Another relationship examined by the researcher was whether participation in CCSS professional development training was associated with increased preparedness to teach using the Common Core standards. Based on comparisons between those who had and had not received CCSS professional development training, teachers who reported participating in professional development training were more likely to report feeling "somewhat" and "completely" prepared to teach using the new standards by 12.5% and 9.1%, respectively (Figure C.20.). Teachers not participating in CCSS professional development training were 14.7% more likely to report feeling not prepared at all to teach using the new standards. Comparing the two groups on the percentage of respondents indicating feeling somewhat or completely prepared using a one-way ANOVA, there was a significant difference between the two groups, $F(1, 416) = 27.02$, $p = .000$. Those who had received CCSS professional development training were significantly more likely to report being either somewhat or completely prepared to teach using the Common Core State Standards compared to teachers who had not received CCSS professional development training.

Beliefs in Improved Student Learning Based on PD Participation

A final comparison that the researcher was interested in examining was whether differences existed in beliefs surrounding the Common Core State Standards based on participation in CCSS professional development training. Under the assumption that participation in professional development training improves one's knowledge and skills, it would

be expected that as knowledge and skills are gained or enhanced that an individual's beliefs may also change. Based on the data shown in Figure C.21. it appears that teachers who have participated in professional development training were 13.0% more likely to agree or strongly agree with the belief that the new standards in ELA and math would help them to improve student learning compared to those who have not participated in CCSS professional development training. Conversely, those who have not participated in CCSS professional development training were more likely to disagree, strongly disagree, and not know whether the Common Core State Standards will help them to improve student learning. Comparing the percentage of respondents indicating agreement or strong agreement with this belief between the two groups using a one-way ANOVA, this difference was found to be significant, $F(1, 420) = 7.26$, $p = .007$.

Support Personnel Inclusion in PD Training

Support personnel in education such as special educators, Title I, and alternative educators represent important collaborators for teachers with students on individualized education plans (IEPs). As the Common Core State Standards have changed the educational expectations for students in traditional classrooms, it is important that educators understand how they may change the expectations for students in non-traditional classrooms and those who switch between the two on a given school day. Teachers were asked to report to what extent teacher support personnel at the teacher level are included in professional development regarding the new standards in ELA and math. A total of 405 (64.2%) teachers responded to this survey question. Nearly 70% of respondents indicated teacher support personnel are included in professional development training either "sometimes" (41.2%) or "always" (27.9%) as shown in Figure C.22. Less than 10% of teachers surveyed reported that teacher support personnel are never involved in professional development training pertaining to the Common Core standards.

Examining inclusion of teacher support personnel in professional development training by level of school taught, it appears that teacher support personnel are less likely to be included in professional development training as school level taught increases. Teacher support personnel were reported to be included in professional development training "sometimes" or "always" by 80.1% of elementary teachers compared to 68.0% of middle school and 64.7% of high school teachers (Figure C.23.).

Assessing teacher support personnel involvement in professional development training across content areas taught, teachers of elementary subjects were more likely to indicate "sometimes" or "always" compared to ELA and math teachers (Figure C.24.). Conversely, ELA and math teachers were more likely to indicate "never" or "rarely" compared to teachers of elementary. Few differences were observed in responses between teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested content areas (Figure C.25.).

Research Question 3: Teachers' Awareness of CCSS Resources

This section will discuss the activities and resources available to teachers regarding the Common Core State Standards, the CCSS information sources teachers utilize, the helpfulness and trustworthiness of these information sources, the type of CCSS information sought by teachers, and the presence of CCSS staff or personnel resources.

CCSS Activities and Resources Available to Teachers

The PD Teacher Survey attempted to examine the activities and resources available to North Dakota teachers related to the Common Core State Standards. Resources and activities of interest included collaborative planning time, content-focused trainings, lesson plans aligned to the CCSS, implementation resources, and professional learning communities. Participants were able to select as many responses as applied from the list of activities and resources provided in

the survey item. Three-hundred ninety-seven (62.9%) teachers responded to this survey

question. Findings from the survey suggest that the CCSS resources and activities most

frequently listed as available to North Dakota teachers were "collaborative planning time

dedicated to understanding and deconstructing the new state standards," "collaborative planning

time dedicated to aligning curriculum to the new state standards," and "professional learning

communities focused on implementing the new state standards." Content-focused trainings were

cited as being available to approximately one-third of teachers (35.3%); whereas, CCSS-aligned

lesson plans were available to just one in four teachers surveyed (Table 9). One in ten teachers

surveyed reported that none of the activities/resources listed were available to them. A full

breakdown of CCSS activities and resources available to teachers surveyed is shown in Table 9.

Table 9.

CCSS Activities and Resources Available to Teachers

Activities and Resources Available	Respondents Indicating at Least 1 Resource Available ($n = 397$)	
	Freq.	Percent
Collaborative planning time dedicated to understanding and deconstructing the new state standards	206	51.9%
Collaborative planning time dedicated to aligning curriculum to the new state standards	184	46.3%
Professional learning community focused on implementation of the new state standards	183	46.1%
Content-focused trainings on the new state standards	140	35.3%
Resources on research/best practice on implementation of the new state standards	111	28.0%
Lesson plans aligned to the new state standards	106	26.7%
Job-embedded training or coaching focused on implementation of the new state standards	81	20.4%
None of the above	46	11.6%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate access
to multiple resources or activities.

Looking at the resources and activities available to teachers across school levels taught, very few differences were observed. The three most commonly cited resources and activities included collaborative planning time to deconstruct the new standards, professional learning communities focused on CCSS implementation, and collaborative planning time to align the curriculum to the new standards (Table 10). Elementary level teachers were slightly more likely to report having access to professional learning communities and job-embedded coaching or training, whereas high school teachers were slightly more likely to have access to collaborative planning time and content-focused trainings.

Table 10.

Activities and Resources Available to Teachers by School Level Taught

Activities and Resources Available	Elem. ($n = 178$)	Middle ($n = 169$)	High ($n = 178$)
Collaborative planning time dedicated to understanding and deconstructing the new state standards	**59.0%[1]**	**55.8%[1]**	**59.9%[1]**
Professional learning community focused on implementation of the new state standards	**55.8%[2]**	**53.2%[2]**	**50.0%[3]**
Collaborative planning time dedicated to aligning curriculum to the new state standards	**49.4%[3]**	**45.5%[3]**	**55.3%[2]**
Content-focused trainings on the new state standards	34.0%	39.6%	43.4%
Resources on research/best practice on implementation of the new state standards	32.7%	33.1%	30.3%
Lesson plans aligned to the new state standards	30.8%	29.9%	32.9%
Job-embedded training or coaching focused on implementation of the new state standards	30.1%	22.1%	19.1%
None of the above	16.0%	11.0%	11.8%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate access to multiple resources or activities. The top three CCSS activities and resources available cited by each group are bolded and labeled with superscripts.

Examining for differences in resources and activities available to teachers based on content area taught, it appears that those in CCSS-tested content areas were more likely to have

participated in collaborative planning time to deconstruct and align their curriculums with the new standards (Figure C.26.). Between those in CCSS-tested content areas, very few differences were found in regard to resources and activities available. Looking specifically at teachers in CCSS-tested content areas (regardless of subject taught) versus those teaching in non-CCSS-tested content areas, those in CCSS-tested content areas were generally more likely to have access to CCSS-related resources and activities (Figure C.27.). The only resource where access was equal between groups was for research and best practices related to CCSS implementation.

CCSS Information Sources Utilization

Participants were asked to select which resources they have accessed for CCSS information from the following sources: the Department of Public Instruction website, ND United, the ND Curriculum Initiative website, REA website, REA provided professional development, and other educational websites (e.g. Learnzillion, Achievethecore). Because of the nature of the question format it was not possible to differentiate respondents who had not accessed any of the resources listed above and those who skipped the question entirely. A total of 388 (61.5%) teachers indicated accessing at least one resource for CCSS information. The most frequently cited resource accessed was the Department of Public Instruction website with 68.2% of teachers indicating access (Table 11). Slightly less than half of teachers indicated seeking information from the ND Curriculum Initiative website (43.6%) and other educational websites (45.9%). The least accessed resources for CCSS information were REA provided professional development and the REA website, each with less than 10% of teachers indicating access. A full breakdown of the resources accessed for CCSS implementation information by teachers surveyed is included in Table 11.

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Table 11.

Resources Accessed for CCSS Implementation Information

Resource Accessed	Respondents Accessing at Least 1 CCSS Resource ($n = 388$)	
	Freq.	Percent
Department of Public Instruction Website	240	61.9%
ND Curriculum Initiative Website	169	43.6%
ND United	52	13.4%
REA Website	36	9.3%
REA Provided PD	34	8.8%
Other Educational Websites (Learnzillion, Achievethecore, etc)	178	45.9%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate access to multiple resources.

Helpfulness of CCSS Information Sources

Teachers were asked to rate the level of helpfulness for each of the resources they accessed for CCSS implementation information. Other educational websites (e.g. Learnzillion, Achievethecore) yielded the highest percentage of teachers rating them as "very helpful" at 72.9% (Figure C.28.). From the specified options, the ND Curriculum Initiative website was rated as either "somewhat helpful" or "very helpful" by 97.9% of teachers surveyed, and the Department of Public Instruction website was a close second with 97.0% of respondents. The REA website and REA provided professional development were the most likely options to be rated as "not helpful" by teachers surveyed; however, they were also some of the most likely options to receive ratings of "very helpful" by survey respondents. REA provided professional development was rated as one of the most helpful options at providing teachers with the support they need with nearly 50% of respondents indicating it as "very helpful." It is important to note that this finding is based on ratings of 28 teachers who indicated access to REA provided professional development.

Types of CCSS Information Sought

The PD Teacher Survey also asked teachers to identify the type of information they were seeking when accessing the resources listed in the previous sections. Participants were able to select as many as applied from a list of items which included links to the specific standards, instructional materials aligned to the standards, reminders about the implementation timeline, and links to supplemental materials. A total of 342 (54.2%) respondents identified at least one type of information sought regarding the Common Core State Standards. The most commonly cited types of information sought were instructional materials aligned to the standards, links to the specific standards, and links to supplemental materials (Table 12). Other types of information sought that were not listed in the survey included specific lesson plans, instructional materials for special student populations (e.g. ELL, students with disabilities), assessments aligned to the Common Core State Standards, and a clearinghouse or database of CCSS materials.

Table 12.

Information Sought Regarding the Common Core State Standards

CCSS Information Sought	Respondents Seeking at Least 1 Type of CCSS Information ($n = 342$)	
	Freq.	Percent
Link to the specific standards	226	66.1%
Instructional materials aligned to the standards	226	66.1%
Links to supplemental materials (e.g., curriculum guides, exemplars from other states)	175	51.2%
Fact sheets, talking points, or powerpoints to pass on to staff, parents, the public about Common Core	68	19.9%
Reminders about implementation timeline	42	12.3%
Powerpoints of specific Common Core webinars to review or adapt for redelivery	38	11.1%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate seeking multiple types of information related to the Common Core State Standards.

Examining whether there were differences in the type of information sought based on school level taught, middle school teachers were more likely than elementary or high school teachers to seek instructional materials aligned to the new standards (Figure C.29.). Elementary and high school teachers were more likely to seek for information on links to the specific standards than middle school teachers. Over 50% of teachers of each school level taught indicated seeking links to supplemental materials.

Assessing type of information sought by content area taught it appears that those teaching in CCSS-tested subjects were more likely to indicate a need for instructional materials aligned to the standards, links to specific standards, and supplemental materials (Figure C.30.). Considering teachers in CCSS-tested content areas, math teachers were slightly more likely to indicate seeking instructional materials aligned to the standards and links to supplemental materials than ELA and elementary teachers.

Comparing the type of CCSS information sought by teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested content areas, those in CCSS-tested content areas were more likely to have sought instructional materials aligned to the standards, links to the specific standards, and links to supplemental materials (Figure C.31.). Teachers in non-CCSS-tested content areas were slightly more likely to seek information from fact sheets, talking points, or PowerPoints about the Common Core standards.

CCSS Personnel Resources

The PD Teacher Survey also assessed whether teachers have access to individuals knowledgeable regarding the Common Core State Standards. When asked if there is a staff member in their school or district who has been identified as a resource on the Common Core State Standards, 131 (31.3%) out of 419 teachers responding to this question indicated "yes."

Twenty-nine percent of teachers indicated "no" and an additional 39.4% of teachers reported that they did not know (Figure C.32.). Approximately one-third (33.6%) of teachers surveyed did not respond to this survey item.

Examining whether there were differences in regard to staff members identified as a resource for the Common Core standards across school levels taught, there were slight differences across the elementary, middle, and high school levels (Figure C.33.). As school level taught increased, fewer teachers indicated not having an identified staff member as a resource for the Common Core standards. This trend was counteracted by a slight increase in the percent of teachers who indicated not knowing if there was a staff member resource for the Common Core State Standards in their school or district. No difference was found between the groups in regard to those indicating having an identified CCSS staff member resource.

CCSS Staff Member Resource Position

Teachers indicating that their school or district had an identified staff member as a resource for the Common Core State Standards were asked to provide the position that individual holds. Out of 131 teachers indicating having an identified staff member resource for the CCSS in their school or district, 103 (78.6%) indicated the position of the CCSS staff member resource. A variety of positions were identified, but largely the staff members fell within one of six categories: 1) curriculum director/coordinator; 2) administrator; 3) principal; 4) teacher; 5) curriculum or instructional coach; and 6) other specialist. The most frequently listed position was fellow teacher (30.1%), followed by curriculum or instructional coaches (28.2%), and curriculum directors/coordinators (14.6%) as shown in Table 13. Other specialists were cited by 14.6% of respondents which included instructional strategists, library/media specialists, counselors, Title I, and a curriculum, instruction, and professional development partner.

Table 13.

Identified Staff Members as a CCSS Resource

Staff Member Position	Respondents Indicating Position of Identified CCSS Staff Member Resource ($n = 103$)	
	Freq.	Percent
Fellow teacher	31	30.1%
Curriculum or instructional coach	29	28.2%
Curriculum director/coordinator	15	14.6%
Other specialist	15	14.6%
Principal	11	10.7%
Administrator	6	5.8%

Note. Percentages do not add up to 100% due to the fact that some respondents indicated multiple positions of staff members identified as a resource for the Common Core State Standards.

Accessibility of CCSS Staff Member Resource

Teachers who indicated their school or district had an identified staff member for CCSS information were asked to report the staff member's accessibility. A total of 128 (97.7%) teachers indicating having an identified CCSS staff member resource reported the staff member's accessibility. Respondents reported that individual staff member resources were largely available to provide support. Over 95% of teachers surveyed who identified the accessibility of CCSS staff member resources reported that they were either "very accessible" (53.9%) or "somewhat accessible" (42.2%) as shown in Figure C.34. No teachers surveyed reported the CCSS staff member as being "not accessible."

CCSS Information Resources Trusted

Participants were also asked to report which resources that provide information regarding the Common Core State Standards in which they trusted. Respondents were able to select all that applied from a variety of different sources including the "state department website," "online or print news media," "school principal," "professional associations," and "fellow teachers," as

well as others. Because of the nature of the survey question, it was not possible to differentiate

individuals who did not trust any resources for CCSS information and those who skipped the

question entirely. Out of a total of 394 (62.4%) teachers who indicated trusting at least one

source for CCSS information, the most trusted source reported was the state department website

(72.3%). School principals and fellow teachers were also trusted by approximately half of

teachers surveyed (Table 14). Online or print news media (10.2%) and REA newsletters (8.4%)

were among the least trusted sources for CCSS information. A full breakdown of trusted sources

for CCSS information reported by teachers surveyed is included in Table 14.

Table 14.

CCSS Information Sources Trusted

CCSS Information Source	Respondents Trusting at Least 1 Source for CCSS Information ($n = 394$)	
	Freq.	Percent
State department website	285	72.3%
School principal	204	51.8%
Fellow teachers	188	47.7%
District administrator	156	39.6%
Professional associations	132	33.5%
School district newsletter, website, or emails	127	32.2%
National website	108	27.4%
National Websites (achievethecore.org)	78	19.8%
REA Websites	45	11.4%
Online or print news media	40	10.2%
REA Newsletter	33	8.4%
Other	14	3.6%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate trusting
multiple sources for information related to the Common Core State Standards.

As school level taught increased, the trustworthiness of the state department website,

school principals, district administrator, and school district newsletter, website, or email

decreased (Figure C.35.). No differences were observed between school levels in trust for fellow teachers, professional associations, national websites, and online or print news media.

Examining the trustworthiness of sources for CCSS information by content area taught, teachers in CCSS-tested content areas were more likely to trust the state department website and national websites compared to teachers in non-CCSS-tested content areas (Figure C.36). Between elementary, ELA, and math teachers, elementary teachers were more likely to report trust in the school principal and district administrator. Few differences were found when comparing teachers in CCSS-tested content areas (regardless of subject taught) and those in non-CCSS-tested content areas (Figure C.37.). Notable differences included teachers in CCSS-tested content areas being more trusting towards the state department website and national websites.

Research Question 4: CCSS Resources Needed by Teachers

This section will address teachers' preparedness to teach using the Common Core State Standards as well as the resources teachers reported they need to feel prepared to teach using the new standards.

Preparedness to Teach Using CCSS

Teachers were asked to rate their level of preparedness to teach the Common Core State Standards in ELA and math or the literacy standards in history/social studies, science, and CTE. Participants could select from feeling completely prepared, somewhat prepared, not prepared at all, and not knowing if they are prepared. A total of 566 (89.7%) teachers responded to this item in the survey. Survey findings indicate that nearly 75% of teachers reported feeling either somewhat prepared (59.5%) or completely prepared (14.1%) to teach using the Common Core State Standards (Figure 5). On the other hand, 15.5% of teachers did not feel prepared at all to teach using the new standards and an additional 10.8% were unsure if they were prepared.

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"Do you feel prepared to teach the NDSS in ELA and math, or the literacy standards in history/social studies, science, and CTE?"

	Not Prepared At All	Somewhat Prepared	Completely Prepared	I don't know
Percent	15.5%	59.5%	14.1%	10.8%
Frequency	88	337	80	61

Preparedness to Teach Using New Standards
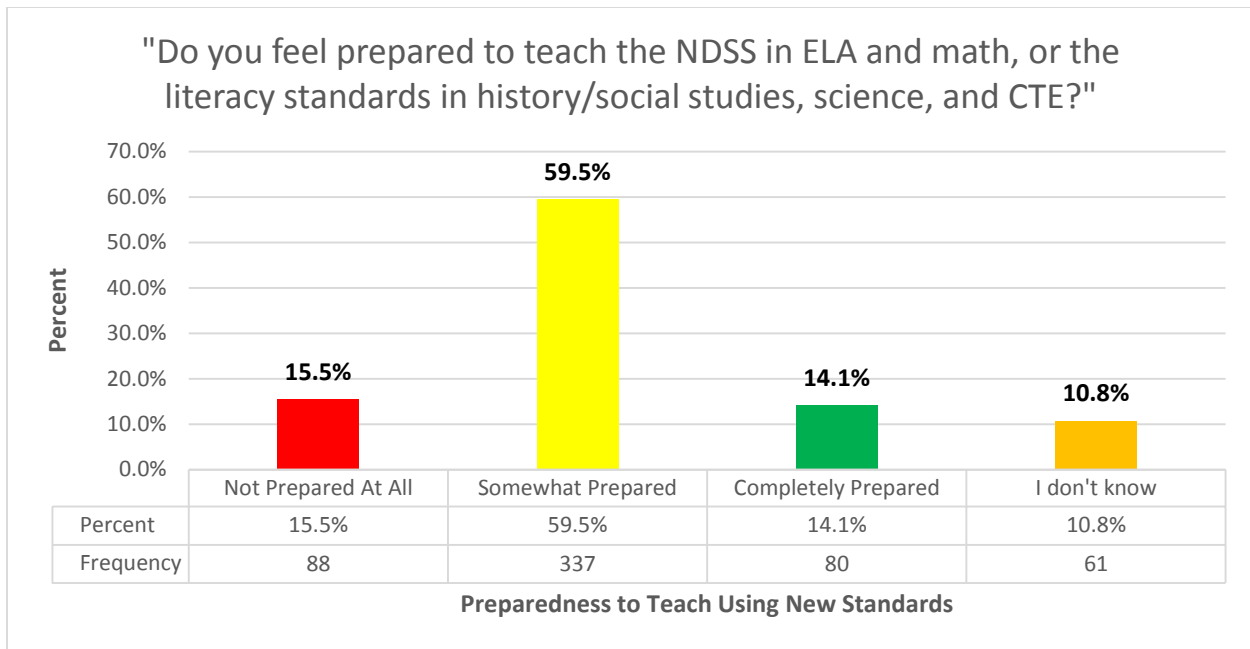
Figure 5. Preparedness to Teach Using the Common Core State Standards. *n* = 566.

Looking at whether school level taught influences teachers' preparedness to teach using the Common Core State Standards, it appears that there were very few differences between the three groups (Figure C.38.). The majority of respondents in each group indicated feeling somewhat prepared. High school teachers were slightly more likely to feel not prepared at all and slightly less likely to feel somewhat prepared compared to elementary and middle school teachers. No differences were observed between the groups in terms of those feeling completely prepared and not knowing if they are prepared.

When examining if there were differences in preparedness level to teach using the CCSS between teachers in CCSS-tested content areas and non-CCSS-tested content areas, those in the non-CCSS-tested areas were slightly less likely to feel prepared. Teachers in non-CCSS-tested subjects were approximately 10% more likely to report feeling not prepared at all to teach using CCSS compared to those who teach elementary, ELA, or math (Figure C.39.). Those in non-CCSS-tested subjects were also approximately 15% more likely to report not knowing if they were prepared to teach using the new standards than those in CCSS-tested content areas. Among

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teachers in CCSS-tested content areas, ELA teachers were 10.9% and 12.7% more likely to feel

completely prepared to teach using the new standards compared to teachers of elementary and

math, respectively.

Comparing preparedness level to teach using the Common Core standards between

teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested

content areas, teachers in CCSS-tested content areas were 15.8% more likely to feel somewhat

prepared and 11.4% more likely to feel completely prepared (Figure C.40.). On the other hand,

teachers in non-CCSS-tested content areas were 11.9% more likely to feel not prepared at all,

and 15.3% more likely to not know if they are prepared.

Resources Needed to Feel Prepared to Teach Using CCSS

Respondents were also asked to indicate what resources would help them feel prepared to

teach using the Common Core State Standards. Participants were able to select as many as

applied from the following resources: "access to curricular resources aligned to the NDSS in

ELA and math," "access to assessments aligned to the NDSS in ELA and math," "more

information about how the standards change what is expected of my instructional practice," and

"more information about how the standards change what is expected of my students." Because

of the nature of the question format it was not possible to differentiate those who indicated not

needing any of the resources listed in the question and those who skipped the question entirely.

A total of 470 (74.5%) teachers reported needing at least one resource in the survey item to be

prepared to teach using the Common Core standards. The most commonly cited resources

needed were access to curricular resources aligned to the NDSS in ELA and math (60.5%) and

more information about how the standards change what is expected of my instructional practice

(60.3%). All options listed in the survey item were cited by over half of respondents who

identified needing at least one resource to feel prepared to teach using the CCSS (Table 15).

Respondents also had the opportunity to provide open-ended responses identifying additional

information that they may need to feel prepared to teach using the Common Core State

Standards. Common themes emerged including the need for more CCSS-aligned resources and

strategies, more planning time, a curriculum guide or timeline, and more information on how the

CCSS apply to students in special education.

Table 15.

Resources Needed to Feel Prepared to Teach Using CCSS

Resource Needed to Feel Prepared	Respondents Indicating Needing At Least 1 Resource ($n = 470$)	
	Freq.	Percent
Access to curricular resources aligned to the NDSS in ELA and math	286	60.5%
More information about how the standards change what is expected of my instructional practice	281	60.3%
More information about how the standards change what is expected of my students	247	52.3%
Access to assessments aligned to the NDSS in ELA and math	244	51.4%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate trusting multiple sources for information related to the Common Core State Standards.

The researcher was also interested in examining whether school level taught influenced

the type of resource needed to feel prepared to teach using the Common Core State Standards.

Elementary level teachers were between 10% and 15% more likely to indicate a need for more

access to curricular resources aligned to CCSS compared to middle and high school teachers

(Table 16). Elementary teachers were also slightly more likely to indicate a need for more

access to assessments aligned to the CCSS in ELA and math than middle and high school

teachers. As school level taught increased, there was an increasing trend in teachers' desire to

know how the CCSS changed the expectations for their instructional practice.

Table 16.

Resources Needed to Feel Prepared to Teach Using CCSS by School Level Taught

Resource Needed to Feel Prepared	Elem. ($n = 215$)	Middle ($n = 199$)	High ($n = 216$)
Access to curricular resources aligned to the NDSS in ELA and math	69.3%	58.8%	54.2%
More information about how the standards change what is expected of my instructional practice	56.7%	60.8%	62.5%
More information about how the standards change what is expected of my students	51.2%	50.3%	54.6%
Access to assessments aligned to the NDSS in ELA and math	57.2%	49.2%	47.7%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate needing multiple resources to feel prepared to teach using the Common Core State Standards.

Looking at whether there were different needs based on content area taught, those who

taught in CCSS-tested subjects reported a greater need for curricular resources and assessments

aligned to the new standards compared to those in non-CCSS-tested subjects (Figure C.41.).

Across teachers in CCSS-tested content areas very few differences existed between teachers of

elementary, ELA, and math. The only notable difference found was that math teachers were

approximately 10% more likely to indicate a need for access to assessments aligned to the

Common Core standards compared to elementary and ELA teachers. Teachers in non-CCSS-

tested content areas were more likely to cite needs for more information about how the standards

change the expectations of their instructional practice and the expectations of their students

compared to teachers in CCSS-tested subjects.

Comparing the needs of teachers in CCSS-tested content areas (regardless of subject

taught) and non-CCSS-tested content areas, teachers in CCSS-tested subjects were 29.2% and

23.3% more likely to indicate needs for curricular resources and aligned assessments on the

Common Core standards, respectively (Figure C.42.). On the other hand, teachers in non-CCSS-

tested content areas were 10.1% and 8.7% more likely to indicated needs for information on how

the standards change the expectations of their instructional practice and of their students,

respectively.

Additional Information Needed from CCSS Resources

In a separate survey item, participants were asked to openly write what they would have

liked to see on the resources they have already accessed regarding the Common Core State

Standards. Many themes re-emerged from previous survey questions including examples of

lesson plans, curriculum guides or timelines, CCSS-aligned textbooks, materials, and activities,

CCSS materials for special student populations, assessments aligned to the Common Core

standards, and information on how to transition from the previous standards to the CCSS.

Research Question 5: Teachers' Perceptions Regarding CCSS Implementation

This section explores teachers' perceptions about whether their school and district have a

plan in place to implement the Common Core State Standards, how teachers are currently

incorporating the standards into their practice, what extent their assessments are aligned to the

standards, and what perceived challenges teachers have in regard to implementing the CCSS.

School and District Plans to Implement the CCSS

Teachers were asked to report whether their school and their district had plans in place to

implement the new standards in ELA and math. As shown in Figure 6, 69.6% of teachers

indicated their school had a plan in place, and 67.7% of teachers indicated their school district

had a plan in place. Under 5% of teachers surveyed indicated that either their school (4.2%) or

district (3.0%) did not have a plan in place. Approximately one-quarter of teachers surveyed

reported not knowing whether their school or district had a plan in place to implement the Common Core State Standards. No major differences were observed across school levels in regard to schools or districts having a plan to implement CCSS (Figure C.43.). It is important to note that over one-third of the teachers surveyed did not respond to either of these survey items.
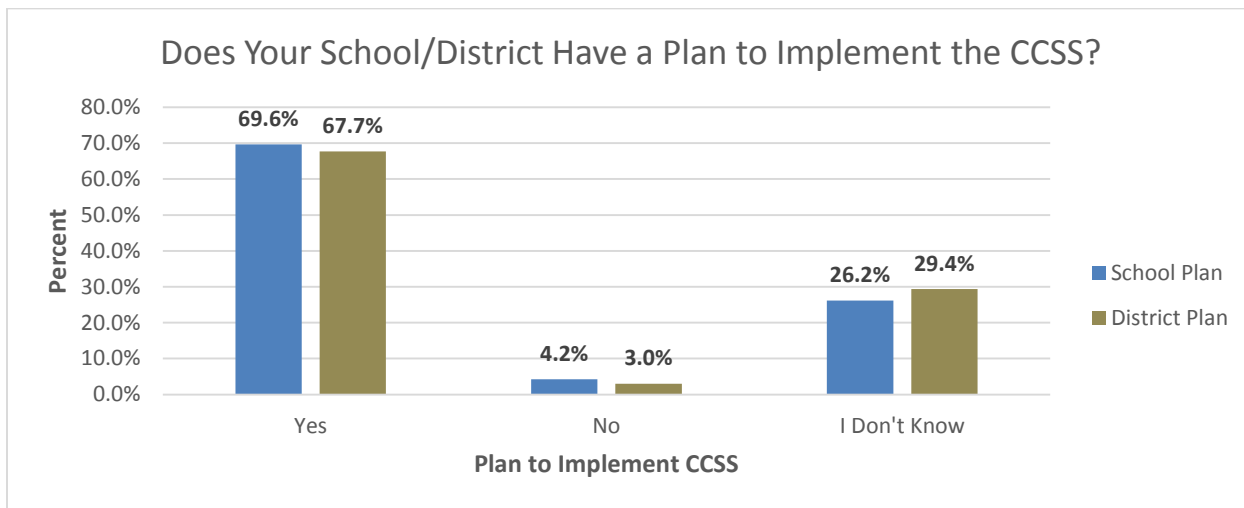
Figure 6. School and District Plans for Implementing CCSS. $n_{school} = 405$; $n_{district} = 402$.

Incorporation of CCSS into Instructional Practice

Whether or not a teacher's school or district has a plan to implement the CCSS, teachers are expected to be implementing the standards into their instruction in lieu of the state standardized assessments which are to be introduced in the spring of 2015. One survey item asked teachers to report what level they had incorporated the Common Core State Standards into their teaching expectations and practice. Options included "No, I have not incorporated the Common Core into my teaching expectations or practice," "I've incorporated the Common Core in some areas of my teaching, in others I have not," "Yes, I've fully incorporated the Common Core into my teaching expectations and practice," and "I don't know." A total of 404 (64.0%) of teachers responded to this survey item. Out of those responding to this survey item, one-fifth of teachers surveyed (20.8%) indicated fully incorporating the Common Core into their teaching expectations and practice. A majority of teachers (64.4%) reported incorporating the Common

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Core in some areas of their teaching practice but not others (Figure 7). The remaining 15% of teachers surveyed were split between not incorporating the Common Core at all (9.9%) and not knowing if they have incorporated the standards into their teaching expectations and practice (5.0%). Over 80% of those who indicated not incorporating the standards at all within their practice and 70% of those who did not know if they were incorporating the standards within their practice, were teachers outside of CCSS-tested content areas.

"Have you incorporated the new North Dakota state standards (NDSS) in ELA and math into your teaching expectations and practice?"

Level of Incorporation of CCSS Into Practice	Not Incorporated CCSS	Incorporated Some CCSS	Fully Incorporated CCSS	I Don't Know
Percent	9.9%	64.4%	20.8%	5.0%
Frequency	40	260	84	20
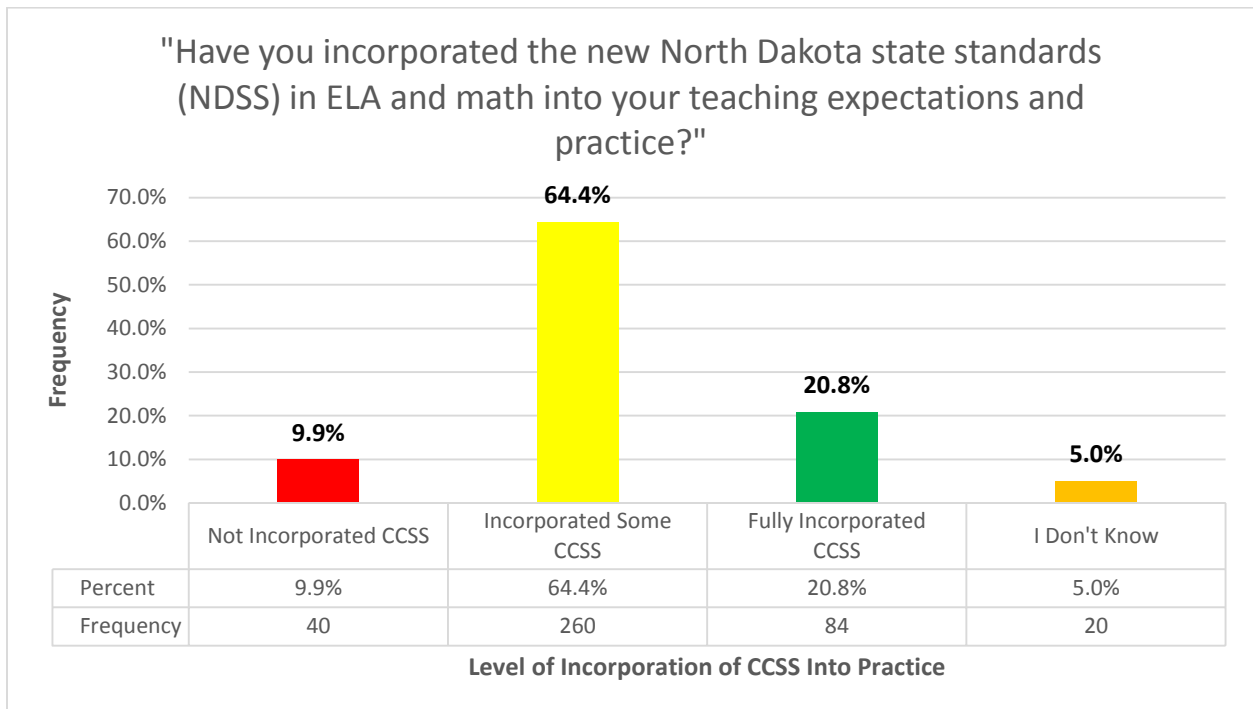
Figure 7. Level of Incorporation of CCSS into Instructional Practice. $n = 404$.

Across school levels taught, elementary school teachers (28.0%) were more likely to report fully incorporating the standards than middle (16.1%) or high school (8.4%) teachers (Figure C.44.). Subsequently, high school teachers were most likely to report not incorporating the standards at all (14.0%) and incorporating some of the standards into practice (69.7%).

Notable differences were also found when comparing incorporation of the CCSS into practice between teachers in CCSS-tested and non-CCSS-tested content areas. Teachers in non-tested subjects were more likely to report not incorporating the standards into their practice

(22.4%) and not knowing if they have incorporated the standards (9.8%) compared to teachers of elementary, math, and ELA (Figure C.45.). Between teachers in CCSS-tested content areas, elementary teachers (30.9%) were the most likely to report fully incorporating the CCSS into their teaching practice, followed by ELA teachers (24.7%), and math teachers (22.1%).

Comparing the level of incorporation of the CCSS into practice between teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested content areas, teachers in CCSS-tested content areas were 20.5% more likely to have fully incorporated the standards (Figure C.46.). Teachers in non-CCSS-tested content areas were 19.7% more likely to have not incorporated the standards into their practice at all.

Classroom Assessments Aligned to the Common Core State Standards

Teachers were also asked to indicate to what extent their classroom assessments have been aligned to the Common Core State Standards. Respondents could select from the following options: "all of my assessments are aligned," "some of my assessments are aligned," "just beginning work on assessment alignment," and "no work has been done on alignment." A total of 374 (59.3%) teachers responded to this survey question. A majority of respondents fell in the categories of "some of my assessments are aligned" (37.2%) and "just beginning work on assessment alignment" (34.8%) as shown in Figure 8. One in six teachers (16.6%) surveyed indicated no work done on assessment alignment. Approximately two-thirds of teachers who reported no work done on assessment alignment were teachers in non-CCSS-tested content areas.

Examining differences in assessment alignment based on school level taught, elementary level teachers were more likely to indicate all of their assessments being aligned than middle and high school teachers (Figure C.47.). On the other hand, high school teachers were the most likely group to report no work being done on assessment alignment.

When comparing level of assessment alignment based on content area taught, teachers in non-CCSS-tested content areas were more likely to report no work done on alignment than those in CCSS-tested content areas. They were also the least likely to report all assessments being aligned with 3.6% of respondents (Figure C.48.). Most respondents fell in the "some of my assessments are aligned" category with 47.1% of ELA teachers, 44.6% of math teachers, and 40.6% of elementary teachers indicating that particular level of assessment alignment.

"To what extent have you aligned your classroom assessments to the NDSS in ELA and math?"

Level of Assessment Alignment	No Work Done on Alignment	Beginning Work on Alignment	Some Assessments Aligned	All Assessments Aligned
Percent	16.6%	34.8%	37.2%	11.5%
Frequency	62	130	139	43
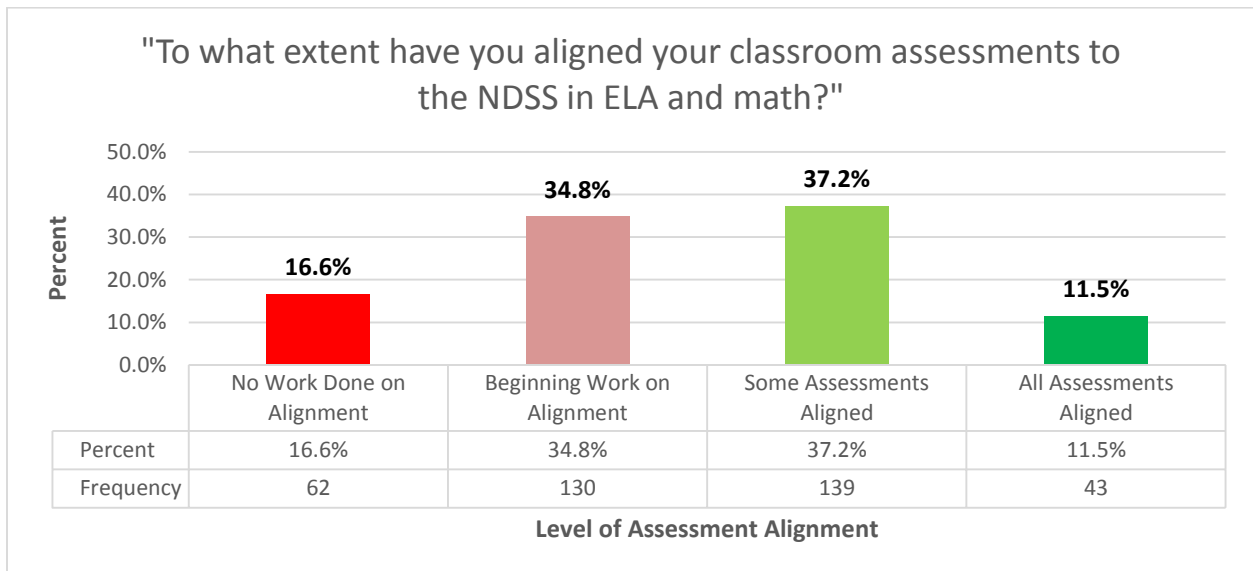
Figure 8. Level of Assessment Alignment to CCSS. *n* = 374.

Comparing teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested content areas on level of assessment alignment to the CCSS, teachers in CCSS-tested content areas were 11.9% more likely to have all of their assessments aligned and 17.2% more likely to have some assessments aligned (Figure C.49.). Teachers in non-CCSS-tested content areas were 23.6% more likely to have indicated no work done on assessment alignment.

Challenges to CCSS Implementation

Survey participants were also asked to indicate the top two challenges in regard to implementing the Common Core State Standards in their school or district. They could select from a variety of options including "students' prior knowledge," "need more information about

the standards," "need more quality professional development," "need more time to collaborate

with colleagues," and "need more aligned textbooks and materials" just to name a few.

Although, participants were instructed to select the top two challenges related to CCSS

implementation, faulty question formatting allowed respondents to select as many challenges as

applicable. A total of 405 (64.2%) respondents identified at least one challenge regarding CCSS

implementation. The most frequently cited challenges included needing more time to collaborate

with my colleagues, students' prior knowledge, needing more aligned textbooks and materials,

and needing more quality professional development as shown in Table 17. Needing more

information about the standards and a state assessment aligned to the Common Core standards

were also cited by approximately one in five teachers surveyed. Other challenges not listed on

the survey item provided by respondents included the use of electronic testing/assessment, lack

of buy-in or support from teachers and parents, and lack of leadership during implementation.

Table 17.

Challenges to CCSS Implementation

Challenges to CCSS Implementation	Respondents Indicating at Least 1 Challenge ($n = 405$)	
	Freq.	Percent
Need more time to collaborate with my colleagues	174	43.0%
Students' prior knowledge	163	40.2%
Need more aligned textbooks and materials	157	38.8%
Need more quality professional development	152	37.5%
Need more time to help all students really learn the standards	138	34.1%
Need more formative assessments aligned to the Common Core	109	26.9%
Need more information about the standards	91	22.5%
Need a state assessment aligned to the Common Core	85	21.0%
Need more parental involvement	71	17.5%
Need more funding	59	14.6%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate multiple
challenges in regard to implementing CCSS.

Differences were found among the three school levels taught in regard to perceived challenges to CCSS implementation. Elementary teachers were slightly more likely than middle or high school teachers to indicate challenges related to needing more time to collaborate with colleagues, needing more aligned textbooks and materials, and needing more formative assessments aligned to the Common Core standards (Table 18). Middle and high school teachers, on the other hand, were more likely to indicate the challenge of needing more information about the standards. The need for more quality professional development was identified as one of the top three frequently cited challenges by teachers of each school level taught. The least cited challenges identified by each group included the need for more funding and the need for more parental involvement.

Table 18.

Challenges to CCSS Implementation by School Level Taught

Challenges to CCSS Implementation	Elem. ($n = 181$)	Middle ($n = 173$)	High ($n = 179$)
Need more time to collaborate with my colleagues	**46.4%[1]**	**40.5%[3]**	**39.7%[1]**
Need more quality professional development	**40.9%[3]**	**41.0%[2]**	**37.4%[3]**
Students' prior knowledge	37.6%	**42.8%[1]**	**38.5%[2]**
Need more aligned textbooks and materials	**43.6%[2]**	39.9%	27.4%
Need more time to help all students really learn the standards	37.6%	32.4%	28.5%
Need more formative assessments aligned to the Common Core	33.7%	22.5%	21.8%
Need more information about the standards	16.6%	25.4%	27.4%
Need a state assessment aligned to the Common Core	22.7%	19.1%	20.1%
Need more parental involvement	21.0%	14.5%	14.5%
Need more funding	18.2%	13.9%	8.9%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate multiple challenges in regard to implementing CCSS. The top three challenges to CCSS implementation cited by each group are bolded and labeled with superscripts.

Examining the perceived challenges to CCSS implementation based on content area taught some interesting trends occurred. The top challenges cited by respondents included

needing more time to collaborate with colleagues, needing more aligned textbooks and materials, students' prior knowledge, and needing more quality professional development (Table 19). Math teachers were the most likely group to indicate a challenge of students' prior knowledge; whereas, elementary and ELA teachers were more likely to indicate the challenge of needing more formative assessments aligned to the Common Core. Teachers in non-CCSS-tested content areas were the most likely to cite challenges in regard to needing more quality professional development and needing more information about the standards.

Table 19.

Challenges to CCSS Implementation by Content Area Taught

Challenges to CCSS Implementation	Elem. ($n = 151$)	ELA ($n = 93$)	Math ($n = 86$)	Non-Tested ($n = 145$)
Need more time to collaborate with my colleagues	**47.0%[2]**	**51.6%[1]**	**46.5%[3]**	**39.3%[2]**
Need more aligned textbooks and materials	**49.0%[1]**	**47.3%[2]**	**47.7%[2]**	27.6%
Students' prior knowledge	35.1%	**40.9%[3]**	**50.0%[1]**	**38.6%[3]**
Need more quality professional development	**39.1%[3]**	37.6%	31.4%	**42.1%[1]**
Need more time to help all students really learn the standards	38.4%	39.8%	36.0%	32.4%
Need more formative assessments aligned to the Common Core	36.4%	32.3%	27.9%	16.6%
Need a state assessment aligned to the Common Core	22.5%	30.1%	26.7%	15.9%
Need more information about the standards	15.9%	19.4%	20.9%	32.4%
Need more parental involvement	22.5%	19.4%	20.9%	15.2%
Need more funding	17.9%	18.3%	12.8%	15.2%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate multiple challenges in regard to implementing CCSS. The top three challenges to CCSS implementation cited by each group are bolded and labeled with superscripts

Comparing perceived implementation challenges between teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested content areas, some notable differences were found. The top three challenges for teachers in CCSS-tested content areas were

needing more time to collaborate with colleagues, needing more aligned textbooks and materials, and students' prior knowledge (Figure C.50.). The top three challenges for teachers in non-CCSS-tested content areas were the need for more quality professional development, more time to collaborate with colleagues, and students' prior knowledge. Teachers in CCSS-tested content areas were 17.4% more likely to cite the challenge of needing more aligned textbooks and materials compared to teachers in non-CCSS-tested content areas. On the other hand, teachers in non-CCSS-tested content areas were 15.7% more likely to indicate the challenge of needing more information about the standards. Teachers of non-CCSS-tested subjects were also 6.8% more likely to report the challenge of needing more quality professional development.

Resources Needed to Address CCSS Implementation Challenges

Participants were subsequently asked for feedback regarding what tools, resources, or information would be most helpful in addressing the challenges related to CCSS implementation. Many of the themes highlighted in previous survey questions were reiterated including the need for more CCSS-aligned textbooks and instructional materials, examples of lesson plans, curriculum guides or timelines, more professional development opportunities and workshops, more time to collaborate with colleagues and in professional learning communities, and more access to CCSS-aligned assessments. Other less commonly cited resources identified by respondents included better technology, increased funding, clarification of roles for teacher support personnel, and the use of curriculum coaches.

Research Question 6: Changes in Instructional Practice as a Result of the CCSS

The researcher was also interested in looking at the perceived changes in instructional practice that teachers believe will occur as a result of the Common Core State Standards, changes teachers have already made, as well as reasons why teachers are or are not making these changes.

Understanding the CCSS Will Help Differentiate Instruction

One perceived change that was assessed within the PD Teacher Survey was whether understanding the effective practices of the Common Core State Standards would help teachers differentiate instruction to meet the unique needs of their students. Respondents were instructed to rate their level of agreement or disagreement with this belief on a 4-point Likert-type item ranging from "strongly disagree" to "strongly agree" with an additional option of "I don't know." A total of 386 (61.2%) teachers responded to this survey item. Over two-thirds (68.6%) of teachers responding to this question either agreed (57.5%) or strongly agreed (11.1%) that they would be better able to differentiate instruction by understanding the effective practices of the Common Core standards (Figure 9). On the other hand, 17.6% of respondents either disagreed (14.2%) or strongly disagreed (3.4%) with this belief, and an additional 13.7% indicated they did not know. Teachers in non-CCSS-tested content areas represented the majority of respondents who strongly disagreed with the belief. Findings show that as level of agreement with the belief increased, the greater the percentage of teachers in CCSS-tested content areas represented.

Comparing the belief that knowledge of effective CCSS teaching practices will help teachers differentiate instruction across school levels taught, middle and high school teachers were more likely to disagree with the belief as well as not know compared to elementary school teachers (Figure C.51.). Conversely, elementary school teachers were more likely to indicate agreement or strong agreement with this belief than middle and high school teachers.

Few differences were observed when comparing the responses of teachers in CCSS-tested and non-CCSS-tested content areas (Figure C.52.). Among teachers in CCSS-tested content areas, elementary teachers were more likely to agree with the statement than math or

ELA teachers. Examining differences in beliefs between teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested content areas, teachers in CCSS-tested content areas were 6.8% more likely to agree and 3.4% more likely to strongly agree that the new standards will help them to differentiate instruction (Figure C.53.).

Comparison of Beliefs that the Common Core State Standards Will Change Instructional Practices

	My understanding of the effective practices to teach of the new NDSS in ELA and math will help me differentiate instruction to meet the unique needs of my students.	The new NDSS in ELA and math will require that I change the way I incorporate instructional technology into classroom learning.	The new NDSS in ELA and math will help me know what content to teach my students and in what sequence to teach it in order for them to fully master key competencies.
Strongly Agree	11.1%	10.1%	9.7%
Agree	57.5%	53.6%	54.9%
I Don't Know	13.7%	16.8%	16.5%
Disagree	14.2%	17.9%	15.5%
Strongly Disagree	3.4%	1.6%	3.4%

Change in Instructional Practice

Figure 9. Comparison of Beliefs that the Common Core State Standards Will Change Instructional Practices. $n_{differentiate} = 386$; $n_{technology} = 386$; $n_{content} = 381$.

Implementing the CCSS Will Change the Use of Instructional Technology

Another survey item that assessed perceived changes in instruction as a result of the Common Core State Standards examined whether teachers felt that the new standards would change the way they incorporate instructional technology into classroom learning. Respondents were instructed to rate their level of agreement or disagreement with this belief on a 4-point Likert-type item ranging from "strongly disagree" to "strongly agree" with an additional option of "I don't know." A total of 386 (61.2%) teachers responded to this survey item. Nearly two-thirds of teachers responding to this survey item indicated agreement (53.6%) or strong agreement (10.1%) that the new standards will require changes in the use of instructional technology (Figure 9). Approximately 20% of teachers surveyed either disagreed (17.9%) or strongly disagreed (1.6%) that the way they incorporate instructional technology will change, and one in six teachers reported not knowing whether a change would occur.

Very few differences were found when comparing the beliefs surrounding change in use of instructional technology between elementary, middle, and high school teachers, with a majority of each group reporting agreement (Figure C.54.). The only notable difference found was elementary teachers were roughly 8% more likely to report strong agreement in the belief than the other two groups.

When comparing teachers in CCSS-tested and non-CCSS-tested content areas, a majority of teachers in each group reported agreement that their use of instructional technology will change under the Common Core State Standards. The largest difference amongst the groups were for those indicating "I don't know." Teachers in non-CCSS-tested content areas were approximately twice as likely to indicate not knowing compared to elementary, math, and ELA

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teachers. Teachers of ELA and math were each more likely to indicate disagreement with the belief than they were to indicate strong agreement (Figure C.55.).

Comparing differences in beliefs between teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested content areas, a majority of respondents in each group reported agreement (Figure C.56.). The only notable difference in beliefs about changes in the use of instructional technology found was for those indicating that they did not know. Teachers in non-CCSS-tested content areas were 10.3% more likely to indicate not knowing than those in CCSS-tested content areas.

CCSS Will Improve Knowledge of Content and Sequence

A third survey item that measured teachers' perceptions regarding instructional changes attributable to the Common Core State Standards is the belief that the standards in ELA and math will help teachers know what content to teach their students and in what sequence in order for students to fully master key competencies. Respondents were instructed to rate their level of agreement or disagreement with this belief on a 4-point Likert-type item ranging from "strongly disagree" to "strongly agree" with an additional option of "I don't know." A total of 381 (60.4%) teachers responded to this survey item. Approximately two-thirds (64.6%) of teachers responding to this survey item either agreed (54.9%) or strongly agreed (9.7%) with this statement (Figure 9). Conversely, 18.9% of teachers either disagreed (15.5%) or strongly disagreed (3.4%) with the statement, and an additional 16.5% indicated they did not know.

When comparing teachers' beliefs about this statement across school levels taught, the majority of respondents in each category agreed that the standards would improve knowledge of content and sequence (Figure C.57.). Elementary school teachers were 8.5% and 12.2% more likely to indicate strong agreement with the statement compared to middle and high school

teachers, respectively.   On the other hand, middle school and high school teachers were slightly more likely to disagree with the statement compared to elementary school teachers.

Examining whether there were differences among those who teach in CCSS-tested content areas and non-CCSS-tested content areas, the most common response across all groups was "agree" (Figure C.58.). Teachers in CCSS-tested content areas were two to four times more likely to indicate "strongly agree" to the statement than those in non-CCSS-tested categories. Teachers in non-CCSS-tested content areas were more likely to indicate that they did not know compared to elementary, ELA, and math teachers.

Comparing beliefs about changes in understanding of content and sequence between teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested content areas, very few differences were observed. The only notable differences found were teachers in non-CCSS-tested content areas were 11.9% more likely to indicate not knowing if the standards would increase their understanding of content and sequence, and teachers in CCSS-tested content areas were 8.1% more likely to "strongly agree" that the new standards would increase their understanding of content and sequence (Figure C.59.).

Changes in Instructional Practice as a Result of CCSS Implementation

Lastly, the researcher was interested in what changes teachers have made in their instructional practice as a reflection of implementing the Common Core State Standards. A total of 335 teachers (53.1%) indicated making at least one change in practice due to the new standards. Teachers were able to select from items such as incorporating new curricular materials and instructional strategies, asking students more questions, structuring opportunities for students to develop and solve problems, increasing use of national resources on teaching, diversifying student assessment and feedback, and increasing collaboration with colleagues.

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Some of the most common changes reported by teachers included "asking students more questions and encouraging them to develop answers independently," "incorporating new curricular materials and instructional strategies in my teaching," "structuring opportunities to develop and solve their own problems," and "increasing my collaboration with colleagues within my school and in other schools" as shown in Table 20. Additional changes in instruction proposed by teachers included "using more higher level questioning and thinking skills," "increased writing on assessments," and "increasing the use of informational text."

Table 20.

Changes in Instructional Practice as a Result of CCSS Implementation

Change in Instructional Practice	Respondents Indicating at Least 1 Change (*n* = 335)	
	Freq.	Percent
Incorporating new curricular materials and instructional strategies in my teaching	238	71.0%
Asking students more questions and encouraging them to develop answers independently	235	70.1%
Structuring opportunities for students to develop and solve their own problems	179	53.4%
Increasing my collaboration with colleagues within my school and in other schools	173	51.6%
Diversifying the ways I assess student learning and provide feedback	141	42.1%
Increasing my use of national resources on teaching	58	17.3%

Note. Percentages do not add up to 100% due to the fact that respondents could indicate multiple changes in instructional practice.

Looking at changes in instructional practice as a result of the Common Core State Standards based on school level taught, elementary and middle school teachers were slightly more likely to report asking students more questions and encouraging them to develop answers independently, incorporating new curricular materials and instructional strategies in their

teaching, and incorporating new curricular materials and instructional strategies in their teaching compared to high school teachers (Figure C.60.).

Comparing changes in instructional practice by content area taught, the data show that those in CCSS-tested content areas were more likely to cite changes in asking students more questions and encouraging them to develop answers independently, incorporating new curricular materials and instructional strategies in my teaching, and structuring opportunities to develop and solve their own problems than teachers in non-CCSS-tested content areas (Figure C.61.). No differences emerged between the groups in terms of increasing collaboration with colleagues and diversifying student assessment and feedback. When comparing the changes in practice between teachers in CCSS-tested content areas (regardless of subject taught) and non-CCSS-tested content areas, these differences still remained (Figure C.62.).

Participants were also allowed to write openly about why they are making these changes in their instructional practice. Five major themes emerged: 1) to meet the requirements or expectations of one's school or district; 2) to prepare students for state assessments; 3) to increase student knowledge and prepare them for the future; 4) to meet, implement, and/or align with the new standards; and 5) to become a better teacher or improve instruction. A total of 163 teachers provided comments for this survey item. Out of these 163, 69 (42.3%) teachers cited they were making these changes to increase student knowledge and prepare them for the future. Comments in this category included responses such as "to increase student learning," "to better prepare my students for their future," and "to better the students' knowledge." The second most cited reason for changing instructional practice was in order to meet, implement, and/or align with the new standards (22.7%). Comments in this category included responses such as "to meet the new state standards," "to meet the rigors of the standards," and "to align better with the

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common core." The third most cited reason for making changes in one's instruction was to meet the requirements or expectations of one's school or district. A total of 35 teachers (21.5%) indicated this was a reason for change. Comments in this category ranged from "administration expects these changes" and "because we are required to" to "there is no choice" and "because I have been told that I need to change!" Just under 15% of teachers indicated making changes to become a better educator and slightly under 10% of teachers indicated making changes to prepare students for state assessments.

Additional Comments Regarding the Transition to the CCSS

Participants were invited to share additional comments regarding their experiences with the transition to the Common Core State Standards. Teachers provided a wide array of positive, negative, and constructive feedback. Positive feedback included comments that were supportive of the Common Core State Standards such as "I think the Common Core is a good thing" and "I feel the standards are what we should always be focusing on." Negative comments were also present which included responses such as "I personally believe these standards are garbage," "I feel unprepared for the transition," as well as feelings of being overwhelmed. Negative comments also targeted many of the teachers' perceived flaws of the Common Core State Standards. Some of the common flaws identified by teachers include lack of time to teach everything, the presence of learning gaps between the old and new standards, the Common Core State Standards embracing a "one-size fits all" approach, lack of developmental appropriateness within the new standards, and lack of leadership through the transition process. Other flaws include lack of specificity within the new standards, lack of evidence surrounding the effectiveness of CCSS, the lack of application to other subjects or content areas, and too much focus on standards.

Teachers also provided information regarding what they would like in the future. Some of the most common things teachers cited a need for were time to collaborate with colleagues on the standards, more professional development training, more information regarding implementation, more CCSS-aligned curricular materials, and more information on how the new standards apply to diverse student populations (e.g. ELL, students with disabilities) and across subjects.

CHAPTER FIVE. DISCUSSION

The adoption and implementation of the Common Core State Standards in K-12 schools represents a significant shift in the American educational system. Developed as an outgrowth from the largely unsuccessful No Child Left Behind Act of 2001, the Common Core State Standards aim to increase student proficiency as well as prepare students for both college and careers after graduation. Changes in the standards including increased rigor and a common set of expectations across schools and school districts were supported by a majority of teachers surveyed in this study. While, most practicing North Dakota teachers indicated support for the Common Core State Standards, some expressed concerns about how the new standards will change the way they teach their students.

North Dakota represents one of the 42 states that have elected to fully adopt the Common Core State Standards in both ELA and math. Since their adoption in 2011, teachers in North Dakota have been faced with the difficult challenge of trying to align their curriculum with the new standards. As the time to prepare for the new Common Core state assessments in the spring of 2015 draws nearer, teachers are expected to be implementing the standards into their practice. The intention of this research study was to explore North Dakota teachers' attitudes and experiences as they begin to implement the Common Core State Standards into their instruction, and to provide recommendations specific to providers of professional development training.

Teachers' Perceptions Regarding the CCSS

Before any recommendations can be provided it is important to gauge where southeastern North Dakota teachers stand in regard to their level of support for the Common Core State Standards. Looking at results from the PD Teacher Survey, 60% of teachers indicated support for the standards and believed the standards would help them to improve student learning. This

finding is consistent with previous research by the Education Week Research Center which found that 65% of teachers believed the new standards would help them improve student learning (From Adoption to Practice, 2014). Although a majority of teachers indicated being supportive of the standards, approximately 40% were not, which highlights that many teachers may not be receiving the support they need as they make the transition to the Common Core.

Examining for school level differences, elementary teachers were the most supportive of the new standards, followed by middle school and high school teachers. High school teachers were the group most likely to indicate that the new standards would not help them to improve student learning. High school teachers were also more likely than elementary and middle school teachers to indicate that the previous standards are better than the new standards. Although it was not directly assessed in the current study, it would be beneficial to explore further the underlying reasons why teachers of each school level, especially high school, did not express support for the Common Core State Standards.

A separate question in the PD Teacher Survey assessed some possible reasons why teachers may be unfavorable towards the new standards. Although just one quarter of teachers surveyed cited at least one non-benefit for the Common Core State Standards it is important to look at these potential barriers as teachers move ahead with CCSS implementation. The most common non-benefit reported by teachers was that the new standards embrace a "one size fits all" approach. Dovetailing with the "one size fits all" approach non-benefit, teachers also felt that the new standards lack the flexibility to help students who are not at grade level. Interestingly, the Common Core State Standards were designed to allow for more flexibility in instruction and to restore instructional autonomy back to the teachers. Previously, the expectations of the No Child Left Behind Act caused some teachers to feel they had to teach

specifically to state assessments due to the high stakes of funding based on student proficiency. In this era of data-driven decision-making there continues to be an emphasis on standardized assessments for student proficiency by state and federal governments. The Common Core State Standards introduce a more unified language to use among teachers and schools that identifies the knowledge and skills students should master, but now how they are taught. Professional development activities should be focused on breaking down these perceived barriers and increasing teachers' understanding of how the new standards change their teaching expectations. Additionally, attention should be placed on helping teachers to bridge learning gaps students may have as they transition from the previous state standards to the Common Core standards.

Another concern held by teachers is whether the Common Core State Standards represent an improvement over the previous state standards. Teachers were asked to report their perceptions regarding the difference between the two sets of standards in the PD Teacher Survey. Approximately two-thirds of teachers surveyed reported that the new standards are better than the previous state standards, compared to just 2.9% of teachers indicating that the new standards are worse. One in five teachers cited that they did not know if there was a difference; however, two-thirds of these were teachers outside of CCSS-tested content areas. Clearly, a majority of teachers do believe that the new standards represent an improvement over the previous state standards, but there is a sizable minority of teachers who are still uncertain regarding the quality of the Common Core standards.

Despite the criticisms of the Common Core standards identified above, teachers were more likely to cite benefits than non-benefits for the new standards. Seven benefits for the Common Core standards were cited by more teachers surveyed than the most frequently listed non-benefit. The most commonly cited benefits for the Common Core standards included

helping educators focus on what is most important, ensuring vertical alignment in the standards from Kindergarten through 12th grade and beyond, and giving students the opportunity to master key competencies. If these three benefits are actualized through the Common Core State Standards, there is little doubt that the students' educational experience will improve. One particular benefit which is expected to occur with the Common Core standards is that students will be college and career ready after graduation. Although this is expected with adoption of the new standards, only half of teachers in CCSS-tested content areas believed that the new standards will prepare students for college, and roughly one-third believed they would help prepare students for the workforce. Clearly, there is a need for more information regarding how the new standards will help prepare students for college and career after graduation.

Teachers' Experiences Regarding CCSS Professional Development Training

Professional development training is an effective way for teachers to build their knowledge, awareness, and repertoire of instructional skills and techniques. A majority of respondents, 60%, reported receiving training related to the Common Core standards. However, at the time of the survey, 40% of teachers had yet to receive such training. Looking specifically at teachers in CCSS-tested content areas, it is reasonable to expect that those who teach in CCSS-tested content areas would be more likely to attend professional development trainings about the new standards than those who do not. Based on results from the PD Teacher Survey, 68% of teachers in CCSS-tested content areas had received training related to the new standards in ELA and math compared to 47% of those outside of CCSS-tested content areas. This is a moderate difference, but this still leaves one-third of teachers in CCSS-tested content areas without such training. Previous professional development literature by Sparks (2002) found that over half of U.S. teachers were not granted release time to attend professional learning activities.

While, this is just one possible reason for lack of attendance, this would significantly limit the professional development opportunities teachers are able to attend. Because professional development is crucial for growth and improvement as an educator, schools and school districts need to make an effort to increase the opportunities for teachers to attend these trainings, especially those who teach in CCSS-tested content areas.

For those who have received CCSS professional development training, the most frequently attended type of training were one-day trainings, which is consistent with previous professional development training literature by Gulamhussein (2013). Over 50% of teachers surveyed in this study reported attending a one-day training; whereas 41% reported attending multi-day trainings. One-day trainings continue to be the most commonly utilized form of professional development training, but multi-day trainings are becoming more common amongst educators. It has been established in the professional development literature that for training to be effective it "must be ongoing, intensive, and connected to practice" (Darling-Hammond et al., 2009, p. 9). Although, one-day trainings are a much more convenient and less costly option compared to multi-day trainings, one-day trainings are less likely to promote lasting or "deep change" in teachers' practice (Sparks, 2002). Despite this fact, teachers often have busy schedules and cannot afford to take time away from their classrooms during typical school day hours. Professional development providers must work with teachers and school districts to provide ongoing trainings that also cater to teachers' school schedules.

Nearly two-thirds of teachers reported that the training they received on the Common Core standards was of high quality. Two-thirds represents a distinct majority of teachers, but there is still room for improvement in this area. One possible influential factor in regard to quality of professional development training is the professional development training provider.

Teachers surveyed in this study were 20% more likely to have received CCSS professional development training from a staff member in their school or district compared to a professional development provider, and four times as likely as from a regional educational association. Colleagues are often reliable, knowledgeable sources for information, although, many are not formally trained in providing specialized support. Once again, this illustrates the point that professional development providers must continue to make a concerted effort to be available for teachers as a Common Core resource and raise awareness about the services they provide.

Effects of Professional Development Training

Sparks (2002) suggested that effective professional development training produces a "deep change" within an individual. This change can result from an increase in awareness, broadening of knowledge, and the building of skills. It is assumed that if professional development training is perceived as effective by recipients that change may be produced in any or all of these facets. Comparing the belief that the new standards will help to improve student learning between professional development training participants and non-participants, the data shows that those who participated in CCSS professional development training were significantly more likely to agree with this belief. When looking at the perceived difference between the Common Core State Standards and the previous state standards, those who had participated in CCSS professional development training were significantly more likely to rate the new standards as better than the previous standards. Lastly, the data suggest that those who participated in professional development training were significantly more likely to indicate being somewhat or completely prepared to teach using the new standards. Based on these three findings, it is reasonable to suggest that participation in professional development training may lead to greater support for and preparedness to implement the Common Core State Standards into practice.

Teachers' Awareness of CCSS Resources

Based on data from the PD Teacher Survey, it appears that teachers are seeking out sources other than professional development training as a means of support for implementing the Common Core State Standards. The most common resources identified by teachers surveyed were collaborative time with colleagues to deconstruct and align the new standards into their existing curriculum and professional learning communities focused on CCSS implementation. Clearly, colleagues play an influential role in terms of providing support and guidance regarding the Common Core. In comparison to support from colleagues, content-focused trainings were available to just 35% of teachers with access to resources regarding the Common Core standards. Although, teachers interact with colleagues on a day-to-day basis, the fact that content-focused trainings were available to one third of teachers surveyed illustrates the need for professional development providers to increase their availability to the teachers they serve.

When professional development training is unavailable and colleagues do not provide the information needed, where do teachers turn to for support? Two-thirds of teachers surveyed indicated that they access the North Dakota Department of Public Instruction website and close to half of teachers reported accessing the North Dakota Curriculum Initiative website. These resources were utilized by four to six times as many teachers surveyed compared to regional education association websites and REA provided professional development. Despite its lack of access by teachers surveyed, REA provided professional development was 15-20% more likely to be rated as "very helpful" compared to the North Dakota Department of Public Instruction website or the North Dakota Curriculum Initiative website. Subsequently, the DPI and Curriculum Initiative websites were twice as likely as REA provided professional development to be rated as "somewhat helpful." Findings from the PD Teacher Survey also show that a

majority of teachers surveyed who had received professional development training, felt that the training was of high quality. It appears based on these findings that professional development, when utilized, may be more likely to provide teachers with the specialized support they need. On the other hand, the DPI and Curriculum Initiative websites are more likely to provide more convenient, generalized support to teachers. One possible explanation for the difference in utilization between websites, such as the North Dakota DPI, and REA provided professional development may be that teachers are simply unaware of the professional development opportunities available to them. Teachers' awareness of professional development opportunities was not assessed in the PD Teacher Survey, but may be a topic worth looking into in the future.

One factor that may lead a teacher to prefer one source of information over another is trust. Teachers surveyed were the most trusting towards the state department website as a source for CCSS information, followed by school principals, fellow teachers, and district administrators. Professional associations were trusted by just one-third of teachers surveyed, and REA websites by just one in ten teachers surveyed. The fact that professional associations and REA websites are rated so low in trustworthiness by teachers is notable considering that they typically have a more specialized knowledge base.

Another influential factor that may predispose an individual to seek out one resource over another is the type of information an individual is looking for. Based on the results from the PD Teacher Survey, the most often searched for information by teachers were links to the specific standards, instructional materials aligned to the standards, and links to supplemental materials. With this in mind, it makes sense that the DPI and Curriculum Initiative websites topped the list of sources accessed for CCSS information. It will be interesting to see if the type of information

teachers seek regarding CCSS implementation changes over time as they gain more experience with the standards and the state assessments.

CCSS Resources Needed by Teachers

Based on the data provided in the previous section, it appears that teachers have a variety of resources for CCSS information at their disposal. Despite all of these resources at hand, teachers continue to indicate a need for more information and support. The fact that only 14% of teachers surveyed reported feeling completely prepared to teach using the Common Core State Standards illustrates this point. However, the fact that nearly 60% of teachers surveyed reported feeling somewhat prepared to teach using the Common Core State Standards indicates that teachers are already receiving some of the support they need. These findings are similar to previous research by the Education Week Research Center which found that 76% of teachers surveyed reported feeling at least somewhat or moderately prepared to teach using CCSS (From Adoption to Practice, 2014).

Findings from the PD Teacher Survey suggest that teachers are primarily interested in information regarding the Common Core State Standards and how the standards impact their instructional practice. Not only are teachers interested in learning about the standards, they are interested in learning how to use them. Although, websites such as the ND DPI and Curriculum Initiative websites are generally trusted sources for CCSS information, they do not provide all of the support that teachers need. Professional development trainings not only aim to provide information (similar to websites), but allow opportunities for teachers to engage in hands-on activities with other educators. Professional development literature by Darling-Hammond et al. (2009) suggests that for training to be effective it must address the "…concrete, everyday challenges involved in teaching" (p. 10). Hands-on activities allow teachers to apply the skills

and knowledge they have learned while immersed in a collaborative environment with other educators. Based on the professional development literature, information may not be the only thing teachers need to feel prepared to implement the Common Core State Standards.

When asked what additional resources educators needed to feel prepared to teach using the Common Core standards, teachers responded with a wide variety of resources. Over 50% of teachers indicated a need for curricular resources and assessments in ELA and math, as well as information on how the new standards change instructional and student expectations. Other resources needed by teachers included a curriculum guide/timeline, example lesson plans, more planning time, and more information on how the standards apply for special student populations. These resources represent a need for more information or resources related to integrating the Common Core State Standards into their practice, and less of a need for an introduction to the standards themselves. As was established in previous research regarding the Common Core State Standards, over 80% of teachers in a national survey were generally familiar with the standards in ELA and math (From Adoption to Practice, 2014).

Teachers' Perceptions Regarding CCSS Implementation

Regardless of whether teachers are supportive or opposed to the Common Core State Standards, the expectation is that all teachers in North Dakota will be using them in their practice. Teachers have typically been the individuals holding primary responsibility for deconstructing and aligning the standards within their existing curriculums, although, some schools and districts throughout the state have plans in place for implementing the standards into practice. Approximately two-thirds of teachers surveyed indicated either their school or district as having a plan to implement the Common Core State Standards. Under 5% of teachers

indicated their school or district did not have a plan, and the remaining 25-30% of teachers indicated they were unsure if their school or district had a plan in place.

Whether or not a plan is in place to implement the Common Core State Standards, there are bound to be challenges and roadblocks that arise during this dramatic transition. Teachers in the PD Teacher Survey were asked to report the challenges they face in implementing the Common Core State Standards. Results from the PD Teacher Survey indicate that teachers are most concerned about needing more time to collaborate with colleagues, students' prior knowledge, and needing more aligned textbooks and materials as they make the transition to the Common Core. Additional challenges reported by teachers include the use of electronic testing for state assessments, lack of support or buy-in for the standards by teachers, and the lack of direction or leadership throughout the transition process. Professional development training may not be able to address all of these challenges, but it may assist in establishing more support for the standards, providing more direction throughout the implementation process, and introducing teachers to techniques and materials that have been used successfully to implement the standards. Outside of additional professional development training, teachers indicated needs for examples of lesson plans, curriculum guides and timelines, CCSS-aligned assessments, more funding, and better technology.

Two survey questions attempted to assess where teachers currently stand in regard to their level of implementation of the Common Core State Standards. These questions asked teachers to report their level of incorporation of the standards into their instructional practice, and to what degree their classroom assessments are aligned to the new standards. Slightly over 85% of teachers surveyed reported they had incorporated at least some of the standards in ELA and math into their teaching expectations and practice. Of those indicating incorporating at least

some of the standards into their practice, 20% reported fully incorporating the standards into their practice. Ten percent of teachers surveyed reported not incorporating the standards into their practice at all; although, 80% of these were teachers outside of CCSS-tested content areas. When looking at level of assessment alignment to the new standards, 83% of teachers reported at least beginning to work on assessment alignment. Out of those who had not begun work on assessment alignment, two-thirds were teachers in non-CCSS-tested content areas. Based on the findings from these two questions, a clear majority of teachers have begun to implement the Common Core State Standards into their practice, but full incorporation is yet to come for many teachers. As teachers continue to fully incorporate CCSS into their instructional practice, support from professional development providers is crucial.

Changes in Instructional Practice as a Result of the CCSS

A majority of teachers have begun to implement the Common Core State Standards into their instructional practice. As teachers implement the standards into their practice, they are faced with making changes in regard to how they teach their students. Some of the most common changes teachers have made in their practice as a result of the Common Core standards include incorporating new materials and strategies into their teaching, asking students more questions and encouraging independent answers, structuring more opportunities for students to problem solve, and increasing collaboration with colleagues in and outside of their school district. When asked the reasons for making these changes, the most common reasons reported were to increase student knowledge and prepare them for the future, and to meet the expectations of the new standards. Although some teachers are hesitant about making the transition to the Common Core State Standards, it appears that a majority are making this leap for the benefit of the students they teach. Other changes that teachers believe are likely to occur as a direct result

from implementing the Common Core standards include changing the way instructional technology is used in the classroom, enhanced ability to differentiate instruction, and increased knowledge of content and sequencing of instructional material.

Recommendations for Professional Development Providers

Taking into account previous literature on the Common Core State Standards and effective professional development training as well as findings from the PD Teacher Survey, the following five recommendations are suggested for professional development providers.

1. Continue to provide professional development trainings that are on-going, intensive, specific to teachers' needs, and that provide hands-on activities where teachers can discuss their experiences and develop their skills.

Professional development is an integral practice for the continued improvement of teachers as well as the teaching profession as a whole. A wealth of literature exists explaining the importance and effectiveness of professional development training. The important thing to recognize is that effective professional development facilitates change. The degree of change will vary based on a number of factors including the type of training involved, the participant(s) receiving the training, as well as the perceived quality of the training. Professional development training that is perceived as high quality is likely to produce what Sparks (2002) terms as "deep changes." These changes require new ways of thinking and behaving, and are typically irreversible. Changes such as these were evident in the PD Teacher Survey, as teachers who had received professional development training were significantly more likely to indicate support for the standards, believe the new standards are better than the previous state standards, and feel more prepared to implement the Common Core standards in their instructional practice. Previous literature on professional development suggests that for professional development to be

effective it must be "ongoing, intensive, and connected to practice" (Darling-Hammond et al., 2009, p. 9). Without these three things, professional development is less likely to promote lasting change.

Similar to the notion that "practice makes perfect" teachers want opportunities to practice the skills and discuss the knowledge they have learned with their colleagues. Providing hands-on activities in a constructive environment where teachers are able to give and receive feedback from other experts in the field is paramount to promoting lasting change. Ensuring that professional development is ongoing also allows individuals to see the gains they have made over time. Attendees are also able to discuss any barriers or setbacks that have prevented them from making more significant changes. Lastly, having multiple sessions also helps build a deeper, more trusting relationship between professional development training participants and the providers of professional development training.

A majority of participants in the PD Teacher Survey indicated that the professional development they received regarding the Common Core State Standards was of high quality. This is encouraging for professional development providers as they are already well on their way to providing teachers with the support they need to successfully implement the Common Core standards. However, there is room for improvement. Providing ongoing, intensive, specific professional development training will help facilitate more significant changes for a greater number of teachers.

2. Specialize trainings to specific populations of teachers (e.g. school levels, content areas, CCSS-tested vs. non-CCSS-tested, alternative/special educators).

Teachers will often tell you that no two students are exactly the same. In fact, each student is different and brings in a unique set of knowledge, skills, and abilities. Just as teachers

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attempt to differentiate their instruction to benefit the different types of learners in their

classroom, professional development providers should differentiate their trainings to benefit the

greatest number of educators they serve. It is unlikely that an individual will perceive a training

as high quality when they go home saying, "None of this applied to what I do." Teachers at each

grade level and in each content area have different sets of expectations for what their students

should know and be able to do, and subsequently what they should be teaching. Professional

development providers should be aware of the type of audience they are providing training to,

and ensure that the content of the training applies to all who are expected to attend. It is

frustrating for teachers to take time out of their classroom to attend a training to come back

feeling that it was a complete waste of time.

Based on results from the PD Teacher Survey, differences exist between those who teach

different grade levels and in different content areas. For example, teachers in non-CCSS-tested

content areas are more likely to seek information about how the standards change their teaching

expectations. As a professional development provider it would make little sense to focus on

creating assessments aligned to the Common Core State Standards with teachers in non-CCSS-

tested content areas, when they are not assessing their students on them. Although, there are

topics and standards that may apply to all teachers or content areas, providing specialized

training may be more beneficial to certain groups of teachers.

3. Increase your availability to teachers as a reliable, trusted resource for the Common Core
   State Standards.

Teachers seek out professional development training as a means of obtaining knowledge,

information, and support. Sixty percent of teachers in the professional development survey

indicated receiving professional development training regarding the Common Core standards in

ELA and math. Although, this percentage represents the majority of teachers surveyed, it leaves four in ten teachers who have not received such training. Whether the lack of training is due to time, costs, or training availability is outside the scope of the survey. Regardless of the reason for lack of participation in professional development training, professional development providers are responsible for promoting their trainings to the public and recruiting participants.

Teachers in the PD Teacher Survey were six times more likely to visit the North Dakota Department of Public Instruction website than they were to receive REA-provided professional development. Teachers surveyed also indicated being more trusting of the state department website, school principal, fellow teachers, and district administrators when seeking CCSS information compared to professional associations and REA websites. Based on these findings, it may be that teachers lack trust in professional development trainings as a reputable resource for information. This is surprising given the finding that REA provided professional development training was 15% more likely to be rated as "very helpful" to teachers compared to the North Dakota DPI website. Another possible reason for the lack of access to REA provided professional development may be related to teachers' awareness surrounding professional development opportunities. Lack of communication between administrators and teachers regarding professional development opportunities may limit the number of trainings teachers attend. Regardless of the reason for lack of access, the fact that roughly 10% of teachers surveyed reported seeking out REA provided professional development for information regarding the Common Core standards is noteworthy, especially for professional development providers. Efforts should be concentrated on communicating the professional development opportunities that are available for teachers, and establishing trust between educators and professional development providers.

4. Teachers need time and information.

As with any large or dramatic change, it takes time to adjust. The transition to the Common Core State Standards is no exception to this rule. In many teachers' eyes the Common Core standards represent uncharted territory - a new set of standards and expectations that they have not been exposed to in the past. Unfortunately, for these teachers, there is no map to follow that will guide the way to implementing the standards. Teachers were left with the responsibility to unpack and deconstruct the new standards and to align them with their pre-existing curriculums. This forces teachers to re-conceptualize how they intend to teach their students according to this new set of standards. These changes do not simply affect one class or one unit; they affect all classes and the entire curriculum. Without a guide on how to do this, this is a task that will take a considerable amount of time, time that many teachers simply do not have to give.

Examining the resources that teachers need to feel prepared to teach using the Common Core State Standards, a majority of teachers reported the need for more collaborative planning time with colleagues to deconstruct the new standards and align assessments, and information on how the standards change the expectations for their students and their instruction. Specifically, teachers are looking for information such as CCSS-aligned instructional materials, examples of lesson plans and assessments, links to the specific standards, information on how to address learning gaps, and information on how to apply the standards for special student populations. Professional development providers should make an emphasis on providing opportunities for teachers to work with other teachers on deconstructing and aligning their curriculums to the new standards. Professional development providers should also focus on sharing resources with teachers that have been shown to be successful and refer teachers to resources that they may need regarding the Common Core standards.

5. Continue to show the benefits of the Common Core State Standards.

Based on previous literature regarding the Common Core State Standards and the findings from the PD Teacher Survey, a majority of teachers are familiar with and supportive of the new standards. However, there is still a sizable minority of teachers who are opposed to the Common Core standards. Some are opposed due to circumstantial reasons in that they believe the Common Core standards were forced upon them with very little input or guidance. Others believe that the new standards are worse than the previous state standards or lack evidence that they will lead to student achievement. Regardless of the reason, professional development providers must continue to show teachers how the standards will lead to increased student learning and achievement. Teachers want to know answers to questions such as: How will students benefit from the new standards in ways that the previous standards did not allow? Will the Common Core standards improve the way students learn? Continuing to provide answers to these questions will go a long way in terms of showing teachers that the change to the Common Core standards is worth the struggle.

Recommendations for Further Research

This research study provided a glimpse into the perceptions and experiences of teachers in southeastern North Dakota as they make the transition into teaching with the Common Core State Standards. In the future it would be beneficial to extend the reach of the survey to a much larger scale, either the whole state, the upper Midwest, or even across the entire United States to explore possible regional similarities and differences. It would also be beneficial to take a more in-depth look at factors such as the size of the school district and amount of teaching experience, as these factors may potentially influence teachers' experiences as they transition to teaching with the Common Core State Standards.

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Secondly, it would be beneficial to revise a number of the questions within the survey instrument. Many of the questions were very long and not specific, which may have led to survey fatigue. Dropout was evident throughout the course of the survey which may have impacted the results. Some questions could have used skip logic for teachers who teach in particular content areas, as some questions may not have applied to certain groups of teachers. Questions with "check all that apply" type responses should include a response of "none of the above" or "does not apply to me" to increase data clarity. Overall, with some revisions to questions in the survey instrument the results could be stronger and lead to less dropout.

Another recommendation proposed by the researcher would be to conduct this study again after the first administration of state assessments to see what kinds of changes occur in responses to items in the survey. Multiple questions exist about implementation of the new standards. How might support for or preparedness to teach using the Common Core standards change after a year of teaching using the standards? Would the needs of teachers established in the current implementation of the survey be the same or different at the next implementation? How has the use of particular resources changed as teachers have begun to use the Common Core standards in their practice? What sources of information regarding the Common Core State Standards are teachers aware of? What sources of information regarding the Common Core State Standards do teachers trust? All of these questions are of interest to professional development providers as teachers and schools begin the next chapter of their educational career – implementation of the Common Core State Standards.

REFERENCES

Common Core Assessment Consortia. (2011). *Association for Supervision and Curriculum Development.* Retrieved from http://www.ascd.org/publications/newsletters/policy-priorities/vol17/num01/Common-Core-Assessment-Consortia.aspx

Common Core Feedback Tool – For Educators. (2014). *U.S. Education Delivery Institute.* Retrieved from http://www.deliveryinstitute.org/publications/feedback-loops-common-core-state-standards-implementation

Common Core Timeline. (2013). *Home School Legal Defense Association*. Retrieved from http://www.hslda.org/commoncore/timeline.aspx

Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad.* Dallas, TX. National Staff Development Council.

Definition of Professional Development. (2014). *Learning Forward.* Retrieved from http://learningforward.org/who-we-are/professional-learning-definition#DefinitionResources

Development Process. (2015). *Common Core State Standards Initiative.* Retrieved from http://www.corestandards.org/about-the-standards/development-process/

Feedback Loops for Common Core State Standards Implementation – Survey Tools for State Education Leaders. (2014). *U.S. Education Delivery Institute*. Retrieved from http://www.deliveryinstitute.org/sites/default/files/Common%20Core%20Survey%20Guidance.pdf

From Adoption to Practice: Teacher Perspectives on the Common Core. (2014). *Editorial*

Projects in Education Inc. Retrieved from

http://www.edweek.org/media/ewrc_teacherscommoncore_2014.pdf

Gulamhussein, A. (2013). Effective professional development in an era of high-stakes

accountability. *The Center for Public Education*. Retrieved from

http://www.centerforpubliceducation.org/Main-Menu/Staffingstudents/Teaching-the-

Teachers-Effective-Professional-Development-in-an-Era-of-High-Stakes-

Accountability/Teaching-the-Teachers-Full-Report.pdf

Huffman, D., Thomas, K., & Lawrenz, F. (2003). Relationship between professional

development, teachers' instructional practices, and the achievement of students in science

and mathematics. *School Science and Mathematics, 103*(8), 378-387. doi:

10.1111/j.1949-8594.2003.tb18123.x

McRobbie, J. (2000). Career-long teacher development: Policies that make sense. *WestEd.* p.

1-8. Retrieved from http://www.wested.org/online_pubs/teacher_dev/TeacherDev.pdf

Patten, M. L. (2007). *Understanding research methods: An overview of the essentials.*

Glendale, CA: Pyrczak Publishing.

Reichstetter, R. (2006). Defining a professional learning community: A literature review. *E&R*

Research Alert, #06.05. Retrieved August 8, 2008, from

http://www.wcpss.net/evaluation-research/reports/2006/0605plc_lit_review.pdf

Rentner, D. S., & Kober, N. (2014a). Common Core State Standards in 2014: curriculum and

professional development at the district level. *Center on Education Policy*. Retrieved

from http://www.cep-dc.org/publications/index.cfm?selectedYear=2014

Rentner, D. S., & Kober, N. (2014b). Common Core State Standards in 2014: districts'

perceptions, progress, and challenges. *Center on Education Policy*. Retrieved from

http://www.cep-dc.org/publications/index.cfm?selectedYear=2014

Sparks, D. (2002). Designing powerful professional development for teachers and principals.

National Staff Development Council. Retrieved from

http://www.friscoisd.org/ly/departments/professionalDev/documents/DesigningPowerful

ProfessionalDevelopmentforTeachersandPrincipals_000.pdf

Standards in Your State. (2015). *Common Core State Standards Initiative.* Retrieved from

http://www.corestandards.org/standards-in-your-state/

Wei, R. C., Darling-Hammond, L., Andree, A., Richardson, N., Orphanos, S. (2009).

Professional learning in the learning profession: A status report on teacher development

in the United States and abroad. Technical report. *National Staff Development Council*.

Dallas, TX.

What Parents Should Know. (2015). *Common Core State Standards Initiative.* Retrieved from

http://www.corestandards.org/what-parents-should-know/

PD Teacher Survey

1. Thank you for taking the time to complete this survey. The North Dakota Department of Public Instruction is administering this survey to better understand how educators can best be supported in the implementation of the new North Dakota state standards in English language arts and math based on the Common Core State Standards. This survey is approximately 15 minutes in length, participation is completely voluntary, and your responses are completely confidential.

◯ Begin the Survey

PD Teacher Survey

2. Which school district do you work for? This survey is confidential and will provide valuable data for professional development providers.

[ ]

3. Please select the grade levels in which you work. Check all that apply.

- [ ] K-Grade 1
- [ ] Grades 2-3
- [ ] Grades 4-5
- [ ] Grades 6-8
- [ ] Grades 9-10
- [ ] Grades 11-12

4. In which content areas do you work? Check all that apply

- [ ] Elementary
- [ ] English language arts/literacy
- [ ] Math
- [ ] Science
- [ ] Social Studies
- [ ] Special Education
- [ ] English Language Learners (ELL)
- [ ] Title I
- [ ] Physical Education/Health
- [ ] Career and Technical Education (CTE)
- [ ] Library/Media

Other (please specify)

[ ]

5. I believe the new North Dakota State Standards (NDSS) in English language arts (ELA) and math (Common Core) will help ME to improve student learning for the majority of students I serve.

◯ Strongly Agree

◯ Agree

◯ Disagree

◯ Strongly Disagree

◯ I don't know

6. Please identify the reasons you believe that the NDSS in ELA and math will benefit the majority of the students you serve. Check all that apply

☐ The will help educators better prepare students for college

☐ They will help educators focus on what is most important

☐ they will help educators better prepare students to compete in the workforce

☐ the will ensure that a high school diploma has meaning

☐ They will provide educators a manageable amount of curricular area to teach in a school year

☐ They will give students the opportunity to master key competencies, rather than just being superficially exposed to them

☐ They will help my school system ensure that our standards are vertically-aligned from Kindergarten through grade 12 and beyond

☐ They will provide students a clearer understanding of what they must know in order to succeed

Other (please specify)

7. Please identify the reasons you beleive the NDSS in ELA and math will not benefit the majority of students you serve. Check all that apply

☐ Our previous state standards were better than the new ones

☐ The new standards are too rigorous for many of the students I teach

☐ The new standards exclude important concepts that students should learn

☐ The new standards embraces "one size fits all" approach that will not help many students I teach

☐ The standards do not provide educators the flexibility to help students who are not at grade level

Other (please specify)

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8. How would you describe the difference between the state's previous standards and the new standards in ELA and math

◯ The new standards are more demanding and raise expectations for student learning

◯ The old and new standards are pretty much the same

◯ The new standards are less demanding and lower expectations for student learning

◯ I don't know

9. Do you feel prepared to teach the NDSS in ELA and math, or the literacy standards in history/social studies, science, and CTE?

◯ Yes, I feel completely prepared

◯ I feel somewhat prepared

◯ No, I do not feel prepared at all

◯ I do not know if I am prepared

10. What would help you feel prepared to teach the NDSS in ELA and math, or the literacy standards in history/social studies, science, and CTE? Check all that apply

☐ Access to curricular resources aligned to the NDSS in ELA and math

☐ Access to assessments aligned to the NDSS in ELA and math

☐ More information about how the standards change what is expected of my instructional practice

☐ More information about how the standards change what is expected of my students

Other (please specify)

11. The NDSS in ELA apply to many teachers across curricular areas (general, social studies, science, CTE) as you reflect on your teaching of literacy in your subject area, please answer the questions below

	Very Important	Important	Somewhat Important	Not Important	I Don't Know
Providing students ongoing opportunities to write creatively drawing from personal experiences	◯	◯	◯	◯	◯
Structuring opportunities for students to have conversations and develop arguments based on the texts they have read	◯	◯	◯	◯	◯
Utilizing pre-reading strategies to help all students fully understand a text through discussions of context, vocabulary, and author's craft prior to reading	◯	◯	◯	◯	◯
Creating learning experiences that build knowledge using informational texts, not just literature	◯	◯	◯	◯	◯
Providing instruction in academic vocabulary to support students' understanding of complex text	◯	◯	◯	◯	◯

12. For general, ELA, science, and social studies instructors. Which of the following are central shifts required for the new NDSS in ELA? Check all that apply

☐ Students summarize a chapter of a novel and apply what they've read to their own lives.

☐ Students write a story about the American Revolution as if they lived through the time period.

☐ After reading a novel, students develop an argument in favor of a character's point of view based on facts and events from the book.

☐ Students interview a local elected official after reading about voting rights of Americans.

13. For general, ELA, science, social studies educators. Which of the following are the central shifts required for the new NDSS in ELA? Check all that apply.

☐ Build students' knowledge through content-rich non-fiction

☐ Provide students reading and writing experiences grounded in evidence from text, both literary and informational

☐ Strengthen students' understanding of narrative text by making meaningful connections to their personal experiences

☐ Provide students different levels of text based on their reading abilities.

☐ Provide regular opportunities for students to practice with complex grade-level text and its academic language

14. For general/math/CTE/science educators. The NDSS for math can also apply to other subject area teachers, related to their work to develop students' mathematical understanding and practice. As you reflect on your teaching in your subject area, please answer the questions below.

To what extent do you believe the following practices are important to improving student learning?

	Very important	Important	Somewhat important	Not important	I don't know
Structuring class time for students to develop procedural skill and fluency in core operations (such as multiplication tables) so they can understand more complex topics	○	○	○	○	○
Exposing students to a wide range of math topics within each grade level in preparation for their future learning	○	○	○	○	○
Connecting student learning within and across grades so learning builds on foundations built in previous years	○	○	○	○	○
Providing opportunities for students to apply math concepts to "real world" situations	○	○	○	○	○
Maximizing student learning by teaching effective mnemonics and recall strategies as alternatives to conceptual understanding	○	○	○	○	○

15. For general/math/science educators. Which of the following are the central shifts required from the Common Core state standards in math? Check all that apply

- ☐ Focus deeply on the concepts emphasized in the standards to help students build strong foundations for learning
- ☐ Create coherent progressions within the standards from grade to grade so student knowledge and skills build onto previous learning
- ☐ Introduce multiplication and division earlier in students' learning as foundations for math concepts taught in later years
- ☐ Develop students' conceptual understanding, procedural fluency, and their ability to apply math in context
- ☐ Teach each math topic as an independent, new concept that is distinct from topics taught earlier or later

16. Have you accessed any of the following for resources about North Dakota standards implementation? For those that you have accessed, please rate their quality.

	Yes	No	Very Helpful	Somewhat Helpful	Not Helpful
Department of Public Instruction Website	☐	☐	☐	☐	☐
ND Curriculum Initiative website	☐	☐	☐	☐	☐
ND United	☐	☐	☐	☐	☐
REA website	☐	☐	☐	☐	☐
REA Provided PD	☐	☐	☐	☐	☐
Other Educational Websites (Learnzillion, Achievethecore, etc)	☐	☐	☐	☐	☐

17. When you accessed the resources listed above what information were you looking for? (check all that apply)

- ☐ Link to the specific standards
- ☐ Instructional materials aligned to the standards
- ☐ Reminders about implementation timeline
- ☐ Links to supplemental materials (e.g., curriculum guides, exemplars from other states)
- ☐ Fact sheets, talking points, or powerpoints to pass on to staff, parents, the public about Common Core
- ☐ Powerpoints of specific Common Core webinars to review or adapt for redelivery

Other (please specify)

[   ]

18. What else would you have liked to see on the resources you accessed?

[   ]

19. Please identify which, if any, of the following activities/resources have been made available to you. Check all that apply

☐ Collaborative planning time dedicated to understanding and deconstructing the new state standards

☐ Collaborative planning time dedicated to aligning curriculum to the new state standards

☐ Content-focused trainings on the new state standards

☐ Lesson plans aligned to the new state standards

☐ Job-embedded training or coaching focused on implementation of the new state standards

☐ Resources on research/best practice on implementation of the new state standards

☐ Professional learning community focused on implementation of the new state standards

☐ None of the above

Other (please specify)

[   ]

20. Have you participated in professional development/training on the new ND state standards in ELA or math?

◯ Yes

◯ No

110

21. How would you describe those professional development/training opportunities? Check all that apply

☐ One-day training opportunity

☐ Multi-day training opportunity

☐ Online webinar or video

☐ Job-embedded training or coaching within my school

☐ Professional learning community (PLC)

Other (please specify)

[   ]

22. Who provided the training? Check all that apply

☐ A staff member from my school or district

☐ A professional development provider brought in by my school district

☐ The ND Department of Public Instruction

☐ An independent professional development provider

☐ Regional Education Association (REA)

☐ ND United

☐ State Association (NDCTE, NDCTM, NDSTA, etc)

☐ I don't know

Other (please specify)

[   ]

23. Choose the answer that most closely reflects your opinion.

In general, the training I have received around the new NDSS in ELA and math has been of high quality. I have learned a great deal of information that has helped me improve my practice.

○ Strongly agree

○ Agree

○ Disagree

○ Strongly disagree

○ I don't know

24. To what extent are support personnel (i.e special ed., Title I, and alternative ed.) at the teacher level included in professional development regarding the NDSS in ELA and math.

◯ Always

◯ Sometimes

◯ Rarely

◯ Never

25. Is there a staff member in your school or district who has been identified as a resource on the Common Core state standards for teachers?

◯ Yes

◯ No

◯ I don't know

26. What position does this individual hold?

27. How accessible is this individual when you have questions about Common Core implementation?

	Very accessible	Somewhat accessible	Rarely accessible	Not accessible
Please rate accessibility	○	○	○	○

28. Of the following sources that provide information on the NDSS in ELA and math, which do you trust? Check all that apply

☐ Online or print news media

☐ State department website

☐ School district newsletter, website, or emails

☐ School principal

☐ Fellow teachers

☐ District administrator

☐ Professional associations

☐ National website

☐ REA Newsletter

☐ REA Websites

☐ National Websites (achievethecore.org)

Other (please specify)

[   ]

29. What communication channels from the ND DPI would be most useful in helping you implement the new NDSS in ELA and math?

☐ Webinars

☐ Professional learning communities

☐ Monthly email updates

☐ Website

☐ Annual conferences

☐ Recorded message updates

☐ Social media (e.g., Twitter, Facebook)

☐ Recorded video messages/webcasts

Other (please specify)

[   ]

30. Does your school have a plan to implement the new NDSS in ELA and math?

○ Yes

○ No

○ I don't know

31. Does your district have a plan to implement the new NDSS in ELA and math?

○ Yes

○ No

○ I don't know

32. What do you believe will be the top two challenges to implementing the Common Core state standards in your school or district? (check up to two)

☐ Students' prior knowledge

☐ Need more information about the standards

☐ Need more formative assessments aligned to the Common Core

☐ Need more quality professional development

☐ Need more time to collaborate with my colleagues

☐ Need more funding

☐ Need more aligned textbooks and materials

☐ Need more parental involvement

☐ Need a state assessment aligned to the Common Core

☐ Need more time to help all students really learn the standards

Other (please specify)

[ ]

33. What tools, resources, or information would be most helpful in addressing the challenge(s)?

[ ]

34. Have you incorporated the new North Dakota state standards (NDSS) in ELA and math into your teaching expectations and practice?

◯ Yes, I've fully incorporated the Common Core into my teaching expectations and practice.

◯ I've incorporated the Common Core in some areas of my teaching, in other areas I have not.

◯ No, I have not incorporated the Common Core into my teaching expectations or practice.

◯ I don't know.

35. What changes are you making to your teaching practice as a result of the new NDSS in ELA and math? (check all that apply)

☐ Incorporating new curricular materials and instructional strategies in my teaching

☐ Asking students more questions and encouraging them to develop answers independently

☐ Structuring opportunities for students to develop and solve their own problems

☐ Increasing my use of national resources on teaching

☐ Diversifying the ways I assess student learning and provide feedback

☐ Increasing my collaboration with colleagues within my school and in other schools

Other (please specify)

[   ]

36. Why are you making these changes?

[   ]

37. To what extent have you aligned your classroom assessments to the NDSS in ELA and math?

◯ All of my assessments are aligned

◯ Some of my assessments are aligned

◯ Just beginning work on assessment alignment

◯ No Work has been done on alignment

Other (please specify)

[   ]

38. My understanding of the effective practices to teach of the new NDSS in ELA and math will help me differentiate instruction to meet the unique needs of my students.

◯ Strongly Agree

◯ Agree

◯ Disagree

◯ Strongly Disagree

◯ I don't know

39. The new NDSS in ELA and math will require that I change the way I incorporate instructional technology into classroom learning.

◯ Strongly Agree

◯ Agree

◯ Disagree

◯ Strongly Disagree

◯ I don't know

40. The new NDSS in ELA and math will help me know what content to teach my students and in what sequence to teach it in order for them to fully master key competencies.

◯ Strongly Agree

◯ Agree

◯ Disagree

◯ Strongly Disagree

◯ I don't know

41. Is there anything else you want us to know about how ND's transition to the new NDSS in ELA and math is affecting you, your school, or your students?

APPENDIX B. CATEGORIZATION OF SURVEY ITEMS BY RESEARCH QUESTION

Proposed Research Questions	
How can CCSS professional development activities be improved for practicing teachers in North Dakota?	**Survey Questions**
1. What are North Dakota teachers' current perceptions of the Common Core State Standards?	5, 6, 7, 8
2. What are North Dakota teachers' experiences regarding Common Core State Standards professional development training?	20, 21, 22, 23, 24
3. What Common Core State Standards resources are available to North Dakota teachers?	16, 17, 19, 25, 26, 27, 28
4. What resources do North Dakota teachers currently need to feel prepared to teach using the Common Core State Standards?	9, 10, 18
5. What are North Dakota teachers' perceptions of implementation of the Common Core State Standards?	30, 31, 32, 33, 34, 37
6. How have North Dakota teachers changed their instructional practice as a result of the Common Core State Standards?	35, 36, 38, 39, 40, 41

Survey items used for demographic information: 2, 3, 4

Survey items not used in analysis: 11, 12, 13, 14, 15, 29

APPENDIX C. SUPPLEMENTAL FIGURES

Figure C.1. through Figure C.62. can be found on pages 122 through 183.

"I believe the new North Dakota State Standards (NDSS) in English language arts (ELA) and math (Common Core) will help ME to improve student learning for the majority of students I serve" by School Level Taught

	Strongly Disagree	Disagree	Agree	Strongly Agree	I Don't Know
Elementary	3.0%	12.5%	54.5%	15.2%	14.9%
Middle	4.6%	17.0%	52.5%	7.3%	18.5%
High	7.5%	16.4%	46.2%	6.8%	22.9%

Level of Agreement/Disagreement

Figure C.1. Beliefs in Improved Student Learning by School Level Taught. $n_{elementary} = 290$; $n_{middle} = 245$; $n_{high} = 278$.

"I believe the new North Dakota State Standards (NDSS) in English language arts (ELA) and math (Common Core) will help ME to improve student learning for the majority of students I serve" by Content Area Taught

	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
Elementary	3.4%	11.4%	11.9%	56.4%	16.9%
ELA	4.0%	17.6%	15.2%	52.8%	10.4%
Math	6.6%	14.8%	12.3%	57.4%	9.0%
Non-Tested	5.5%	20.2%	25.6%	43.3%	5.5%

Level of Agreement/Disagreement

Figure C.2. Beliefs in Improved Student Learning by Content Area Taught. $n_{elementary} = 236$; $n_{ELA} = 125$; $n_{math} = 122$; $n_{non\text{-}tested} = 238$.

"I believe the new North Dakota State Standards (NDSS) in English language arts (ELA) and math (Common Core) will help ME to improve student learning for the majority of students I serve" by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested)

Level of Agreement/Disagreement	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
CCSS-Tested	4.4%	13.2%	13.5%	55.8%	13.0%
Non-CCSS-Tested	5.5%	20.2%	25.6%	43.3%	5.5%

Figure C.3. Beliefs in Improved Student Learning by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} = 385; n_{non\text{-}ccss} = 238$.

"Please identify the reasons you believe that the NDSS in ELA and math will benefit the majority of the students you serve. Check all that apply" by Content Area Taught

	They will help educators focus on what is most important	They will help my school system ensure that our standards are vertically-aligned from Kindergarten through grade 12 and beyond	They will give students the opportunity to master key competencies, rather than just being superficially exposed to them	They will provide students a clearer understanding of what they must know in order to succeed	They will help educators better prepare students for college	They will help educators better prepare students to compete in the workforce	They will provide educators a manageable amount of curricular area to teach in a school year	They will ensure that a high school diploma has meaning	Other
Elementary	74.4%	66.7%	66.0%	58.3%	46.8%	41.0%	32.7%	22.4%	1.3%
ELA	72.7%	64.9%	62.3%	58.4%	50.6%	32.5%	24.7%	26.0%	2.6%
Math	74.7%	63.3%	55.7%	49.4%	59.5%	38.0%	31.6%	32.9%	6.3%
Non-tested	60.2%	53.7%	50.9%	49.1%	50.9%	47.2%	23.1%	22.2%	3.7%

Benefit of CCSS

Figure C.4. Identified Benefits of CCSS by Content Area Taught. Percentages are calculated based on the number of respondents in each category who identified at least one benefit for the Common Core State Standards. $n_{elemenatry} = 156$; $n_{ELA} = 77$; $n_{math} = 79$; $n_{non\text{-}tested} = 108$.

"Please identify the reasons you believe that the NDSS in ELA and math will benefit the majority of the students you serve. Check all that apply" by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested)

Benefit of CCSS	They will help educators focus on what is most important	They will help my school system ensure that our standards are vertically-aligned from Kindergarten through grade 12 and beyond	They will give students the opportunity to master key competencies, rather than just being superficially exposed to them	They will provide students a clearer understanding of what they must know in order to succeed	They will help educators better prepare students for college	They will help educators better prepare students to compete in the workforce	They will provide educators a manageable amount of curricular area to teach in a school year	They will ensure that a high school diploma has meaning	Other
CCSS-Tested	73.7%	64.8%	62.3%	57.5%	50.2%	37.2%	29.6%	23.9%	3.6%
Non-CCSS-Tested	60.2%	53.7%	50.9%	49.1%	50.9%	47.2%	23.1%	22.2%	3.7%

Figure C.5. Identified Benefits of CCSS by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). Percentages are calculated based on the number of respondents in each category who identified at least one benefit for the Common Core State Standards. $n_{ccss} = 247$; $n_{non-ccss} = 108$.

"Please identify the reasons you believe that the NDSS in ELA and math will not benefit the majority of the students you serve. Check all that apply" by Content Area Taught

	The new standards embraces "one size fits all" approach that will not help many students I teach	The standards do not provide educators the flexibility to help students who are not at grade level	The new standards are too rigorous for many of the students I teach	The new standards exclude important concepts that students should learn	Our previous state standards were better than the new ones	Other
Elementary	50.0%	46.4%	42.9%	30.4%	8.9%	25.0%
ELA	55.3%	47.4%	42.1%	26.3%	15.8%	23.7%
Math	55.6%	66.7%	44.4%	27.8%	19.4%	25.0%
Non-tested	58.7%	41.3%	25.3%	26.7%	14.7%	18.7%

Non-Benefit of CCSS

Figure C.6. Identified Non-Benefits of CCSS by Content Area Taught. Percentages are calculated based on the number of respondents in each category who identified at least one non-benefit for the Common Core State Standards. $n_{elementary} = 56$; $n_{ELA} = 38$; $n_{math} = 36$; $n_{non-tested} = 67$.
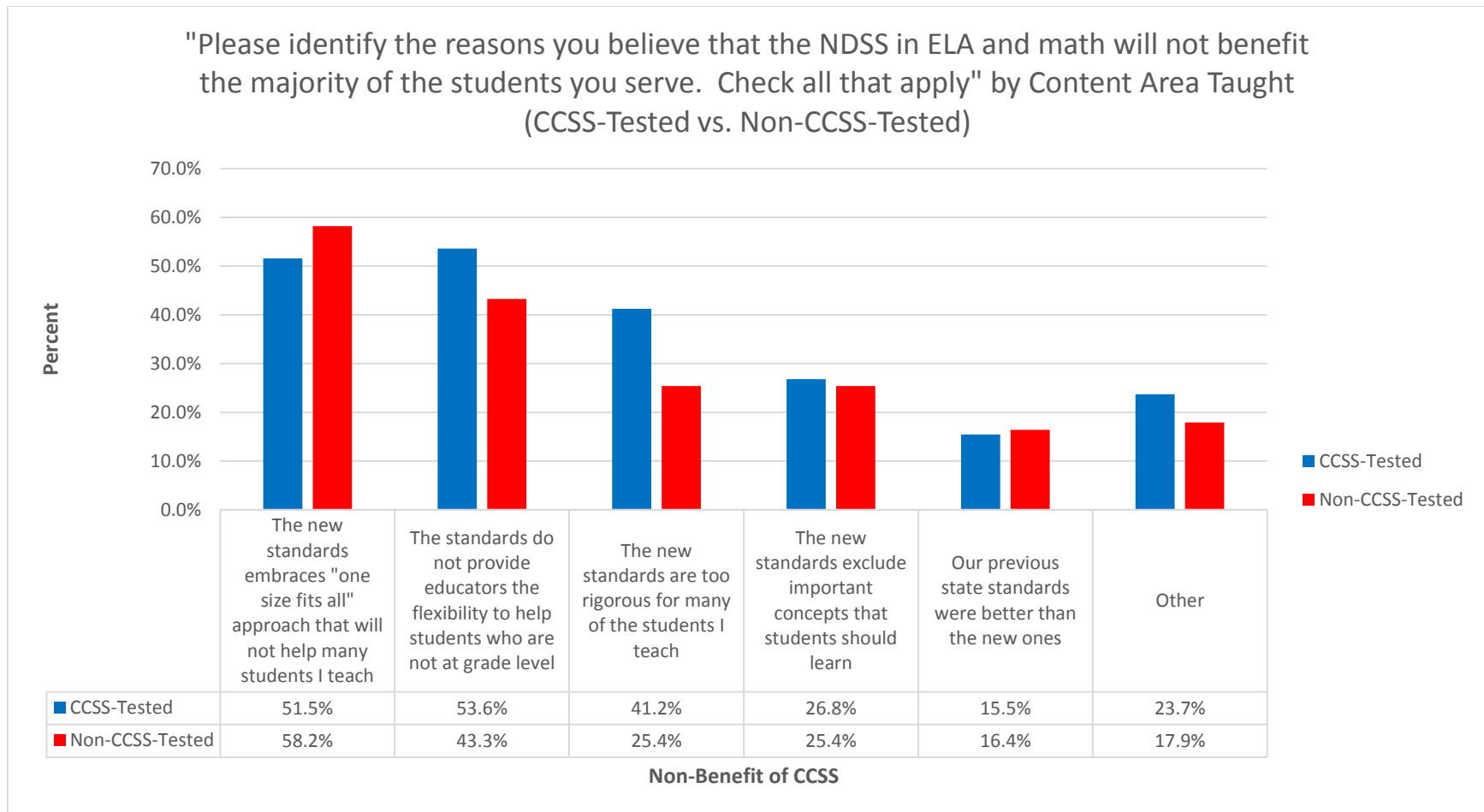
Figure C.7. Identified Non-Benefits of CCSS by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). Percentages are calculated based on the number of respondents in each group who identified at least one non-benefit for the Common Core State Standards. $n_{ccss} = 97$; $n_{non-ccss} = 67$.
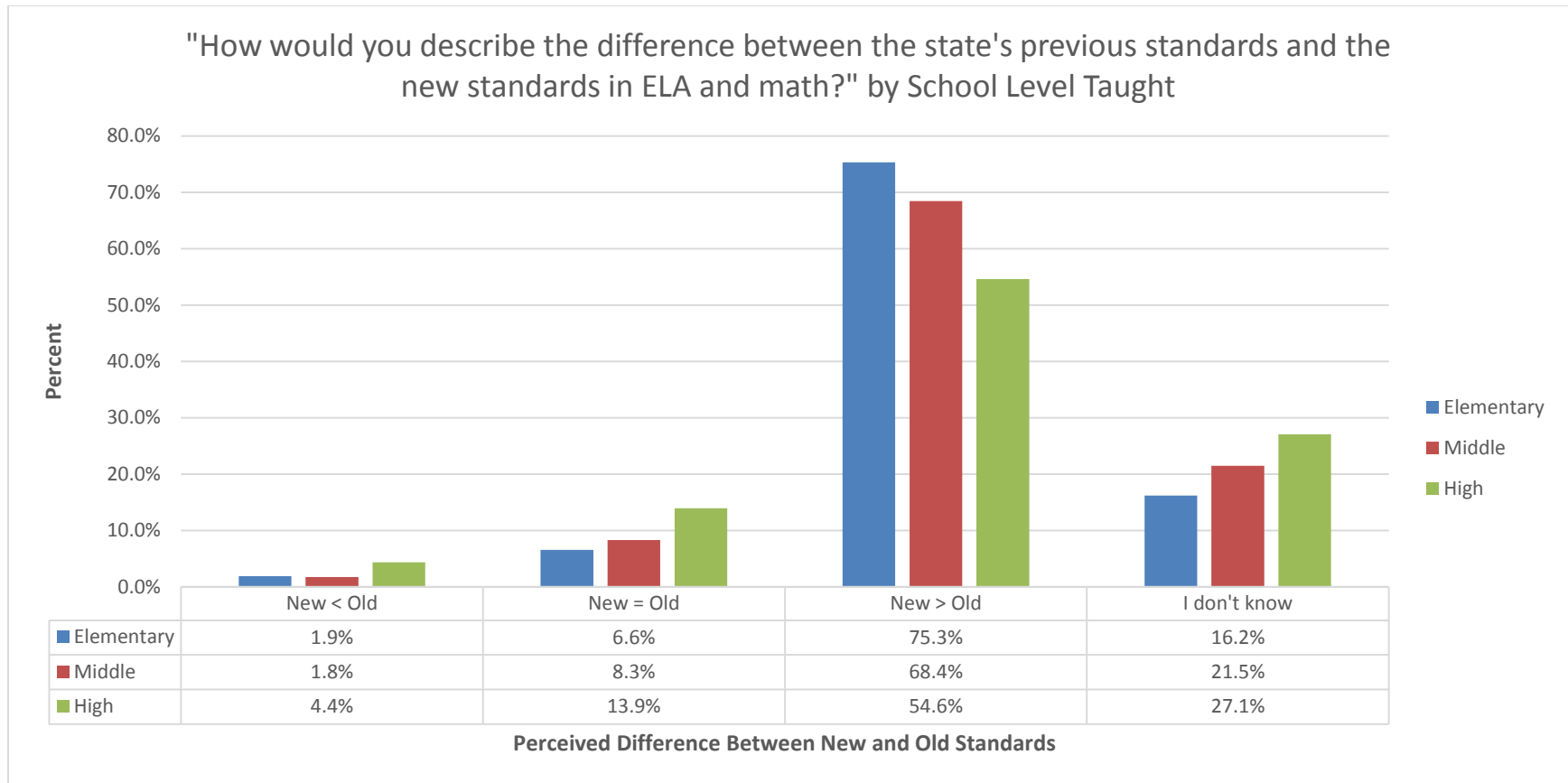
Figure C.8. Perceived Difference Between CCSS and the Previous State Standards by School Level Taught. $n_{elementary} = 259$; $n_{middle} = 228$; $n_{high} = 251$.

"How would you describe the difference between the state's previous standards and the new standards in ELA and math?" by Content Area Taught

	New < Old	New = Old	New > Old	I don't know
Elementary	1.89%	8.02%	78.30%	11.79%
ELA	4.10%	18.03%	68.03%	9.84%
Math	3.42%	8.55%	78.63%	9.40%
Non-tested	3.52%	8.37%	53.74%	34.36%

Perceived Difference Between New and Old Standards
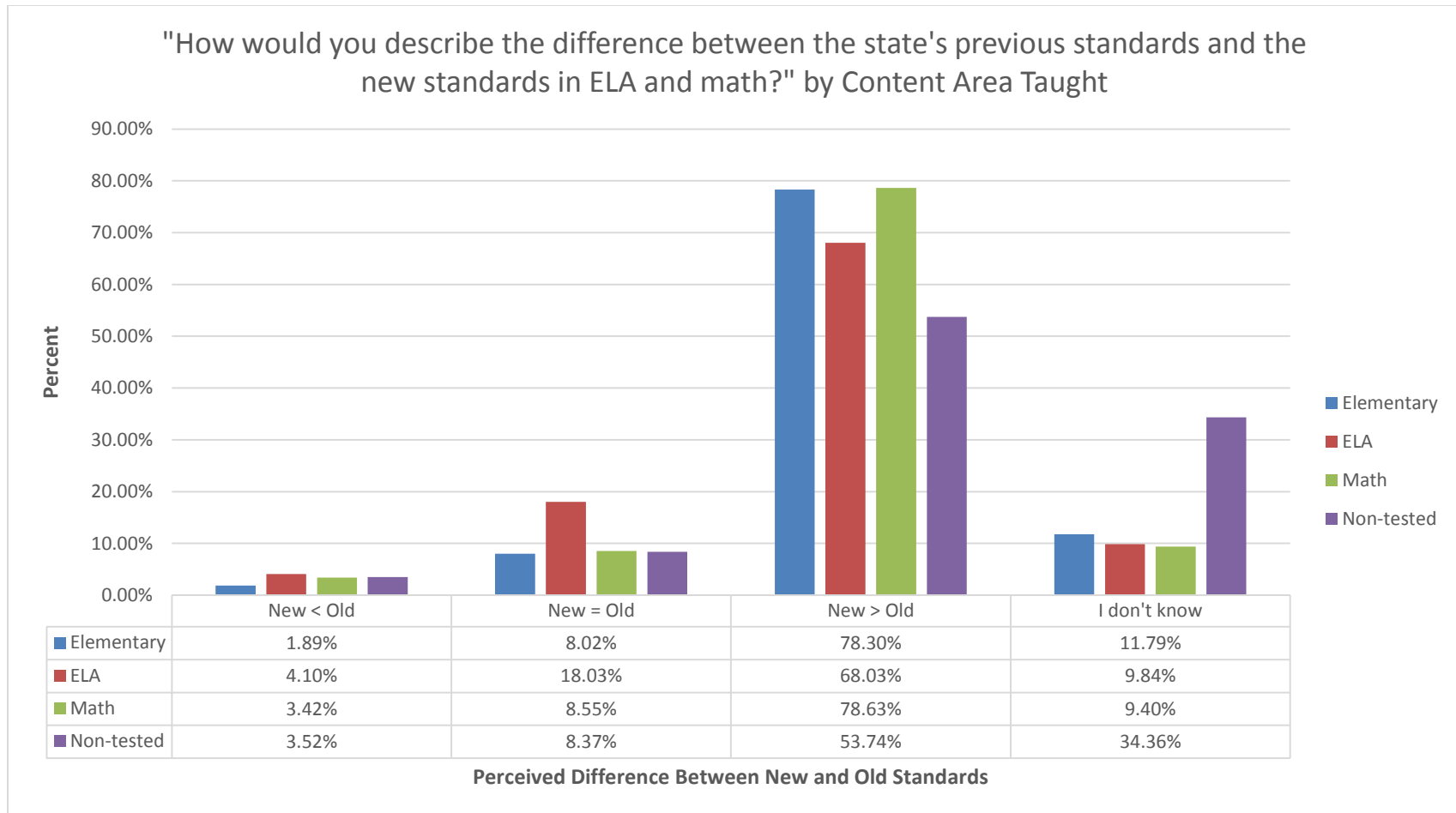
Figure C.9. Perceived Difference Between CCSS and the Previous State Standards by Content Area Taught. $n_{elementary}$ = 208; n_{ELA} = 119; n_{math} = 116; $n_{non-tested}$ = 210.
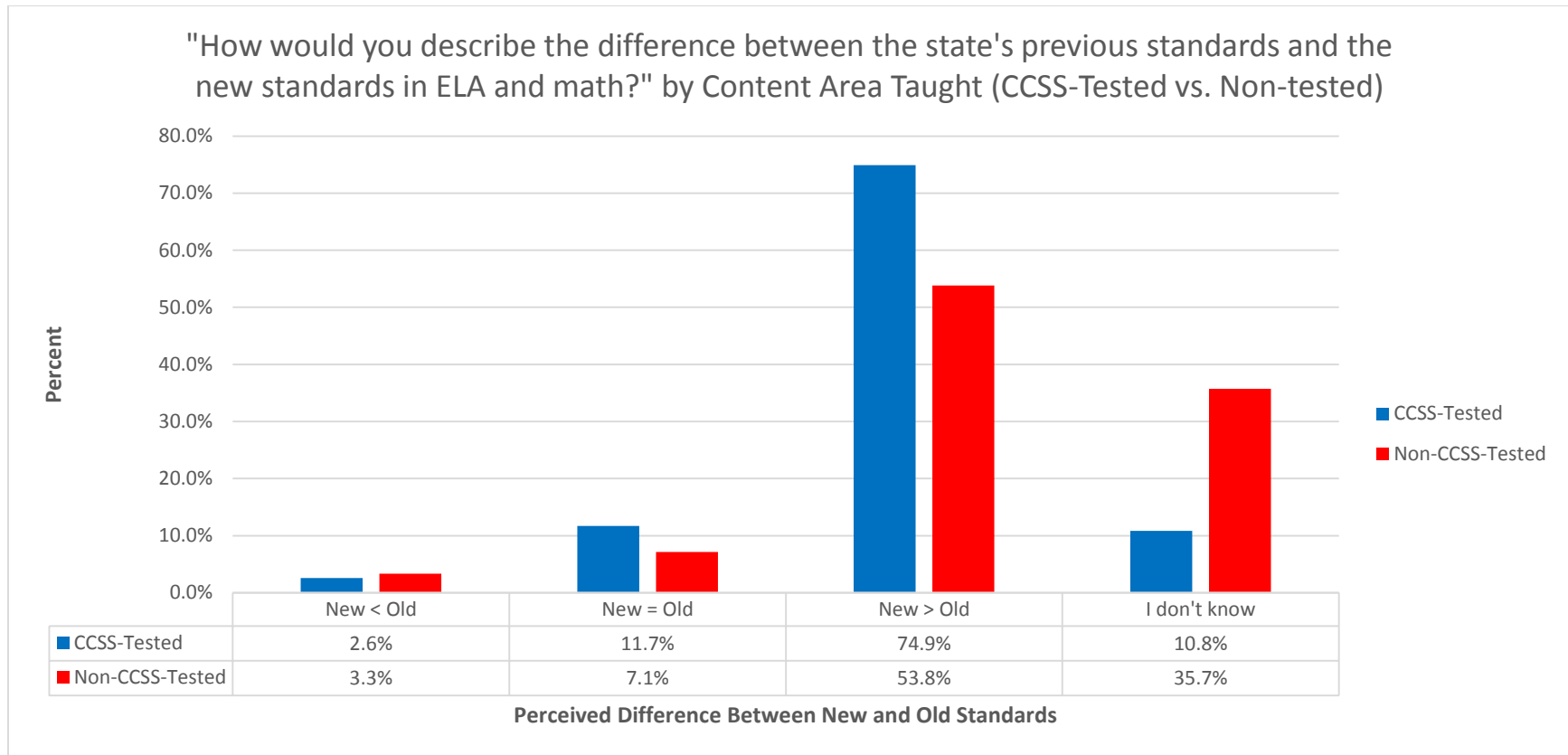
Figure C.10. Perceived Difference Between CCSS and the Previous State Standards by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} = 351$; $n_{non\text{-}ccss} = 210$.
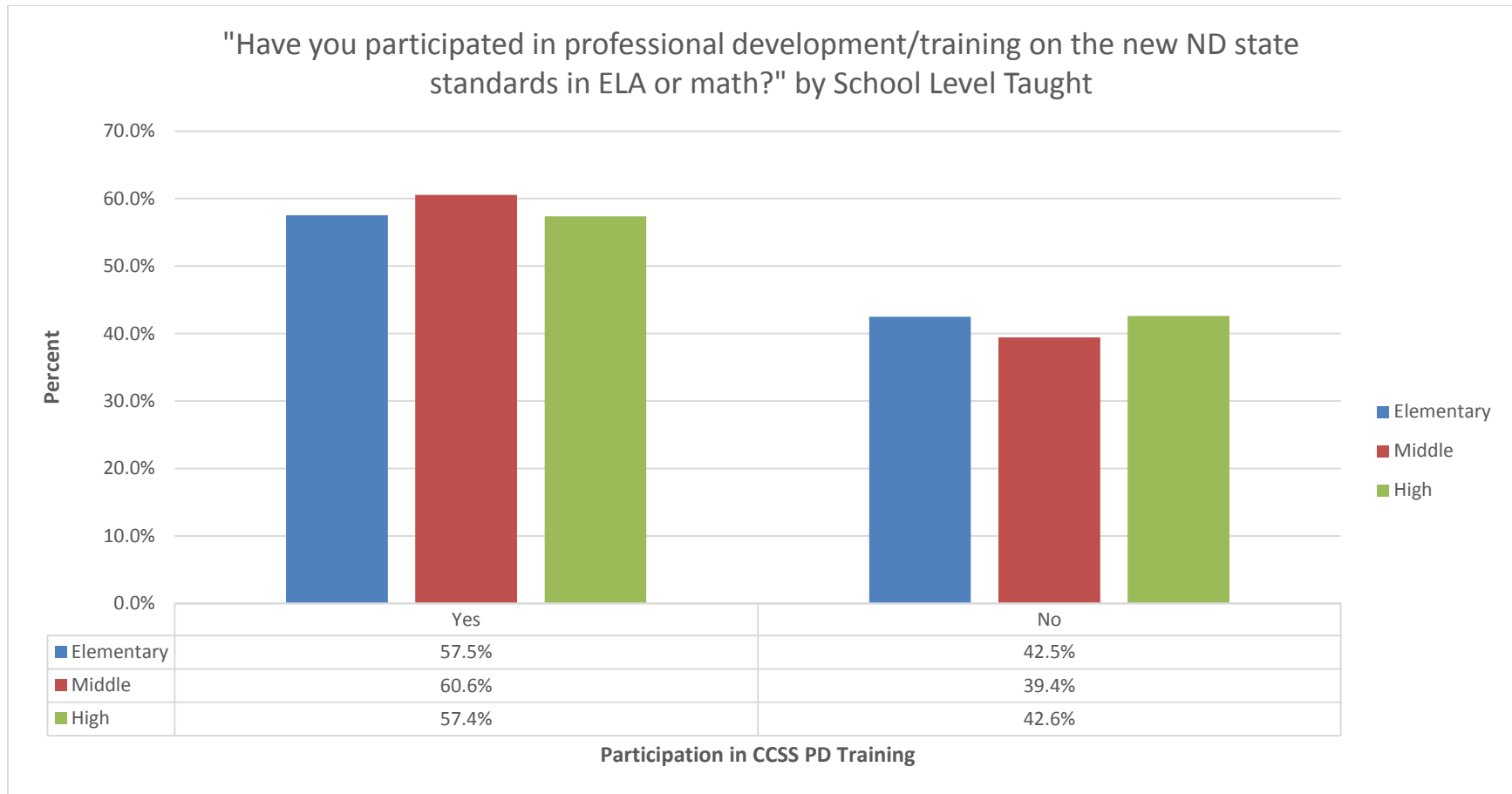
Figure C.11. Participation in CCSS Professional Development Training by School Level Taught. $n_{elementary} = 186$; $n_{middle} = 180$; $n_{high} = 190$.
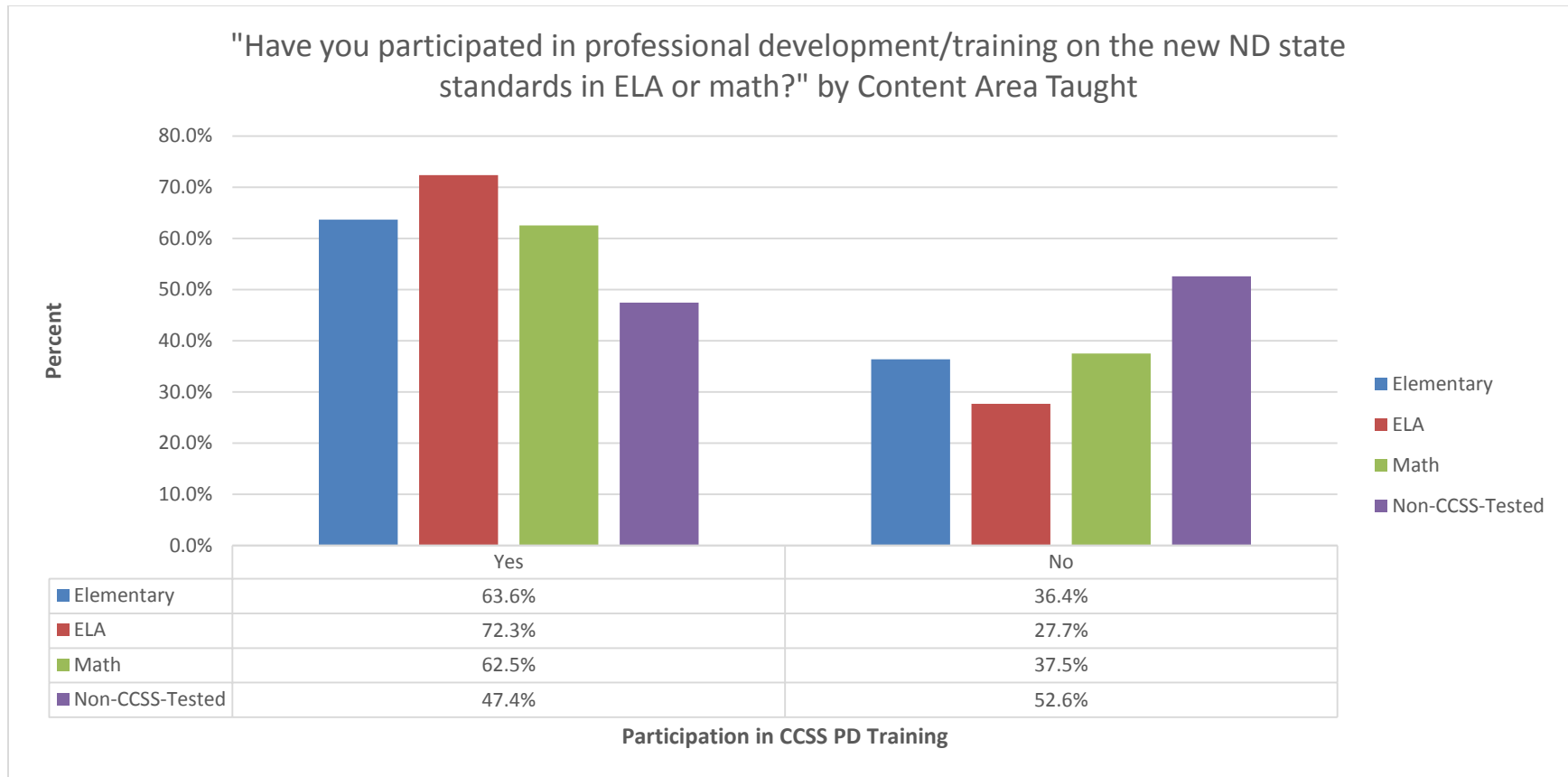
Figure C.12. Participation in CCSS Professional Development Training by Content Area Taught. $n_{elementary} = 154$; $n_{ELA} = 94$; $n_{math} = 88$; $n_{non-tested} = 156$.

"How would you describe those professional development/training opportunities? Check all that apply" by School Level Taught

	One-day training opportunity	Multi-day training opportunity	Online webinar or video	Job-embedded training or coaching within my school	Professional learning community (PLC)	Other
Elementary	59.4%	37.7%	40.6%	33.0%	7.5%	2.8%
Middle	54.1%	46.8%	27.5%	16.5%	7.3%	3.7%
High	52.8%	43.5%	35.2%	17.6%	5.6%	4.6%

Type of PD Training

Figure C.13. Type of CCSS Professional Development Training Received by School Level Taught. Percentages are calculated based on the number of respondents indicating having participated in at least one type of training for each group. $n_{elementary} = 106$; $n_{middle} = 109$; $n_{high} = 108$.
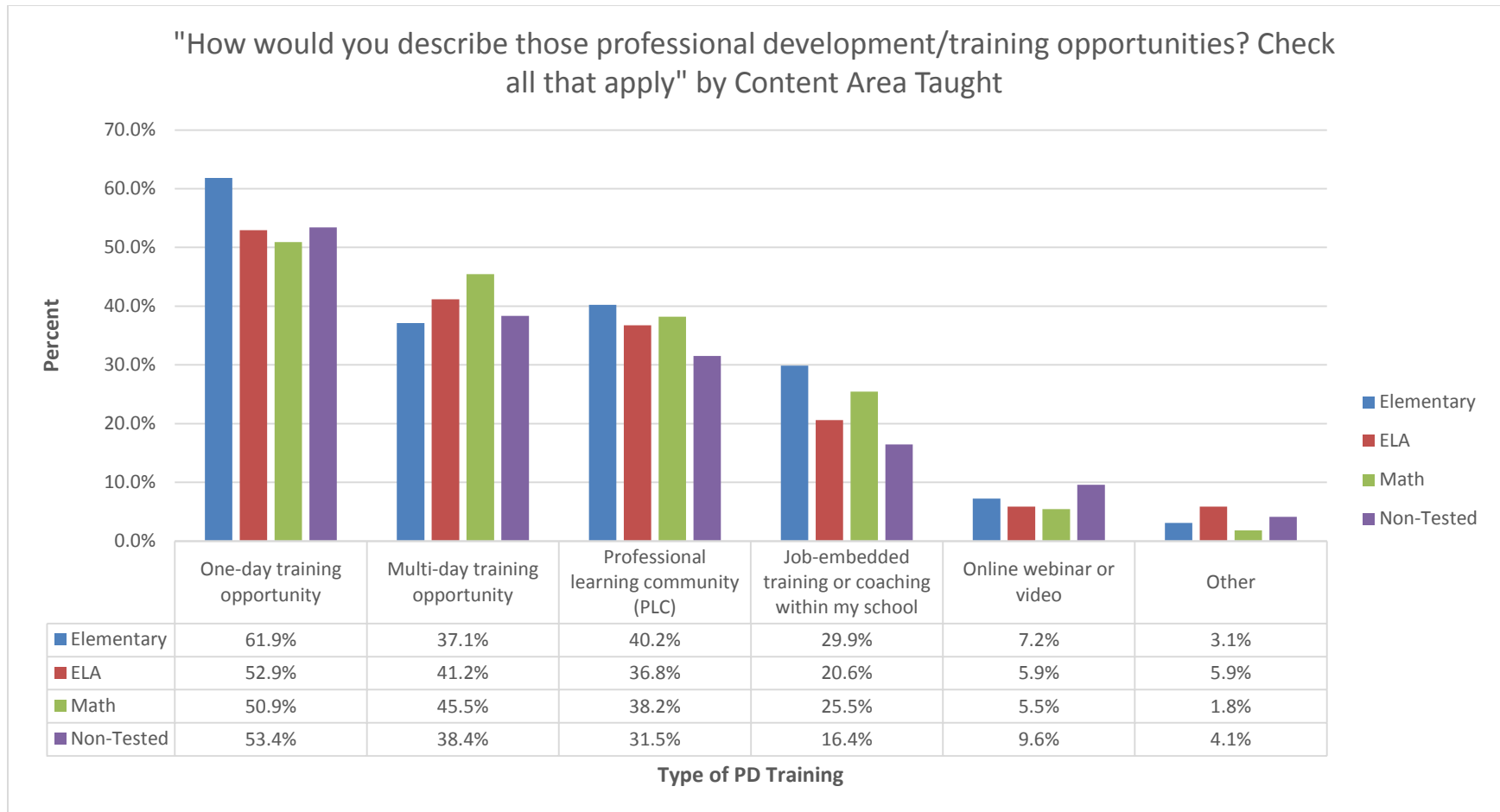
Figure C.14. Type of CCSS Professional Development Training Received by Content Area Taught. Percentages are calculated based on the number of respondents indicating having participated in at least one type of training for each group. $n_{elementary} = 97$; $n_{ELA} = 68$; $n_{math} = 55$; $n_{non\text{-}tested} = 73$.

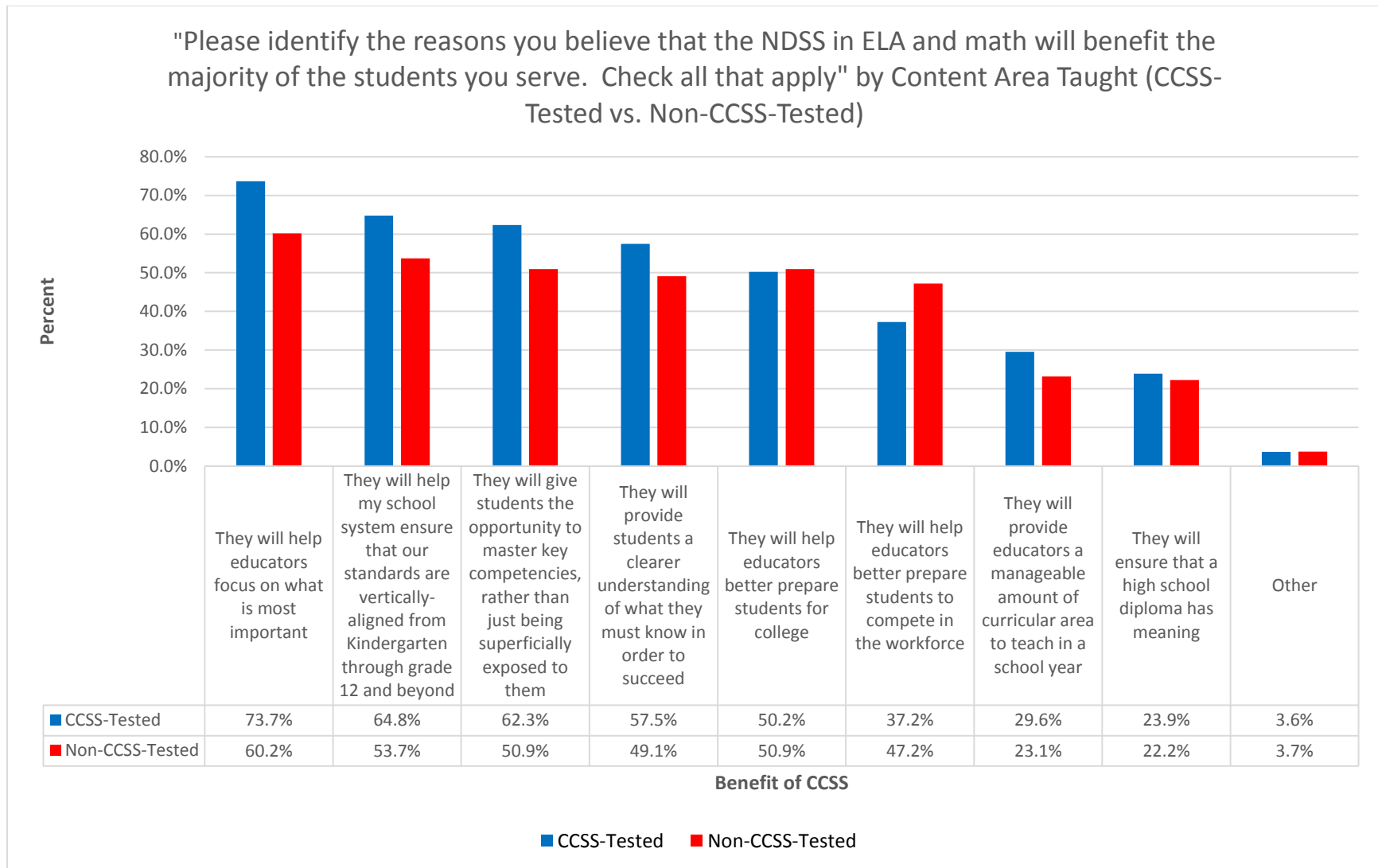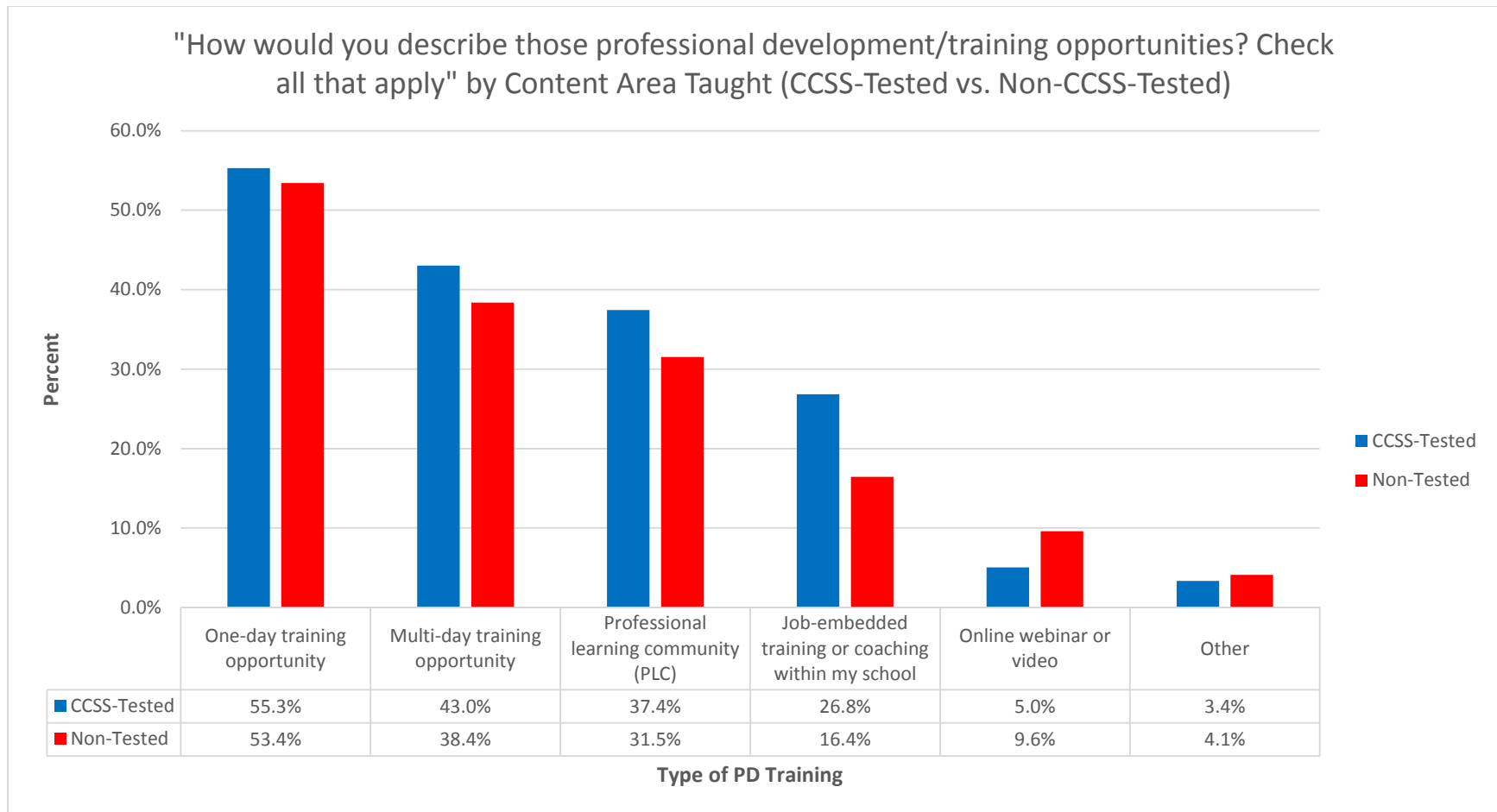*Figure C.15.* Type of CCSS Professional Development Training Received by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). Percentages are calculated based on the number of respondents indicating having participated in at least one type of training for each group. $n_{ccss} = 179$; $n_{non\text{-}ccss} = 73$.
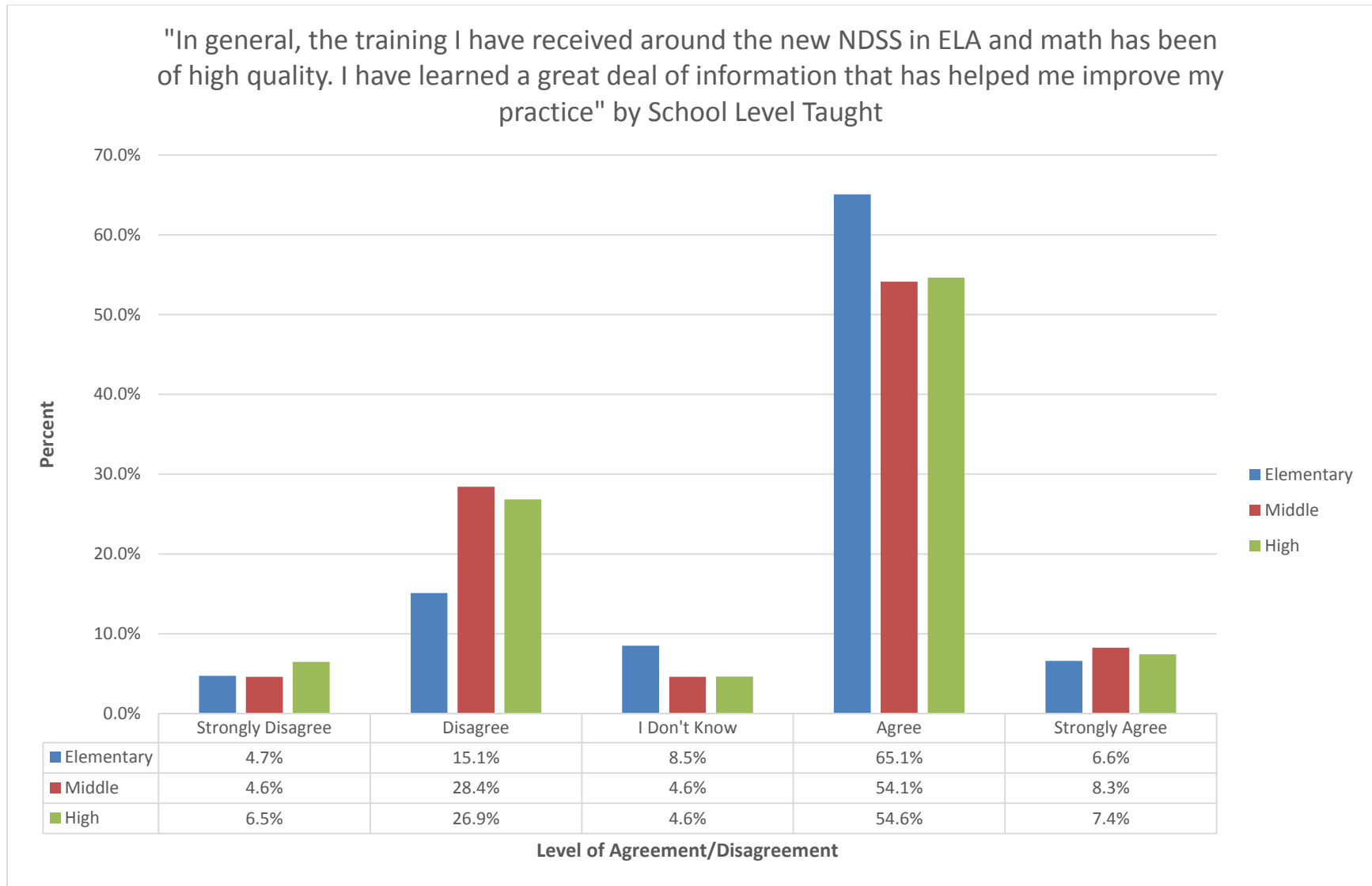
Figure C.16. Quality of CCSS Professional Development Training Received by School Level Taught. $n_{elementary} = 106$; $n_{middle} = 109$; $n_{high} = 108$.

"In general, the training I have received around the new NDSS in ELA and math has been of high quality. I have learned a great deal of information that has helped me improve my practice" by Content Area Taught

	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
Elementary	6.2%	18.6%	8.2%	61.9%	5.2%
ELA	5.9%	32.4%	4.4%	51.5%	5.9%
Math	5.5%	25.5%	3.6%	54.5%	10.9%
Non-Tested	6.8%	26.0%	9.6%	53.4%	4.1%

Level of Agreement/Disagreement

Figure C.17. Quality of CCSS Professional Development Training Received by Content Area Taught. $n_{elementary} = 97$; $n_{ELA} = 68$; $n_{math} = 55$; $n_{non-tested} = 73$.
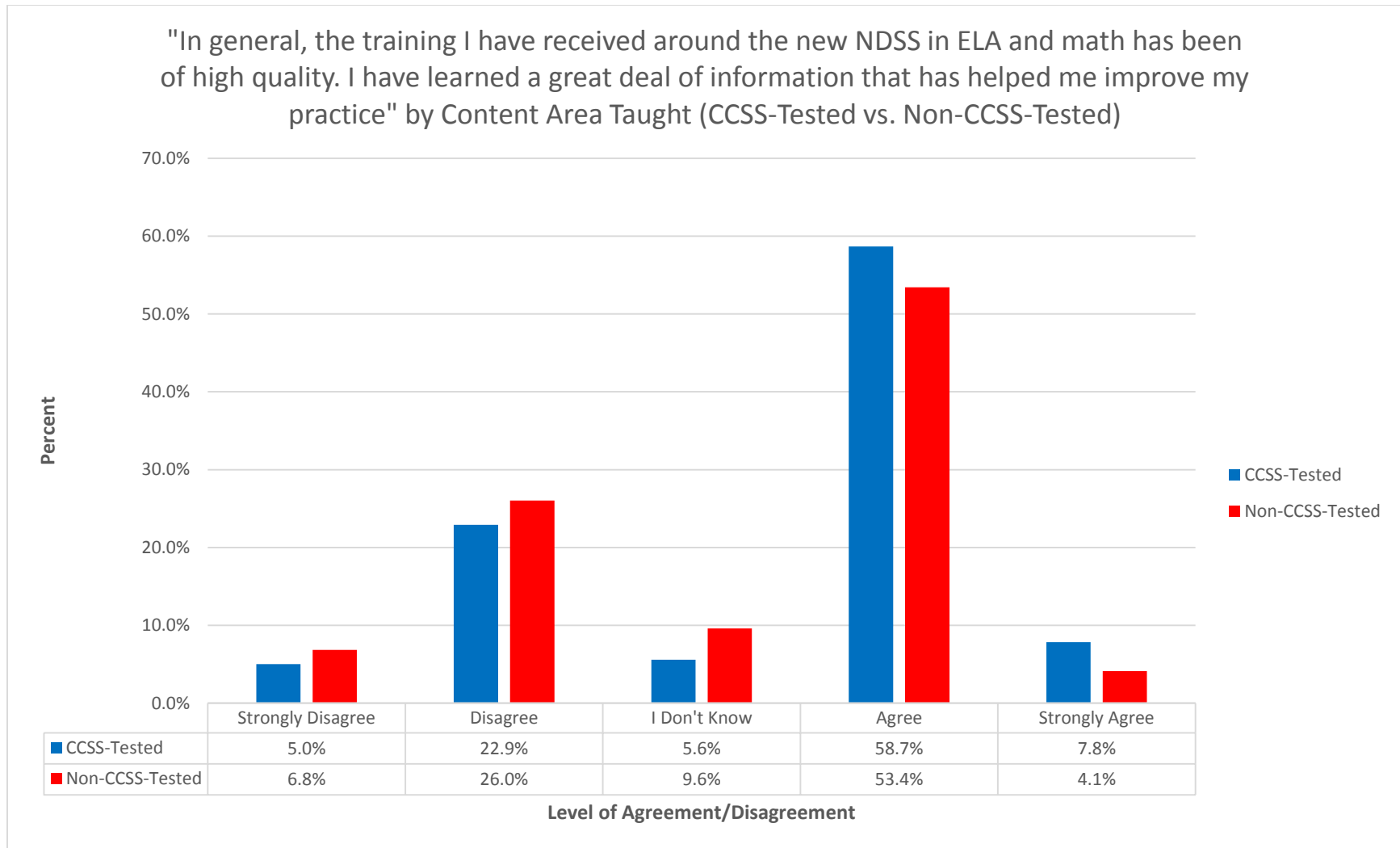
Figure C.18. Quality of CCSS Professional Development Training Received by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} = 179$; $n_{non-ccss} = 73$.
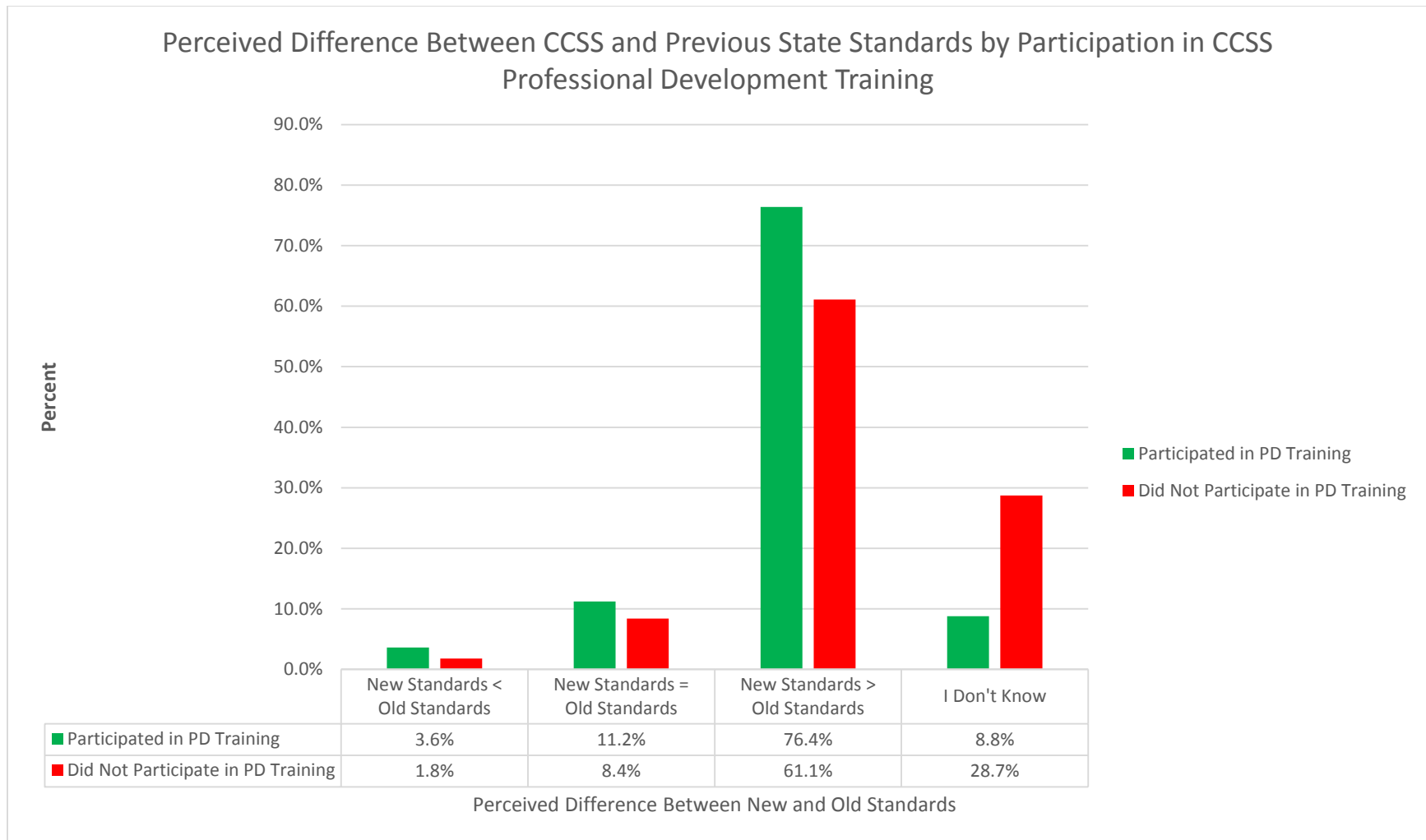
Figure C.19. Perceived Difference Between CCSS and the Previous State Standards by Participation in CCSS Professional Development Training. $n_{\text{participated}} = 250$; $n_{\text{not participated}} = 167$.
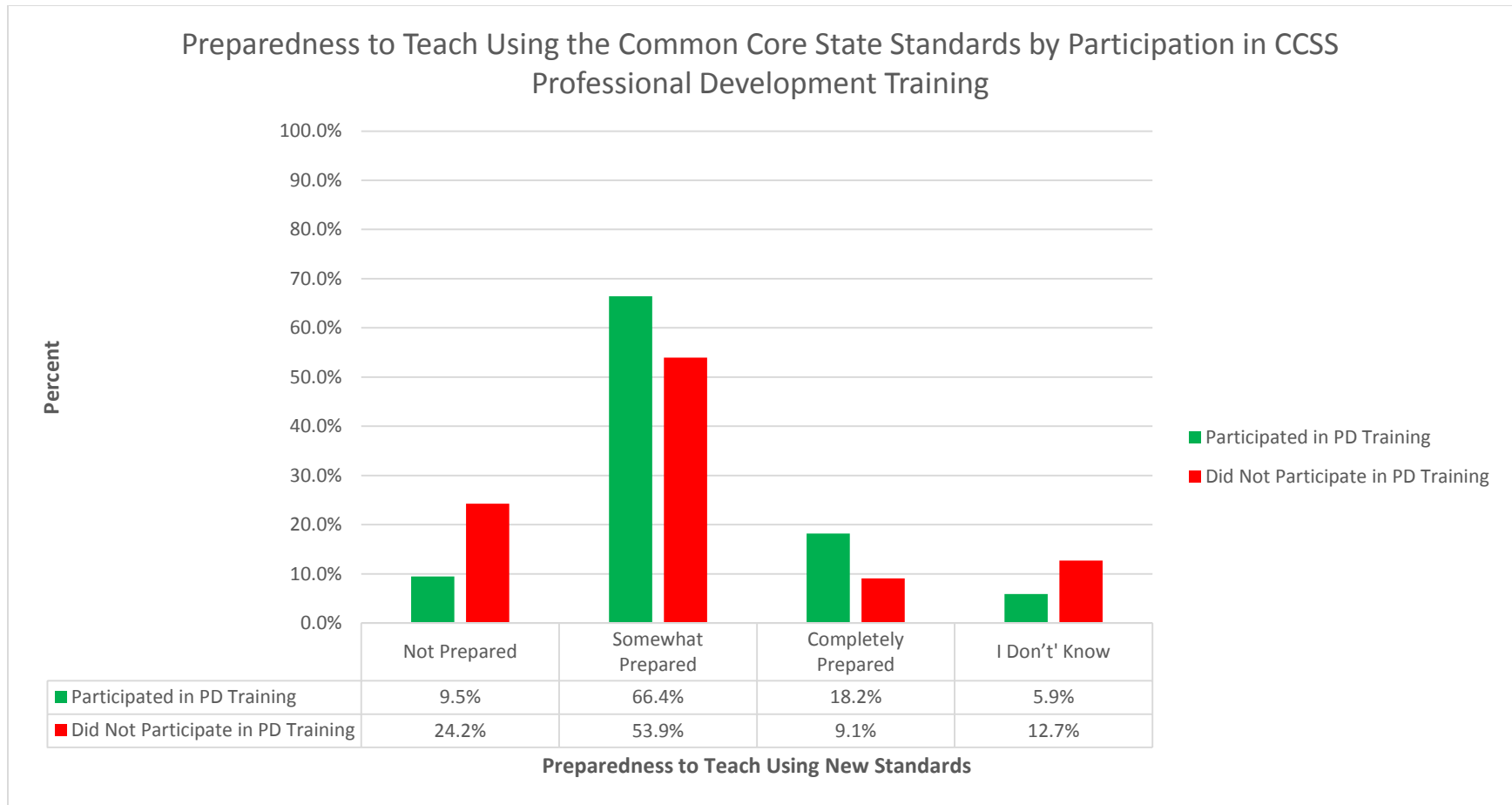
Figure C.20. Preparedness to Teach Using the Common Core State Standards by Participation in CCSS Professional Development Training. $n_{participated} = 263$; $n_{not\ participated} = 165$.

Belief that CCSS Will Help Me to Improve Student Learning by Participation in CCSS Professional Development Training

	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
■ Participated in PD Training	3.1%	15.0%	15.4%	53.5%	13.0%
■ Did Not Participate in PD Training	7.1%	19.6%	19.6%	45.8%	7.7%

Participated in PD Training
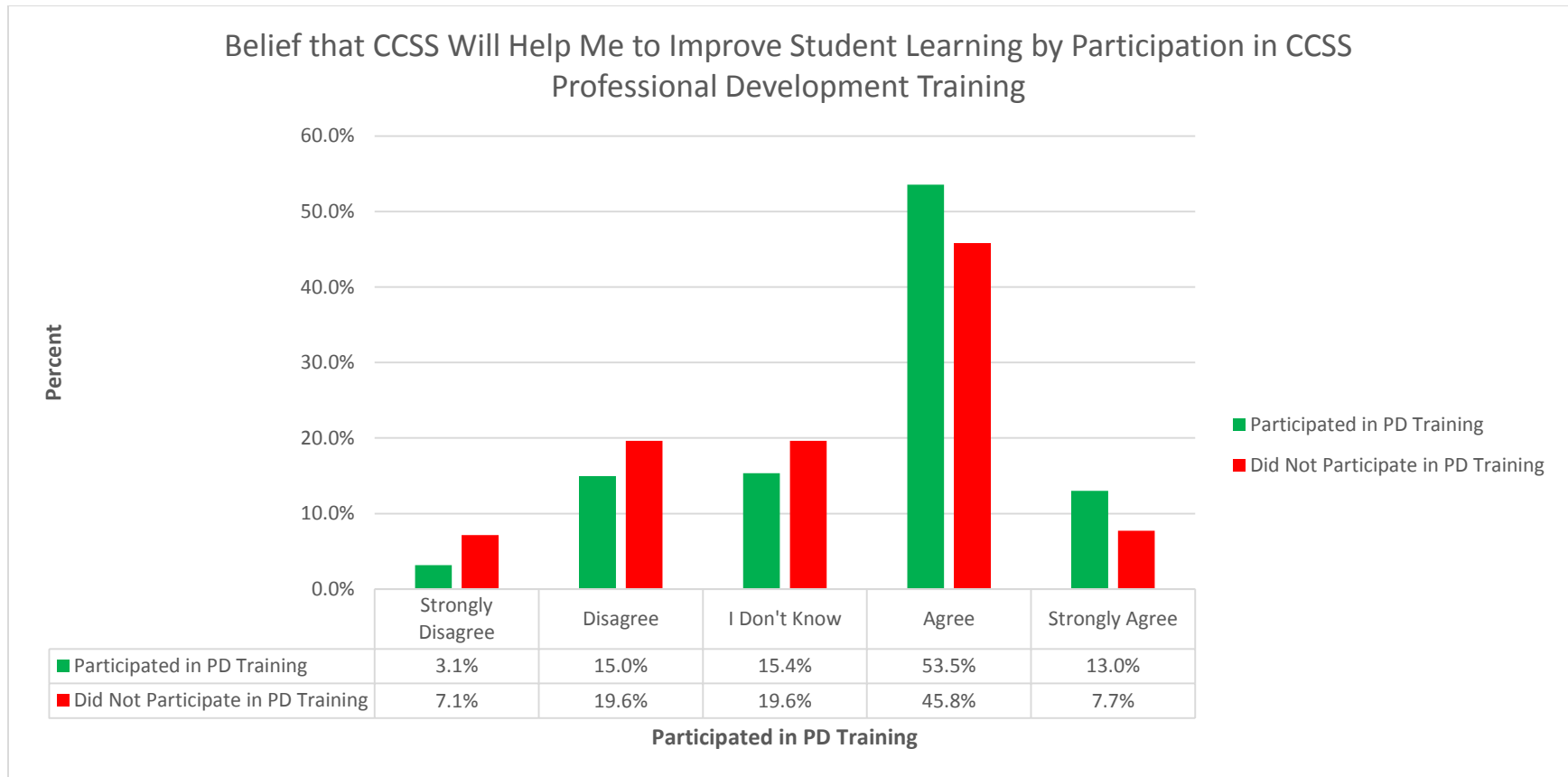
Figure C.21. Belief that CCSS Will Help Me to Improve Student Learning by Participation in CCSS Professional Development Training. $n_{\text{participated}} = 254$; $n_{\text{not participated}} = 168$.
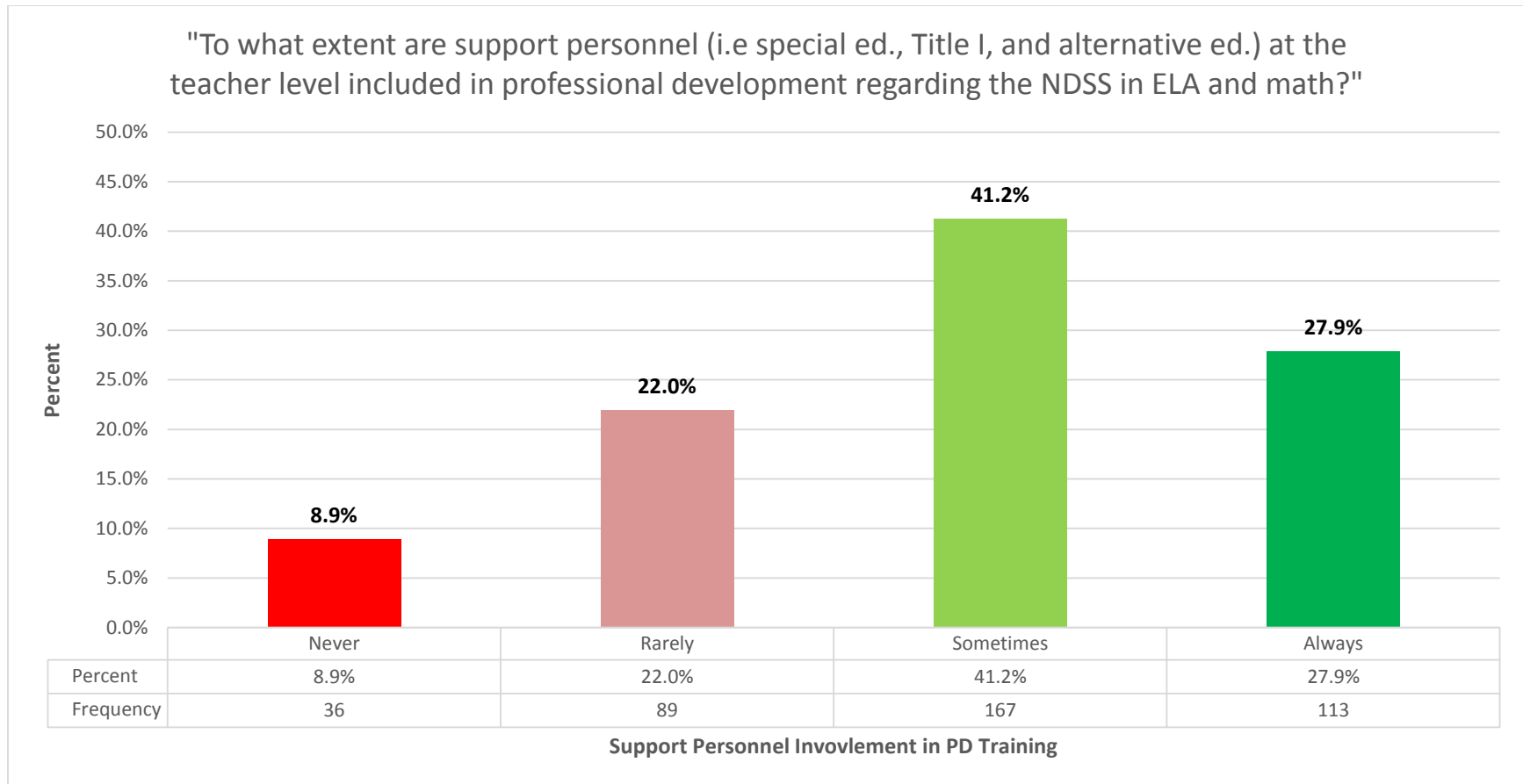
Figure C.22. Teacher Support Personnel Involvement in Professional Development Training. $n = 405$.
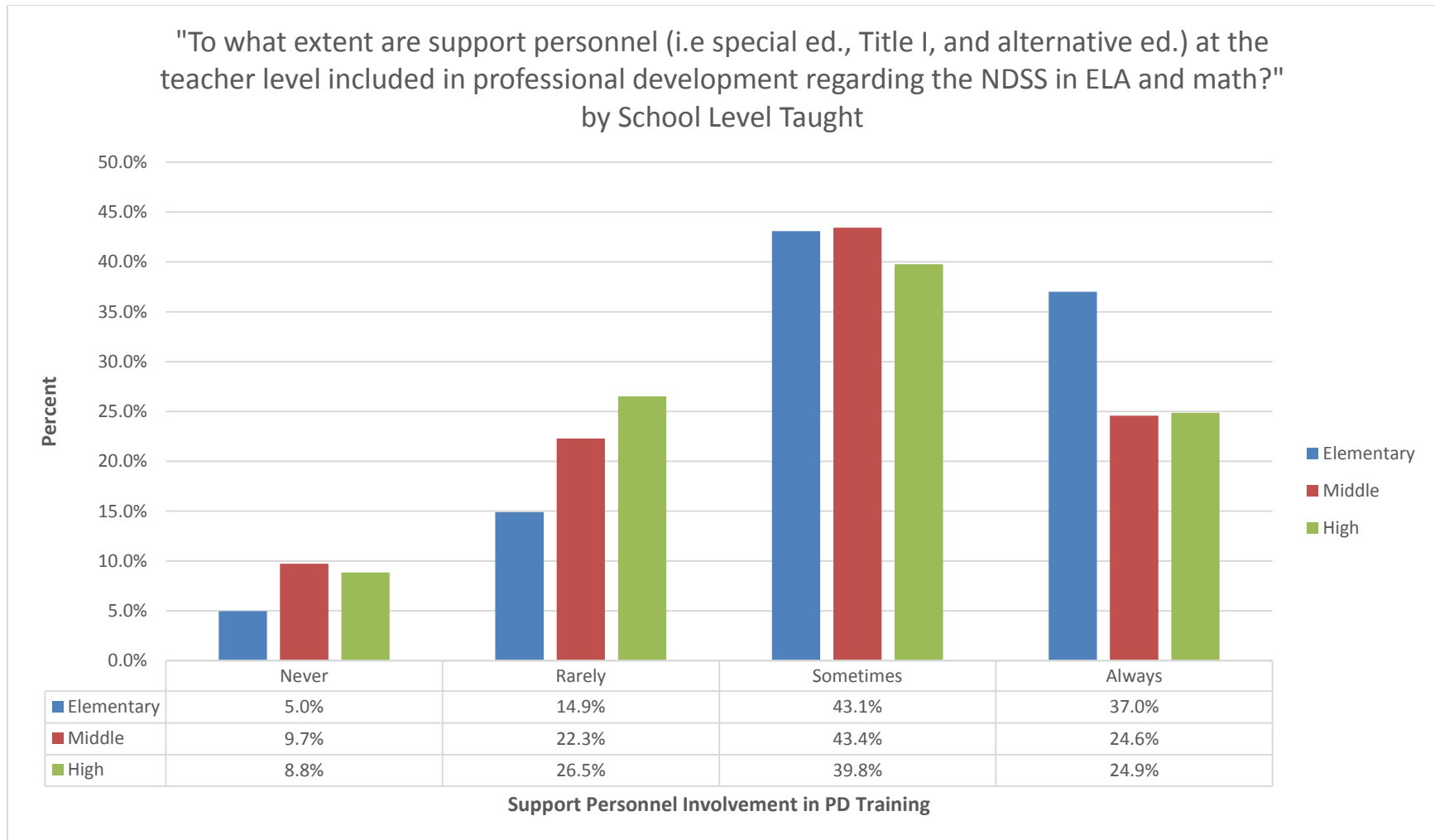
Figure C.23. Teacher Support Personnel Involvement in Professional Development Training by School Level Taught. $n_{elementary}$ = 181; n_{middle} = 175; n_{high} = 181.

"To what extent are support personnel (i.e special ed., Title I, and alternative ed.) at the teacher level included in professional development regarding the NDSS in ELA and math?" by Content Area Taught

Support Personnel Involvement in PD Training	Never	Rarely	Sometimes	Always
Elementary	6.0%	16.0%	42.7%	35.3%
ELA	13.2%	23.1%	38.5%	25.3%
Math	9.2%	27.6%	36.8%	26.4%
Non-Tested	8.8%	20.4%	44.2%	26.5%
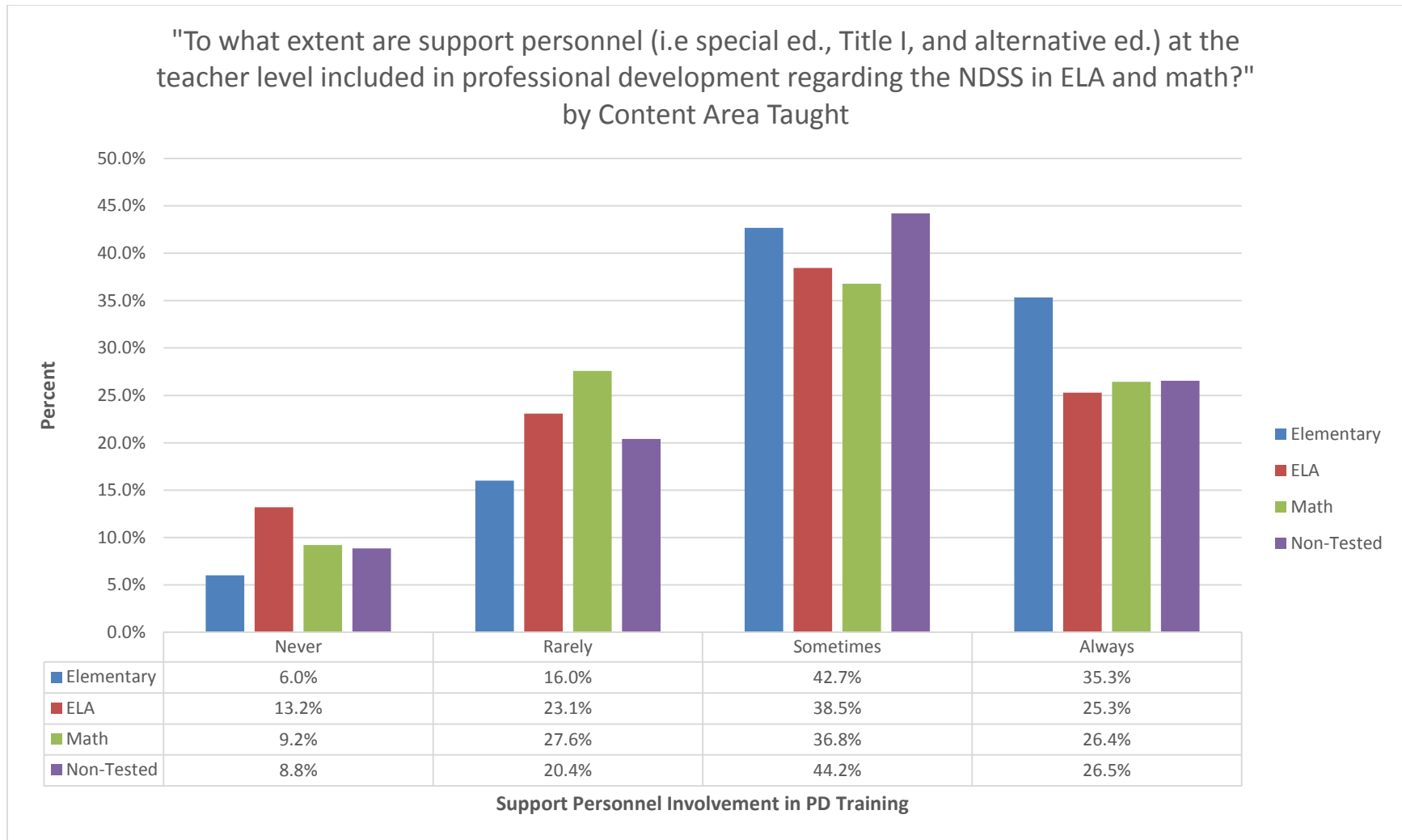
Figure C.24. Teacher Support Personnel Involvement in Professional Development Training by Content Area Taught. $n_{elementary}$ = 150; n_{ELA} = 91; n_{math} = 87; $n_{non\text{-}tested}$ = 147.
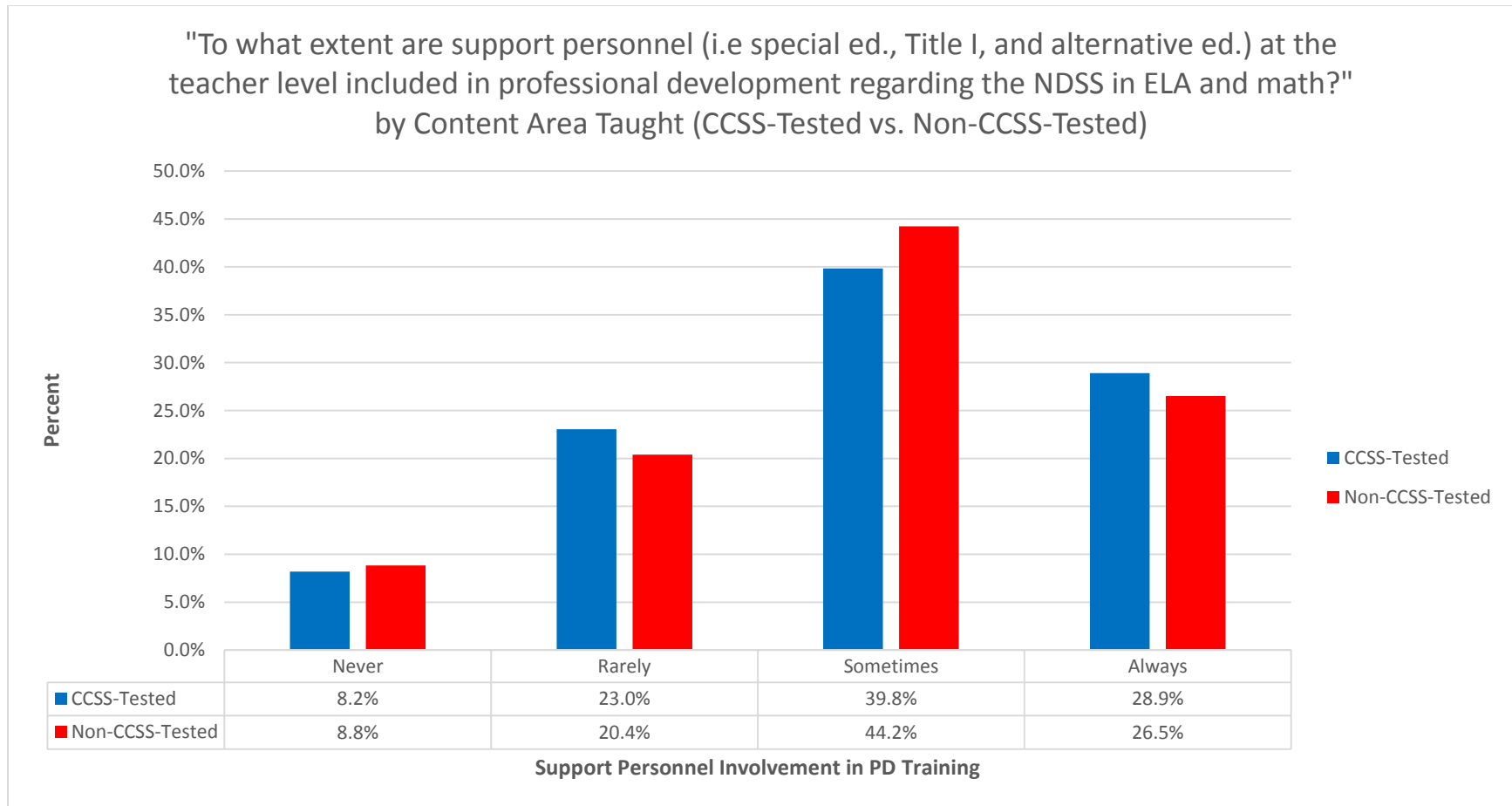
Figure C.25. Teacher Support Involvement in Professional Development Training by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{\text{ccss}} = 256$; $n_{\text{non-ccss}} = 147$.

"Please identify which, if any, of the following activities/resources have been made available to you. Check all that apply" by Content Area Taught

Resouce Available	Collaborative planning time dedicated to understanding and deconstructing the new state standards	Collaborative planning time dedicated to aligning curriculum to the new state standards	Professional learning community focused on implementation of the new state standards	Content-focused trainings on the new state standards	Resources on research/best practice on implementation of the new state standards	Lesson plans aligned to the new state standards	Job-embedded training or coaching focused on implementation of the new state standards	None of the above	Other
Elementary	54.1%	45.3%	48.6%	35.1%	29.7%	29.1%	25.7%	11.5%	5.4%
ELA	55.6%	53.3%	43.3%	35.6%	24.4%	24.4%	15.6%	14.4%	7.8%
Math	57.6%	54.1%	49.4%	35.3%	24.7%	28.2%	18.8%	10.6%	4.7%
Non-Tested	41.5%	38.0%	42.3%	30.3%	28.2%	21.8%	16.9%	14.1%	2.8%

Figure C.26. CCSS Activities/Resources Available by Content Area Taught. Percentages are calculated based on the number of respondents who indicated at least one activity/resource made available to them for each group. $n_{elementary} = 148$; $n_{ELA} = 90$; $n_{math} = 85$; $n_{non\text{-}tested} = 142$.
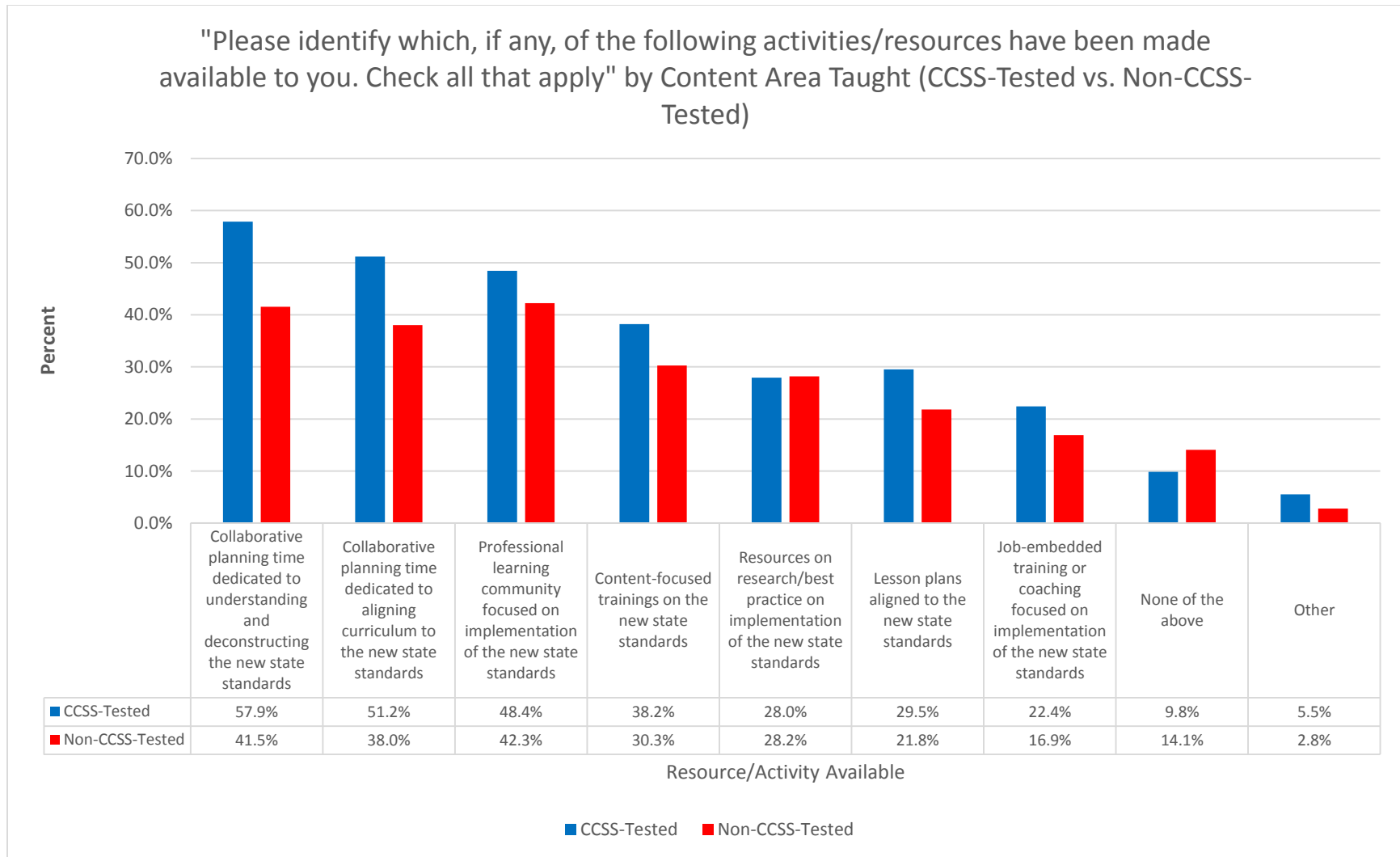
Figure C.27. CCSS Activities/Resources Available by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). Percentages are calculated based on the number of respondents who indicated at least one activity/resource made available to them for each group. $n_{ccss} = 254$; $n_{non\text{-}ccss} = 142$.

"Have you accessed any of the following for resources about North Dakota standards implementation? For those that you have accessed, please rate their quality" by Resource Accessed and Level of Helpfulness

	ND Curriculum Initiative Website	Department of Public Instruction Website	ND United	REA Website	REA Provided PD	Other Educational Websites (Learnzillion, Achievethecore, etc)
■ Very Helpful	31.2%	25.4%	14.6%	28.6%	46.4%	72.9%
■ Somewhat Helpful	66.7%	71.6%	73.2%	57.1%	32.1%	25.7%
■ Not Helpful	2.2%	3.0%	12.2%	14.3%	21.4%	1.4%
n	138	197	41	28	28	70
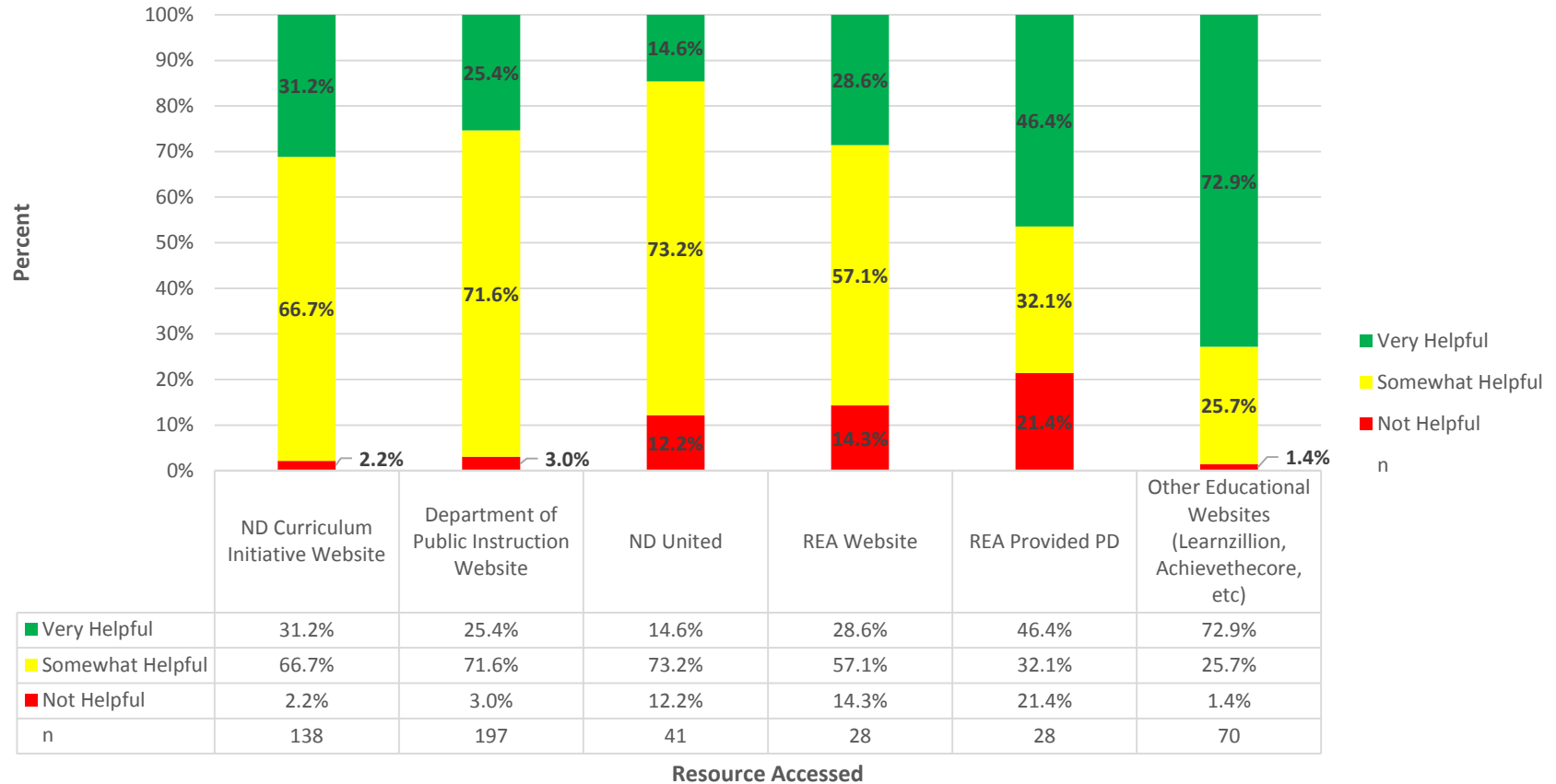
Resource Accessed

Figure C.28. Resources Accessed for CCSS Implementation Information by Level of Helpfulness.

"When you accessed the resources listed above what information were you looking for? (check all that apply)" by School Level Taught

	Instructional materials aligned to the standards	Link to the specific standards	Links to supplemental materials (e.g., curriculum guides, exemplars from other states)	Fact sheets, talking points, or powerpoints to pass on to staff, parents, the public about Common Core	Powerpoints of specific Common Core webinars to review or adapt for redelivery	Reminders about implementation timeline	Other
Elementary	62.8%	67.3%	50.6%	24.4%	13.5%	16.7%	3.2%
Middle	73.4%	59.1%	55.8%	21.4%	14.3%	11.7%	5.2%
High	63.8%	67.1%	54.6%	19.1%	13.8%	7.2%	6.6%

CCSS Information Sought

Figure C.29. CCSS Implementation Information Sought by School Level Taught. Percentages are calculated based on the number of respondents who indicated searching for at least one type of information for each group. $n_{elementary} = 156$; $n_{middle} = 154$; $n_{high} = 152$.

	Instructional materials aligned to the standards	Link to the specific standards	Links to supplemental materials (e.g., curriculum guides, exemplars from other states)	Fact sheets, talking points, or powerpoints to pass on to staff, parents, the public about Common Core	Reminders about implementation timeline	Powerpoints of specific Common Core webinars to review or adapt for redelivery	Other
Elementary	66.9%	70.0%	53.1%	24.6%	16.9%	12.3%	2.3%
ELA	73.1%	73.1%	57.7%	11.5%	10.3%	5.1%	7.7%
Math	77.6%	68.7%	62.7%	14.9%	13.4%	9.0%	7.5%
Non-Tested	55.6%	57.3%	47.0%	24.8%	11.1%	13.7%	6.0%

CCSS Information Sought

Figure C.30. CCSS Implementation Information Sought by Content Area Taught. Percentages are calculated based on the number of respondents who indicated searching for at least one type of information for each group. $n_{elementary} = 130$; $n_{ELA} = 78$; $n_{math} = 67$; $n_{non-tested} = 117$.

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Figure C.31. CCSS Implementation Information Sought by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). Percentages are calculated based on the number of respondents who indicated searching for at least one type of information for each group. $n_{ccss} = 224$; $n_{non\text{-}ccss} = 117$.

"Is there a staff member in your school or district who has been identified as a resource on the Common Core state standards for teachers?"

Staff Identified as Resource for CCSS	No	Yes	I Don't Know
Percent	29.4%	31.3%	39.4%
Frequency	123	131	165
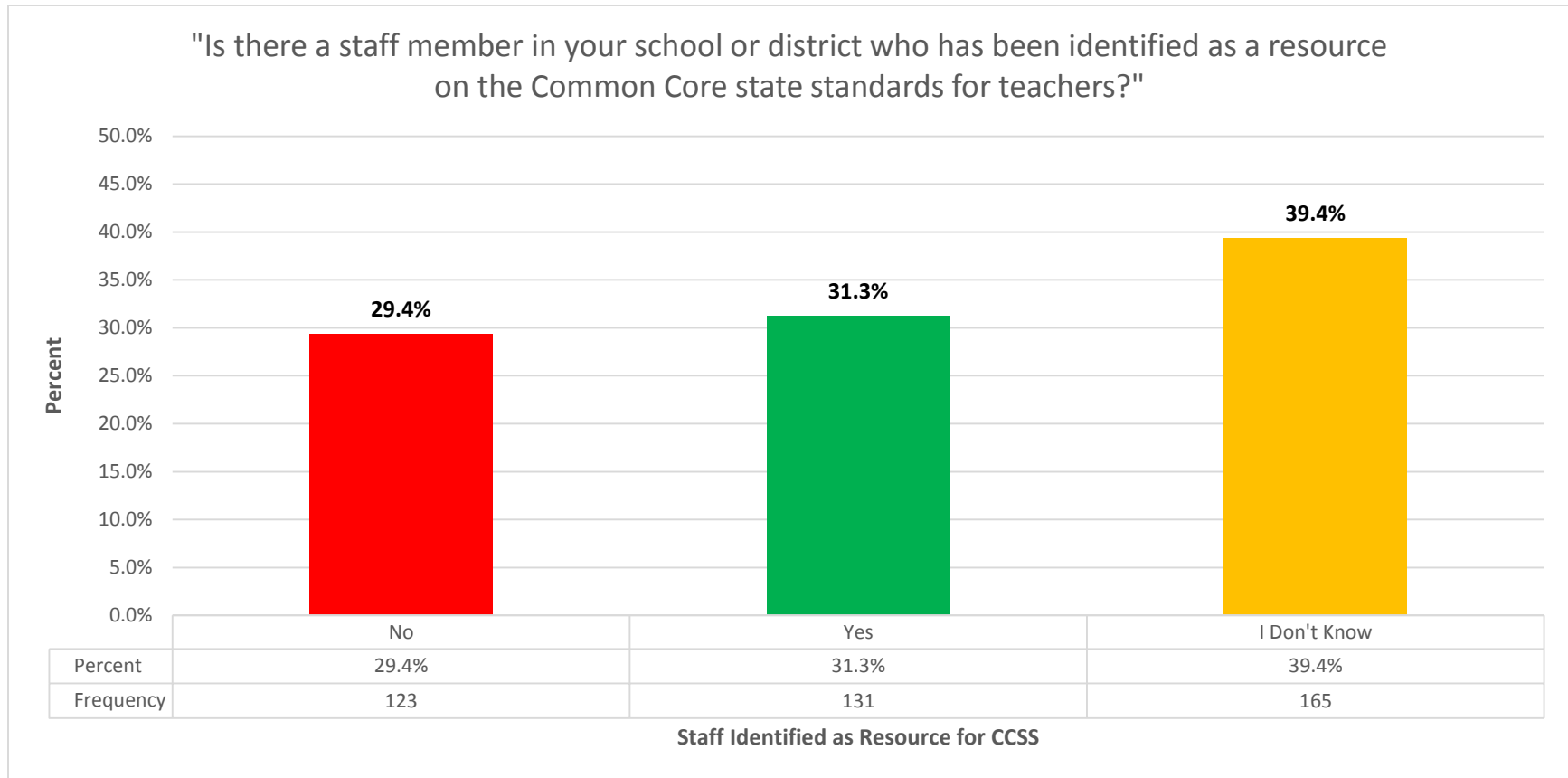
Figure C.32. Staff Member Identified as a CCSS Resource in School/District. $n = 419$.

"Is there a staff member in your school or district who has been identified as a resource on the Common Core state standards for teachers?" by School Level Taught

	No	Yes	I Don't Know
Elementary	35.1%	30.3%	34.6%
Middle	30.0%	31.7%	38.3%
High	25.5%	29.8%	44.7%

CCSS Staff Member Resource in School/District
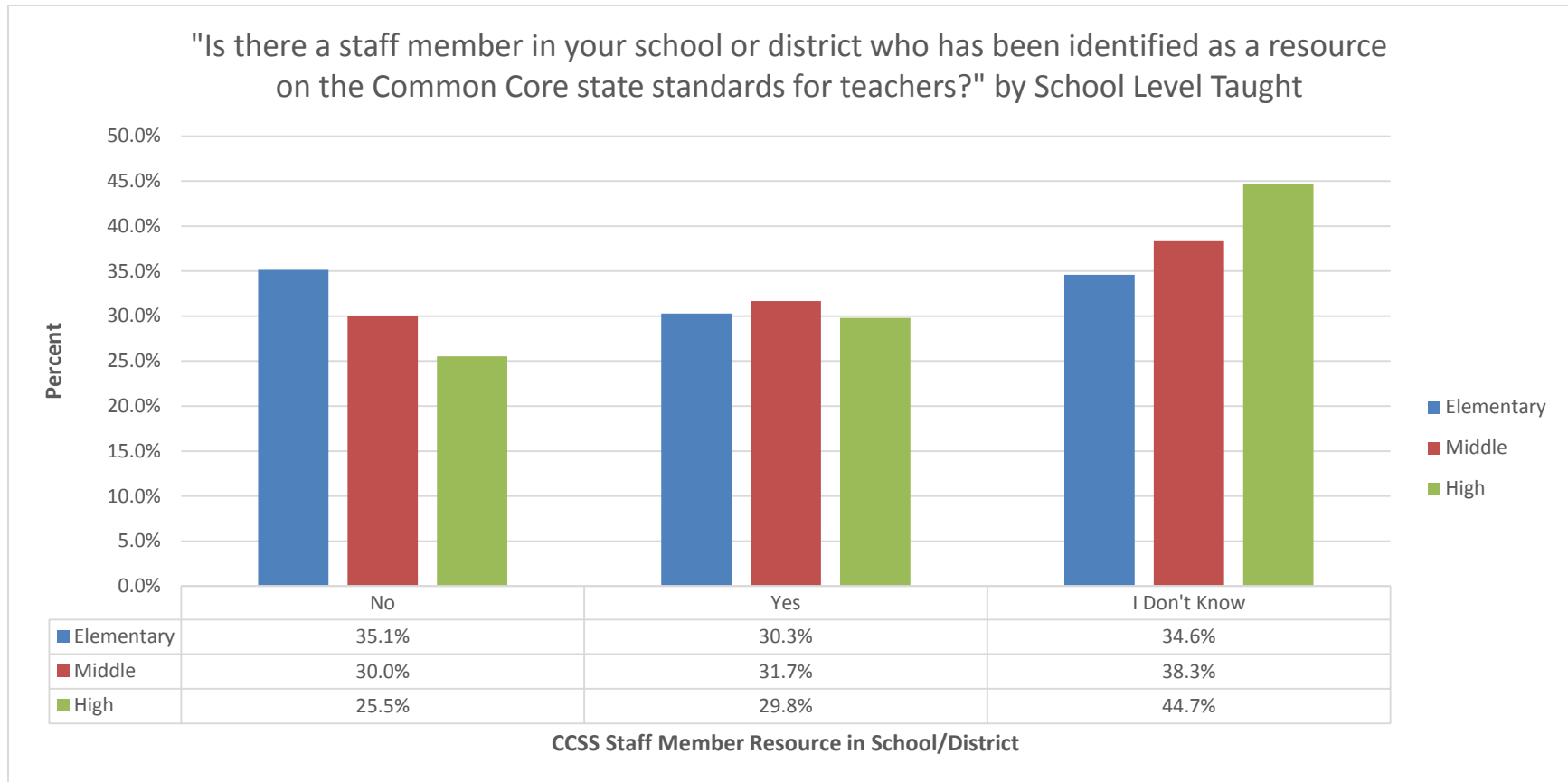
Figure C.33. Staff Member Identified as a CCSS Resource in School/District by School Level Taught. $n_{elementary} = 185$; $n_{middle} = 180$; $n_{high} = 188$.
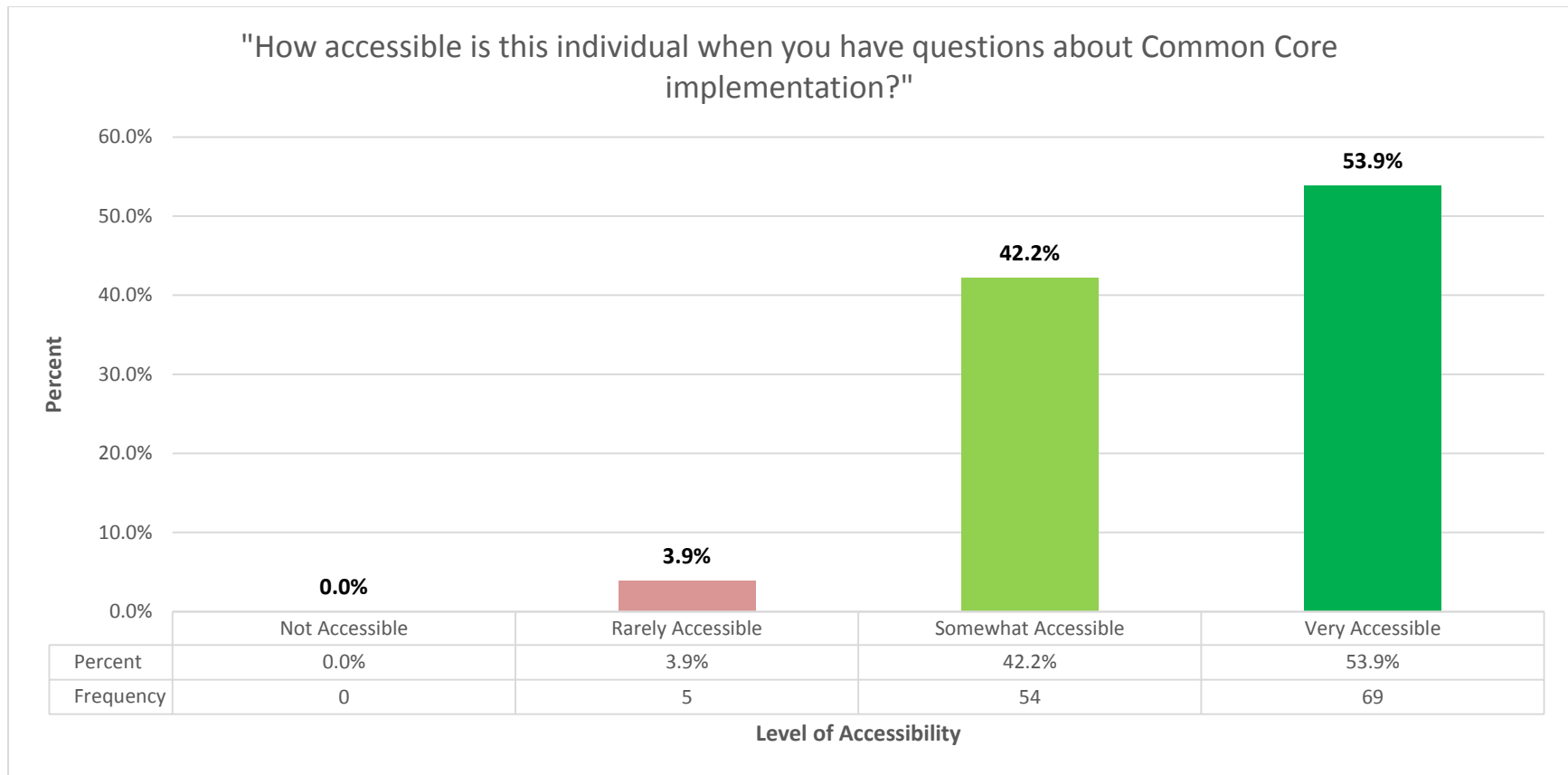
Figure C.34. Accessibility of Staff Member Identified as a CCSS Resource in School/District. *n* = 128.
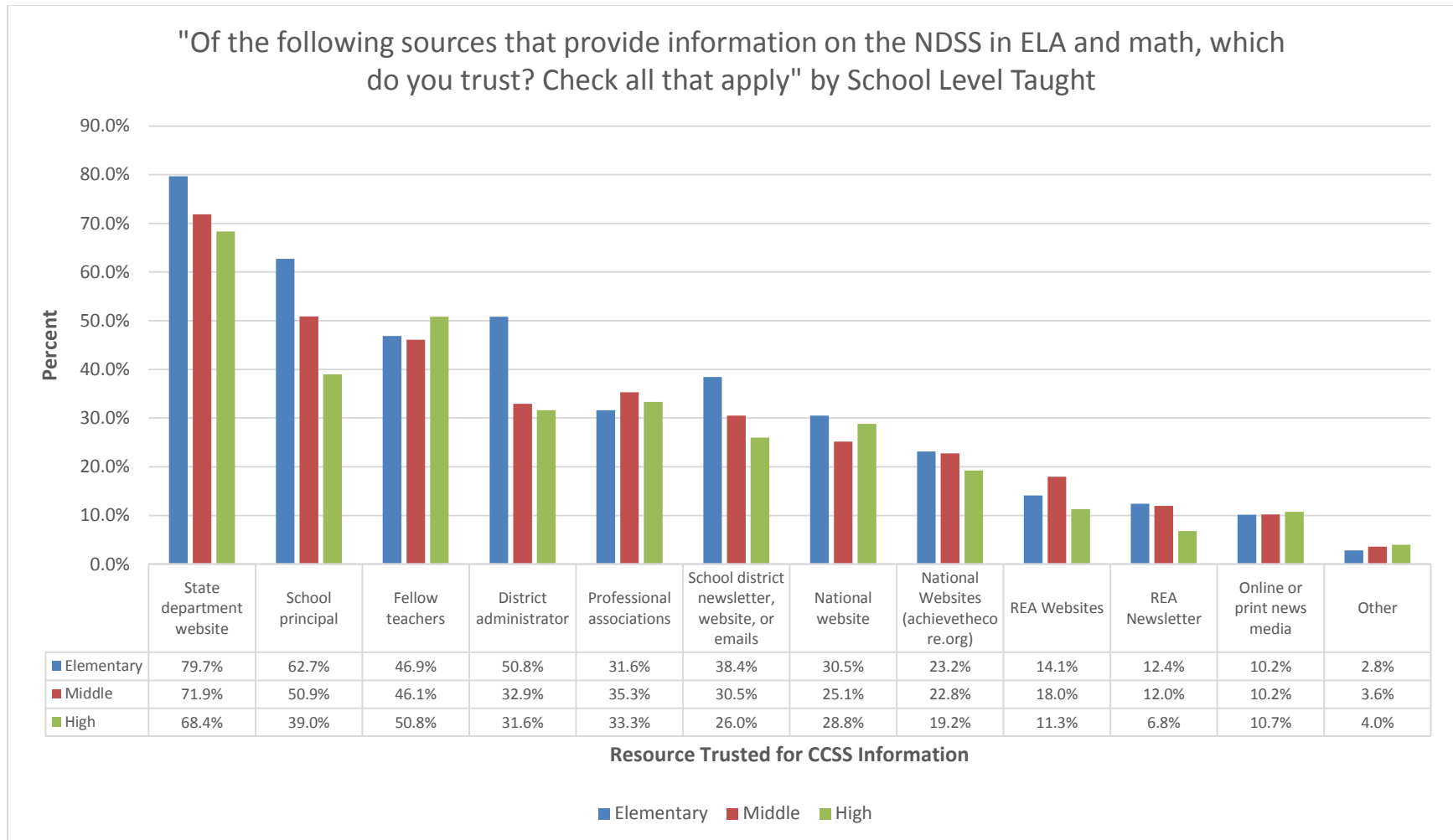
Figure C.35. CCSS Information Sources Trusted by School Level Taught. Percentages are calculated based on the number of respondents indicating trusting at least one source for CCSS information for each group. $n_{elementary} = 177$; $n_{middle} = 176$; $n_{high} = 177$.

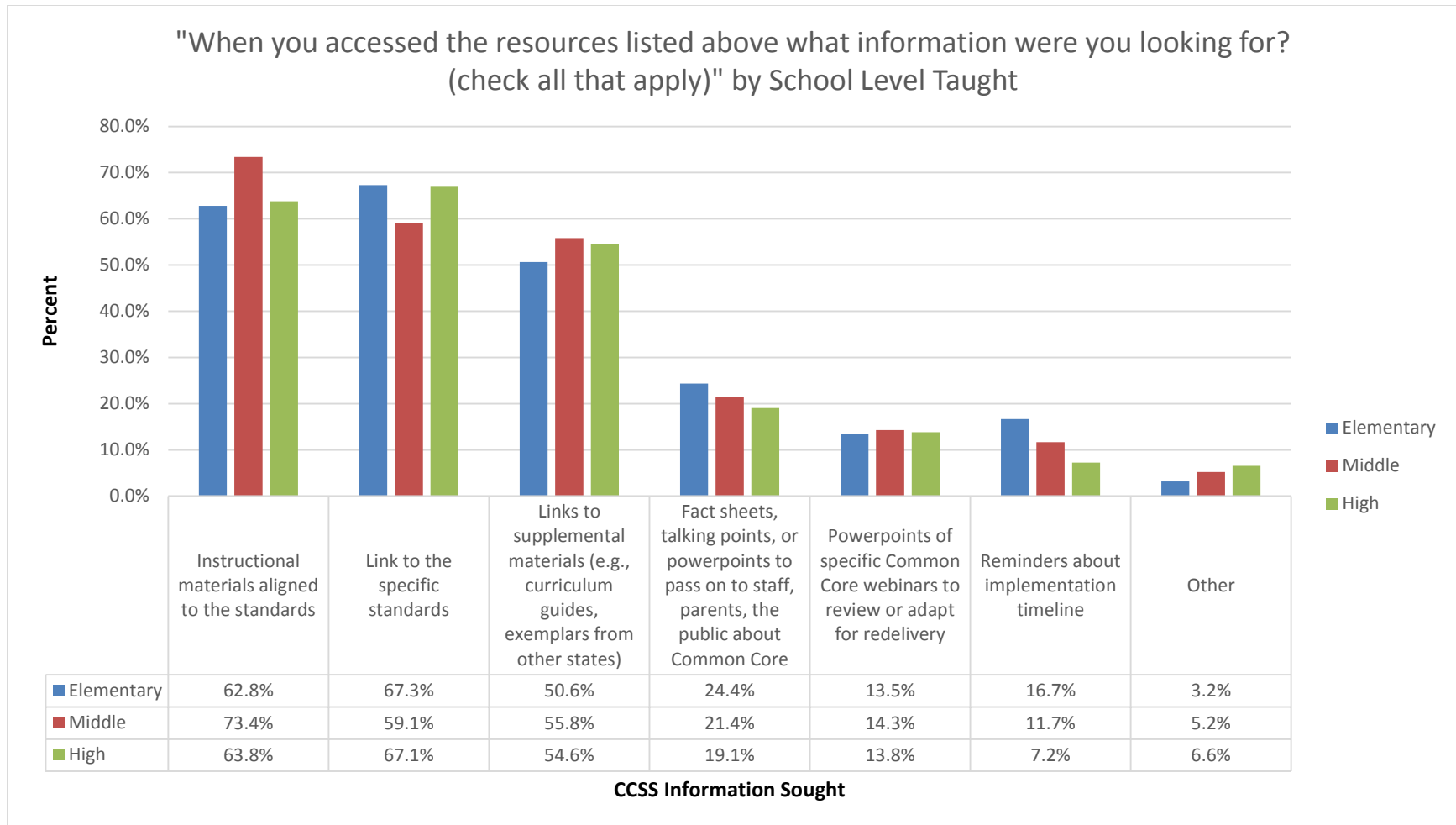"Of the following sources that provide information on the NDSS in ELA and math, which do you trust? Check all that apply" by Content Area Taught

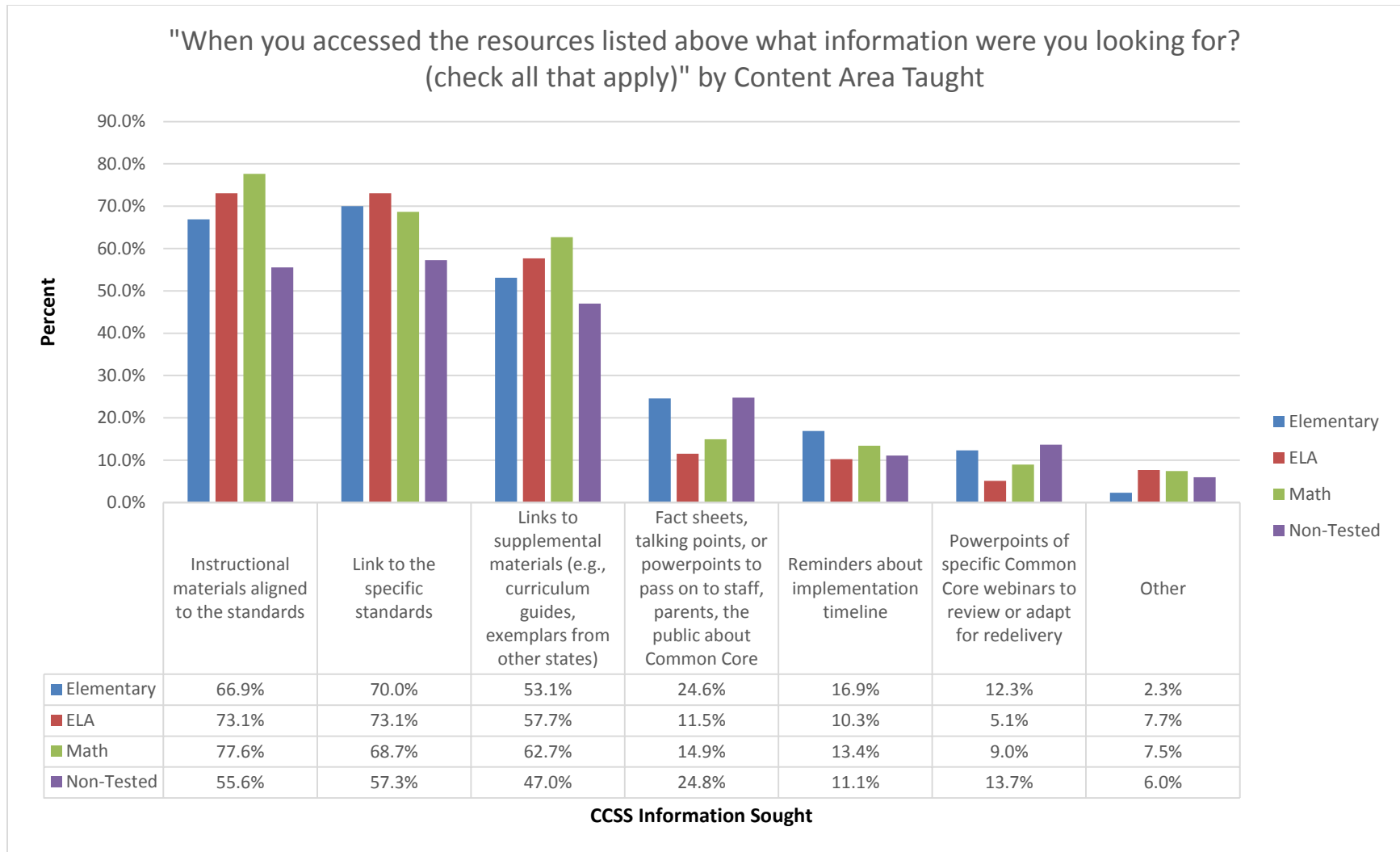| Resource Trusted for CCSS Information	State department website	School principal	Fellow teachers	District administrator	Professional associations	School district newsletter, website, or emails	National website	National Websites (achievethecore.org)	REA Websites	Online or print news media	REA Newsletter	Other
Elementary	81.5%	61.0%	45.9%	50.0%	30.8%	37.0%	31.5%	24.7%	13.0%	8.9%	9.6%	2.7%
ELA	74.7%	44.0%	46.2%	33.0%	35.2%	34.1%	38.5%	26.4%	7.7%	9.9%	5.5%	3.3%
Math	77.9%	46.5%	51.2%	36.0%	32.6%	31.4%	34.9%	26.7%	12.8%	12.8%	12.8%	4.7%
Non-Tested	64.5%	50.4%	50.4%	37.6%	35.5%	30.5%	19.1%	12.1%	12.8%	10.6%	9.2%	4.3%

Figure C.36. CCSS Information Sources Trusted by Content Area Taught. Percentages are calculated based on the number of respondents indicating trusting at least one source for CCSS information for each group. $n_{elementary} = 146$; $n_{ELA} = 91$; $n_{math} = 86$; $n_{non-tested} = 141$.
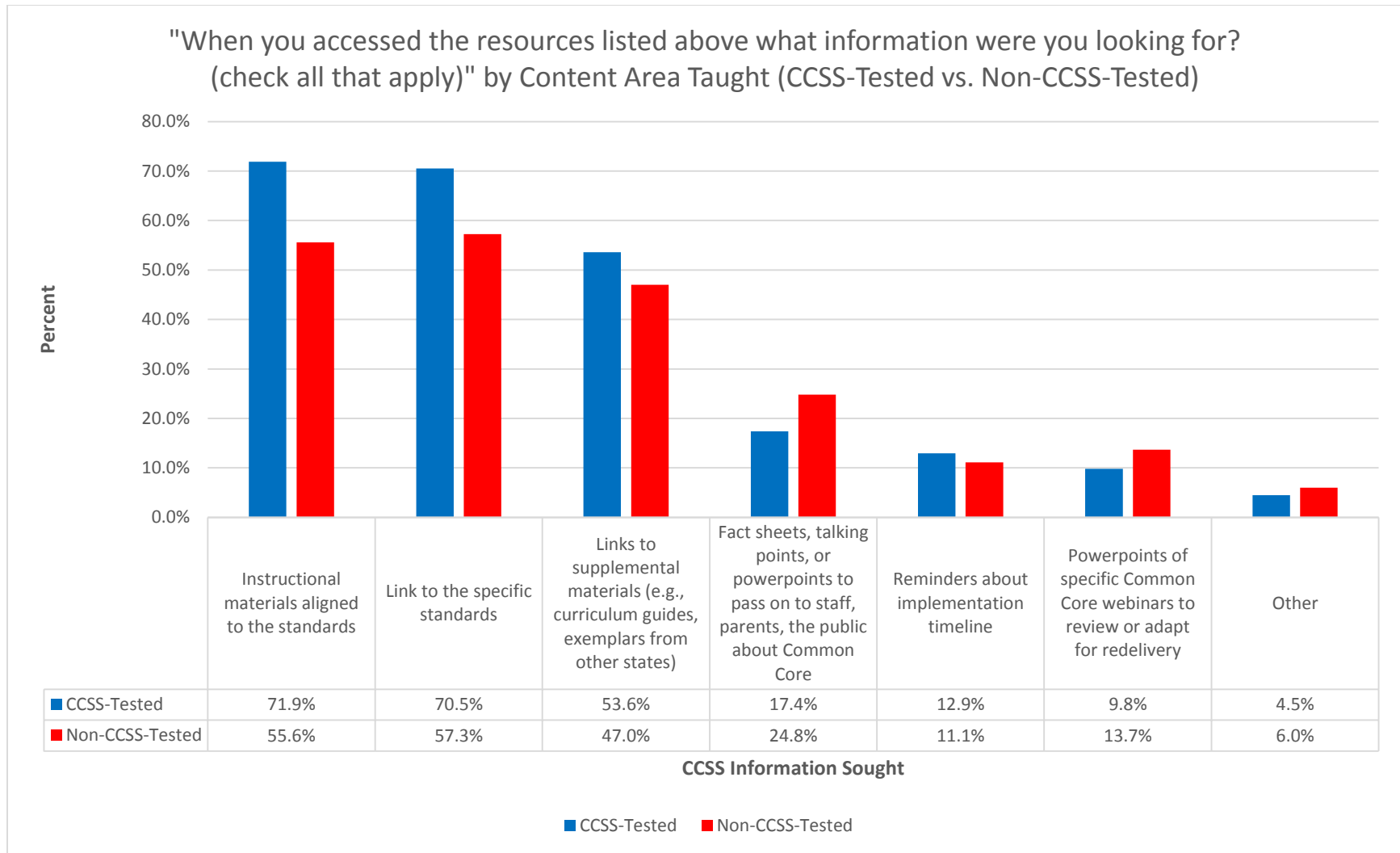
157
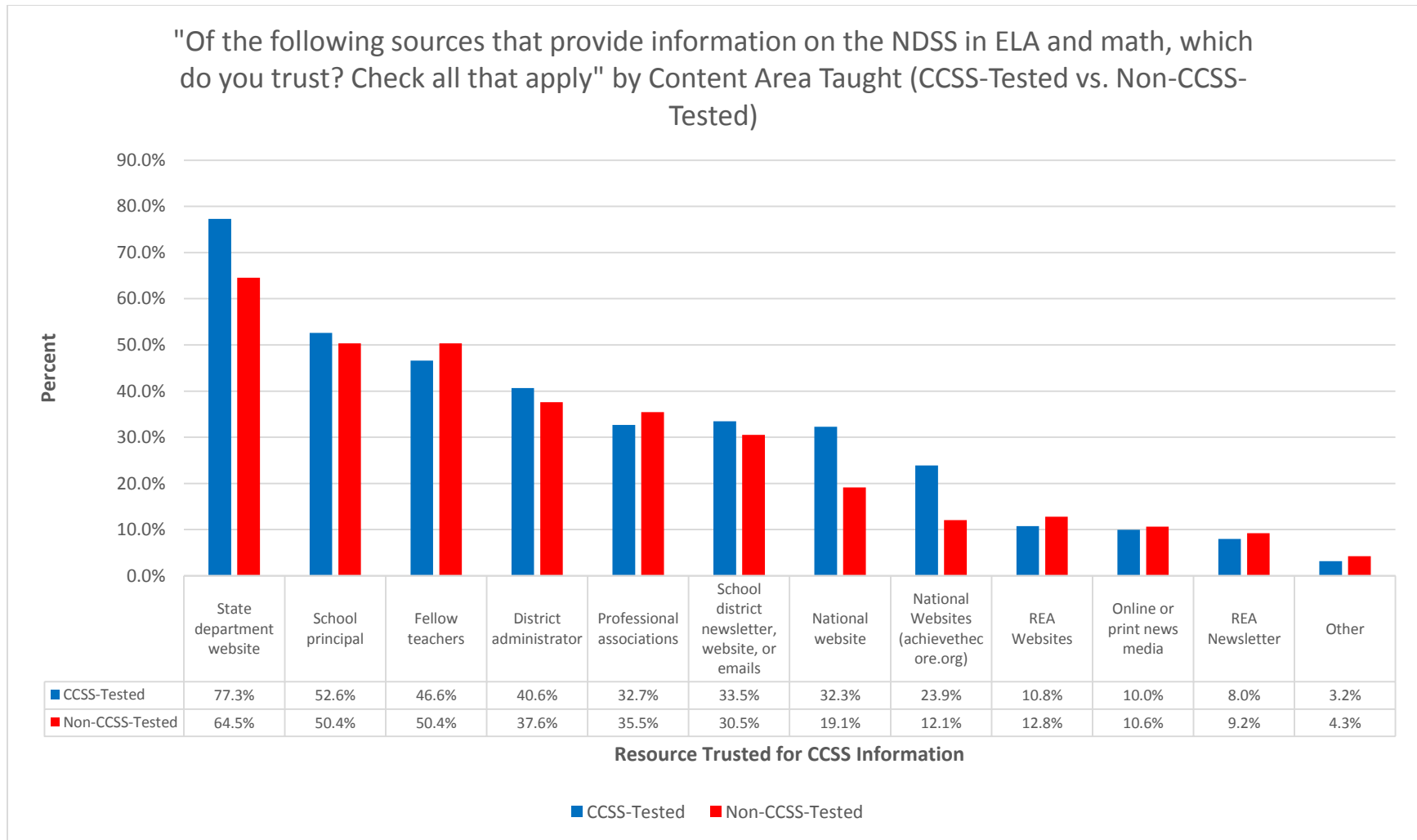
Figure C.37. CCSS Information Sources Trusted by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). Percentages are calculated based on the number of respondents indicating trusting at least one source for CCSS information for each group. $n_{ccss} = 251; n_{non-ccss} = 141$.
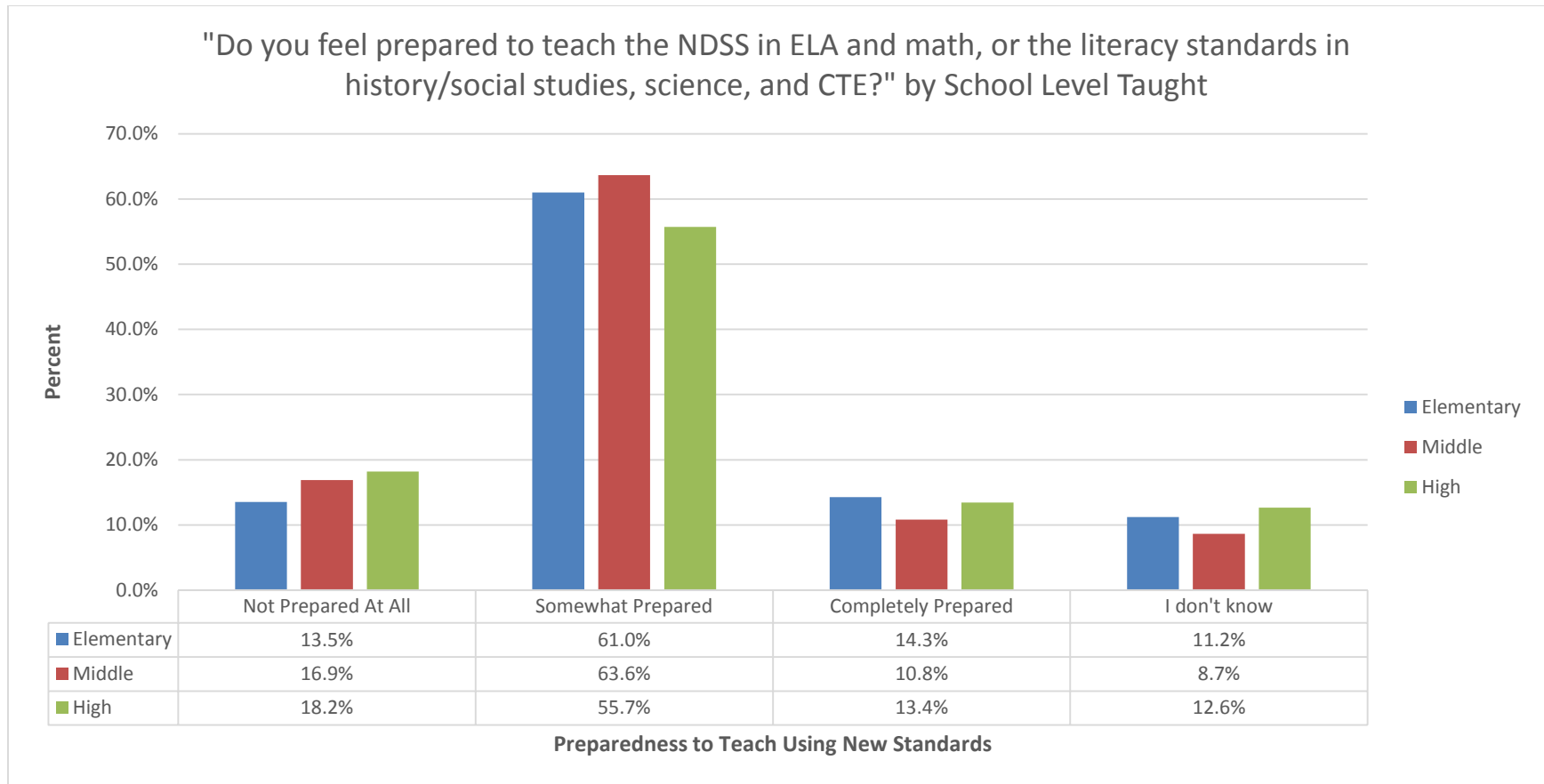
Figure C.38. Preparedness to Teach Using the Common Core State Standards by School Level Taught. $n_{elementary} = 259$; $n_{middle} = 231$; $n_{high} = 253$.

"Do you feel prepared to teach the NDSS in ELA and math, or the literacy standards in history/social studies, science, and CTE?" by Content Area Taught

	Not Prepared At All	Somewhat Prepared	Completely Prepared	I don't know
Elementary	12.1%	66.2%	15.5%	6.3%
ELA	12.4%	57.9%	26.4%	3.3%
Math	13.7%	69.2%	13.7%	3.4%
Non-tested	22.7%	49.8%	7.1%	20.4%

Preparedness to Teach Using New Standards
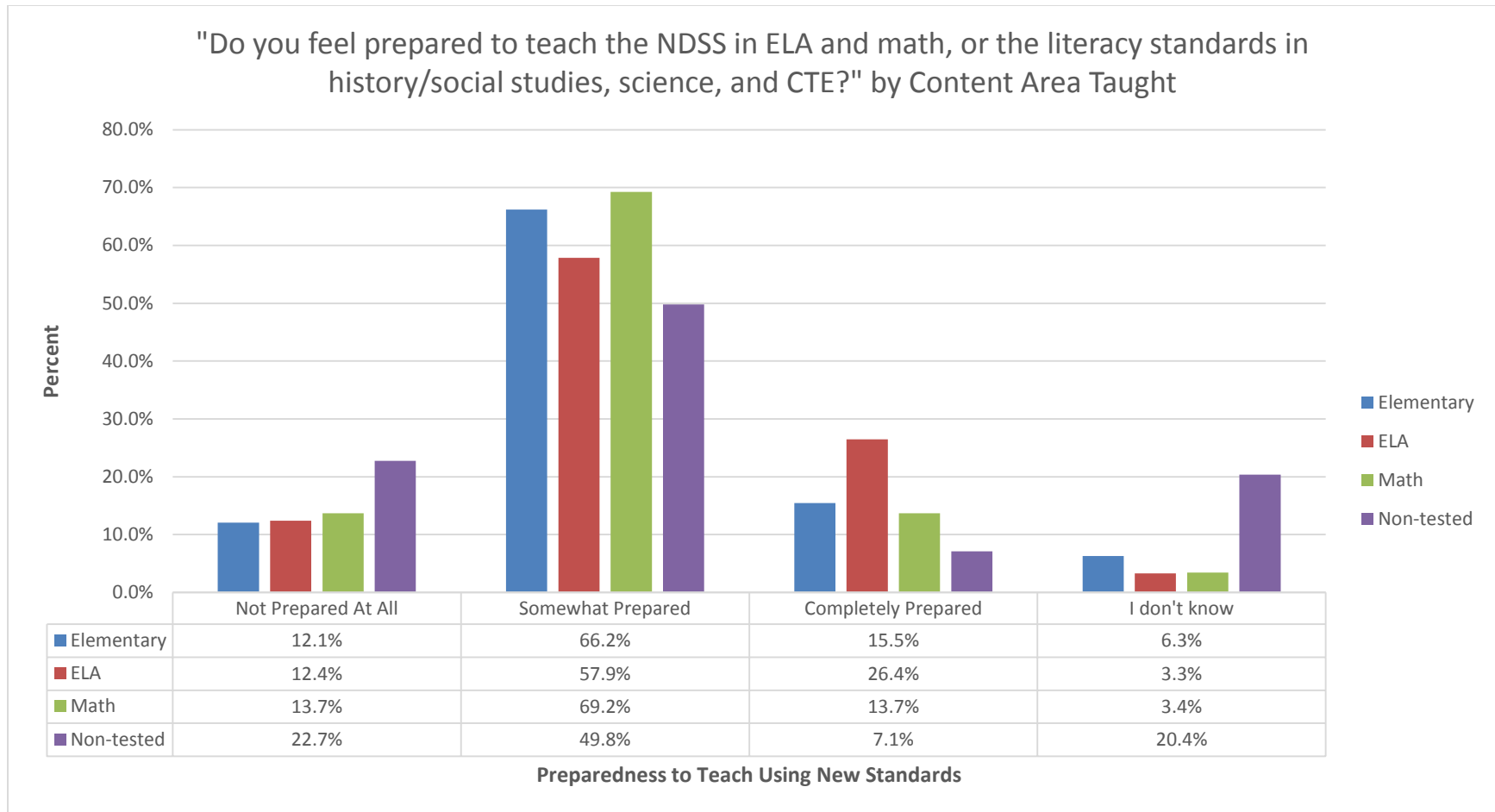
Figure C.39. Preparedness to Teach Using the Common Core State Standards by Content Area Taught. $n_{\text{elementary}} = 207$; $n_{\text{ELA}} = 121$; $n_{\text{math}} = 117$; $n_{\text{non-tested}} = 211$.
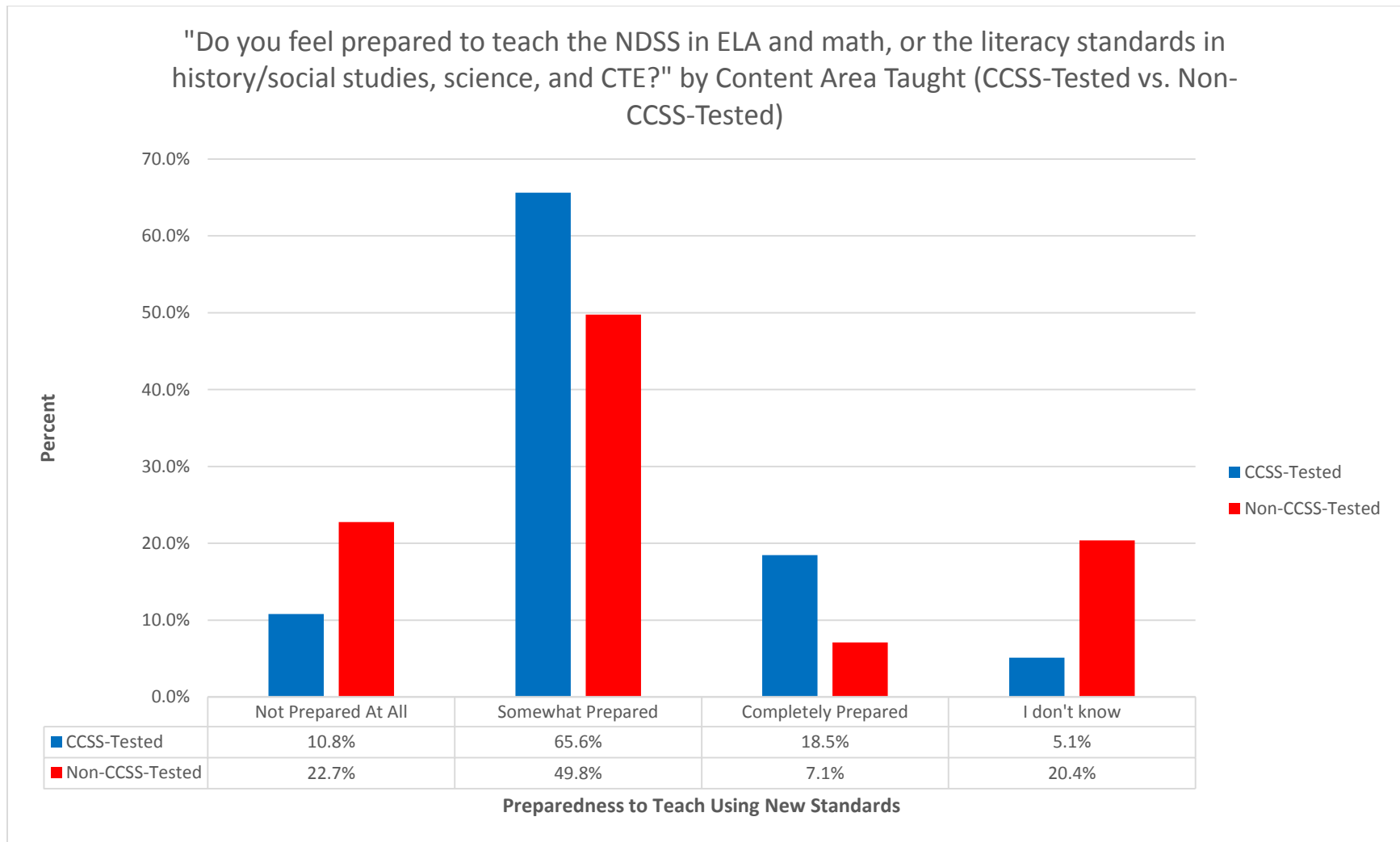
Figure C.40. Preparedness to Teach Using the Common Core State Standards by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} = 352$; $n_{non\text{-}ccss} = 211$.

"What would help you feel prepared to teach the NDSS in ELA and math, or the literacy standards in history/social studies, science, and CTE? Check all that apply" by Content Area Taught

	Access to curricular resources aligned to the NDSS in ELA and math	More information about how the standards change what is expected of my instructional practice	More information about how the standards change what is expected of my students	Access to assessments aligned to the NDSS in ELA and math	Other
Elementary	74.4%	55.2%	51.2%	60.5%	12.8%
ELA	69.7%	57.3%	44.9%	57.3%	5.6%
Math	76.8%	55.6%	48.5%	69.7%	10.1%
Non-tested	43.2%	65.9%	57.8%	37.8%	8.6%

Resource Needed to Feel Prepared to Teach Using CCSS

■ Elementary ■ ELA ■ Math ■ Non-tested

Figure C.41. Resources Needed to Feel Prepared to Teach Using CCSS by Content Area Taught. $n_{elementary} = 172$; $n_{ELA} = 89$; $n_{math} = 99$; $n_{non-tested} = 185$.

"What would help you feel prepared to teach the NDSS in ELA and math, or the literacy standards in history/social studies, science, and CTE? Check all that apply" by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested)

	Access to curricular resources aligned to the NDSS in ELA and math	More information about how the standards change what is expected of my instructional practice	More information about how the standards change what is expected of my students	Access to assessments aligned to the NDSS in ELA and math	Other
CCSS-Tested	72.4%	55.8%	49.1%	61.1%	11.3%
Non-CCSS-Tested	43.2%	65.9%	57.8%	37.8%	8.6%

Resource Needed to Feel Prepared to Teach Using CCSS

Figure C.42. Resources Needed to Feel Prepared to Teach Using CCSS by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} = 283$; $n_{non\text{-}ccss} = 185$.
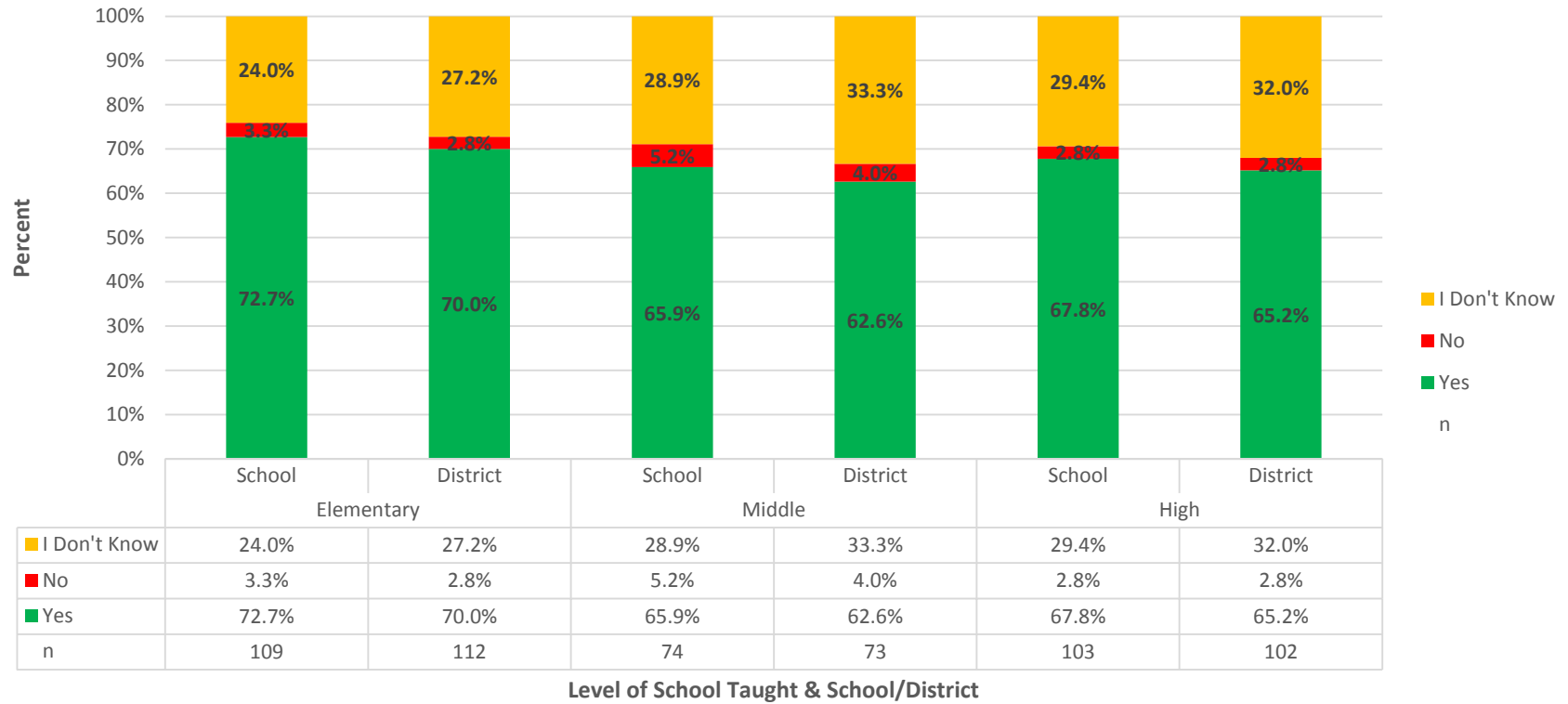
Figure C.43. School and District Plans to Implement CCSS by School Level Taught.

	Not Incorporated CCSS	Incorporated Some CCSS	Fully Incorporated CCSS	I Don't Know
Elementary	5.5%	63.7%	28.0%	2.7%
Middle	11.5%	64.4%	16.1%	8.0%
High	14.0%	69.7%	8.4%	7.9%
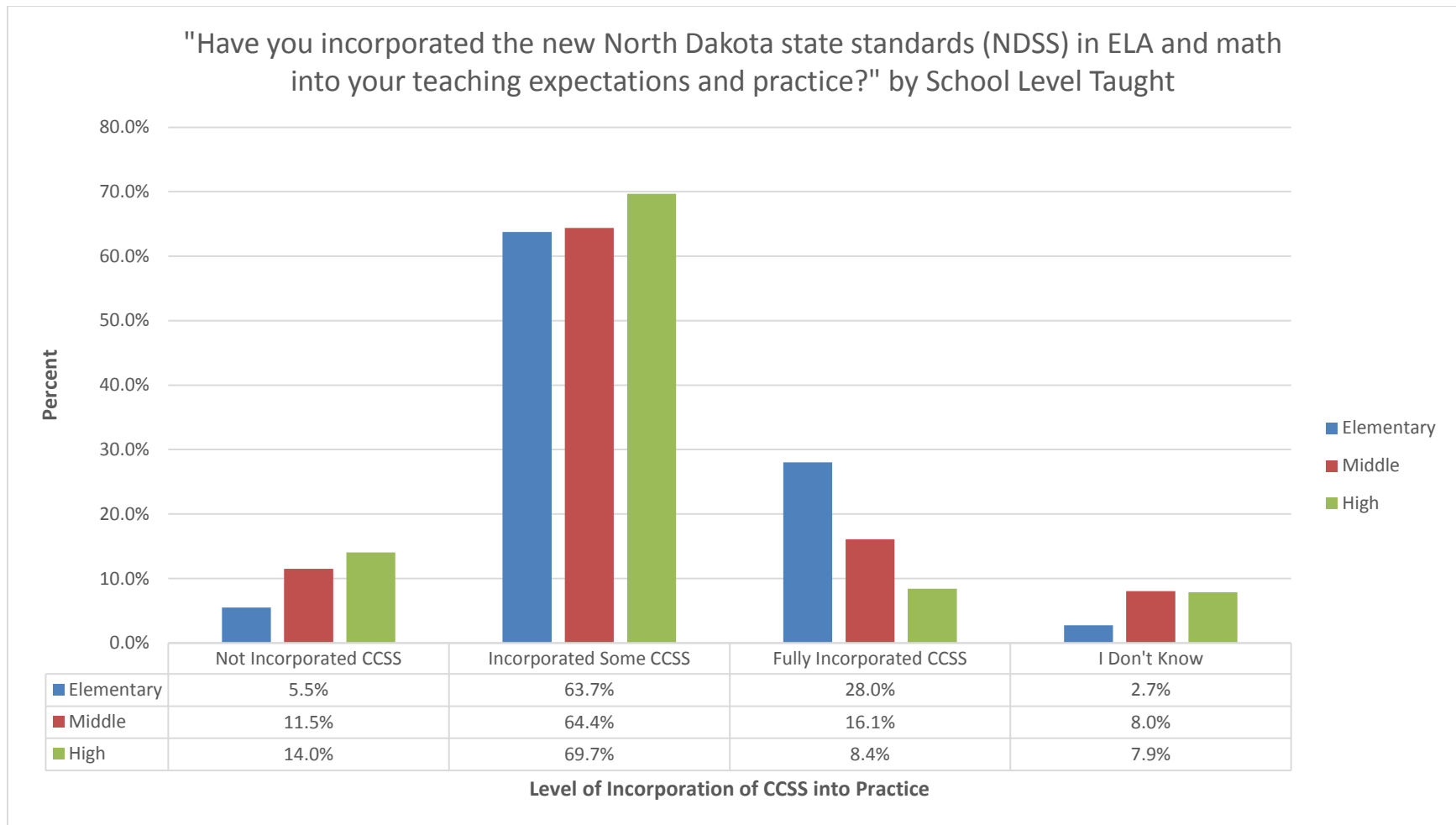
Figure C.44. Level of Incorporation of CCSS into Practice by School Level Taught. $n_{elementary} = 182$; $n_{middle} = 174$; $n_{high} = 178$.

"Have you incorporated the new North Dakota state standards (NDSS) in ELA and math into your teaching expectations and practice?" by Content Area Taught

	Not Incorporated CCSS	Incorporated Some CCSS	Fully Incorporated CCSS	I Don't Know
Elementary	2.6%	65.1%	30.9%	1.3%
ELA	3.2%	69.9%	24.7%	2.2%
Math	2.3%	74.4%	22.1%	1.2%
Non-Tested	22.4%	60.1%	7.7%	9.8%

Level of Incorporation of CCSS into Practice
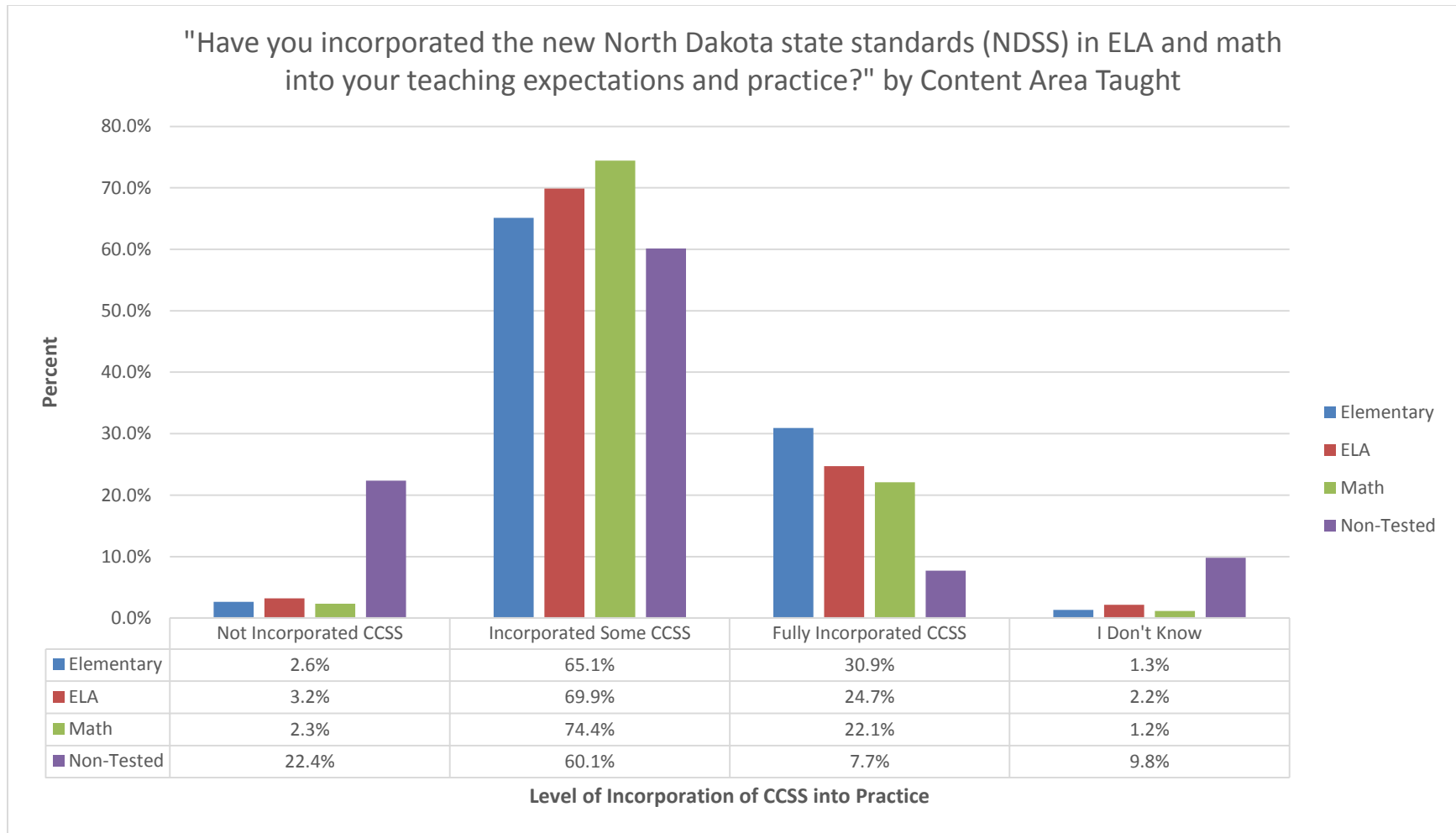
Figure C.45. Level of Incorporation of CCSS into Practice by Content Area Taught. $n_{elementary}$ = 152; n_{ELA} = 93; n_{math} = 86; $n_{non\text{-}tested}$ = 143.
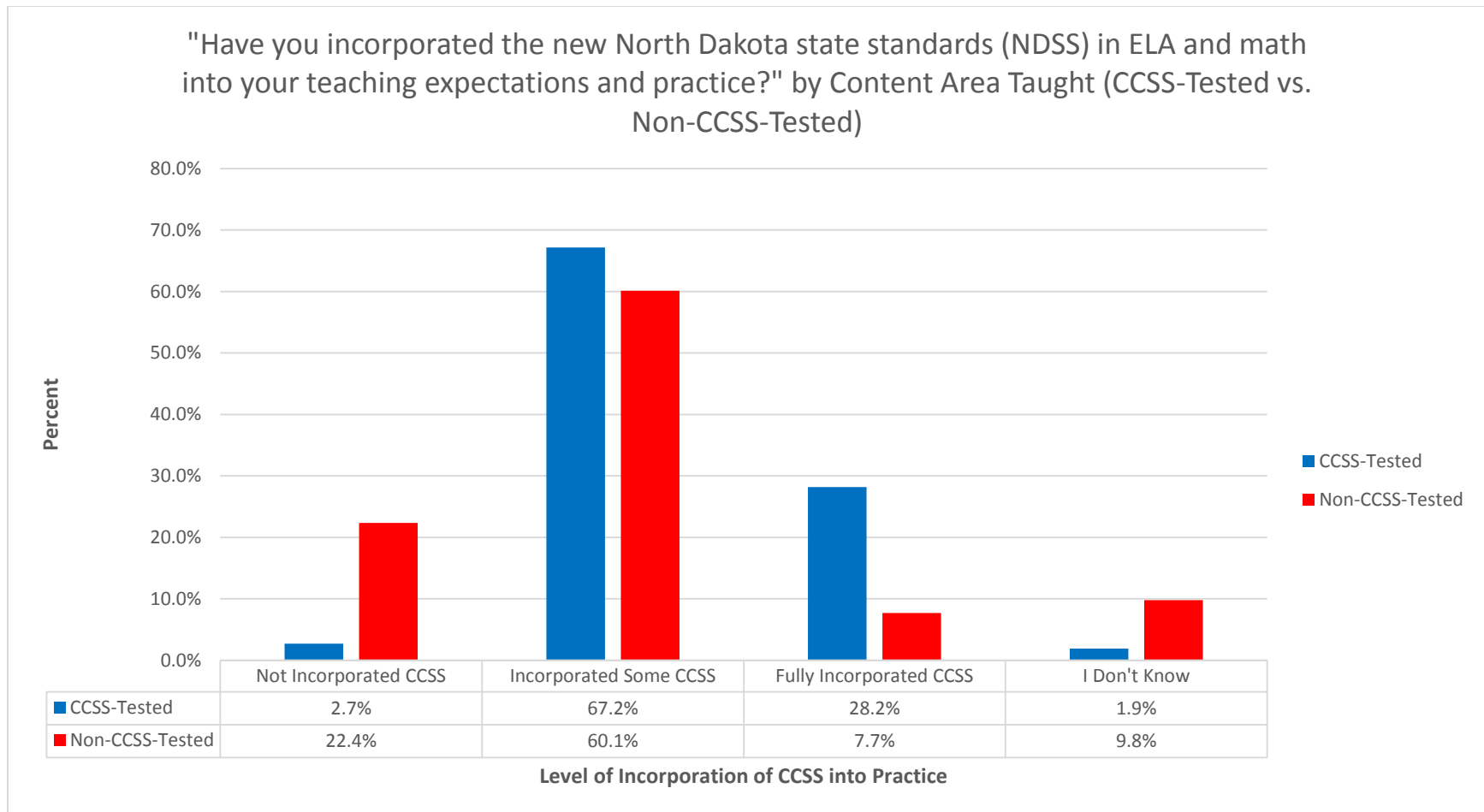
Figure C.46. Level of Incorporation of CCSS into Practice by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} =$ 259; $n_{non\text{-}ccss} = 143$.

"To what extent have you aligned your classroom assessments to the NDSS in ELA and math?" by School Level Taught

	No Work Done on Alignment	Beginning Work on Alignment	Some Assessments Aligned	All Assessments Aligned
Elementary	10.8%	36.5%	36.5%	16.2%
Middle	17.6%	37.1%	35.2%	10.1%
High	24.4%	37.2%	35.4%	3.0%

Level of Assessment Alignment
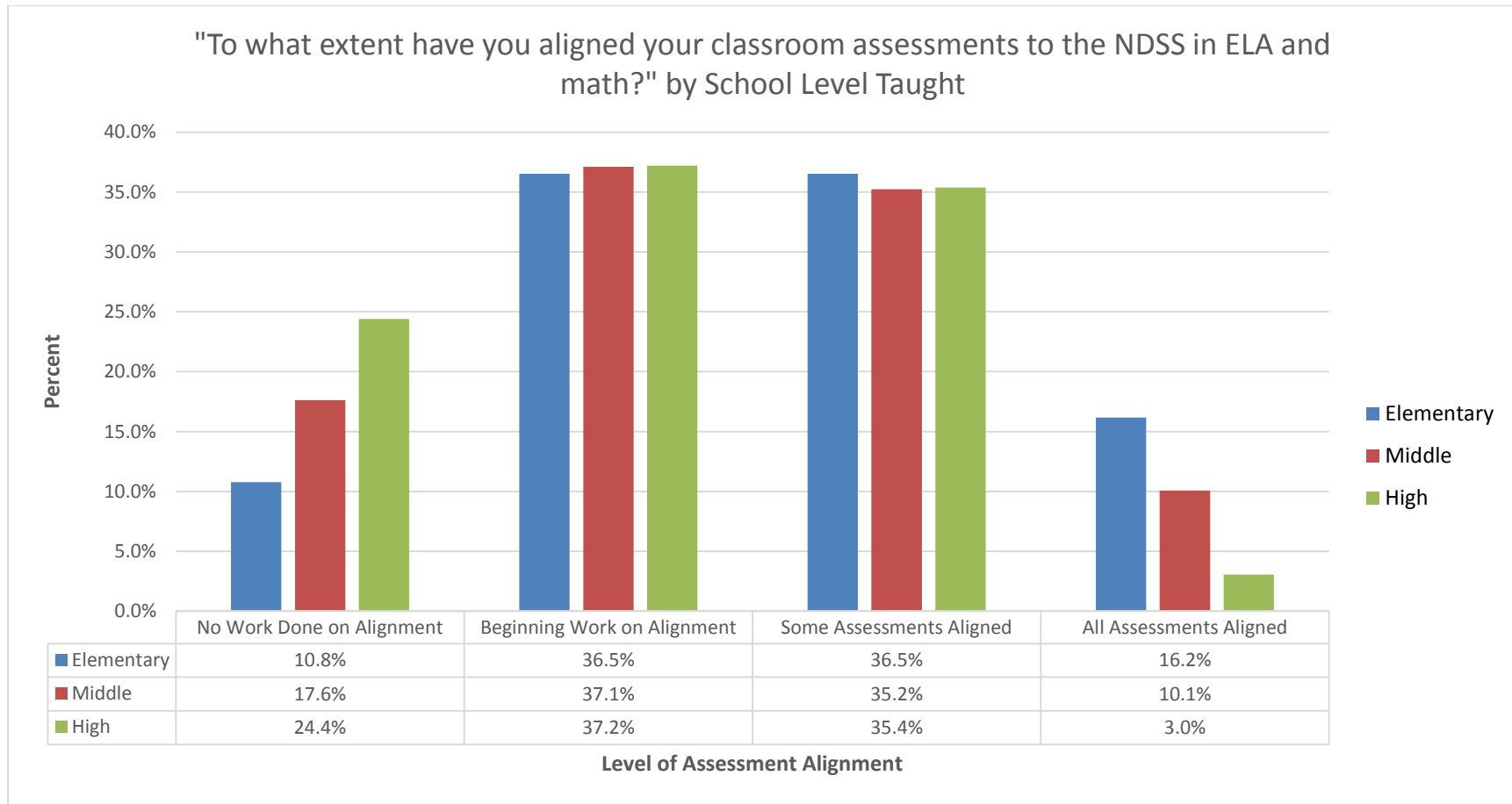
Figure C.47. Level of Assessment Alignment to CCSS by School Level Taught. $n_{elementary} = 167$; $n_{middle} = 159$; $n_{high} = 164$.

Figure C.48. Level of Assessment Alignment to CCSS by Content Area Taught. $n_{elementary} = 143$; $n_{ELA} = 85$; $n_{math} = 83$; $n_{non\text{-}tested} = 130$.
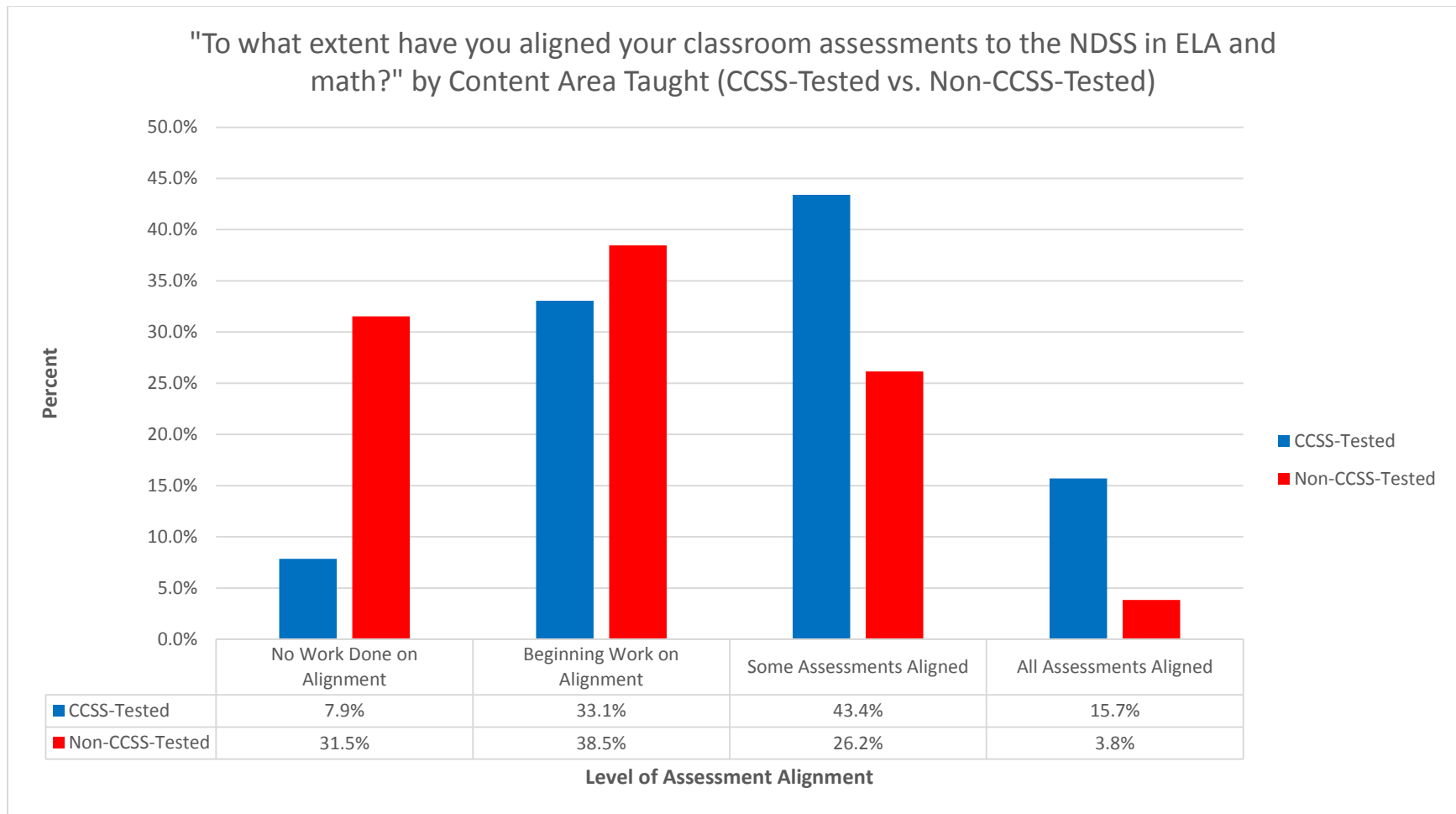
Figure C.49. Level of Assessment Alignment to CCSS by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} = 242$; $n_{non\text{-}ccss} = 130$.

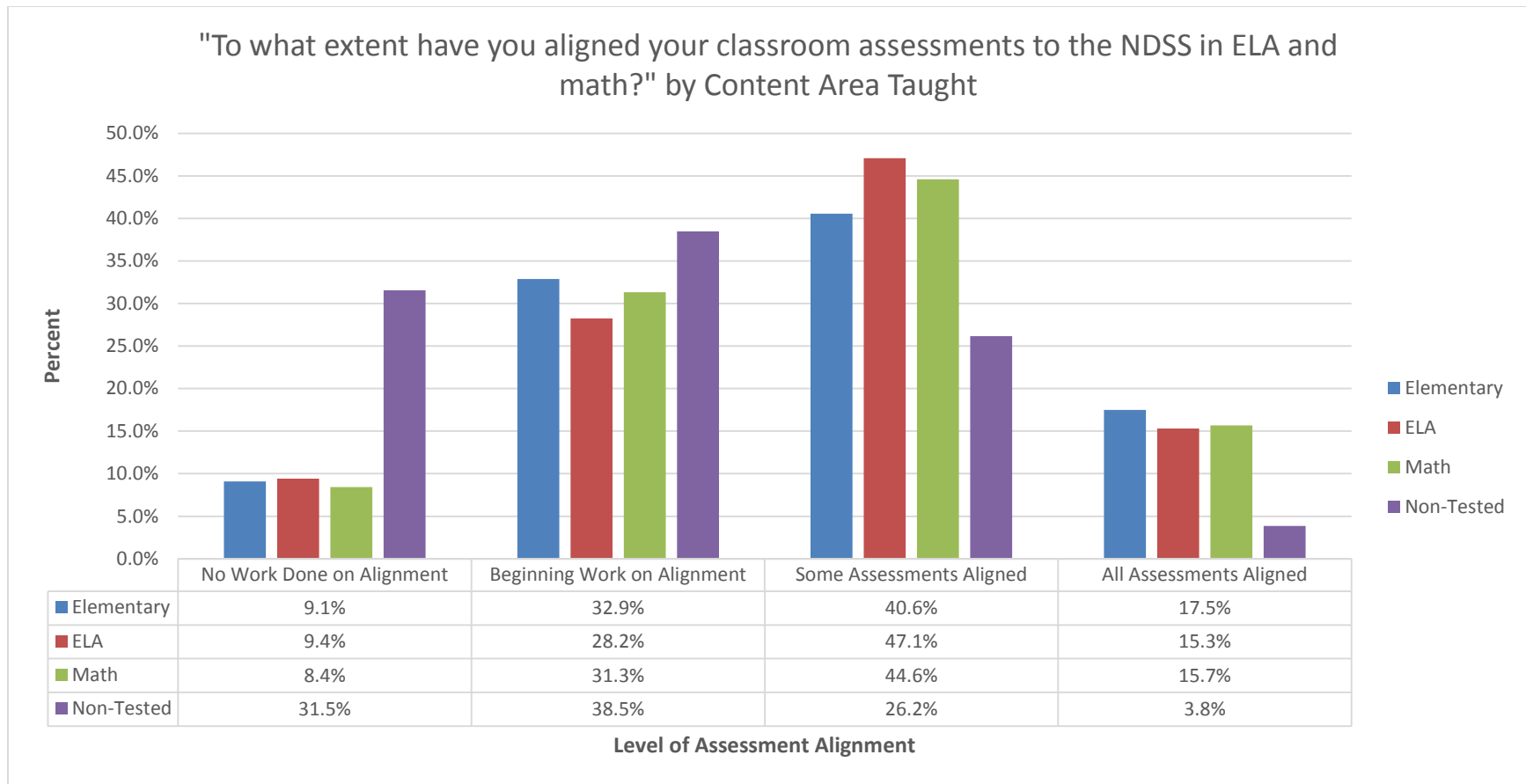"What do you believe will be the top two challenges to implementing the Common Core state standards in your school or district? (check up to two)" by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested)

Challenge to Implementation	Need more time to collaborate with my colleagues	Need more aligned textbooks and materials	Students' prior knowledge	Need more quality professional development	Need more time to help all students really learn the standards	Need more formative assessments aligned to the Common Core	Need a state assessment aligned to the Common Core	Need more information about the standards	Need more parental involvement	Need more funding	Other
CCSS-Tested	45.3%	45.0%	41.1%	35.3%	35.3%	32.9%	24.0%	16.7%	19.0%	14.3%	7.0%
Non-Tested	39.3%	27.6%	38.6%	42.1%	32.4%	16.6%	15.9%	32.4%	15.2%	15.2%	7.6%

Figure C.50. Challenges to CCSS Implementation by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). Percentages are calculated based on the number of respondents indicating at least one challenge to CCSS implementation. $n_{ccss} = 258; n_{non-ccss} = 145$.

"My understanding of the effective practices to teach of the new NDSS in ELA and math will help me differentiate instruction to meet the unique needs of my students" by School Level Taught

	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
Elementary	0.6%	6.3%	12.0%	65.7%	15.4%
Middle	3.0%	18.1%	16.3%	54.2%	8.4%
High	5.4%	16.7%	16.1%	54.2%	7.7%

Figure C.51. Knowledge of the Effective Practices to Teach Using CCSS Will Help Me to Differentiate Instruction by School Level Taught. $n_{elementary} = 175$; $n_{middle} = 166$; $n_{high} = 168$.

Figure C.52. Knowledge of the Effective Practices to Teach Using CCSS Will Help Me to Differentiate Instruction by Content Area Taught. $n_{elementary} = 147$; $n_{ELA} = 89$; $n_{math} = 85$; $n_{non\text{-}tested} = 133$.

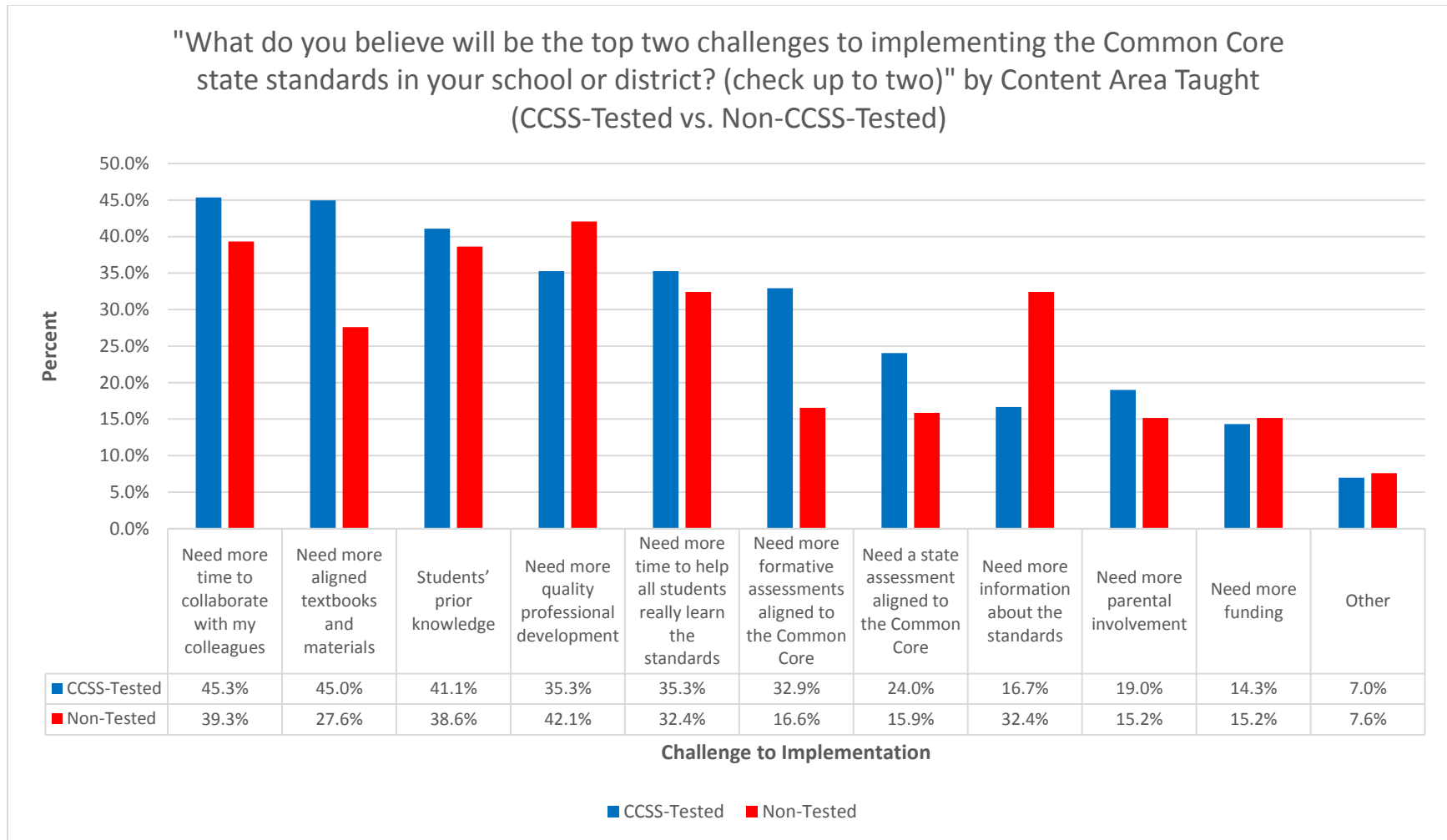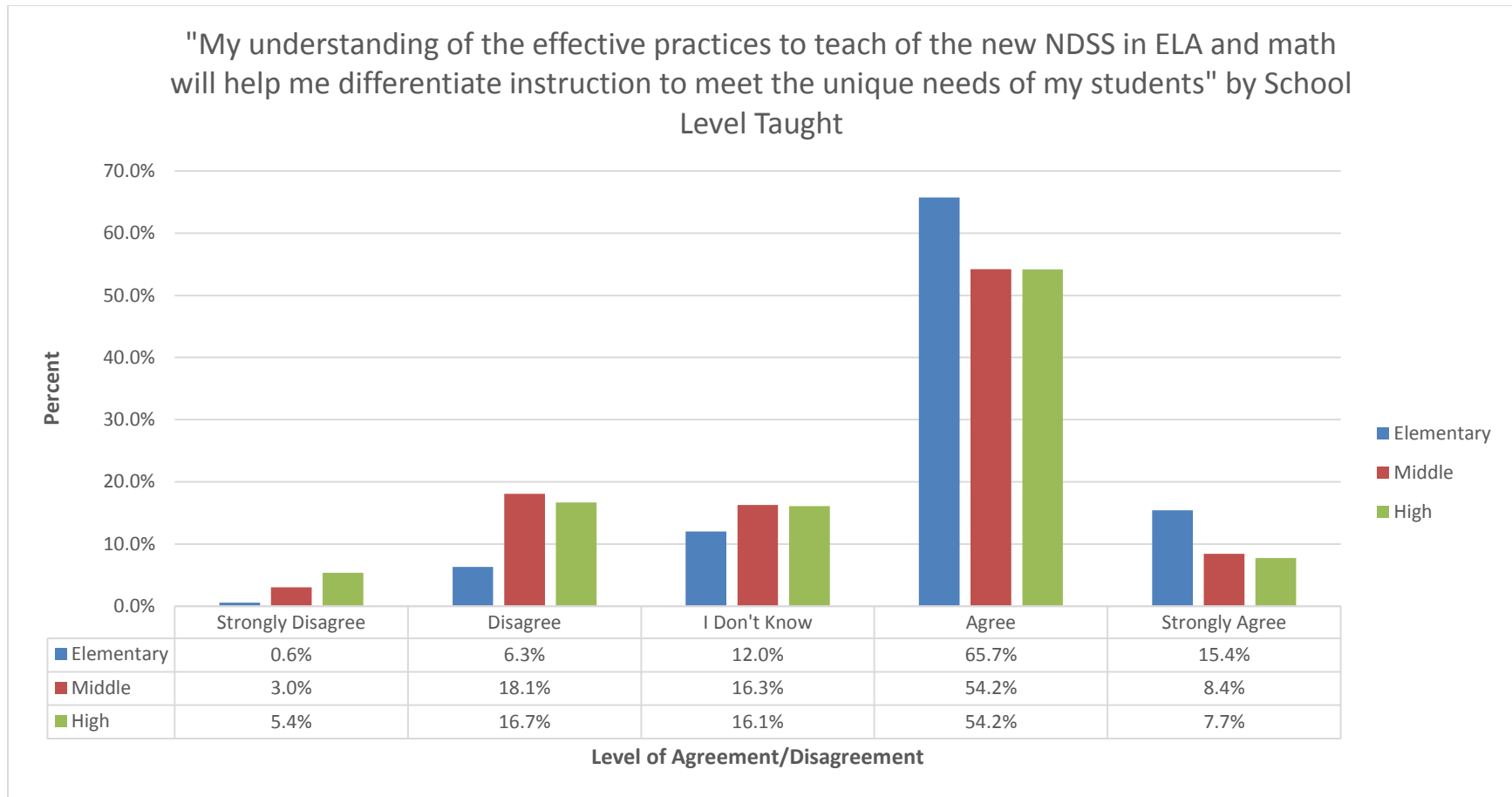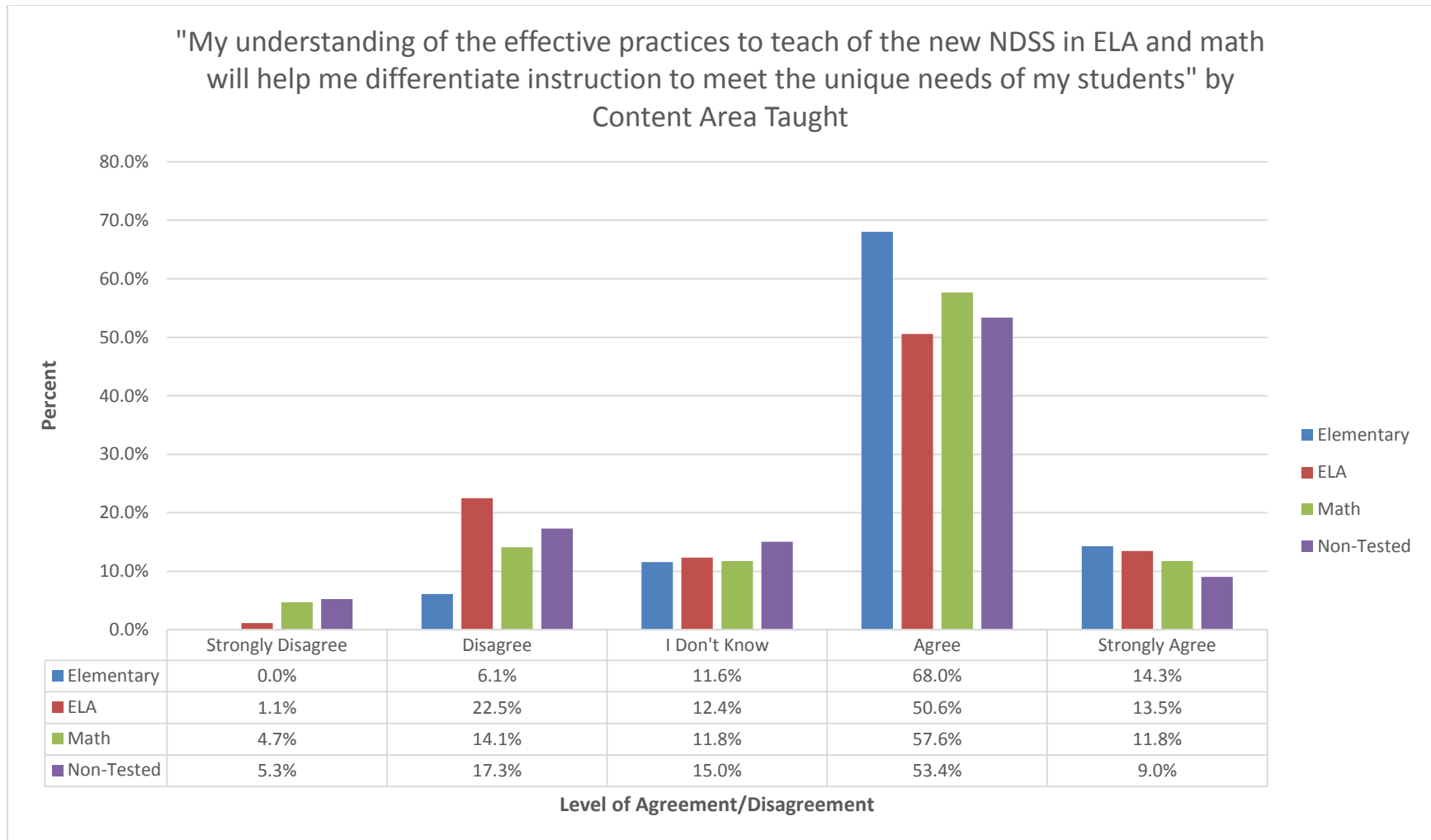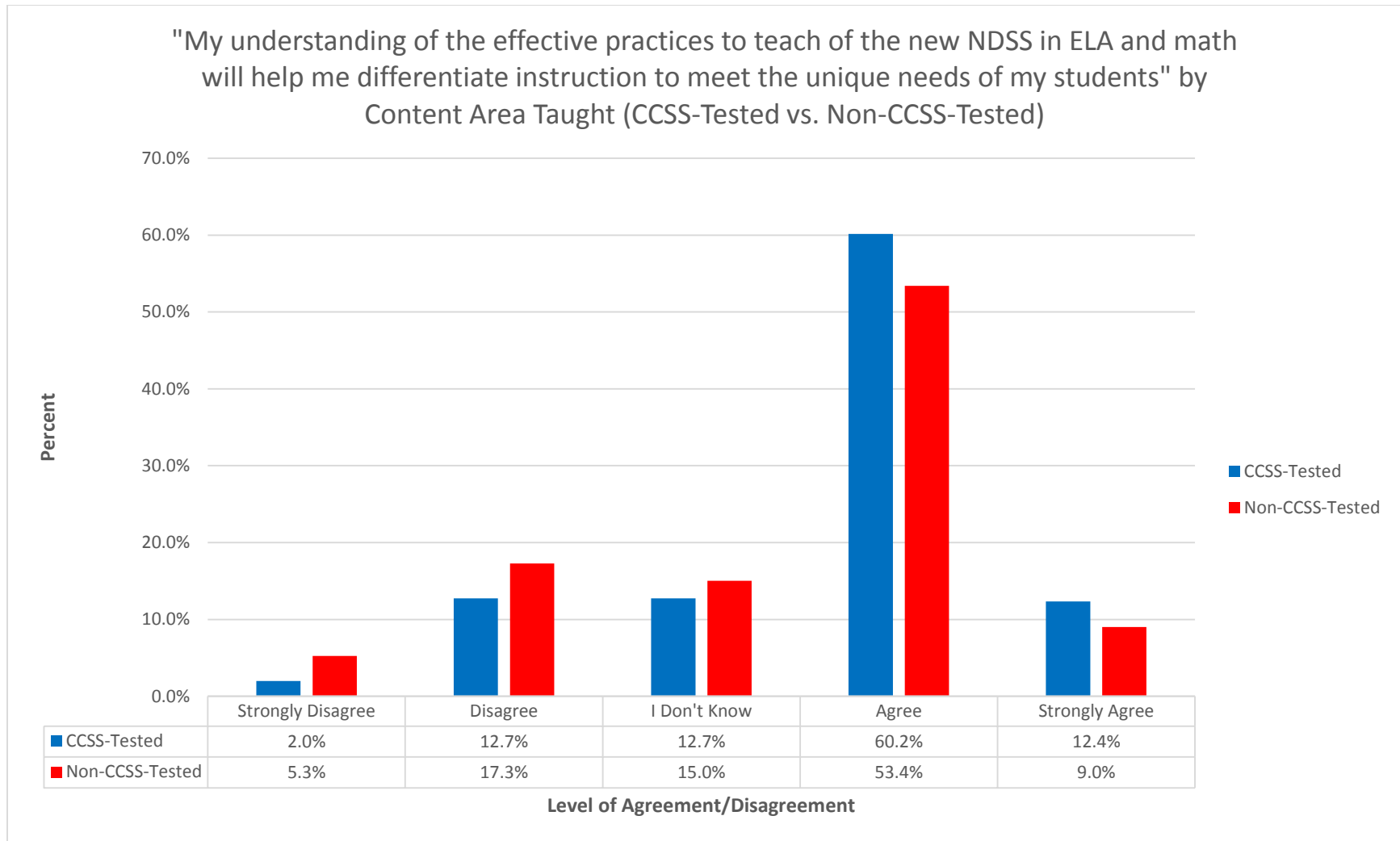*Figure C.53.* Knowledge of the Effective Practices to Teach Using CCSS Will Help Me to Differentiate Instruction by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} = 251; n_{non\text{-}ccss} = 133$.

"The new NDSS in ELA and math will require that I change the way I incorporate instructional technology into classroom learning" by School Level Taught

	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
Elementary	0.6%	13.6%	16.5%	54.5%	14.8%
Middle	0.6%	18.9%	17.7%	56.1%	6.7%
High	2.4%	19.2%	20.4%	51.5%	6.6%

Figure C.54. The Common Core Standards Will Require that I Change the Way I Incorporate Instructional Technology into Classroom Learning by School Level Taught. $n_{elementary} = 176$; $n_{middle} = 164$; $n_{high} = 167$.

"The new NDSS in ELA and math will require that I change the way I incorporate instructional technology into classroom learning" by Content Area Taught

	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
Elementary	0.7%	13.5%	14.2%	55.4%	16.2%
ELA	4.5%	23.9%	10.2%	51.1%	10.2%
Math	2.4%	22.6%	10.7%	48.8%	15.5%
Non-Tested	0.7%	14.2%	23.1%	55.2%	6.7%

Level of Agreement/Disagreement

Figure C.55. The Common Core Standards Will Require that I Change the Way I Incorporate Instructional Technology into Classroom Learning by Content Area Taught. $n_{elementary} = 148$; $n_{ELA} = 88$; $n_{math} = 84$; $n_{non-tested} = 134$.

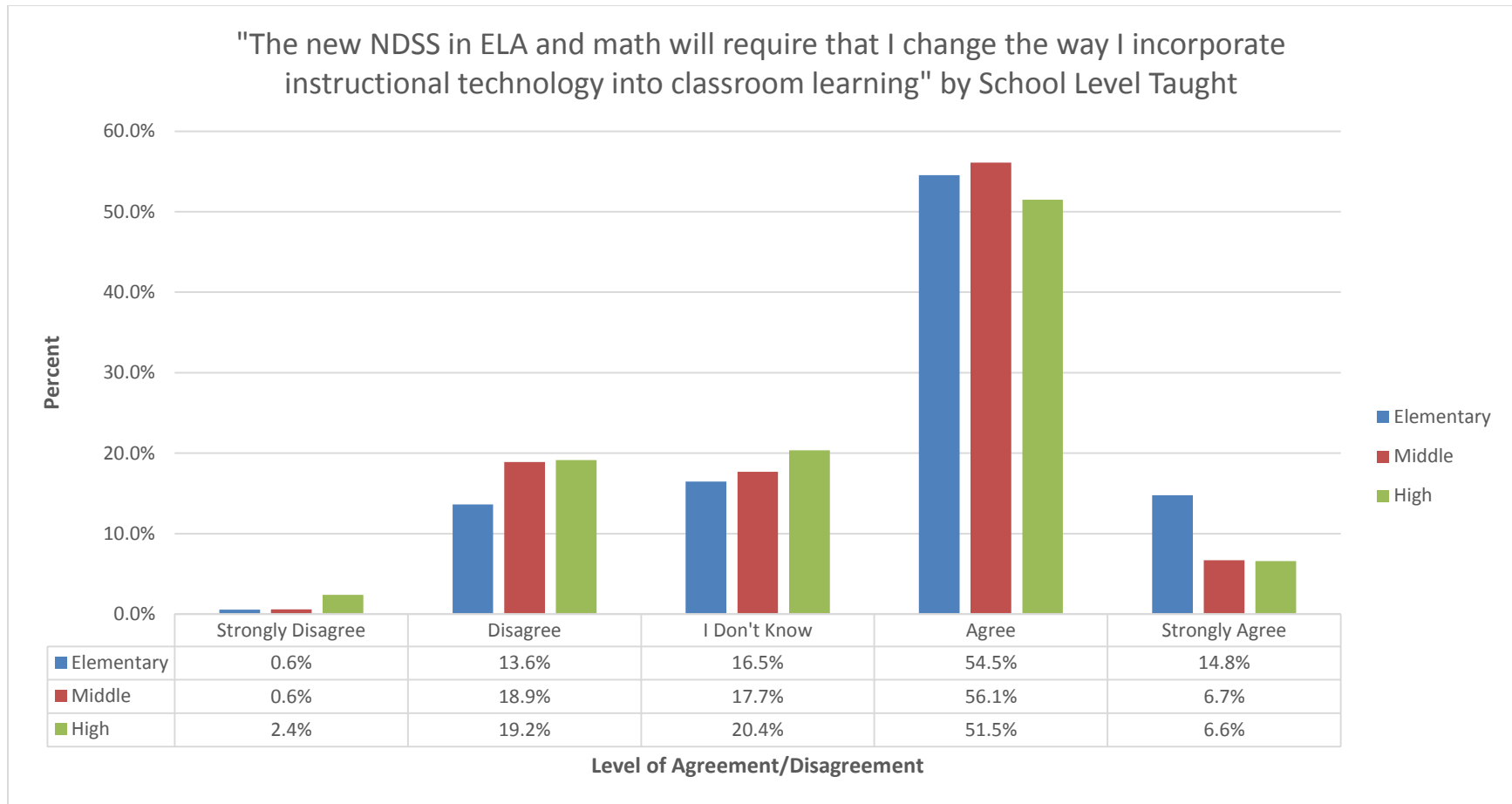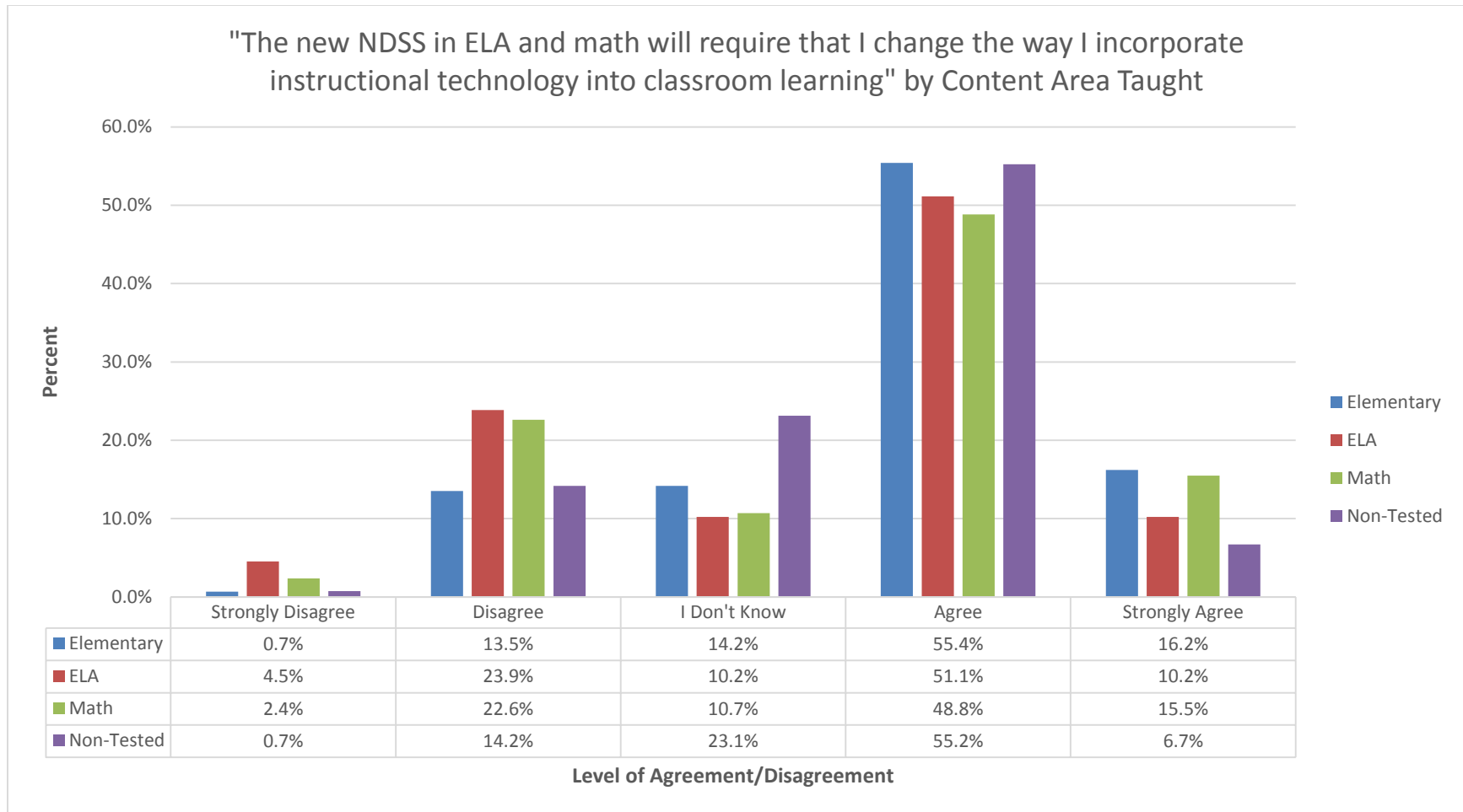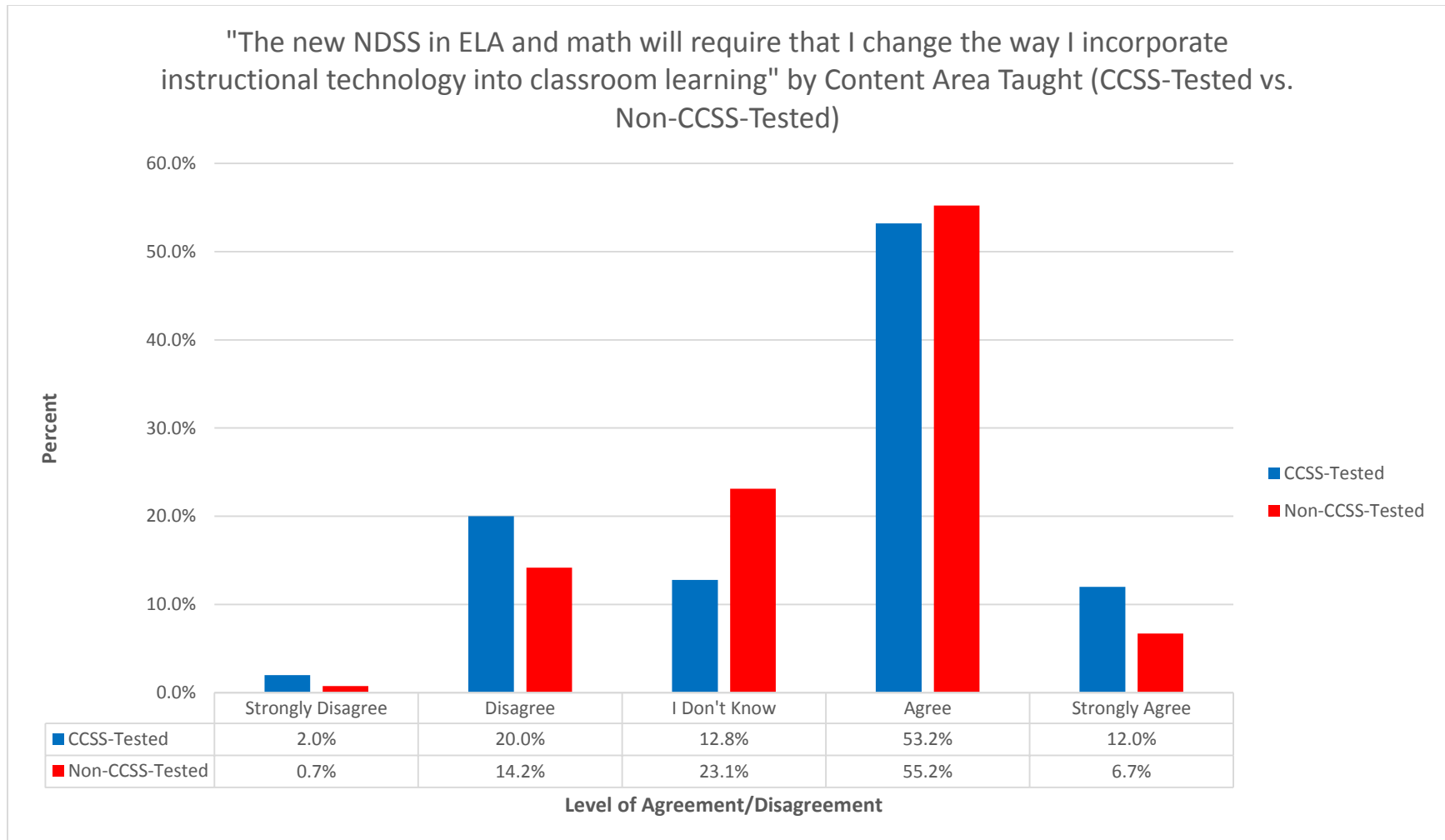*Figure C.56.* The Common Core Standards Will Require that I Change the Way I Incorporate Instructional Technology into Classroom Learning by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} = 250; n_{non\text{-}ccss} = 134.$

"The new NDSS in ELA and math will help me know what content to teach my students and in what sequence to teach it in order for them to fully master key competencies" by School Level Taught

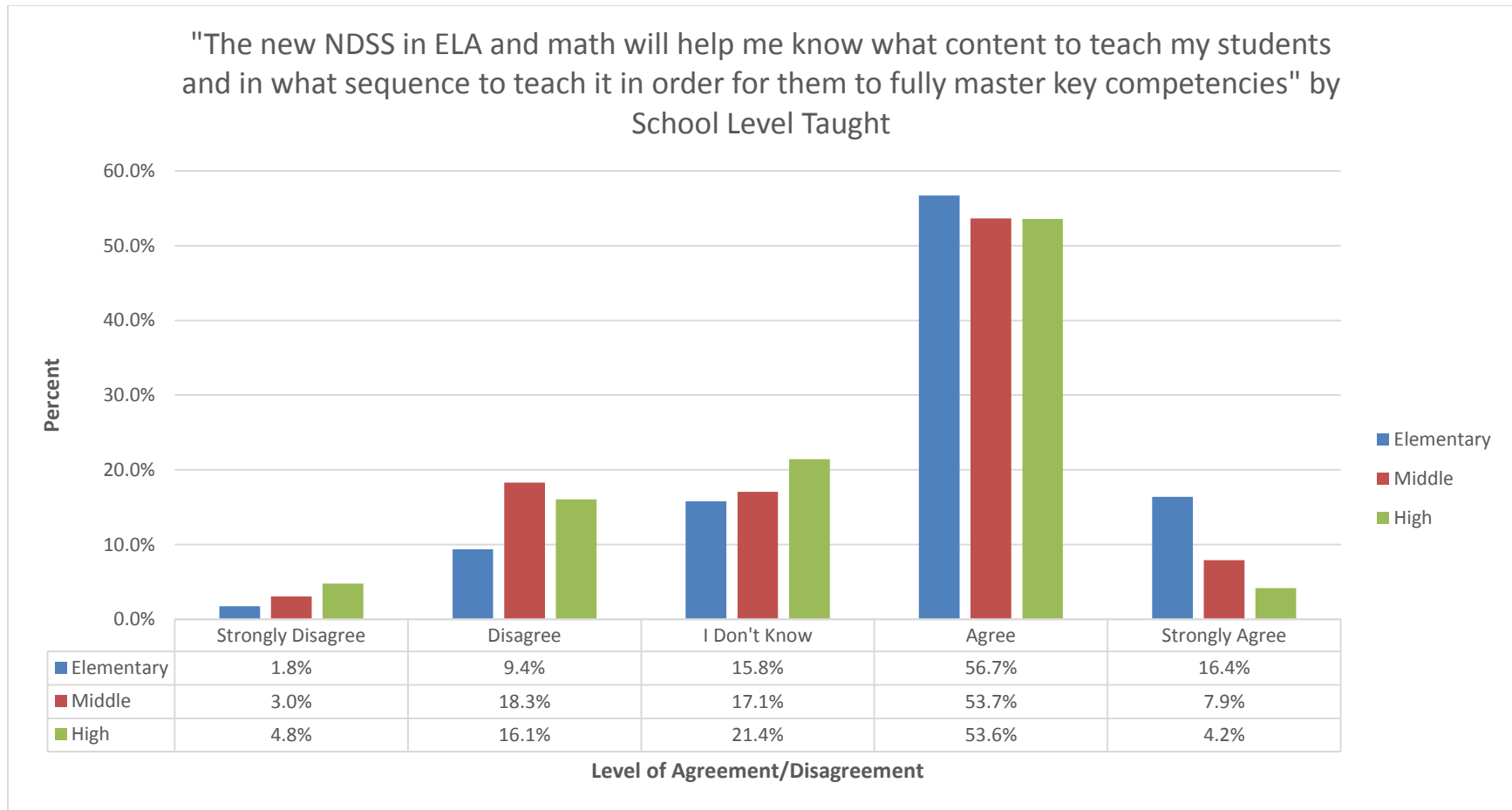|	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
Elementary	1.8%	9.4%	15.8%	56.7%	16.4%
Middle	3.0%	18.3%	17.1%	53.7%	7.9%
High	4.8%	16.1%	21.4%	53.6%	4.2%

Level of Agreement/Disagreement

Figure C.57. The Common Core Standards Will Help Me Know What Content to Teach My Students and in What Sequence for Them to Fully Master Key Competencies by School Level Taught. $n_{elementary} = 171$; $n_{middle} = 164$; $n_{high} = 168$.

"The new NDSS in ELA and math will help me know what content to teach my students and in what sequence to teach it in order for them to fully master key competencies" by Content Area Taught

	Strongly Disagree	Disagree	I Don't Know	Agree	Strongly Agree
Elementary	2.1%	11.9%	13.3%	55.2%	17.5%
ELA	1.1%	19.5%	10.3%	60.9%	8.0%
Math	4.8%	14.3%	4.8%	63.1%	13.1%
Non-Tested	3.0%	15.0%	24.1%	53.4%	4.5%

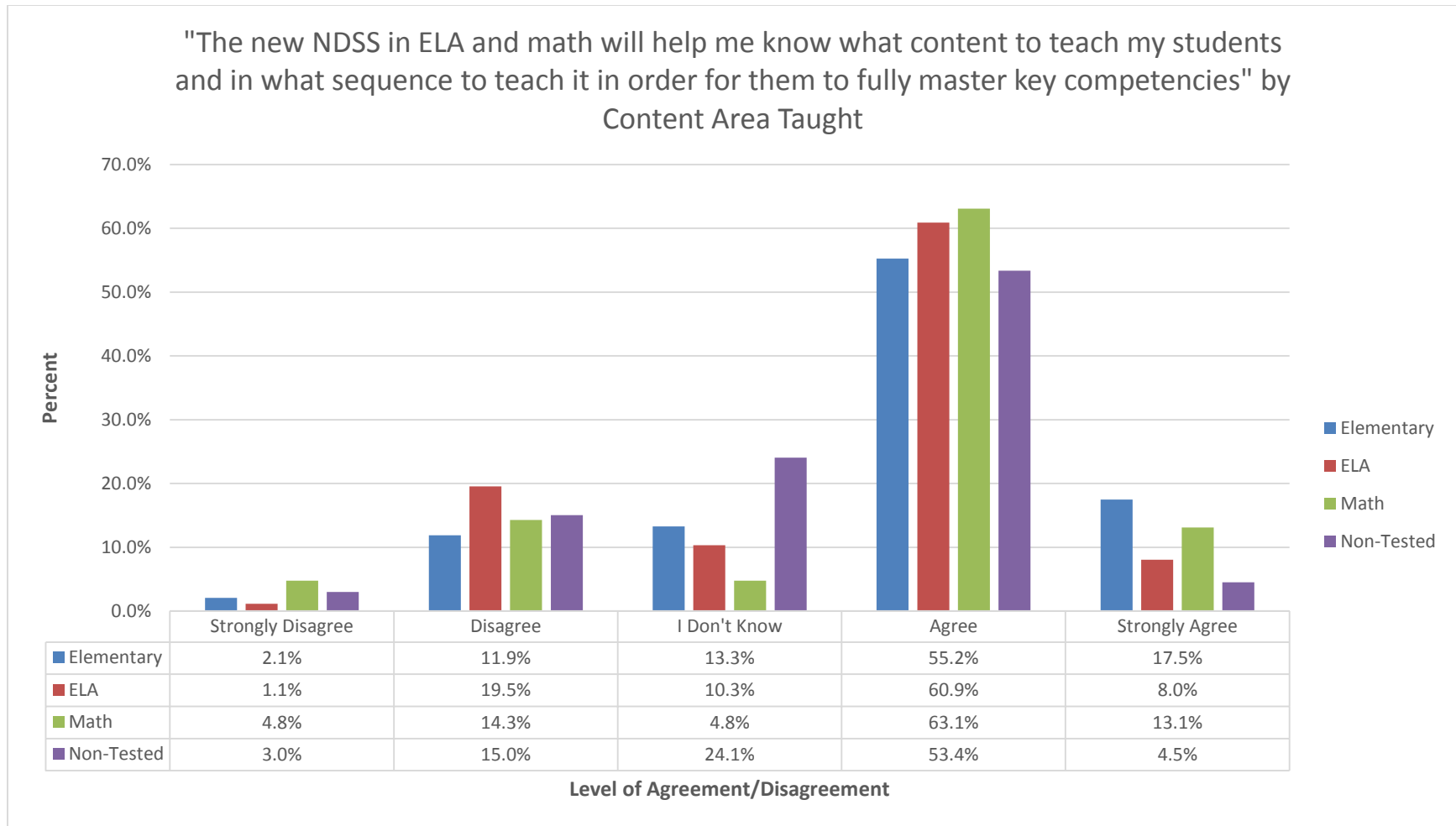Level of Agreement/Disagreement

Figure C.58. The Common Core Standards Will Help Me Know What Content to Teach My Students and in What Sequence for Them to Fully Master Key Competencies by Content Area Taught. $n_{elementary} = 143$; $n_{ELA} = 87$; $n_{math} = 84$; $n_{non\text{-}tested} = 133$.
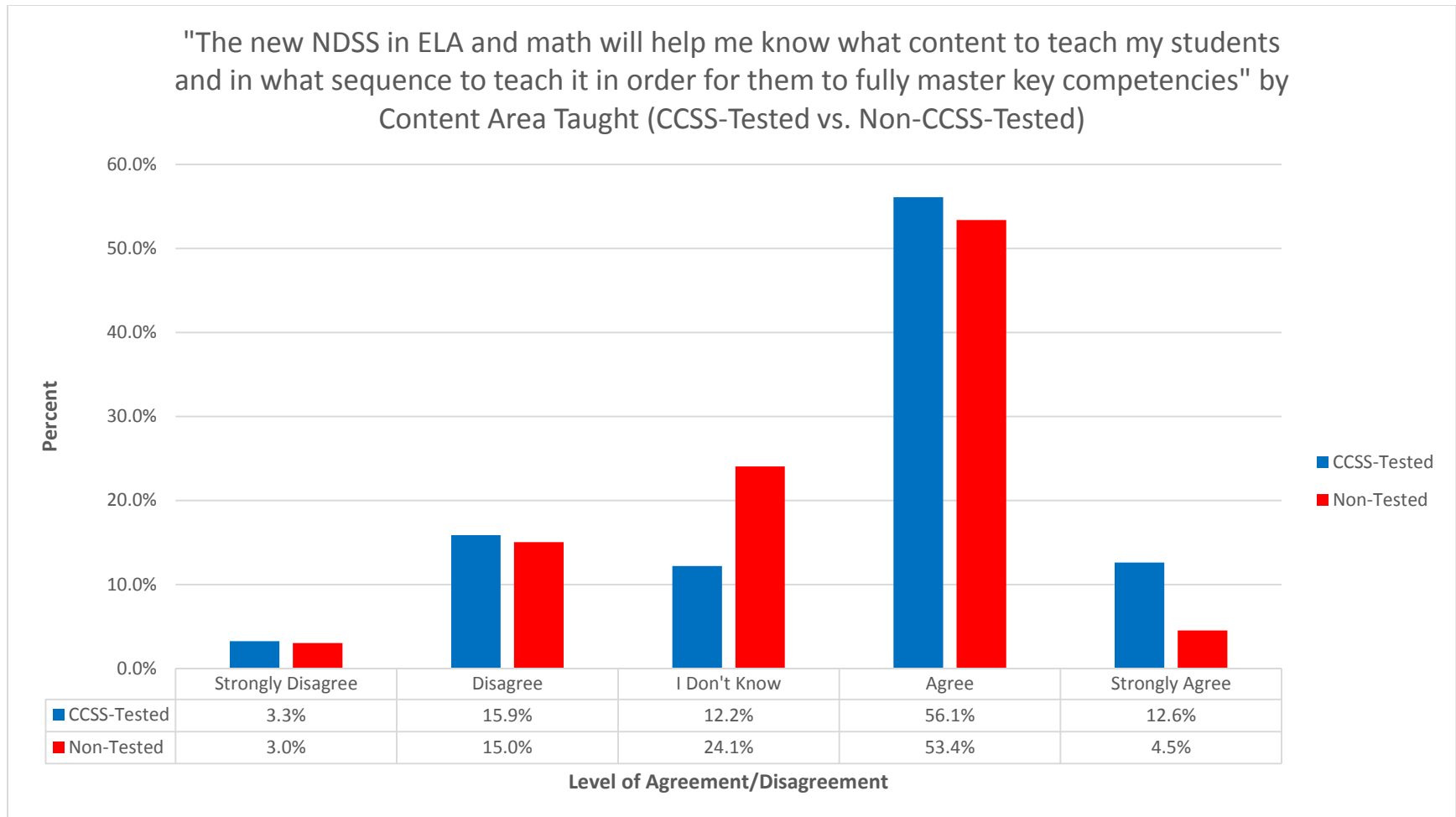
Figure C.59. The Common Core Standards Will Help Me Know What Content to Teach My Students and in What Sequence for Them to Fully Master Key Competencies by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). $n_{ccss} = 246; n_{non\text{-}ccss} = 133$.
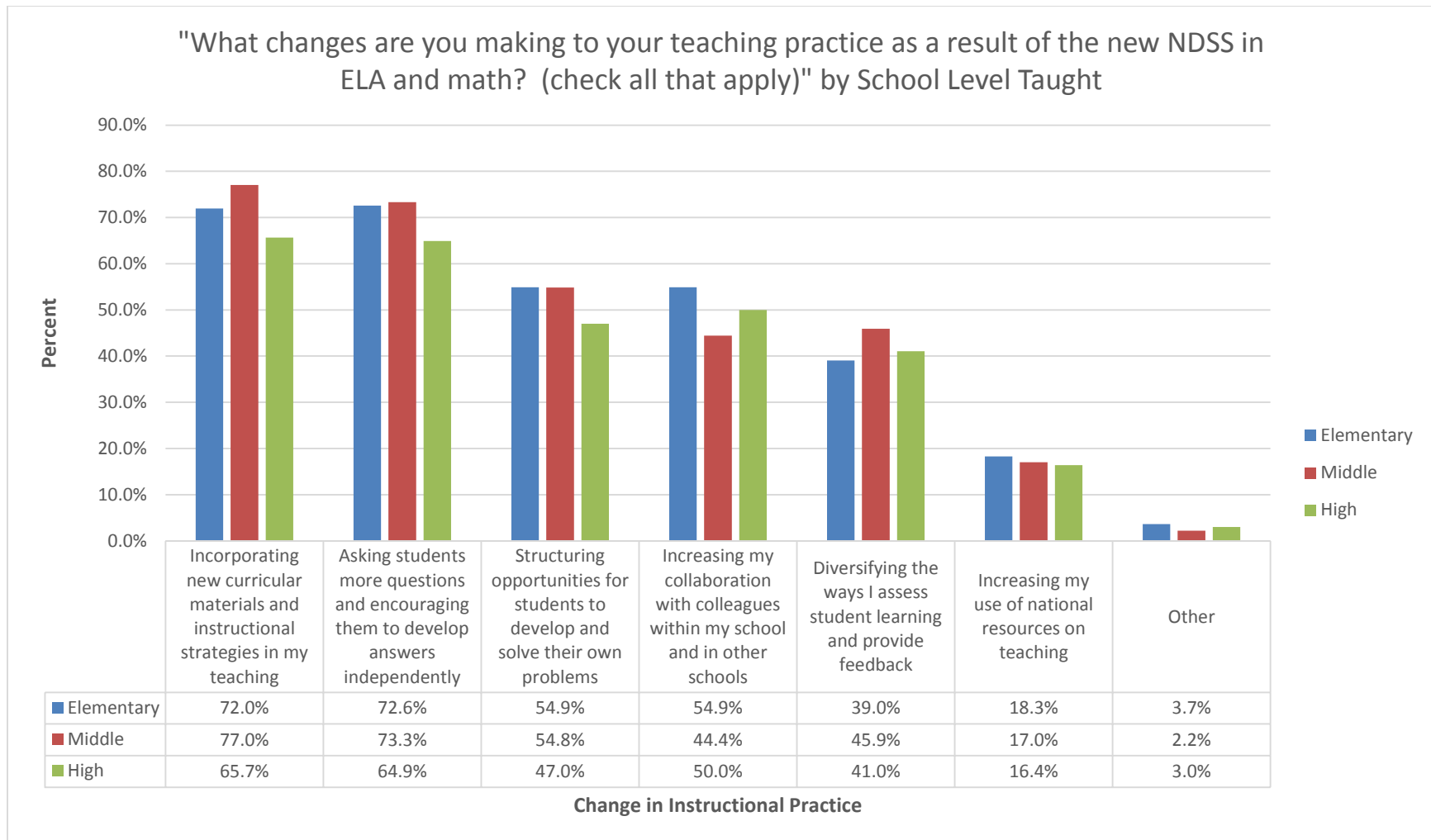
Figure C.60. Changes in Instructional Practice as a Result of CCSS Implementation by School Level Taught. Percentages are calculated based on the number of respondents indicating making at least one change to their instructional practice for each group. $n_{elementary} = 164$; $n_{middle} = 135$; $n_{high} = 134$.

"What changes are you making to your teaching practice as a result of the new NDSS in ELA and math? (check all that apply)" by Content Area Taught

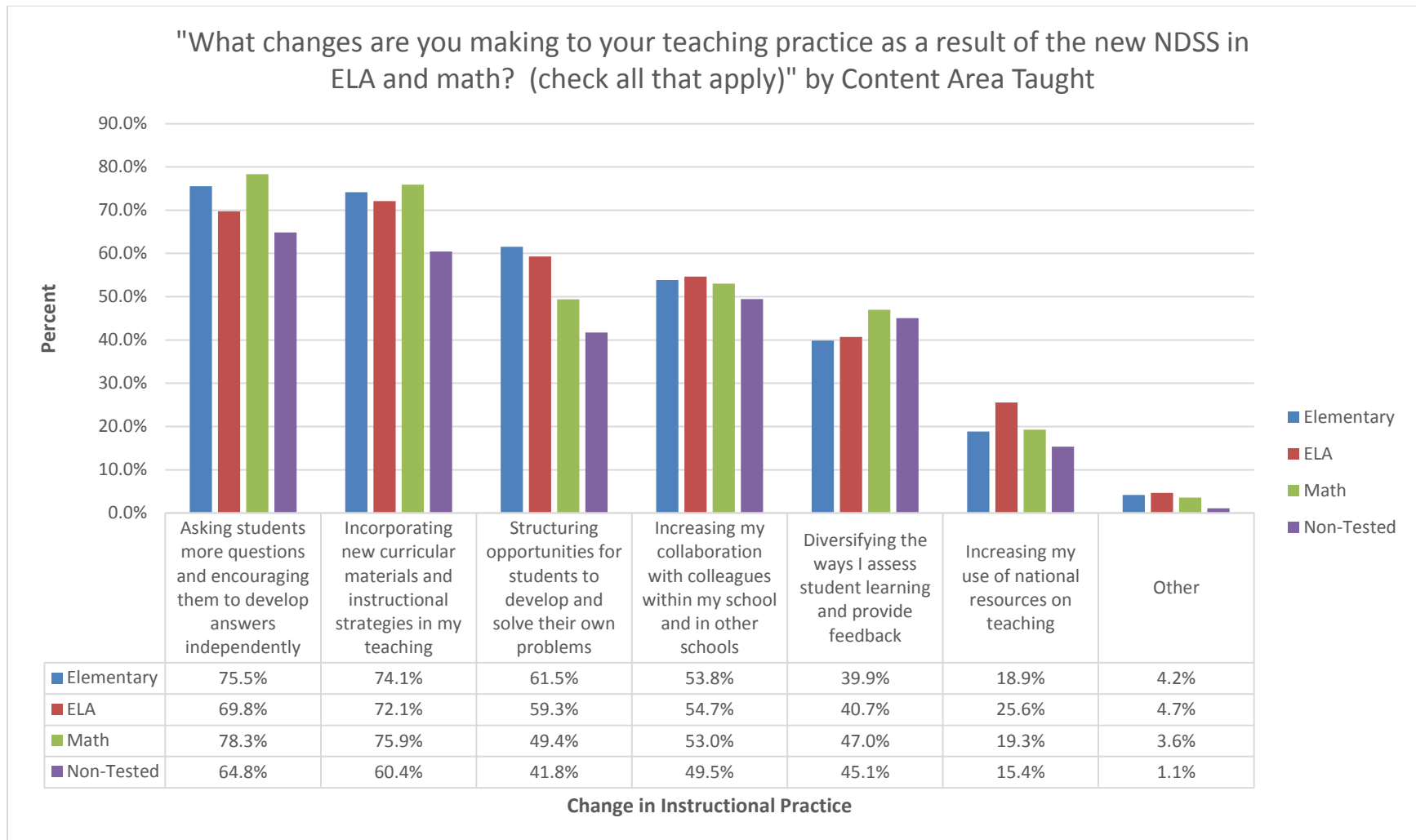|	Asking students more questions and encouraging them to develop answers independently	Incorporating new curricular materials and instructional strategies in my teaching	Structuring opportunities for students to develop and solve their own problems	Increasing my collaboration with colleagues within my school and in other schools	Diversifying the ways I assess student learning and provide feedback	Increasing my use of national resources on teaching	Other
Elementary	75.5%	74.1%	61.5%	53.8%	39.9%	18.9%	4.2%
ELA	69.8%	72.1%	59.3%	54.7%	40.7%	25.6%	4.7%
Math	78.3%	75.9%	49.4%	53.0%	47.0%	19.3%	3.6%
Non-Tested	64.8%	60.4%	41.8%	49.5%	45.1%	15.4%	1.1%

Change in Instructional Practice

Figure C.61. Changes in Instructional Practice as a Result of CCSS Implementation by Content Area Taught. Percentages are calculated based on the number of respondents indicating making at least one change to their instructional practice for each group. $n_{elementary} = 143$; $n_{ELA} = 86$; $n_{math} = 83$; $n_{non-tested} = 91$.
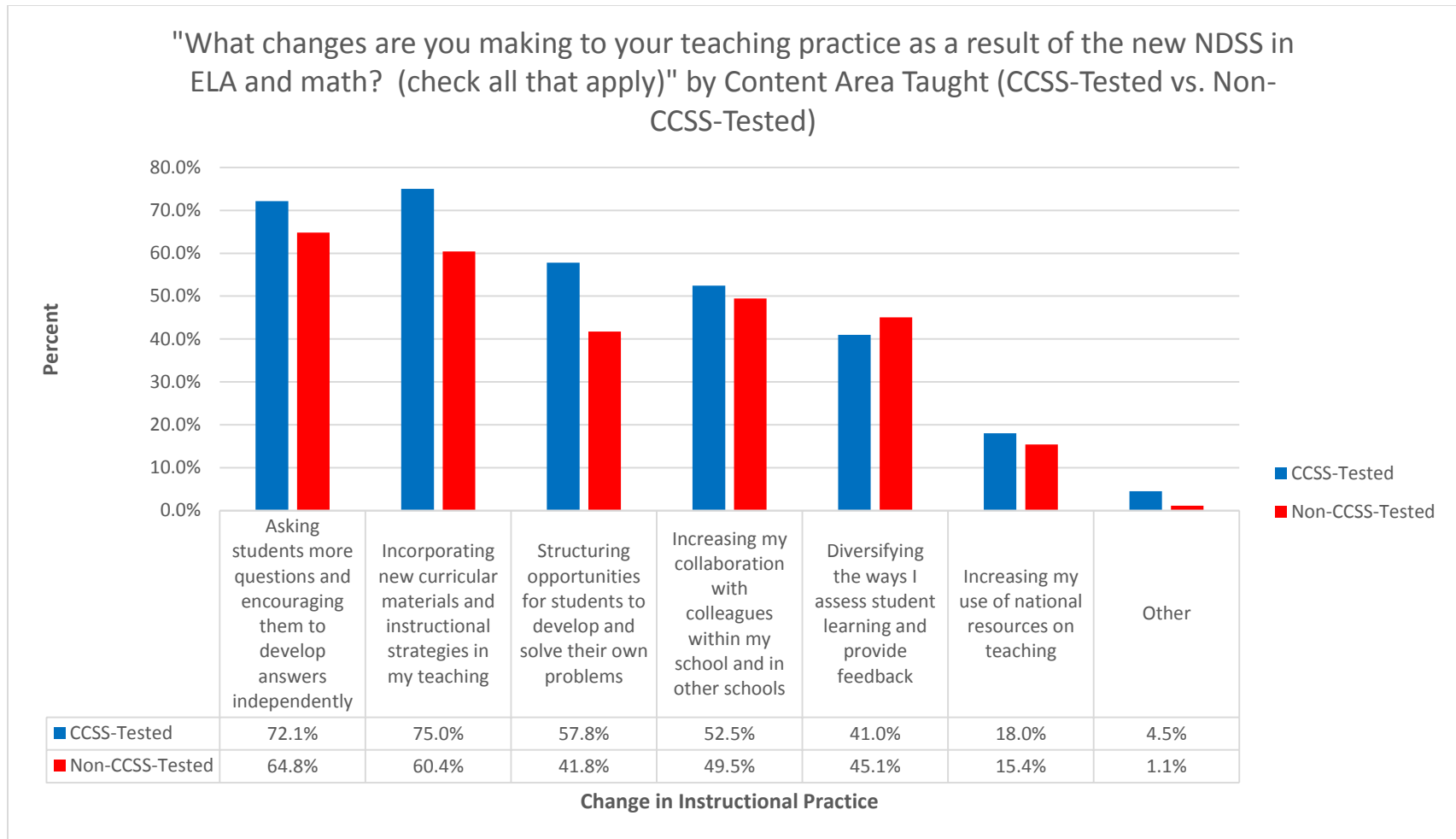
Figure C.62. Changes in Instructional Practice as a Result of CCSS Implementation by Content Area Taught (CCSS-Tested vs. Non-CCSS-Tested). Percentages are calculated based on the number of respondents indicating making at least one change to their instructional practice for each group. $n_{ccss} = 244$; $n_{non-ccss} = 91$.