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# Common Core Standards' Preparation for Vocational Careers in Rural Illinois Public High Schools

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Common Core Standards' Preparation for Vocational Careers  
in Rural Illinois Public High Schools

by

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Master of Science

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I HEARBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING THIS  
PART OF THE GRADUATE DEGREE CITED ABOVE



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## ABSTRACT

The purpose of this research study was to contribute to a better understanding of Common Core Math and Reading/Language Arts Standards for high school students in preparation for post-graduation vocational careers. This research study collected data regarding rural Illinois high school administrator, school board, and teacher perceptions of the Common Core Standards' applicability to students pursuing vocational careers. Data was collected through an online survey and analyzed using Qualtrics and SPSS, version 22. The results of the research revealed that the large majority of the Common Core Standards prepare students for college and not for vocational careers. Recommendations for practice and further research were made based on the findings of this study.

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## CHAPTER 1

### INTRODUCTION

#### Nature of the Study

According to Leventhal (2013), the United States is currently experiencing 1 million high school dropouts annually, while suffering from a shortage of hireable people with trade skills. United States' taxpayers spend up to \$500,000 on each high school dropout, which includes money spent over a dropout's lifetime on criminal justice and welfare expenses (Leventhal, 2013). The Association for Career and Technical Education (ACTE) (2013) reported that "81% of dropouts say relevant, real-world learning opportunities would have kept them in high school" (p. 1).

Currently in the United States, skilled trades are the hardest jobs for employers to fill (ACTE, 2013). However, the United States' public education system emphasizes preparing high school students for college instead of for vocational careers (Sirkin, 2013). It is up to public education to provide equal opportunities for both college-bound and workforce-bound students (Leventhal, 2013).

Public education in the United States is currently undergoing a dramatic shift. Since 1997, individual state governments were responsible for determining standards of education (Illinois State Board of Education, 2010). Currently, the Common Core State Standards Initiative (CCSSI) is attempting to implement consistent education standards across all 50 states (CCSSI, 2012).

Education, or academic, standards are defined by The Education Trust as "public statements regarding what all students should know and be able to do in academic subjects"

(2009). The Common Core State Standards Initiative is led by the National Governor's Association and the Council of Chief State School Officers (CCSSI, 2012). According to the CCSSI (2012), the initiative is:

a state-led effort that established a single set of clear educational standards for kindergarten through 12th grade in English language arts and mathematics that states voluntarily adopt. The standards are designed to ensure that students graduating from high school are prepared to enter credit bearing entry courses in two- or four-year college programs or enter the workforce. The standards are clear and concise to ensure that parents, teachers, and students have a clear understanding of the expectations in reading, writing, speaking and listening, language and mathematics in school. (Overview, para. 2)

The standards' goal is to prepare students for both college (College Readiness) and for the workforce (Career Readiness) (CCSSI, 2012).

College readiness is defined by the National High School Center at the American Institutes for Research (2012) as, "being prepared for any postsecondary education or training experience, including study at two- and four-year institutions leading to a postsecondary credential (i.e. a certificate, license, Associate's, or Bachelor's degree)" (p. 4). High school graduates who are college ready possess the skills necessary to qualify and succeed in credit bearing courses without the need for remedial work (National High School Center at the American Institutes for Research, 2012).

According to the National High School Center at the American Institutes for Research (2012), a student who is career ready is "a high school graduate who has the English and mathematics knowledge and skills needed to qualify for and succeed in the postsecondary job training and/or education necessary for their chosen career (i.e., technical/vocational program,



community college, apprenticeship, or significant on-the-job training)” (p. 4). Career Readiness classes fall under the label of “Career and Technical Education” (CTE) or “Vocational Technical.” CTE provides technical skills for students and prepares them for occupations after high school (Stover, 2013). According to the State of Washington’s Superintendent of Public Instruction (2013):

CTE classes are offered in many different fields, from construction, welding, firefighting, police work and cooking to environmental science, anatomy and physiology, nursing, veterinary science, computer software, graphic arts, mechanical engineering, architectural drafting, and business and marketing. These classes integrate academics with technical skill development to help prepare students for higher-level courses in college...or a paid internship. (p. 1)

The Common Core State Standards (CCSS) will be fully implemented in the public schools of 45 states during the 2014-2015 school year. The CCSS currently only consists of standards for math and language arts (CCSSI, 2012). According to the CCSSI (2012), these standards will also lead to “the development and implementation of common comprehensive assessment systems to measure student performance annually that will replace existing state testing systems” (p. 1).

All public schools in Illinois will be adopting and implementing CCSS (CCSSI, 2012). Illinois public schools are categorized as urban, suburban, town, and rural (IIRC, 2013). An Illinois Class 1 A Rural High School District is defined as a secondary school in a remote area with a student enrollment no greater than 295 (IHSA, 2013). According to the National Center for Education Statistics (NCES) (2009), only 31.3% of rural students attend college after high school, compared to over 42% of students in urban and suburban areas. While rural students

have the second highest graduation rate among these geographical groups, the majority of students in rural communities choose to join the workforce after graduation instead of enrolling in college (Casey, 2013; NCES, 2009).

### Purpose of the Study

The purpose of the study is to contribute to a better understanding of Common Core Math and English Language Arts Standards for high school students in preparation for post-graduation vocational careers. The study will capture perception data from administrators, school board members, and teachers at Class 1A (295 or fewer students) rural Illinois high schools to determine how many Common Core Math and English Language Arts Standards prepare high school students with skills for vocational careers after high school graduation.

### Statement of the Problem

How many Common Core State Standards prepare rural Illinois high school students for careers after graduation?

### Research Questions

These specific research questions were deducted from the purpose of the study:

1. How many Common Core Math and English Language Arts Standards do administrators employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?
2. How many Common Core Math and English Language Arts Standards do school board members serving Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?

3. How many Common Core Math and English Language Arts Standards do teachers employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?
4. What is the relationship between administrators', school board members', and teachers' perceptions on Common Core Standards to prepare high school students for vocational careers immediately following high school graduation?

### Significance of the Study

Information obtained in this study will benefit educators and leaders who desire to prepare high school students for careers after high school. Findings of the study will contribute to the knowledge base of the Common Core State Standards and may facilitate changes to ensure alignment of educational standards with every student's desired career path.

This study will capture data which will identify the Common Core State Standards that administrators, school board members, and teachers feel prepare students for careers after high school. Additionally, the study will help determine if these new standards are equally geared toward students who choose to follow a vocational career path versus those who choose to attend college by showing how many standards are perceived as college preparatory or career preparatory. The determination of emphasizing "college readiness" instead of "career readiness" standards is critical in determining if Common Core State Standards could contribute to a skill gap which would directly impact the United States' economy as a whole. Finally, the study's findings could potentially generate discussions between political leaders who plan to implement these standards and practitioners who are required to meet them, while simultaneously empowering a well-developed, future workforce.

## Definition of Terms

Career Readiness: According to the National High School Center at the American Institutes for Research (2012), “Being ready for a career means that a high school graduate has the English and mathematics knowledge and skills needed to qualify for and succeed in the postsecondary job training and/or education necessary for their chosen career (i.e., technical/vocational program, community college, apprenticeship, or significant on-the-job training)” (p. 4).

Career and Technical Education (CTE): Education that provides technical skills for students and prepares them for occupations (Stover, 2013).

College Readiness: According to the National High School Center at the American Institutes for Research (2012), “Being ‘college ready’ means being prepared for any postsecondary education or training experience, including study at two- and four-year institutions leading to a postsecondary credential (i.e. a certificate, license, Associate’s, or Bachelor’s degree). Being ready for college means that a high school graduate has the English and mathematics knowledge and skills necessary to qualify for and succeed in entry-level, credit-bearing college courses without the need for remedial coursework” (p. 4).

Common Core State Standards (CCSS): According to the Common Core State Standards Initiative (2012), the CCSS are “a single set of clear educational standards for kindergarten through 12th grade in English language arts and mathematics that states voluntarily adopt. The standards are designed to ensure that students graduating from high school are prepared to enter credit bearing entry courses in two- or four-year college programs or enter the workforce” (p. 3).

Common Core State Standards Initiative (CCSSI): An effort to create and implement consistent education standards across the United States led by the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO) (CCSSI, 2012).

Education standards: Public statements regarding what all students should know and be able to do in academic subjects (The Education Trust, 2009).

Illinois Class 1 A Rural High School District: A secondary school in a remote area with a student enrollment no greater than 295 (IHSA, 2013)

Vocational Technical Education: According to John F. Thompson (1973), The Vocational Education Act of 1963 defines vocational technical education as “a program designed to fit individuals for gainful employment as semi-skilled or skilled workers or technicians in recognized occupations” (p. 109).

## CHAPTER 2

### REVIEW OF LITERATURE

#### Introduction

The purpose of the study is to contribute to a better understanding of Common Core Math and English Language Arts Standards for rural Illinois high school students in preparation for post-graduation vocational careers. To better understand the issue, this chapter will focus on literature related to public education, academic standards, and Career and Technical Education (CTE). This chapter will begin by defining education and unveil the historical evolution of public and vocational education in the United States. Further, educational and Common Core standards will be explained as well as distinguishing between career readiness and college readiness. Next, the impact of CTE on the economy will be discussed. Finally, the importance of CTE to rural Illinois communities will be examined.

#### Education Defined

According to Alfie Kohn (Denning, 2011), the definition of education consists of four parts:

“1. To develop the intellect, presumably including linguistic, mathematical and analytic capabilities. 2. To produce competent, caring, loving, and lovable people. 3. To create and sustain a democratic society. 4. To invest in producing future workers for the workforce and, ultimately, corporate profits.” (p. 2)

Education involves more than providing a correct answer on a standardized test (Denning, 2011). However, educational standards are how student, teacher, administrator, and school success is measured in United States' public schools (Maxell, 2013). This disconnect is causing problems in the United States' education system as a whole.

### Historical Evolution of the U.S. Education System

Public education in the United States was originally founded after the American Revolution, with the goal of establishing national unity and creating political leaders (Spring, 2014). If it were required that all political leaders have a college education, the founding fathers realized that politicians would only be selected from the elite (Spring, 2014). Thomas Jefferson proposed the Bill for the More General Diffusion of Knowledge in 1778 (Blackwood, 2012). This bill would allow all nonslave children to receive three free years of education at regional grammar schools; the most talented males would then be chosen for further education. Despite his efforts, the bill was rejected by the Virginia Legislature several times (Blackwood, 2012). However, his fundamental idea that free public education was the best way to create a democratic society continued to be ingrained in the minds of educational developers and reformers (Spring, 2014).

Horace Mann, the founder and secretary of the Massachusetts Board of Education from 1837-1848, is considered to be the father of United States' public schools (Spring, 2014). According to Osgood (1997), Mann wrote that public schools would welcome every child regardless of social class, race, or religion, and provide him or her with free education that would be supported by the United States' tax system (p. 375). Education reformation during the mid-

nineteenth century became known as the Common School Movement because it involved every common child meeting in a common place and being taught common ideologies (Osgood, 1997).

After Mann's era, public education from the 1880s to the 1920s was described as "whole child" education and the following additions were made to public education: playgrounds, cafeterias, school nurses, guidance counselors, extra-curricular activities, and family interventions (Spring, 2014). By implementing these social focuses into public education, schools served as a means to Americanize immigrants, teach about health, reform urban and family life, instill anticommunism, and train a labor force for industrializing the country (Spring, 2014). It is during this time that vocational education was introduced to high schools and public schools began to implement programs to train students for skilled jobs in the labor market (Spring, 2014).

During the 1920s to the 1940s, high schools expanded grade levels to control youths and keep them out of the labor market (Spring, 2014). It was also during this time that the Life Adjustment Movement in curriculum took place (Breault, 2009). Following World War II, the Life Adjustment Movement was a brief effort in school curriculum development focused on preparing students for practical living instead of college or postsecondary training (Breault, 2009). According to Fallace (2011), "This movement was designed to address the portion of the student population, believed to be about sixty percent, that did not benefit from either college preparation or vocational training" (p. 575). Life Adjustment curriculum included hygiene, drivers' education, family living, and socializing (Fallace, 2011). Fallace states that during the Life Adjustment Movement, educators were "free from the top-down dictates of the college



entrance exams, and given the freedom to provide an education that best fit the developmental and social needs of their students” (2011, p. 577).

With the Soviet Union’s launch of the satellite Sputnik in 1957, the focus of curriculum in public schools changed (Holbrow, 2007). According to Holbrow (2007), after Sputnik’s launch

the federal government took several remarkable actions: President Eisenhower established the position of Presidential Science Advisor; the House and the Senate reorganized their committee structures to focus on science policy; Congress created NASA--the National Aeronautics and Space Agency--and charged it to create a civilian space program; they tripled funding for the National Science Foundation to support basic research but also to improve science education and draw more young Americans into science and engineering; and they passed the National Defense Education Act which involved the federal government to an unprecedented extent with all levels of American education. (p. 1)

United States public education’s goals from the 1950s to 1980s not only focused on educating more engineers and scientists, it also focused on racial harmony, fighting poverty, and career education (Spring, 2014). Career education officially began in 1972 in an attempt to make public education relevant to the workplace (Spring, 2014). Over these decades, public education had shifted from Horace Mann’s Common School Model, which focused on equal opportunities, to the Sorting Machine Model, which tracked students based on teacher perceived ability and test results (Spring, 2014).

According to Spring (2014), “from the 1980s into the twenty-first century, the labor market has been swamped with calls for greater testing and certification” (p. 64). This led to the development of The High-Stakes Testing Model of education, which determines if a child should be promoted throughout the education system (Spring, 2014). In addition to controlling learning through testing, the goals of education in the 1980s-early 2000s are to prepare students for globalization and community service (Spring, 2014).

### Educational Standards

The Education Trust (2009) defines education standards as “public statements regarding what all students should know and be able to do in academic subjects” (Questions about Academic Standards, para. 1). The United States began to standardize public education in the late 1980s (Rothman, 2012). Education advocates believed that education would improve if states clearly stated what all students should know and be able to do (Rothman, 2012). Testing, teacher preparation, and assessments would all align to these standards (Rothman, 2012). According to Spring (2014), “Learning goals and instructional methods are determined by a political process involving local, state, and federal officials and, in some cases, the courts” (p. 3). In the early 1990s, education standards were created by national organizations and individual state legislatures that were provided with grants during the Clinton administration (Rothman, 2012). By the late 1990s, all states except Iowa had developed their own state education standards (Rothman, 2012).

Individual state education standards proved to be inconsistent and created problems for teachers and schools (CCSSI, 2012). Even though states created the new standards, schools lacked resources to purchase materials to support new curricula. Because of this, many teachers

continued to use teaching methods they had always been using without adopting the state standards (Rothman, 2012). This inconsistency also proved problematic for students who moved between states during their educational careers. Differences in curriculum, assessments, and expectations made it difficult for students from out of state to assimilate to new standards (CCSSI, 2012).

In 2002, the No Child Left Behind Act (NCLB) was passed (Rothman, 2012). According to Rothman (2012), this act “required all students to reach ‘proficiency’ in reading and math by 2014, but it left it up to states to create their own standards and tests and to determine what constituted proficiency” (p. 59). In addition, NCLB required every state to administer the National Assessment of Educational Progress (NAEP), a nationwide testing program (NCES, 2012). The results of this test showed that certain states were performing much worse than others, suggesting that some states’ standards of education were not rigorous enough (Rothman, 2012). The lack of rigor in the standards led students in the United States to academically fall behind students in other countries.

If a nation’s education system falls behind, the economic system suffers as well. According to Joel Spring (2014), “Preparation for work or college is tied to a larger goal of improving the ability of the United States to compete in the global economic system” (p. 3). Globalization in the early 2000s made it apparent that students from the United States were not being held to high enough standards to compete with students from other countries (Rothman, 2012). According to Rothman (2012), “in 2003, U.S. 15-year-olds ranked 21<sup>st</sup> of 28 industrialized nations in mathematics on the Program for International Student Assessment (PISA), a test administered by the Organization for Economic Cooperation and Development”

(p.59). Policy makers then decided it was time for states to work collectively on creating and implementing consistent education standards for all students in United States public schools (Rothman, 2012).

### Common Core State Standards

In April of 2009, the National Governor's Association and the Council of Chief State School Officers released a memorandum stating that states would take part in developing a nationwide set of education standards (CCSSI, 2012). Every state except Texas and Alaska signed the proposal (Rothman, 2012). The Common Core State Standards (CCSS) were released to the public on June 2, 2010 (Rothman, 2012).

According to the Common Core State Standards Initiative (2011), the CCSS are

A state-led effort that established a single set of clear educational standards for kindergarten through 12th grade in English language arts and mathematics that states voluntarily adopt. The standards are designed to ensure that students graduating from high school are prepared to enter credit bearing entry courses in two- or four-year college programs or enter the workforce. (Overview, para. 2)

The creators of the CCSS wanted a rigorous set of standards that, according to Rothman (2012), "would be higher than the expectations embodied in many state standards and... would be as high as those embodied in the standards of high-performing nations like Finland and Singapore" (p. 59). Illinois and 44 other states have chosen to fully adopt the CCSS for the 2014-2015 school year (CCSSI, 2012).

## Career and College Readiness

The goal of the CCSS is to prepare students for college or the workforce (CCSSI, 2012). College readiness is defined by the National High School Center at the American Institutes for Research (2012) as, “being prepared for any postsecondary education or training experience, including study at two- and four-year institutions leading to a postsecondary credential (i.e. a certificate, license, Associate’s, or Bachelor’s degree)” (p. 4). High school graduates who are college ready possess the skills necessary to qualify and succeed in credit bearing courses without the need for remedial work (National High School Center at the American Institutes for Research, 2012).

According to the National High School Center at the American Institutes for Research (2012), a student who is career ready is “a high school graduate who has the English and mathematics knowledge and skills needed to qualify for and succeed in the postsecondary job training and/or education necessary for their chosen career (i.e., technical/vocational program, community college, apprenticeship, or significant on-the-job training)” (p. 4).

## Career and Technical Education (CTE) and the Economy

Career Readiness classes fall under the label of “Career and Technical Education” (CTE), which is also known as “Vocational Technical Education”. CTE provides technical skills for students and prepares them for a wide-variety of occupations after high school (Stover, 2013). According to the State of Washington’s Superintendent of Public Instruction (2013):

CTE classes are offered in many different fields, from construction, welding, firefighting, police work and cooking to environmental science, anatomy and physiology, nursing, veterinary

science, computer software, graphic arts, mechanical engineering, architectural drafting, and business and marketing. (p. 1)

According to Stover (2013), career readiness skills are equally as important as college readiness skills, but students are being pushed by society to pursue a college degree:

“...just a decade ago... the national mantra in education was all about graduating students to be ‘college ready.’ But with economists warning of a paucity of engineers and scientists--as well as shortages in skilled technicians and industrial craftsmen--recognition is growing that K-12 must put more emphasis on getting students ‘career ready’ and coordinating closely with industry and postsecondary institutions that will complete students’ training for the workplace.” (p. 1)

There is a shortage of skilled workers in the nation, even though “27 percent of people with less than an associate degree, including licenses and certificates, earn more than the average bachelor degree recipient” (ACTE, 2013, para. 3).

In order to alleviate the shortage of skilled workers, the Carl D. Perkins Career and Technical Education Act was passed in 2006 which provides federal funding to support CTE programs in every state (Career Technical Education Consortium, 2011). According to the CTE Consortium (2011), the Perkins Act is “the largest federal investment in secondary education...Perkins has been level funded at \$1.27 billion dollars for several years and experienced cuts in FY 2011 appropriations. As demand for skills training increases and the number of CTE students has grown over the last decade, the need for additional funding and resources is critical” (Current legislation, para. 2).

CTE is critical because it encourages real life occupational experience (Stover, 2013). According to the Association for Career and Technical Education (2013), “81 percent of dropouts say relevant, real-world learning opportunities would have kept them in high school” and “the average high school graduation rate for students concentrating in CTE programs is 90.18 percent, compared to an average national freshman graduation rate of 74.9 percent” (p. 1). CTE classes appeal to students who want to pursue hands-on trades. This information implies that by providing the proper encouragement for students in CTE fields, more students will graduate.

Every student who drops out because he or she is not provided with real-world learning experience, costs society a serious expense. United States' taxpayers spend up to \$500,000 on each high school dropout which includes money spent over a dropout's lifetime on criminal justice and welfare expenses (Levanthal, 2013). The United States is currently experiencing 1 million high school dropouts annually, while suffering from a shortage of hireable people with trade skills (Levanthal, 2013). Proper support of CTE programs in high schools could help lower the number of dropouts by providing better educational experiences for students with trade skills. Simultaneously, emphasizing the importance of CTE and nurturing students with valuable skills also produces more hireable employees to help the nation's economic system.

### Importance of CTE to Rural Illinois Communities

Many of these valuable skilled workers can be found in rural areas throughout the United States. According to the National Center for Education Statistics (NCES) (2009), only 31.3% of rural students attend college after high school, compared to over 42% of students in urban and suburban areas. However, rural students have the second highest high school graduation rate

among these geographical groups, second only to suburban areas (Casey, 2013). This means that the majority of students in rural communities choose to join the workforce after graduation instead of enrolling in college (NCES, 2009). In addition, rural school districts account for 70% of the enrollment increase in United States public schools (The Rural School and Community Trust, 2012). This means that rural schools are gaining students, most of whom will be joining the workforce post-graduation (NCES, 2009).

According to Reynolds and Van Tuyle (2012),

Since the Compulsory School Attendance Law passed in 1883, Illinois' public education system has been dominated by small schools. *The Condition of Education 2011* study found the largest percentage of public schools were in rural areas (32 percent), followed by suburbs (28 percent), cities (26 percent) and towns (14 percent). (p. 1)

The Illinois school system is dominated by rural schools and students choosing to join the workforce post-graduation instead of enrolling in college. According to the Illinois Department of Commerce & Economic Opportunity (2011), "nearly one-half of the state's 5.6 million workers are professionals, skilled technicians, crafts people, or machine operators. 10.1 percent are employed in manufacturing" (p. 1). It is important to the state's economy that the needs of the majority of Illinois students are met by having their skill sets appropriately measured and assessed in order to prepare them for the workforce. If nationwide education standards that will be the basis for future assessments are not equally geared toward both college-bound and workforce-bound students, the economy as a whole will suffer.



## Summary of Chapter 2

Chapter two defined education and reviewed relevant literature. Education was defined and the history of public education in the United States was summarized. Educational standards, Common Core State Standards, and career and college readiness were described. Current studies about CTE and the economy and the importance of CTE to rural Illinois communities were discussed.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### Introduction

The purpose of the study is to contribute to a better understanding of Common Core Math and English Language Arts Standards for high school students in preparation for post-graduation vocational careers. The study will capture perception data from administrators, school board members, and teachers at Class 1A (295 or fewer students) rural Illinois high schools to determine which Common Core Math and English Language Arts Standards prepare high school students with skills for vocational careers after high school graduation.

Chapter Three describes procedures and methods used in conducting this study. Included is information on research methods, participants, the data collection instrument, data collection procedures, and statistical procedures used to analyze the data.

#### Research Questions

Data for this descriptive, correlational study was collected through the use of a questionnaire (see Appendix A). The study was guided by the following research questions:

1. How many Common Core Math and English Language Arts Standards do administrators employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?
2. How many Common Core Math and English Language Arts Standards do school board members serving Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?

3. How many Common Core Math and English Language Arts Standards do teachers employed at Class 1 A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?
4. What is the relationship between administrators', school board members', and teachers' perceptions on Common Core Standards to prepare high school students for vocation careers immediately following high school graduation?

### Research Method

This study used a quantitative research approach to answer the research questions. A quantitative study is defined as a study that “attempts to maximize objectivity, replicability, and generalizability of findings, and is typically interested in prediction” (Harwell, 2011).

Participants from rural Illinois high schools were surveyed to determine which Common Core Math and English Language Arts Standards administrators, school board members, and teachers perceive to prepare high school students for vocational careers immediately following high school graduation. Further, the differences in perceptions were examined.

A web-based survey was used in this study to collect descriptive data. Web-based survey is defined as “the collection of data through a self-administered electronic set of questions on the Web” (Thomas, 2003). This method was chosen because of its ease of distribution among 194 high schools and three different sub-groups within the study population of rural education affiliates: administrators, school board members, and teachers. A web-based survey (See Appendix A) was also used because of its ability to streamline data and results.

## Instrumentation

One survey instrument was developed to collect data for this study. The instrument consists of three sections:

Section I: Demographic Information

Section II: Common Core Standards for High School English Language Arts

Section III: Common Core Standards for High School Math

Prior to completing the survey, the education affiliate received general instructions in an explanatory e-mail (See Appendices C, D, E). These instructions will be included to maintain consistency in the interpretation of the items.

### *Demographics Information*

The demographic portion of the survey instrument measures the characteristics of the respondents. The descriptive information will be collected in questions #1-8. These items include questions about job position, subject area, years in that position, level of education, and questions about previous teaching experience. Each subject only responds to the questions out of these that directly applies to him or her. Administrators will answer 7 of these questions, teachers will answer 6 of these questions, and school board members will answer 5 of these demographics questions.

### *English Language Arts CCS Instrument*

This portion of the survey instrument contains all of the current high school Common Core English Language Arts Standards for questions #9-44. For each standard created by the Common Core State Standards Initiative, the survey recipients are asked to mark whether the standard prepares students for College Readiness or Career Readiness.

### *Math CCS Instrument*

This portion of the instrument contains all of the current high school Common Core Math Standards for questions #45-100. For each standard created by the Common Core State Standards Initiative, the survey recipients are asked to mark whether they perceive that the standard prepares students for College Readiness or Career Readiness.

### Instrument Validity

In accordance with Eastern Illinois University regulations and to ensure the validity of the instrument and the appropriateness of the explanatory letters, approval from the Institutional Review Board will be obtained (See Appendix F). The instrument was reviewed by subject matter experts that were chosen based on their current knowledge of Career and Technical Education and/or the Common Core Standards. The Subject Matter Experts who reviewed the instrument for validity were secondary educators at public Illinois high schools. These experts were given an explanatory email and a first draft of the instrument (See Appendices A & B). They were asked to review and provide feedback before the instrument was sent into the field. Based on their recommendations, changes were made to the instrument and letter to strengthen their validity. After final revisions, a prototype was developed (See Appendix H). This prototype of the instrument and explanatory letters were then submitted to the Institutional Review Board (IRB).

Once approval was received from IRB (Appendix F), the prototype was pilot tested at one Class 1A school. The pilot test was used to identify any areas of concern that the education affiliates had with the instrument. After pilot testing, no changes to the instrument needed to be made before the instrument was distributed on a larger scale.

### Participants

The chosen participants for this study were administrators, school board members, and teachers from Illinois rural high schools. Schools chosen for this study were deemed "Class 1A" by the Illinois High School Association (IHSA) for the 2013-2014 school year. To qualify as a Class 1A school, schools have a student enrollment no greater than 295 (IHSA, 2013). To verify that an Illinois school is indeed rural and qualifies as a Class 1A school, the schools listed with an enrollment of 295 or less by the IHSA were simultaneously checked against the school's description on the Illinois Interactive Report Card (IIRC). The IIRC is a database that provides information on every school in Illinois, including whether it is classified as rural, suburban, or urban. After utilizing the data from both the IHSA and IIRC, it was determined that 194 Illinois schools fit the criteria of being rural and in Class 1A.

The 194 schools were contacted to retrieve contact information for administrators, teachers, and school board members. The survey was distributed to each available school affiliate via email with an explanatory letter (See Appendices A, C, D, E). A total of 388 administrators, 2328 teachers, and 1358 school board members work for Class 1A schools. The total population of this group is 4074 and the minimum sample size of 846 was determined through the use of the American Research Group's Sample Size Calculator.

### Data Collection Procedures

Data collection took place in multiple steps during the spring of 2014. The researcher developed a web-based survey instrument to collect the data. The population for this study consisted of 388 administrators, 1358 school board members, and 2328 full-time teachers

affiliated with rural Class 1A Illinois high schools. To achieve participation, the researcher sent an Initial Email to Administrators (Appendix C). The text explained the research project, provided the web-link to the survey instrument, and asked the administrator to forward the link to their school board and full-time teaching staff. Administrators were notified with a Follow-Up Email (Appendix G) one week after the surveys were sent. The text encouraged administrators, who had not yet completed or distributed the web-based survey, to participate. Administrators were notified with a follow-up phone call one week after the Follow-Up Email was sent.

After receiving minimal response from administrators, the researcher sent an Initial Email to Teachers (Appendix D) and an Initial Email to School Board Members (Appendix E). The text explained the research project and provided the web-link to the survey instrument. Participants were notified with a Follow-Up Email (Appendix G) one week after surveys were sent. The text encouraged teachers and school board members, who had not yet completed the survey, to participate. A Follow-Up Email (Appendix G) was sent each week for two weeks after the first Follow-Up Email. At the conclusion of data collection, the population (N) consisted of 20 (5.9%) administrators, 23 (1.69%) school board members, and 499 (21.43%) full-time teachers.

### Analysis of Data

Data from this study were collected through an Internet based survey developed in the Eastern Illinois University computer application, Qualtrics. Data results were analyzed using descriptive statistics (mean, frequency, and percentages). All statistics were generated using Excel and the statistical software program SPSS, version 22.

## Treatment of the Data

The research questions for this descriptive study were analyzed with data collected from the survey instrument as outlined in Table 1.

Table 1.

*Data analysis overview*

Research question	Survey question	Data analysis approach
1. How many Common Core Math and English Language Arts Standards do administrators employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?	Section I: 1-6, 8 Section II: 9-44 Section III: 45-100	Measures of central tendency, measures of variability, percentages.
2. How many Common Core Math and English Language Arts Standards do school board members serving Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?	Section I: 1-3, 7, 8 Section II: 9-44 Section III: 45-100	Measures of central tendency, measures of variability, percentages.
3. How many Common Core Math and English Language Arts Standards do teachers employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?	Section I: 1-4, 7, 8 Section II: 9-44 Section III: 45-100	Measures of central tendency, measures of variability, percentages.



4. What is the relationship between administration, school board members, and teachers' perceptions on Common Core Standards to prepare high school students for vocation careers immediately following high school graduation?	Section I: 1-8  Section II: 9-44  Section III: 45-100	Measures of central tendency, measures of variability, percentages.
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### Summary

The purpose of chapter three was to describe the research methods used in this study. It listed the research questions, defined the population, described details of instrumentation, explained data collection, and expressed how the data gathered from the instrument was treated in relation to the research questions.

## CHAPTER 4

### RESULTS

#### Introduction

The purpose of the study was to contribute to a better understanding of Common Core Math and English Language Arts Standards for high school students in preparation for post-graduation vocational careers. The study captured perception data from administrators, school board members, and teachers at Class 1 A (295 or fewer students) rural Illinois high schools to determine which Common Core Math and English Language Arts Standards prepare high school students with skills for vocational careers after high school graduation. Data collected for this study were obtained using an online survey reported from 499 full-time high school teachers, 20 administrators, and 23 school board members. The information collected from completed surveys was utilized to address the following research questions:

1. How many Common Core Math and English Language Arts Standards do administrators employed at Class 1 A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?
2. How many Common Core Math and English Language Arts Standards do school board members serving Class 1 A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?
3. How many Common Core Math and English Language Arts Standards do teachers employed at Class 1 A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?

4. What is the relationship between administrators', school board members', and teachers' perceptions on Common Core Standards to prepare high school students for vocation careers immediately following high school graduation?

Chapter four begins with the description of population characteristics, followed by the statistical analysis of data to address each research question. The chapter concludes with a summary of the findings.

#### Population Demographic Data

The population identified for this study consisted of full-time teachers, administrators, and school board members affiliated with Illinois rural Class 1A high schools. All school affiliates were sent an email (prepared by the researcher) requesting their participation in this study. The email explained the purpose of the study and included the link to the web-based survey at the bottom of the message. Out of 4074 school affiliates, 542 (13.3%) completed the web-based survey. Out of 2328 teachers, 499 (21%) completed the web-based survey. Out of 1358 school board members, 23 (1.6%) completed the web-based survey. Out of 388 administrators, 20 (5%) completed the web-based survey.

Demographic data was collected from each respondent and participants were asked to identify their job function, how many years they have served in that position, the highest level of education they have received, and if the school with which they are affiliated met Annual Yearly Progress (AYP) for the state of Illinois in the 2012-2013 school year. Teachers were asked what subject they teach. Administrators were asked for their specific job title. The data in Table 2 summarizes these data by presenting the number and percentage for each category. Of the 542 participants 92 % (n=499) were teachers, 3.69% (n=20) were administrators, and 4.24% (n=23) were school board members. The majority of participants, 75.46% (n=409) indicated that they

have been working in their position for more than five years. The majority of participants had earned a Master's degree, 52.58% (n=285). Teachers of English/Language Arts, 20.24% (n=101) and CTE 17.84% (n=89) responded more than teachers of any other subject. Of the administrators who participated, 30% (n=6) were superintendents while 70% (n=13) were principals, vice-principals, or deans. Thirty-two percent of all participants (n=174) were certain that their school had met Annual Yearly Progress in the 2012-2013 school year.

Table 2

*Demographic data*

Demographic data characteristics	N	Mean	SD	%	Frequency
Job Function	542				
Teacher				92.07	499
Administrator				3.69	20
School Board Member				4.24	23
Years In This Position	542	13.4	10.2		
Less than 2 years				14.76	80
3 to 4 years				9.78	53
5 to 10 years				24.72	134
11 to 20 years				28.60	155
More than 20 years				22.14	120

Highest Level of Education 542

High School Diploma	.92	5
Associates Degree	.92	5
Trade School Certificate	0	0
Bachelor's Degree	44.46	241
Master's Degree	52.58	285
Doctoral Degree	1.11	6

## Teachers: Subject Taught 499

English Language Arts	20.24	101
Math	14.63	73
Science	13.43	67
Social Science	7.01	35
CTE	17.84	89
Foreign Language	5.0	25
Physical Education	4.0	20
Fine Arts	6.8	34
Other	10.8	54

## Administrators: Job Title 20

Superintendent	30.0	6
Principal	55.0	11

Vice Principal		10.0	2
Dean		5.0	1
School Meet AYP	542		
Yes		32.10	174
No		50.18	272
I don't know		17.71	96

### Reliability of the Data

The web-based survey consists of three sections including a demographics section. The instrument was developed by the researcher. A forced choice response was required for each question regarding the Common Core Standards: whether the standard in question is more applicable to students attending college (College) or joining the workforce immediately after high school (Career). The reliability coefficients for the instrument was acceptable (Cronbach's alpha = .96).

### Research Question Results

The purpose of the study was to contribute to a better understanding of Common Core Math and English Language Arts Standards for high school students in preparation for post-graduation vocational careers.

*Question 1: How many Common Core English Language Arts and Math Standards do administrators employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?*

Administrators' perception of the Common Core Standards' ability to prepare students for vocational careers after graduation can be seen in Table 3. Out of the 37 Common Core English Language Arts Standards for grades 9-12, administrators perceive 8 (21.6%) to prepare students for vocational careers and 24 (65%) of the standards to be geared toward college-bound students. Administrators perceptions tied on 5 (13%) of the standards, which represents the standards are beneficial for both career and college-bound students.

Out of the 54 Common Core Math Standards for grades 9-12, administrators perceive 3 (5.56%) of them to prepare students for vocational careers. 1 (1.85%) of the standards tied as being both college preparatory and workforce preparatory. Administrators perceive 50 (92.6%) of the Common Core Math Standards to be geared toward college-bound students.

Out of all 91 Common Core English and Math Standards for grades 9-12, administrators perceive 11 (12%) of the standards to prepare students for vocational careers and 74 (81%) of the standards to prepare students for college.

Table 3

*Administrator perceptions of Common Core Standards*

English Language Arts Standards

Perception	Number (n=37)	Percent
Career	8	21.62
College	24	64.86
Tie	5	13.51

## Math Standards

Perception	Number (n=54)	Percent
Career	3	5.56
College	50	92.59
Tie	1	1.85

## Both English and Math

Perception	Number (n=91)	Percent
Career	11	12.09
College	74	81.32
Tie	6	6.59

*Question 2: How many Common Core Math and English/Language Arts Standards do school board members serving Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?*

School board members' perception of the Common Core Standards ability to prepare students for vocational careers after graduation can be seen in Table 4. Out of the 37 Common Core English Language Arts Standards for grades 9-12, school board members perceive 8 of them (21.6%) to prepare students for vocational careers. School board members perceive 29 of the standards (78.6%) of the standards to be geared toward college-bound students.

Out of the 54 Common Core Math Standards for grades 9-12, school board members perceive 2 (3.7%) of them to prepare students for vocational careers. School board members



perceive 52 (96.3%) of the Common Core Math Standards to be geared toward college-bound students.

Out of all 91 Common Core English and Math Standards for grades 9-12, school board members perceive 10 (10.99%) of the standards to prepare students for vocational careers.

School board members perceive 81 (89.01%) of the standards to prepare students for college.

Table 4

*School board member perceptions of Common Core Standards*

English Language Arts Standards

Perception	Number (n=37)	Percent
Career	8	21.62
College	29	78.34

Math Standards

Perception	Number (n=54)	Percent
Career	2	3.70
College	52	96.30

Both English and Math

Perception	Number (n=91)	Percent
Career	10	10.99
College	81	89.01

*Question 3: How many Common Core Math and English Language Arts Standards do teachers employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?*

Teachers' perception of the Common Core Standards ability to prepare students for vocational careers after graduation can be seen in Table 5. Out of the 37 Common Core English Language Arts Standards for grades 9-12, teachers perceive 9 of them (24.32%) to prepare students for vocational careers. Teachers perceive 28 of the standards (75.68%) of the standards to be geared toward college-bound students.

Out of the 54 Common Core Math Standards for grades 9-12, teachers perceive 1 (1.85%) of them to prepare students for vocational careers. Teachers perceive 53 (98.15%) of the Common Core Math Standards to be geared toward college-bound students.

Out of all 91 Common Core English and Math Standards for grades 9-12, teachers perceive 10 (10.99%) of the standards to prepare students for vocational careers. Teachers perceive 81 (89.01%) of the standards to prepare students for college.

Table 5

*Teacher perceptions of Common Core Standards*

English Language Arts Standards

Perception	Number (n=37)	Percent
Career	9	24.32
College	28	75.67

## Math Standards

Perception	Number (n=54)	Percent
Career	1	1.85
College	53	98.15

## Both English and Math

Perception	Number (n=91)	Percent
Career	10	10.99
College	81	89.01

*Question 4: What is the relationship between administration, school board members, and teachers' perceptions on Common Core Standards to prepare high school students for vocational careers immediately following high school graduation?*

Table 6 shows the relationship between administrator, school board member, and teacher perceptions of the Common Core Standards ability to prepare high school students for vocational careers after high school graduation. Both administrators and school board members perceive that 8 (2.16%) of the Common Core English Language Arts standards will prepare students for vocational careers after high school. Teachers perceive that 9 (2.43) percent of the English Language Arts standards will prepare students for vocational careers after high school.

Administrators perceive that 3 (5.56%) of the Common Core Math Standards prepare students for vocational careers after high school. School board members perceive that 2 (3.70%) of the math standards prepare students for vocational careers. Teachers perceive that 1 (1.85%) of the standards apply to students pursuing vocational careers.

Of both English and Math Common Core Standards combined, administrators perceive that 11 (12.09%) of them prepare students for vocational careers after high school graduation. Both school board members and teachers perceive that 10 (10.99%) of the Common Core standards prepare students for vocational careers after high school graduation.

Non-responders of the survey were not contacted to compare data with responders. Their responses could have been different from the data provided.

Table 6

*Relationship between job title and perceptions of Common Core Standards in preparation for vocational careers*

English Language Arts Standards for Students Pursuing Vocational Careers

Job Title	Number (n=37)	Percent
Administrator	8	2.16
School Board Member	8	2.16
Teacher	9	2.43

Math Standards for Students Pursuing Vocational Careers

Job Title	Number (n=54)	Percent
Administrator	3	5.56
School Board Member	2	3.70
Teacher	1	1.85

## English Language Arts and Math Standards for Students Pursuing Vocational Careers

Job Title	Number (n=91)	Percent
Administrator	11	12.09
School Board Member	10	10.99
Teacher	10	10.99

## Summary

This chapter provided data collection results for the four research question that serve as the purpose of this study: a) How many Common Core Math and English Language Arts Standards do administrators employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?, b) How many Common Core Math and English Language Arts Standards do school board members serving Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?, c) How many Common Core Math and English Language Arts Standards do teachers employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation?, d) What is the relationship between administration, school board members, and teachers' perceptions on Common Core Standards to prepare high school students for vocational careers immediately following high school graduation? Statistics are based on feedback from a web-based survey of 542 teachers, administrators, and school board members at rural Illinois Class 1A high schools.

## CHAPTER 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

The nature of this study was to determine how many Common Core English Language Arts and Math Standards are perceived by rural Illinois Class 1A high school affiliates to prepare students for vocational careers after high school. In the previous chapter, results of data collection were documented. Chapter five will focus on the discussion of the results, a review of limitations, and a proposal of recommendations.

#### Summary

##### Purpose of the Study

The purpose of the study was to contribute to a better understanding of Common Core Math and English Language Arts Standards for high school students in preparation for post-graduation vocational careers. The study captured perception data from administrators, school board members, and teachers at Class 1A (295 or fewer students) rural Illinois high schools to determine which Common Core Math and English Language Arts Standards prepare high school students with skills for vocational careers after high school graduation.

##### Significance of the Study

This study contributes to the knowledge base of the Common Core State Standards and may facilitate changes to ensure alignment of educational standards with every student's desired career path. The study captured data which identifies how many Common Core State Standards administrators, school board members, and teachers feel prepare students for vocational careers

or college after high school. The determination of emphasizing “college readiness” instead of “career readiness” standards is critical in determining if Common Core State Standards could contribute to a skill gap which would directly impact the United States’ economy as a whole. Finally, the study’s findings could potentially generate discussions between political leaders who plan to implement these standards and practitioners who are required to meet them, while simultaneously empowering a well-developed, future workforce.

### Findings

The following are the findings revealed after statistical analysis was conducted on the data received from the survey instrument.

Of the 542 participants 92% (n=499) were teachers, 3.69% (n=20) were administrators, and 4.24% (n=23) were school board members. The majority of participants (n=409, 75.46%) indicated that they have been working in their position for more than five years. The majority of participants had earned a Master’s degree (n= 285, 52.58%). Teachers of Reading/Language Arts (n=101, 20.24%) and CTE (n=89, 17.84%) responded more than teachers of any other subject. Of the administrators who participated, 30% (n=6), were superintendents while 70% (n=13) were principals, vice-principals, or deans. Thirty-two percent (n=174) of all participants were certain that their school had met Annual Yearly Progress in the 2012-2013 school year.

Research Question 1: How many Common Core English Language Arts and Math Standards do administrators employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation? Out of all 91 Common Core English Language Arts and Math Standards for grades 9-12, administrators perceive 11 (12%) of the standards to prepare student for vocational careers, 74 (81%) of the

standards to prepare students for college, and 6 (7%) tied for being both college and career preparatory.

Research Question 2: How many Common Core Math and English Language Arts Standards do school board members serving Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation? Out of all 91 Common Core English Language Arts and Math Standards for grades 9-12, school board members perceive 10 (10.99%) of the standards to prepare students for vocational careers and 81 (89.01%) of the standards to prepare students for college.

Research Question 3: How many Common Core Math and English Language Arts Standards do teachers employed at Class 1A rural high schools perceive to prepare high school students for vocational careers immediately following high school graduation? Out of all 91 Common Core English Language Arts and Math Standards for grades 9-12, teachers perceive 10 (10.99%) of the standards to prepare students for vocational careers. Teachers perceive 81 (89.01%) of the standards to prepare students for college.

Research Question 4: What is the relationship between administration, school board members, and teachers' perceptions on Common Core Standards to prepare high school students for vocational careers immediately following high school graduation? Of both English Language Arts and Math Common Core Standards combined, administrators perceive that 11 (12.09%) of them prepare students for vocational careers after high school graduation. Both school board members and teachers perceive that 10 (10.99%) of the Common Core standards prepare students for vocational careers after high school graduation.



## Discussion

The first research question sought to determine the perception of high school administrators at rural Illinois Class 1A schools in regards to how many Common Core English Language Arts Standards and Math Standards prepare students for vocational careers versus how many standards prepare students for college. Results for the first research question found that administrators perceive over 80% of the Common Core Standards to be geared toward students attending college after graduation. Administrators perceived 7% of the standards to be geared toward both college-bound students and students pursuing vocational careers. Administrators perceived 12% of the Common Core Standards to prepare students for vocational careers.

The results to the first research question came out somewhat as I predicted. I predicted that administrators in rural areas would perceive the Common Core Standards to be mostly geared toward college-bound students. I also predicted that out of administrators, school board members, and teachers, that administrators would be the most torn on the subject. This is evident in the fact that administrators tied on their perceptions of 7% of the standards as being both college-prep and career-readiness. I also predicted that administrators would be less likely to respond to the survey than teachers, because of workload, disinterest, or the politically-charged nature of the Common Core Standards. I did not predict that so many of them would refuse to distribute the survey to their staff and school board, making the process of gathering this information much more difficult than it should have been.

The second research question sought to determine the perception of school board members at rural Illinois Class 1A schools in regards to how many Common Core English Language Arts Standards and Math Standards prepare students for vocational careers versus how many standards prepare students for college. Results for the second research question found that

school board members perceived 89% of the Common Core Standards to be geared toward students attending college after graduation. School board members perceived 11% of the standards to be geared toward students pursuing vocational careers.

The results to the second research question turned out somewhat how I predicted. I expected it to be difficult to get responses from school board members because of the politically charged nature of the Common Core Standards and the lack of public contact information. I did not expect to only have 23 (1.6%) respond. I expected school board members to perceive the majority of the Common Core Standards to be college preparatory because, as invested members of rural communities, they should be more aware of the importance of vocational skills among the students and their children within rural communities. Also, a college education is not required to become a school board member. According to the data, of the school board members who responded (n=23), 4 (17%) had a high school diploma as their highest level of education. Another 4 (17%) had an associate's degree as their highest level of education. While school board members wield political power within school districts, rural school board members are aware of the emphasis on college-preparatory education within the Common Core Standards.

The third research question sought to determine the perception of full-time high school teachers at rural Illinois Class 1A schools in regards to how many Common Core English Language Arts Standards and Math Standards prepare students for vocational careers versus how many standards prepare students for college. Results for the third research question found that teachers perceived 89% of the Common Core Standards to be geared toward students attending college after graduation. Teachers perceived 11% of the standards to be geared toward students pursuing vocational careers.

The results to the third question turned out somewhat how I predicted. I expected rural teachers to perceive the majority of the Common Core standards to be college-preparatory because they see first-hand the skill sets of vocational students whose needs are not being met by the standards in their classrooms. I also predicted that teachers of English Language Arts, Math, and CTE subjects would be more apt to complete the survey because their subjects are the ones that are strongly affected by the standards at this time. English Language Arts, Math, and CTE teachers made up 53% of the teacher respondents. Teachers of all of the other subjects (science, social sciences, foreign language, physical education, fine arts, and other) combined only made up 47% of the respondents.

The fourth research question sought to determine the relationship between the perceptions of administrators, school board members, and teachers at rural Illinois Class 1A schools in regards to how many Common Core English Language Arts Standards and Math Standards prepare students for vocational careers versus how many standards prepare students for college. Results for the fourth research question found that teachers and school board members both perceived that only 10 (11%) of the 91 English Language Arts and Math Common Core Standards are applicable to students pursuing vocational careers after high school. Administrators perceived that 11 (12%) of the 91 standards are applicable to students pursuing vocational careers after high school.

The results to the fourth research question turned out somewhat how I predicted. I predicted that all populations of rural Illinois high school affiliates would perceive the standards to favor college-bound students because they are familiar with the needs of their students. I also predicted that administrator perceptions would be different from that of teachers because teachers are assessing the students' skills in the classroom, while administrators are not. I did

not predict that the school board members' perceptions would so closely match the teachers' perceptions because school board members are political figures and are so far removed from the classroom.

### Limitations/Delimitations of the Study

Factors affecting the generalizability of the results include:

1. Respondents to the Common Core Standards survey hold various levels of education in different subject areas; therefore, they have various perceptions on what standards meet the needs of students going to college or pursuing a vocational career.
2. Administrators and school board members had a minimal response rate.
3. This study only collected data from Class 1A rural Illinois high schools.
4. This study only measured the perceptions of Common Core English Language Arts and Math Standards for grades 9-12.
5. Over the course of this study, Indiana became the first state to officially withdraw from adopting Common Core Standards (Nicks, 2014).

### Implications of the Study

The results from this study were intended to contribute to a better understanding of Common Core Math and English Language Arts Standards for high school students in preparation for post-graduation vocational careers. This study contributed to the knowledge that the Common Core Standards are more geared toward college-bound students. Teachers, administrators, and school board members in rural communities perceive that very few of the Common Core Standards prepare students for vocational careers after high school graduation.

### Recommendations for Practice

This study brings to light the discord between the Common Core Standards Initiative that claims the standards are an equal opportunity for both college-bound and workforce-bound students, and the perceptions of rural educators that the standards significantly ignore the skill sets necessary to prepare students for vocational careers. It is recommended that before fully adopting Common Core Standards, national, state, and local educational policy-makers become more informed of the merit of the standards in effectively meeting the needs of all students and not just those bound for college. I recommend further analysis of the validity and reliability of the Common Core Standards before they are adopted nationwide. I also recommend further study of the impact Common Core Standards will have on the country as a whole if they neglect to meet the needs of students pursuing vocational careers.

### Recommendations for Further Research

The findings of this study advocate the following concerns, which suggest the need for further research.

1. A similar study should be conducted on a larger scale. The study should be nationwide instead of in one state. It should also include suburban and urban school districts.
2. Replicate the study to survey teachers in all subject areas and grade levels.
3. Extend the depth of this study to discover the perceptions of educators on each of the Common Core Standards' sub points. Pin point exactly which parts of each standard apply to college-bound or career-bound students and change the standard accordingly.

4. Using the data obtained in this study as a baseline, the study should be replicated in a time-series design to the same population to see if there is a change after Common Core assessments have been fully implemented across the state of Illinois.
5. Discover a means of obtaining a larger administrator and school board member survey response.

### Conclusion

The purpose of this research study was to contribute to a better understanding of Common Core Math and English Language Arts Standards for high school students in preparation for post-graduation vocational careers. This research study collected data regarding rural Illinois high school administrator, school board, and teacher perceptions of the Common Core Standards applicability to students pursuing vocational careers. Data was collected through an online survey and analyzed using Qualtrics and SPSS, version 22. The results of the research revealed that the large majority of the Common Core Standards prepare students for college and not for vocational careers. Recommendations for practice and further research were made based on the findings of this study.

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## APPENDIX A RESEARCH INSTRUMENT PROTOTYPE

NRV113

Qualtrics Survey Software

Appendix A

### Default Question Block

Which of the following best describes your job function?

- ☐ Teacher
- ☐ Administrator
- ☐ School Board Member

How many years have you served in this position?

- ☐ Two or less years
- ☐ Three or four years
- ☐ Five to ten years
- ☐ Eleven to twenty years
- ☐ More than twenty years

If you are a teacher, what subject do you teach for the majority of the school day?

- ☐ English/Language Arts
- ☐ Math
- ☐ Science
- ☐ Social Sciences
- ☐ Career Technical Education (This includes Ag, Business, FCS, etc.)
- ☐ Foreign Language
- ☐ P.E.

If you are an administrator, do you have previous teaching experience?

- ☐ Yes
- ☐ No

If you are an administrator, which of the following best describes your position?

- ☐ Superintendent
- ☐ Principal
- ☐ Vice Principal
- ☐ Dean

If you are a school board member, do you have previous teaching experience?

- ☐ Yes
- ☐ No

Did the school with which you are affiliated meet AYP (Adequate Yearly Progress) according to the State of Illinois during the 2012-2013 school year?

- ☐ Yes
- ☐ No
- ☐ I don't know

Please read the following Math and English/Language Arts Common Core Standards that will be in effect in your high school by the 2014-2015 school year. Please choose whether you think the standard more clearly reflects a skill that is necessary for students who are going to college right after high school (College Readiness) or if it reflects a skill that is necessary for students who are planning on joining the workforce right after high school (Career Readiness). If you feel like it doesn't fit either category, mark neither.

#### PART 1: COMMON CORE MATH STANDARDS FOR GRADES 9-12

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Extend the properties of exponents to rational exponents.

- ☐ College Readiness
- ☐ Career Readiness
- ☐ Neither

Use properties of rational and irrational numbers.

- ☐ College Readiness
- ☐ Career Readiness
- ☐ Neither

Reason quantitatively and use units to solve problems.

- ☐ College Readiness
- ☐ Career Readiness
- ☐ Neither

Perform arithmetic operations with complex numbers.

- ☐ College
- ☐ Career
- ☐ Neither

☐ Career

☐ Neither

Represent complex numbers and their operations on the complex plane.

☐ College

☐ Career

☐ Neither

Use complex numbers in polynomial identities and equations.

☐ College

☐ Career

☐ Neither

Represent and model with vector quantities.

☐ College

☐ Career

☐ Neither

Perform operations on vectors.

☐ College

☐ Career

☐ Neither

Perform operations on matrices and use matrices in applications.

☐ College

☐ Career

☐ Neither

Interpret the structure of expressions.

☐ College

☐ Career

☐ Neither

Write expressions in equivalent forms to solve problems.

- ☐ College
- ☐ Career
- ☐ Neither

Perform arithmetic operations on polynomials.

- ☐ College
- ☐ Career
- ☐ Neither

Understand the relationship between zeros and factors of polynomials.

- ☐ College
- ☐ Career
- ☐ Neither

Use polynomial identities to solve problems.

- ☐ College
- ☐ Career
- ☐ Neither

Rewrite rational expressions.

- ☐ College
- ☐ Career
- ☐ Neither

Create equations that describe numbers or relationships.

- ☐ College
- ☐ Career
- ☐ Neither

Understand solving equations as a process of reasoning and explain the reasoning.

- ☐ College
- ☐ Career
- ☐ Neither

Neither

Solve equations and inequalities in one variable.

---

☐ College

☐ Career

☐ Neither

Solve systems of equations.

---

☐ College

☐ Career

☐ Neither

Represent and solve equations and inequalities graphically.

---

☐ College

☐ Career

☐ Neither

Understand the concept of a function and use function notation.

---

☐ College

☐ Career

☐ Neither

Interpret functions that arise in applications in terms of the context.

---

☐ College

☐ Career

☐ Neither

Analyze functions using different representations.

---

☐ College

☐ Career

☐ Neither

Build a function that models a relationship between two quantities.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Build new functions from existing functions.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Construct and compare linear, quadratic, and exponential models and solve problems.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Interpret expressions for functions in terms of the situation they model.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Extend the domain of trigonometric functions using the unit circle.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Model periodic phenomena with trigonometric functions.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Prove and apply trigonometric identities.

- 
- ☐ College
- ☐ Career
- ☐ Neither



Experiment with transformations in the plane.

- ☒ College
- ☐ Career
- ☐ Neither

Understand congruence in terms of rigid motions.

- ☐ College
- ☐ Career
- ☐ Neither

Prove geometric theorems.

- ☒ College
- ☐ Career
- ☐ Neither

Make geometric constructions.

- ☐ College
- ☐ Career
- ☐ Neither

Understand similarity in terms of similarity transformations.

- ☐ College
- ☐ Career
- ☐ Neither

Prove theorems involving similarity.

- ☐ College
- ☐ Career
- ☐ Neither

Define trigonometric ratios and solve problems involving right triangles.

- ☒ College

☐ Career

☐ Neither

Apply trigonometry to general triangles.

☐ College

☐ Career

☐ Neither

Understand and apply theorems about circles.

☐ College

☐ Career

☐ Neither

Find arc lengths and areas of sectors of circles.

☐ College

☐ Career

☐ Neither

Translate between the geometric description and the equation for a conic section.

☐ College

☐ Career

☐ Neither

Use coordinates to prove simple geometric theorems algebraically.

☐ College

☐ Career

☐ Neither

Explain volume formulas and use them to solve problems.

☐ College

☐ Career

☐ Neither

Visualize relationships between two-dimensional and three-dimensional objects.

- ☐ College
- ☐ Career
- ☐ Neither

Apply geometric concepts in modeling situations

- ☐ College
- ☐ Career
- ☐ Neither

Summarize, represent, and interpret data on a single count or measurement variable.

- ☐ College
- ☐ Career
- ☐ Neither

Summarize, represent, and interpret data on two categorical and quantitative variables.

- ☐ College
- ☐ Career
- ☐ Neither

Interpret linear models.

- ☐ College
- ☐ Career
- ☐ Neither

Understand and evaluate random processes underlying statistical experiments.

- ☐ College
- ☐ Career
- ☐ Neither

Make inferences and justify conclusions from sample surveys, experiments, and observational studies.

- ☐ College
- ☐ Career
- ☐

☐ Neither

Understand independence and conditional probability and use them to interpret data.

- ☐ College
- ☐ Career
- ☐ Neither

Use the rules of probability to compute probabilities of compound events in a uniform probability model.

- ☐ College
- ☐ Career
- ☐ Neither

Calculate expected values and use them to solve problems.

- ☐ College
- ☐ Career
- ☐ Neither

Use probability to evaluate outcomes of decisions.

- ☐ College
- ☐ Career
- ☐ Neither

## Part 2: Common Core Standards for High School Reading, Writing, and Language Arts

Please continue to mark whether you think the standard listed is a skill needed for someone planning on going to college (College) or someone planning on joining the workforce directly after high school (Career).

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

- ☐ College
- ☐ Career
- ☐ Neither

Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective

summary of the text.

- ☐ College
- ☐ Career
- ☐ Neither

Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).

- ☐ College
- ☐ Career
- ☐ Neither

Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)

- ☐ College
- ☐ Career
- ☐ Neither

Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.

- ☐ College
- ☐ Career
- ☐ Neither

Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).

- ☐ College
- ☐ Career
- ☐ Neither

Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist).

- ☐ College
- ☐ Career
- ☐ Neither

Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics.

- ☒ College
- ☐ Career
- ☐ Neither

Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.

- ☐ College
- ☐ Career
- ☐ Neither

Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10).

- ☐ College
- ☐ Career
- ☐ Neither

Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.

- ☐ College
- ☐ Career
- ☐ Neither

Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.

- ☐ College
- ☐ Career
- ☐ Neither

Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

- ☐ College
- ☐ Career

☐ Neither

Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist*, presidential addresses.)

---

☐ College

☐ Career

☐ Neither

Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features.

---

☐ College

☐ Career

☐ Neither

Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

---

☐ College

☐ Career

☐ Neither

Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

---

☐ College

☐ Career

☐ Neither

Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

---

☐ College

☐ Career

☐ Neither

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience

---

☐ College

- ☐ Career
- ☐ Neither

Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

- ☐ College
- ☐ Career
- ☐ Neither

Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

- ☐ College
- ☐ Career
- ☐ Neither

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

- ☐ College
- ☐ Career
- ☐ Neither

Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and over reliance on any one source and following a standard format for citation.

- ☐ College
- ☐ Career
- ☐ Neither

Draw evidence from literary or informational texts to support analysis, reflection, and research.

- ☐ College
- ☐ Career
- ☐ Neither

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.



- ☒ College
- ☐ Career
- ☐ Neither

Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade appropriate *topics, texts, and issues*, building on others' ideas and expressing their own clearly and persuasively.

- ☐ College
- ☐ Career
- ☐ Neither

Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

- ☐ College
- ☐ Career
- ☐ Neither

Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

- ☐ College
- ☐ Career
- ☐ Neither

Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

- ☐ College
- ☐ Career
- ☐ Neither

Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

- ☐ College
- ☐ Career
- ☐ Neither

Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Determine or clarify the meaning of unknown and multiple-meaning words and phrases.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

- 
- ☐ College
- ☐ Career
- ☐ Neither

Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading,

writing, speaking, and listening at the college and career readiness level: demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

---

- ☐ College
- ☐ Career
- ☐ Neither

APPENDIX B  
EMAIL TO SUBJECT MATTER EXPERTS

9/30/13

Dear \_\_\_\_\_,

My name is Emily Fultz. I am a full-time high school teacher and am currently working on finishing my Master's thesis at EIU. Dr. Chadd recommended you as a subject matter expert to look over my survey instrument before I distribute it on a large scale.

Would you be interested in helping with this process? All I need you to do is look through the attached pdf of the survey and tell me if it makes sense to you as a professional. If you have suggestions on ways to make it better or more valid, please let me know. I am very open to suggestions.

Here is an introductory paragraph of my thesis to give you insight on the content of my research. If you need more information about the study before reviewing the survey, please let me know:

"The purpose of the study is to contribute to a better understanding of Common Core Math and English Language Arts Standards for high school students in preparation for post-high school vocational careers. The study will capture perception data from teachers, administrators, and school board members at Class 1A (295 or fewer students) rural Illinois high schools to determine which Common Core Math and English/Language Arts Standards prepare high school students with skills for vocational careers after high school graduation."

I know this is a busy time of year for everyone in education. If you won't be able to review this for me, no problem. Please just let me know so I can find another subject matter expert.

Thank you so much for your time,

Emily Fultz

APPENDIX C  
ADMINISTRATOR EXPLANATORY EMAIL

Dear Administrator,

I am a high school teacher at an Illinois, Class 1A School who is in the process of conducting research for my master's degree at Eastern Illinois University. The title of my study is Common Core Standards: Career Readiness or College Prep? The purpose of this study is to use the perceptions of administrators, full-time teachers, and school board members at all of the Class 1A rural schools in Illinois to determine whether the Common Core Standards include necessary skill sets to prepare students for vocational careers after high school.

Your school was identified through the use of the Illinois High School Association and the Illinois Interactive Report Card as fitting the criteria of a Class 1A school. In order to gather data from all 194 Class 1A rural schools in Illinois, I am requesting your help. I could use your help passing the survey link on to all **full-time administrators, high school teachers, and school board members** currently affiliated with your school. You should be able to pass on the survey by simply forwarding this email. Please forward the email before taking the survey yourself, so you aren't forwarding a link that has already been used.

This study has been reviewed and approved by the Eastern Illinois University Committee for research on Human Subjects. Your participation is voluntary and confidential. The information obtained from the survey will be used exclusively for the completion of this research study. I will also be happy to share the results of the study with your school as well. If you are interested in the results, please contact me at [erfultz@eiu.edu](mailto:erfultz@eiu.edu). As an incentive to complete the survey, one school with more than ten respondents will be chosen at random to receive a free year-long subscription to <http://coreplanner.com>, a Common Core lesson planning tool, for all the teachers in your staff.

The survey itself involves three sections: demographics, a section listing all of the high school Common Core English Language Arts Standards, and a section listing all of the high school Common Core Math Standards. For the sections of standards, you are to mark whether you think that standard reflects a skill set that is more beneficial for a student attending college immediately after high school or if it is more beneficial to a student immediately joining the workforce after high school. The survey should take 10 to 20 minutes to complete.

I appreciate your time, cooperation, and support. Without it, I would not be able to conduct this study, which will hopefully shine some light on the Common Core Standards in relation to the skill sets of students in rural communities. If you have any questions whatsoever, feel free to contact me via email at [erfultz@eiu.edu](mailto:erfultz@eiu.edu).

Sincerely,

Emily Fultz

APPENDIX D  
TEACHER EXPLANATORY EMAIL

Dear Teacher,

I am a high school teacher at an Illinois, Class 1A School who is in the process of conducting research for my master's degree at Eastern Illinois University. The title of my study is Common Core Standards: Career Readiness or College Prep? The purpose of this study is to use the perceptions of administrators, full-time teachers, and school board members at all of the Class 1A rural schools in Illinois to determine whether the Common Core Standards include necessary skill sets to prepare students for vocational careers after high school.

Please take the survey at the bottom of this email. Your response is critical to understanding how the Common Core will impact students in rural communities. It is also necessary for me to be done with my master's degree forever. I need more responses from teachers in the state. Please help! The survey should only take 10 to 20 minutes to complete.

I appreciate your time, cooperation, and support. Without it, I would not be able to conduct this study, which will hopefully shine some light on the Common Core Standards in relation to the skill sets of students in rural communities. If you have any questions whatsoever, feel free to contact me via email at [erfultz@eiu.edu](mailto:erfultz@eiu.edu).

Sincerely,

Emily Fultz

APPENDIX E  
SCHOOL BOARD MEMBER EXPLANATORY EMAIL

Dear School Board Member,

I am a high school teacher at an Illinois, Class 1A School who is in the process of conducting research for my master's degree at Eastern Illinois University. The title of my study is Common Core Standards: Career Readiness or College Prep? The purpose of this study is to use the perceptions of administrators, full-time teachers, and school board members at all of the Class 1A rural schools in Illinois to determine whether the Common Core Standards include necessary skill sets to prepare students for vocational careers after high school.

This study has been reviewed and approved by the Eastern Illinois University Committee for research on Human Subjects. Your participation is voluntary and confidential. The information obtained from the survey will be used exclusively for the completion of this research study. I will also be happy to share the results of the study with your school as well. If you are interested in the results, please contact me at [erfultz@eiu.edu](mailto:erfultz@eiu.edu).

The survey itself involves three sections: demographics, a section listing all of the high school Common Core English Language Arts Standards, and a section listing all of the high school Common Core Math Standards. For the sections of standards, you are to mark whether you think that standard reflects a skill set that is more beneficial for a student attending college immediately after high school or if it is more beneficial to a student immediately joining the workforce after high school. The survey should take 10 to 20 minutes to complete.

I appreciate your time, cooperation, and support. Without it, I would not be able to conduct this study, which will hopefully shine some light on the Common Core Standards in relation to the skill sets of students in rural communities. If you have any questions whatsoever, feel free to contact me via email at [erfultz@eiu.edu](mailto:erfultz@eiu.edu).

Sincerely,

Emily Fultz

APPENDIX F  
INSTITUTIONAL REVIEW BOARD EXEMPTION

EIU IRB [eiuirb@eiu.edu](mailto:eiuirb@eiu.edu)

to me, rhogan

November 18, 2013

Emily Fultz  
School of Technology

Thank you for submitting the research protocol titled, "Common Core State Standards: CTE or College Prep" for review by the Eastern Illinois University Institutional Review Board (IRB). The IRB has reviewed this research protocol and effective 11/15/2013, has certified this protocol meets the federal regulations exemption criteria for human subjects research. The protocol has been given the IRB number 13-186. You are approved to proceed with your study.

The classification of this protocol as exempt is valid only for the research activities and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me, or the Compliance Coordinator at 581-8576, in the event of an emergency. All correspondence should be sent to:

Institutional Review Board  
c/o Office of Research and Sponsored Programs  
Telephone: 217-581-8576  
Fax: 217-581-7181  
Email: [eiuirb@www.eiu.edu](mailto:eiuirb@www.eiu.edu)



APPENDIX G  
FOLLOW-UP EMAIL

Dear \_\_\_\_\_,

This is a reminder to please take the survey below. I thank you from the bottom of my heart for your time. I can't get my master's degree without your help!

Many Thanks,  
Emily

Follow this link to the Survey:

Take the

Survey<[http://eiu.co1.qualtrics.com/WRQualtricsSurveyEngine/?Q\\_SS=cTThwRH9KtpVN1b\\_6LFWgyIiic3U15r&\\_=1](http://eiu.co1.qualtrics.com/WRQualtricsSurveyEngine/?Q_SS=cTThwRH9KtpVN1b_6LFWgyIiic3U15r&_=1)>

## APPENDIX H RESEARCH INSTRUMENT FOR DISTRIBUTION

4/16/2014

Qualtrics Survey Software

### Default Question Block

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Which of the following best describes your job function?

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- ☐ Teacher
- ☐ Administrator
- ☐ School Board Member

How many years have you served in this position?

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- ☐ Two or less years
- ☐ Three or four years
- ☐ Five to ten years
- ☐ Eleven to twenty years
- ☐ More than twenty years

What is the highest amount of education you have received?

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- ☐ High School Diploma
- ☐ Associates Degree
- ☐ Certification from a trade school
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ Doctorate Degree

If you are a teacher, what subject do you teach for the majority of the school day?

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- ☐ English/Language Arts
- ☐ Math
- ☐ Science
- ☐ Social Sciences
- ☐ Career Technical Education (This includes Ag, Business, FCS, etc.)
- ☐ Foreign Language
- ☐ P.E.
- ☐ Fine Arts
- ☐ Other

If you are an administrator, do you have previous teaching experience?

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- ☐ Yes
- ☐ No

If you are an administrator, which of the following best describes your position?

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- ☐ Superintendent
- ☐ Principal
- ☐ Vice Principal
- ☐ Dean

If you are a school board member, do you have previous teaching experience?

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- ☐ Yes
- ☐ No

Did the school with which you are affiliated meet AYP (Adequate Yearly Progress) according to the State of Illinois during the 2012-2013 school year?

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- ☐ Yes
- ☐ No
- ☐ I don't know

Please read the following English Language Arts and Math Common Core Standards that will be in effect in your high school by the 2014-2015 school year. Please choose whether you think the standard is geared more toward students who are going to college right after high school (College) or if it is more geared toward students who are planning on joining the workforce right after high school (Career).

#### PART 1: COMMON CORE ENGLISH LANGUAGE ARTS STANDARDS FOR GRADES 9-12

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Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

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- ☐ College
- ☐ Career

Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.

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- ☐ College

☐ Career

Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).

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☐ College

☐ Career

Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)

---

☐ College

☐ Career

Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.

---

☐ College

☐ Career

Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).

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☐ College

☐ Career

Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist).

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☐ College

☐ Career

Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics.

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☐ College

☐ Career

Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events

interact and develop over the course of the text.

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- ☐ College
- ☐ Career

Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10).

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- ☐ College
- ☐ Career

Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.

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- ☐ College
- ☐ Career

Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.

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- ☐ College
- ☐ Career

Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

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- ☐ College
- ☐ Career

Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist*, presidential addresses.)

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- ☐ College
- ☐ Career

Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features.

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- ☐ College
- ☐ Career

Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

- 
- ☐ College
- ☐ Career

Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

- 
- ☐ College
- ☐ Career

Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

- 
- ☐ College
- ☐ Career

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience

- 
- ☐ College
- ☐ Career

Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

- 
- ☐ College
- ☐ Career

Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

- 
- ☐ College
- ☐ Career

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

- 
- ☐ College
- ☐ Career

Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and over reliance on any one source and following a standard format for citation.

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☐ College

☐ Career

Draw evidence from literary or informational texts to support analysis, reflection, and research.

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☐ College

☐ Career

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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☐ College

☐ Career

Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade appropriate *topics, texts, and issues*, building on others' ideas and expressing their own clearly and persuasively.

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☐ College

☐ Career

Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

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☐ College

☐ Career

Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

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☐ College

☐ Career

Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

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☐ College

☐ Career

Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

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☐ College

☐ Career

Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.

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☐ College

☐ Career

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

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☐ College

☐ Career

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

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☐ College

☐ Career

Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

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☐ College

☐ Career

Determine or clarify the meaning of unknown and multiple-meaning words and phrases.

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☐ College

☐ Career

Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

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☐ College

☐ Career



Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

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☐ College

☐ Career

## Part 2: COMMON CORE STANDARDS FOR MATH GRADES 9-12

Please continue to mark whether you think the standard listed is more geared toward someone planning on going to college (College) or someone planning on joining the workforce directly after high school (Career).

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Extend the properties of exponents to rational exponents.

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☐ College

☐ Career

Use properties of rational and irrational numbers.

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☐ College

☐ Career

Reason quantitatively and use units to solve problems.

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☐ College

☐ Career

Perform arithmetic operations with complex numbers.

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☐ College

☐ Career

Represent complex numbers and their operations on the complex plane.

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☐ College

☐ Career

Use complex numbers in polynomial identities and equations.

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☐ College

☐ Career

Represent and model with vector quantities.

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☐ College

☐ Career

Perform operations on vectors.

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☐ College

☐ Career

Perform operations on matrices and use matrices in applications.

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☐ College

☐ Career

Interpret the structure of expressions.

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☐ College

☐ Career

Write expressions in equivalent forms to solve problems.

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☐ College

☐ Career

Perform arithmetic operations on polynomials.

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☐ College

☐ Career

Understand the relationship between zeros and factors of polynomials.

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☐ College

☐ Career

Use polynomial identities to solve problems.

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☐ College

☐ Career

Rewrite rational expressions.

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☐ College

☐ Career

Create equations that describe numbers or relationships.

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☐ College

☐ Career

Understand solving equations as a process of reasoning and explain the reasoning.

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☐ College

☐ Career

Solve equations and inequalities in one variable.

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☐ College

☐ Career

Solve systems of equations.

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☐ College

☐ Career

Represent and solve equations and inequalities graphically.

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☐ College

☐ Career

Understand the concept of a function and use function notation.

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☐ College

☐ Career

Interpret functions that arise in applications in terms of the context.

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☐

College

☐ Career

Analyze functions using different representations.

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☐ College

☐ Career

Build a function that models a relationship between two quantities.

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☐ College

☐ Career

Build new functions from existing functions.

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☐ College

☐ Career

Construct and compare linear, quadratic, and exponential models and solve problems.

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☐ College

☐ Career

Interpret expressions for functions in terms of the situation they model.

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☐ College

☐ Career

Extend the domain of trigonometric functions using the unit circle.

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☐ College

☐ Career

Model periodic phenomena with trigonometric functions.

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☐ College

☐ Career

Prove and apply trigonometric identities.

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☐ College

☐ Career

Experiment with transformations in the plane.

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☐ College

☐ Career

Understand congruence in terms of rigid motions.

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☐ College

☐ Career

Prove geometric theorems.

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☐ College

☐ Career

Make geometric constructions.

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☐ College

☐ Career

Understand similarity in terms of similarity transformations.

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☐ College

☐ Career

Prove theorems involving similarity.

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☐ College

☐ Career

Define trigonometric ratios and solve problems involving right triangles.

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☐ College

☐ Career

Apply trigonometry to general triangles.

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☐ College

☐ Career

Understand and apply theorems about circles.

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☐ College

☐ Career

Find arc lengths and areas of sectors of circles.

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☐ College

☐ Career

Translate between the geometric description and the equation for a conic section.

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☐ College

☐ Career

Use coordinates to prove simple geometric theorems algebraically.

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☐ College

☐ Career

Explain volume formulas and use them to solve problems.

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☐ College

☐ Career

Visualize relationships between two-dimensional and three-dimensional objects.

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☐ College

☐ Career

Apply geometric concepts in modeling situations

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☐ College

☐ Career

Summarize, represent, and interpret data on a single count or measurement variable.

- 
- ☐ College
  - ☐ Career

Summarize, represent, and interpret data on two categorical and quantitative variables.

- 
- ☐ College
  - ☐ Career

Interpret linear models.

- 
- ☐ College
  - ☐ Career

Understand and evaluate random processes underlying statistical experiments.

- 
- ☐ College
  - ☐ Career

Make inferences and justify conclusions from sample surveys, experiments, and observational studies.

- 
- ☐ College
  - ☐ Career

Understand independence and conditional probability and use them to interpret data.

- 
- ☐ College
  - ☐ Career

Use the rules of probability to compute probabilities of compound events in a uniform probability model.

- 
- ☐ College
  - ☐ Career

Calculate expected values and use them to solve problems.

- 
- ☐ College
  - ☐ Career

Use probability to evaluate outcomes of decisions.

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- ☐ College
- ☐ Career

## Error

Bad Request

OK