

Lindenwood University

Digital Commons@Lindenwood University

Dissertations

Theses & Dissertations

10-6-2021

Teacher Perceptions of the Curricular Viability of Missouri Learning Standards as Correlated to Student Outcomes on End-of-Course Assessments

Kevin G. Lowery

Follow this and additional works at: <https://digitalcommons.lindenwood.edu/dissertations>



Part of the Education Commons

Teacher Perceptions of the Curricular Viability of Missouri Learning
Standards as Correlated to Student Outcomes on
End-of-Course Assessments

by

Kevin G. Lowery

October 6, 2021

A Dissertation submitted to the Education Faculty of Lindenwood University in
partial fulfillment of the requirements for the degree of

Doctor of Education

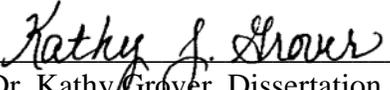
School of Education

Teacher Perceptions of the Curricular Viability of Missouri Learning
Standards as Correlated to Student Outcomes on
End-of-Course Assessments

by

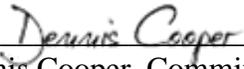
Kevin G. Lowery

This Dissertation has been approved as partial fulfillment
of the requirements for the degree of
Doctor of Education
Lindenwood University, School of Education



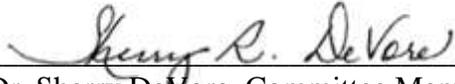
Dr. Kathy Grover, Dissertation Chair

October 6, 2021
Date



Dr. Dennis Cooper, Committee Member

October 6, 2021
Date



Dr. Sherry DeVore, Committee Member

October 6, 2021
Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

Full Legal Name: Kevin G. Lowery

Signature: *Kevin G. Lowery*

Date: October 6, 2021

Acknowledgments

I would like to thank Dr. Kathy Grover for serving as my Dissertation Chair. From beginning to end, Dr. Grover provided steadfast support and encouragement. Her unrelenting drive and passion contributed significantly to the completion of this dissertation. Dr. Grover's legacy as my Dissertation Chair will be forever cherished. In addition to Dr. Grover, I would like to thank Dr. Dennis Cooper and Dr. Sherry DeVore for serving on my Dissertation Committee. Dr. Cooper's personal encouragement and feedback, combined with Dr. DeVore's scholarly guidance and attention to detail, were invaluable to completing this dissertation. It was an honor to expand my scholarship under the tutelage of these three consummate professionals.

I am deeply indebted to those Missouri superintendents and principals who authorized me to collect data from their high school English II teachers. The correlational study associated with this dissertation would not have been possible without their participation. I am particularly thankful for each teacher who took the time to complete my survey under stressful conditions associated with the COVID-19 global pandemic.

I would like to thank my wonderful family for supporting me each day throughout the dissertation process. Suzanne, my wife, never once doubted my ability to complete a dissertation. Her immeasurable support, patience, encouragement, and unconditional love are truly unrivaled by any standard. My children, Kevin, Hannah, and Gavin provided a great deal of personal perspective, inspiration, and joy, especially when I needed it the most. Finally, I would like to acknowledge my parents, the late Wallace and Wreatha Lowery. Any success I have in this life is attributed to them and I proudly dedicate this dissertation to their loving memory.

Abstract

Approved by the Missouri State Board of Education in 2016, the Missouri Learning Standards “define the knowledge and skills students need in each grade-level and course” (Missouri Department of Elementary and Secondary Education [MODESE], 2021g, About the Missouri Learning Standards section). State-mandated end-of-course assessments, such as the English II end-of-course assessment, are directly aligned to the Missouri Learning Standards and are administered in courses that have content associated with the standards (MODESE, 2021c). The purpose of this correlational study was to determine if significant relationships existed between teachers’ perceptions of the guaranteed and viable nature of Missouri Learning Standards and student achievement on English II end-of-course assessments. The framework for this study was based upon Marzano’s groundbreaking concept of a guaranteed and viable curriculum and Marzano’s claim that students will achieve at higher levels when the curriculum is both guaranteed and viable (Marzano & Eaker, 2020). This study was significant because no research existed regarding the guaranteed and viable nature of Missouri Learning Standards (C. Neale, personal communication, July 14, 2020). Analyses of quantitative data collected from 53 English II teachers across 32 Missouri public school districts were used to answer seven research questions. The findings from this study revealed no significant correlations between student achievement and teachers’ perceptions regarding the extent to which Missouri Learning Standards are viable, guaranteed, grade-level appropriate, understandable, unpacked and prioritized, and aligned to end-of-course assessments. The conclusions reached in this study have significant implications for the development and implementation of state-wide learning standards in Missouri and across the United States.

Table of Contents

Abstract	iii
Chapter One: Introduction	1
Background of the Study	2
Conceptual Framework.....	3
Statement of the Problem.....	5
Purpose of the Study	6
Research Questions and Hypotheses	7
Significance of the Study	10
Definition of Key Terms.....	12
Delimitations, Limitations, and Assumptions.....	13
Summary	15
Chapter Two: Review of Literature	17
Historical Overview of Academic Standards in America.....	17
Conceptual Framework: Guaranteed and Viable Curriculum	31
Unpacking and Prioritizing Academic Standards	37
Missouri HB 1490.....	42
Missouri Learning Standards	44
Missouri End-of-Course Assessments	48
Curricular Resources.....	51
Summary	55

Chapter Three: Methodology	56
Problem and Purpose Overview.....	56
Research Questions and Hypotheses	57
Research Design.....	60
Population and Sample	61
Instrumentation	62
Reliability.....	64
Validity	66
Data Collection	67
Data Analysis	68
Ethical Considerations	69
Summary	71
Chapter Four: Analysis of Data	73
Data Collection	73
Demographic Data	76
Research Question One.....	79
Research Question Two	81
Research Question Three	83
Research Question Four	84
Research Question Five	86
Research Question Six	88
Research Question Seven.....	90
Summary	92

Chapter Five: Conclusions and Implications	93
Findings.....	93
Conclusions.....	100
Implications for Practice	108
Recommendations for Future Research	124
Summary	127
References	131
Appendix A.....	140
Appendix B	141
Appendix C	142
Appendix D.....	143
Appendix E	145
Vita.....	147

Chapter One: Introduction

The debate over rigorous academic standards and their impact on curriculum and student achievement has persisted for decades (Wexler, 2018). However, the standards era ushered in new challenges for classroom teachers, chief among them was ensuring that curricular standards can be implemented effectively in the time available for instruction (Hoegh et al., 2020). In their analysis of time as a global indicator of classroom learning, Hattie and Yates (2014) categorized time into four interrelated concepts: “allocated time, instructional time, engaged time, and academic learning time” (p. 37). Instructional time refers to the actual number of minutes a teacher has during the school day and the school year to actively instruct students (Hattie & Yates, 2014). Teachers frequently report that instructional time is rushed to accommodate the excessive number of standards they must implement during the school year (Hattie & Yates, 2014). As Marzano and Kendall concluded in 1999, academic standards require more instructional time than what is typically available during a school year (Hoegh et al., 2020). Therefore, excessive academic standards can be a barrier to effective instruction, more profound levels of student learning, and high student achievement (Marzano, 2017).

According to Marzano (2017), the excessive nature of state standards contributes to a curriculum “that is so bloated and cumbersome that it is impossible for teachers to teach well and, therefore, difficult for students to learn efficiently” (p. 20). Even with the hope of fewer and more focused standards, such as those found within the Common Core State Standards, many educators across the country still believe there are far too many standards and not enough instructional time to teach them all (Reeves, 2019).

Chapter One includes the background for this study, a review of the conceptual framework used for this study, and a statement of the problem. The purpose of this study and the research questions and hypotheses that will guide the research are also introduced. The significance of the study is discussed, and key terms are defined. Finally, several delimitations, limitations, and assumptions associated with this study are identified.

Background of the Study

On July 14, 2014, Missouri Governor Jay Nixon signed into law House Bill 1490 [HB 1490] (Missouri Department of Elementary and Secondary Education [MODESE], 2014). Passed by the 97th General Assembly, this new law repealed five sections of the Revised Missouri Statutes and replaced those sections with new legislative mandates on state education standards (HB 1490, 2014, p. 1). Under HB 1490, the MODESE was required to establish state-developed learning standards that would “lead to or qualify a student for high school graduation, prepare students for postsecondary education or the workplace or both, and are necessary in this era to preserve the rights and liberties of the people” (p. 1). HB 1490 further specified that Missouri’s rewritten learning standards must be adopted no later than October 1, 2015 and implemented in all Missouri public schools no later than one year after the standards had been adopted (p. 10).

The Missouri Learning Standards were established to identify K12 grade-level and course-level content and skills to be taught in all public schools (MODESE, 2021g). Unchanged by HB 1490, the original 73 Show-Me Standards provided the framework for Missouri’s revised learning standards (MODESE, 2021g, About the Missouri Learning Standards section). The Show-Me Standards, established in 1996, contain descriptions of

the content and skills all students must learn before graduating from high school (MODESE, 2021g, About the Missouri Learning Standards section). In response to NCLB federal requirements, course-level expectations and objectives were developed by the MODESE in 2004 to support school districts in the development and evaluation of subject area curricula (MODESE, 2021d, History of the Missouri Assessment Program section). The Missouri Learning Standards also serve as a framework for local school districts to make autonomous decisions about curriculum, instruction, assessment, and curricular resources used to support learning (MODESE, 2021g).

Conceptual Framework

Two politically charged publications, *A Nation at Risk* in 1983 and *What Work Requires of Schools* in 1991, contributed to a new era of controversial curriculum reform known as outcomes-based education (Pollock & Tolone, 2021, p. 10). In this curriculum reform model, an outcome was defined as a graduation standard that must be assessed as part of a student's requirement to graduate from high school (Pollock & Tolone, 2021). According to Wexler (2020), work to identify outcomes increased graduation requirements and amplified teacher certification and evaluation standards fell short as the outcomes-based era collapsed under a shroud of controversy. Two fundamental questions remained unanswered after the outcomes-based failure: What content and skills should be taught to students and how would student learning be accurately measured for proficiency? (Wexler, 2020). Many states answered those questions by adopting learning standards and state assessments aligned to the learning standards (Wexler, 2020).

Seven years after the release of *What Work Requires of Schools*, Marzano and Kendall conducted a study on the prevalence of learning standards in the United States

(McTighe & Curtis, 2019). Marzano and Kendall concluded from the study that it would take approximately 15,465 hours of classroom instruction for American educators to sufficiently cover all K–12 core learning standards, well beyond the 9,042 hours of instruction typically available during a student’s K–12 schooling experience (McTighe & Curtis, 2019, p. 60). According to Marzano (2017), many teachers across the country still find it difficult, if not impossible, to successfully implement a curriculum with excessive learning standards. Consequently, the curriculum implemented in most American schools is not viable; that is, teachers do not have enough instructional time during the school year to adequately implement the curriculum as it is written (DuFour et al., 2021).

According to Summers (2021a), curriculum is the foundation for effective classroom instruction, assessment, and student learning. The quality of curriculum and instruction is, perhaps, the most significant factor that leads to the acquisition of essential knowledge and skills necessary for students’ future success (Valdez et al., 2019). Given the significance of curriculum and its relationship to student achievement, Marzano’s (2003) innovation of a guaranteed and viable curriculum served as the conceptual framework for this study. In 2003, Marzano analyzed 35 years of school effectiveness research and concluded that “a guaranteed and viable curriculum is the school-level factor with the most impact on student achievement” (Marzano, 2003, p. 15). Marzano determined that *opportunity to learn* and *time* were the two most significant variables correlated to student learning and achievement (Summers, 2021b).

In schools identified as highly effective, students have the *opportunity* to learn essential content that is guaranteed, and teachers have enough instructional *time* to teach the guaranteed content during the school year (Buffum et al., 2018). Therefore, a fully

implemented guaranteed and viable curriculum is the goal of any high-quality school (McTighe & Curtis, 2019). This is because a guaranteed and viable curriculum, deeply embedded within a school's culture, is the most critical prerequisite for improving teaching, learning, and student achievement (Marzano & Eaker, 2020).

Statement of the Problem

Schmoker (2018) referenced three elements that contribute significantly to school success in his book, *Focus: Elevating the Essentials*. The one most pertinent to this study is *what we teach* (Schmoker, 2018). Simply stated, this element refers to implementing a written and taught curriculum (Schmoker, 2018). According to *What the Research Shows: Building Ranks in Action*, in highly effective schools, curriculum, instruction, and assessment work in tandem to maximize each student's potential for future success (Valdez et al., 2019). Because of this, teachers must make certain that classroom instruction is fully aligned to state learning standards (Learning First Alliance, 2018).

According to Wexler (2018), a high-quality curriculum contributes significantly to improved student achievement and more equitable learning experiences for all students. When all students are exposed to a guaranteed and viable curriculum, and all teachers agree to teach the guaranteed content, equity is achieved (Dempsey, 2017). A guaranteed and viable curriculum, then, must reflect a manageable number of learning standards that clearly specify what all students must learn in each grade-level and course (Schmoker, 2018). Schmoker (2018) surmised that very few schools in the United States had implemented a guaranteed and viable curriculum that provided students with essential content and sufficient time for learning. A lack of a guaranteed and viable curriculum is the likely consequence of schools having an excessive number of state

standards that cannot be adequately taught in a typical 180-day school year (Schmoker, 2018, p. 45). According to Eaker (2020), the absence of guaranteed and viable curriculum in the nation's public schools may very well result from state standards being so vast in scope and sequence or so poorly written that teachers are left to determine for themselves what is and is not essential. Eaker's claim is even more problematic given the shared belief among many educators that curriculum and state learning standards are essentially the same (Marzano, 2017).

Even after decades of standards development and refinement, many learning standards remain vast in number and unclear in language and intention (Marzano, 2017). Ironically, proponents of the standards movement intended for learning standards to be fewer in number and more clearly written (Hoegh, 2020). Unfortunately, the trend has not improved and there remains an apparent disparity between the excessive nature of learning standards and the amount of instructional time teachers have during the school year (Marzano, 2017). According to Reeves (2019), many of America's teachers still believe they have too much curriculum to teach and not nearly enough time to teach it. Until state learning standards are reduced to a manageable number, "curricular chaos" will continue to compromise the quality of education in America's public schools (Schmoker, 2018, p. 23).

Purpose of the Study

The purpose of this study was to determine the extent to which high school English II teachers perceived they had enough instructional time during the school year to effectively teach all Missouri Learning Standards for English II. According to Marzano et al. (2018), a curriculum must be "focused enough that teachers can adequately address it

in the time they have available” (p. 112). In the absence of a guaranteed and viable curriculum, that is, in the absence of opportunity to learn and time to learn, student achievement on state assessments could be compromised (Kramer & Schuhl, 2017).

Research Questions and Hypotheses

The following research questions and hypotheses guided the study:

1. What is the correlation between teachers’ perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H1₀: There is no significant correlation between teachers’ perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H1_a: There is a significant correlation between teachers’ perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

2. What is the correlation between teachers’ perceptions regarding this extent to which Missouri Learning Standards are guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H2₀: There is no significant correlation between teachers’ perceptions regarding the extent to which Missouri Learning Standards are guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H2_a: There is a significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

3. What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H3₀: There is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H3_a: There is a significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

4. What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H4₀: There is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who score advanced and proficient

on the English II end-of-course assessment.

H4_a: There is a significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

5. What is the correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H5_o: There is no significant correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H5_a: There is a significant correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

6. What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H6_o: There is no significant correlation between teachers' perceptions regarding the extent to which the Missouri Learning Standards for English II are

appropriately aligned to end-of-course assessments and the percentage of students who score advanced and proficient on the English II end-of-course assessments.

H6_a: There is a significant correlation between teachers' perceptions regarding the extent to which the Missouri Learning Standards for English II are appropriately aligned to end-of-course assessments and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

7. What is the correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H7₀: There is no significant correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H7_a: There is a significant correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

Significance of the Study

Educational standards provide the foundation for all academic learning experiences (Schimmer et al., 2018). Standards communicate what all students must know and be able to do upon the conclusion of learning (Heflebower et al., 2019). Because standards provide the framework for units of study, teachers must know

precisely how to unpack, prioritize, and integrate the standards into daily instruction (Schimmer et al., 2018). A thorough understanding of standards is critical given that many state standards are often complicated and encompass multiple concepts, skills, and learning targets (Friziellie & Schmidt, 2020). When educators do not fully understand the standards they are expected to teach, students will undoubtedly have difficulty learning the essential content associated with the standards (Schimmer et al., 2018). As educators spend more time exploring the academic standards, analyzing the standards, clarifying the standards, and committing to the full implementation of each standard, students will be more likely to learn the standards along with the content associated with each standard (Schimmer et al., 2018). Furthermore, when academic standards are effectively implemented, the standards promote deeper learning and greater appreciation for the content being learned (Learning First Alliance, 2018).

A curriculum cannot be viable if teachers do not have enough instructional time to implement the required learning standards (McTighe & Curtis, 2019). With so many standards to teach, along with the class time needed for state testing, teachers have little time to cover the entire curriculum (DuFour et al., 2021). This reality has caused many educators to characterize the taught curriculum as “a mile wide and an inch deep” (McTighe & Curtis, 2019, p. 61). The solution to this problem begins with implementing a guaranteed and viable curriculum (Marzano et al., 2018). Marzano et al. (2018) found that teachers in highly effective schools can, in fact, successfully implement the prescribed learning standards and required curriculum in the amount of time available for instruction. However, learning standards must first be reduced to a viable number and then thoroughly clarified before gains in student achievement can be realized (Schmoker,

2018).

According to C. Neale (personal communication, July 14, 2020), the MODESE Office of Quality Schools Assistant Commissioner, “I am not familiar with any research that is specifically aimed at determining the viability of Missouri Learning Standards.” The MODESE Standards and Assessment Administrator, L. Sireno (personal communication, July 14, 2020), confirmed, “I am not aware of specific research on the Missouri Learning Standards.” This study was crucial given the lack of research associated with the curricular viability and guaranteed nature of the Missouri Learning Standards.

The findings of this study may allow educators, school leaders, government officials, policymakers, and other educational researchers to determine if there is a correlation between the guaranteed and viable nature of Missouri Learning Standards and student outcomes on state-mandated, end-of-course assessments. Given the existing gap in current research, the results of this study could be used to improve how state standards are written, implemented, and assessed in Missouri and elsewhere in the United States. This study is critically important because the absence of a guaranteed and viable curriculum is, perhaps, the most significant equity issue in public education today (Eaker et al., 2021).

Definition of Key Terms

For the purposes of this study, the following key terms were defined:

End-of-Course Assessments

According to the MODESE (2021c), “End-of-course assessments are taken when a student has received instruction on the Missouri Learning Standards for an assessment,

regardless of the grade-level” (End-of-Course section).

Guaranteed Curriculum

For a curriculum to be guaranteed, all students must have “access to the same curriculum content in a specific course and at a specific grade-level, regardless of their assigned teacher” (Marzano et al., 2018, p. 7).

HB 1490

HB 1490 required the MODESE to “convene workgroups to develop and recommend performance standards by October 1, 2015 and implement the academic performance standards beginning in the 20162017 school year” (HB 1490, 2014, p. 11).

Missouri Learning Standards

According to the MODESE (2021g), “The Missouri Learning Standards define the knowledge and skills students need in each grade-level and course for success in college, other postsecondary training, and careers” (About the Missouri Learning Standards section).

Viable Curriculum

For a curriculum to be viable, all teachers must be able to “teach the curriculum in the amount of instructional time provided” (Marzano et al., 2018, p. 7).

Delimitations, Limitations, and Assumptions

The scope of the study was bounded by the following delimitations:

Time Frame

English II teachers from Missouri public high schools were surveyed in the spring of 2021. Secondary achievement data came from 32 public school districts from which the MODESE published English II end-of-course assessment data. The data were

gathered for the 2017–2018 and 2018–2019 school years. All 2020 MODESE spring assessments, including English II end-of-course assessments, were canceled due to the COVID-19 pandemic (MODESE, 2020a).

Location of the study

The study took place exclusively within the state of Missouri.

Sample

The target population for this study included certified high school English teachers in Missouri public schools who currently taught English II courses and administered the English II end-of-course assessment as required by the Missouri Assessment Program. English II teachers were recruited from approximately 794 public high schools in Missouri. Given that some English II teachers in Missouri did not participate in this study, were not given an opportunity to participate in the study, refused to participate in the study, or failed to submit completed responses to the research survey, the final accessible population consisted of 53 English II teachers from 32 public school districts in Missouri. The participation rate is especially noteworthy considering the study took place during the second year of a COVID-19 global pandemic.

Criteria

All properly certified English II teachers who were actively employed in Missouri public high schools at the time of the study and administered English II end-of-course assessments were qualified to participate in this research.

The following limitations were identified in this study:

Instrument

An electronic survey was administered through Qualtrics (2021) survey software.

The survey was reflective of the literature review and the conceptual framework upon which the study was based. Survey items were informed by the works of Bailey and Jakicic (2019), Frizziellie and Schmidt (2020), Hoegh (2020), Kramer and Schuhl (2017), Marzano (2003, 2018, 2019, 2020), Marzano and Eaker (2020), and Schmoker (2018).

The following assumptions were accepted:

1. All participants responded honestly and willingly.
2. The sample was representative of the general population of educators who held valid 9–12 English teaching certificates from the MODESE.
3. The sample was representative of the general population of educators who taught English II and administered English II end-of-course assessments in Missouri public high schools.

Summary

In Chapter One, time as a global indicator of classroom learning was highlighted to establish a research-based context for this study. Chapter One included a background of the study along with a conceptual framework derived from Marzano's (2003) research on guaranteed and viable curriculum. A statement of the problem was presented, followed by the purpose of the study. Seven research questions and hypotheses were presented to guide the study. Following the research questions and hypotheses, the significance of the study was explored. Five key terms unique to this study were defined. Chapter One concluded with a review of delimitations, limitations, and assumptions.

In Chapter Two, a review of the literature is presented. A historical review of the American standards movement is explored in detail, followed by an in-depth discussion of the study's conceptual framework based on Marzano's 2003 groundbreaking research

syntheses on opportunity to learn and time. In Chapter Two, the reasons why teachers must unpack and prioritize academic learning standards as they endeavor to implement a guaranteed and viable curriculum are explored. Steps and processes for unpacking and prioritizing academic standards are also included. The impact of HB 1490 on the elimination of the Common Core State Standards and the rewriting of new Missouri Learning Standards is also discussed. A detailed overview of the Missouri Learning Standards and Missouri end-of-course assessments is presented. Chapter Two concludes with a review of related literature pertaining to the use of high-quality curricular resources within a guaranteed and viable curriculum.

Chapter Two: Review of Literature

Chapter Two begins with a historical overview of academic standards in America. A review of Marzano's (2003) original concept of a guaranteed and viable curriculum serves as the conceptual framework upon which the Missouri Learning Standards are studied. The importance of unpacking academic standards and establishing priority standards is explored in detail. Chapter Two concludes with a review of Missouri House Bill 1490 (2014), an overview of the Missouri Learning Standards, a description of Missouri end-of-course assessments, and a discussion regarding the use of high-quality curricular resources within a guaranteed and viable curriculum.

Historical Overview of Academic Standards in America

It is possible that public education in America was first established upon passage of the Old Deluder Satan Act of 1647 (Pollock & Tolone, 2021, p. 7). The Old Deluder Satan Act required all Massachusetts settlements having more than 50 children to establish community-funded schools to teach children how to overcome the dangers of Satan (Pollock & Tolone, 2021, p. 7). More than a century later, Thomas Jefferson proposed a new idea for preserving the nation's newly formed democracy by establishing a public school system that would be free of charge (Hirsch, 2020). Of paramount importance was Jefferson's belief that the education of all white children was necessary for the preservation of the new republic (Taylor, 2019). In the words of Jefferson, "It is an axiom in my mind that our liberty can never be safe but in the hands of the people...with a certain degree of instruction. That is the business of the state to effect, and on a general plan" (as cited in Taylor, 2019, p. 162). At the time, Jefferson's ideas about public education were both radical and unpopular (Hirsch, 2020).

It was not until the early nineteenth century, however, when Horace Mann initiated the common school movement, that public education flourished in Northeastern and Midwestern states (Hirsch, 2020). Horace Mann inspired the common school movement based on his personal belief that America's prosperity and stability relied almost exclusively on a system of public education that would teach all children to be competent readers, writers, and speakers (Hirsch, 2020). Protesges of Horace Mann were deeply committed to the common school movement and its vision to create a more cohesive and united America for all people (Hirsch, 2020).

The Industrial Revolution challenged the prevailing belief that schools existed merely to impart general knowledge (Pollock & Tolone, 2021). With the growing demand for schools to train more specialized workers, America's schools were at a crossroad: either teach a primarily vocational curriculum or a traditional curriculum that is predominantly academic (Pollock & Tolone, 2021). The Industrial Revolution, more specifically its workforce-driven economy, laid a foundation for the schools that exist today (Stuart et al., 2018). The Committee of Ten and the Commission on the Reorganization of Secondary Education issued separate reports that led to the repurposing of public schools to include a focus on workplace readiness (Pollock & Tolone, 2021). Industrial education was based on a philosophy of uniformity that required most students to take the same course offerings, learn the same content, and be tested and measured in the same ways (Stuart et al., 2018).

A new era of standards-based accountability was ushered in during the 1980s (Merrow, 2017). In 1983, President Reagan's National Commission on Excellence in Education released a scathing report on the quality of education in America (DuFour et

al., 2018, p. 12). The report, *A Nation at Risk*, issued a provocative warning to the nation's citizenry: "The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and a people" (as cited in Merrow, 2017, p. xxxiii). The report was a call to action to address the many failed educational reforms of the 1960s and 1970s (Ravitch, 2016, p. 25). A U.S. Department of Labor report released in 1991, *What Work Requires of Schools, SCANS—Report on Workplace Skills*, added to the national debate by insisting that schools not only prepare students for the workplace but must also ensure that students master workplace readiness skills (Pollock & Tolone, 2021, p. 10). Even though the National Commission on Excellence in Education members went to great lengths not to intentionally target schools in *A Nation at Risk*, many politicians, government bureaucrats, and policymakers used the report to champion a new era of educational reform known as the standards movement (Merrow, 2017).

While some opportunists used the *A Nation at Risk* report as a platform to promote school reform efforts, others insisted the report was nothing more than a political strategy to intentionally manufacture a national education crisis (Wexler, 2020). Those in favor of educational reform cited the report's claim that poor student performance was due to the inadequacy of curricular content, while those in opposition to reform argued better curriculum and higher standards alone would not solve the nation's growing economic difficulties (Ravitch, 2016). While *A Nation at Risk* forced policymakers and educational leaders to focus their attention on many legitimate academic concerns, the report also paved the way for intensified federal oversight and accountability (Koretz, 2017). According to Merrow (2017), America became a nation of educational

experimenters and reformers in response to *A Nation at Risk*. With inadequate curriculum and poor content representing the greatest threats to America's economic prosperity, the standards movement was all but inevitable (Ravitch, 2016).

In less than two years after *A Nation at Risk* was published, most states increased graduation requirements, instructional time requirements, teacher certification requirements, and teacher evaluation standards (Wexler, 2020). However, none of these measures specifically addressed the curricular concerns spotlighted in *A Nation at Risk* (Wexler, 2020). For some, the solution rested with individual states adopting educational standards to clearly define what knowledge and skills were necessary for student proficiency (Wexler, 2020). These newly adopted state standards set the stage for what would eventually become an unprecedented period of federal accountability and control (Glatthorn et al., 2019).

Since the 1990s, virtually every school district in America has required the implementation of academic standards (Schimmer et al., 2018, p. 1). With all states, except Iowa, adopting educational standards for the first time, the 1990s would become widely regarded as the decade of academic standards (Glatthorn et al., 2019, p. 50). Instead of adopting statewide educational standards, Iowa legislators required individual school districts to adopt standards (Glatthorn et al., 2019). However, it was not until the presidency of George H. W. Bush and his Goals 2000 initiative that school reform emerged as a significant federal priority (Morrow, 2017).

In 1989, President Bush convened a national Education Summit with the governors from all 50 states to address concerns regarding the declining economy and declining student achievement (Glatthorn et al., 2019, p. 47). The Education Summit

identified six strategic goals to be achieved by the year 2000, one of which focused on student proficiency in the core subject areas and geography (Glatthorn et al., 2019, p. 47). Local school districts would be empowered by the federal government to determine the means for achieving each of the Education Summit's goals and, consequently, would be held accountable if goals were not achieved (DuFour et al., 2018).

After George H. W. Bush's presidency, the Clinton administration moved forward with the Goals 2000 initiative by providing each state with federal funds to develop its own academic standards (Ravitch, 2016). Before the Goals 2000 initiative, Missouri and Florida were the only two states that had officially adopted academic learning standards and state assessments aligned to the learning standards (DuFour, 2018, p. 14). According to Ravitch (2016), "Most state standards were windy rhetoric, devoid of any concrete descriptions of what students should be expected to know and be able to do" (p. 22). The federal Goals 2000: Educate America Act signed by President Clinton in 1994 failed to achieve any of the legislation's six national goals (DuFour et al., 2018, p. 13).

Upon President Clinton's departure from the White House in early 2001, the newly elected president from Texas, George W. Bush, immediately called on Congress to pass his first legislative priority, the No Child Left Behind Act (DuFour et al., 2018, p. 13). Some have described this legislation as the single most significant public education story of the new century (Glatthorn et al., 2019). Within a year of President Bush's inauguration, the No Child Left Behind (NCLB) Act passed in both houses of Congress with unprecedented bipartisan support and signaled a new era of increased federal oversight and accountability (DuFour et al., 2018). The NCLB Act was established around three overarching goals designed to improve the American system of public

education:

1. To make sure that all students in a school, as well as students from low-income families, minority populations, limited English proficient students, and students with disabilities, perform well in the areas of reading and mathematics
2. To hold schools responsible if all children are not on grade-level or above
3. To make sure that there is a highly qualified teacher in each classroom.

(Glatthorn et al., 2019, p. 53)

The NCLB Act required states to establish educational standards, select rigorous assessments, and clearly define academic proficiency in reading and mathematics (Ravitch, 2016).

Under the terms of NCLB, yearly testing in mathematics and reading was required for all public-school students in grades three through eight and only one time in high school (DuFour et al., 2018). Perceived by many educators as impossible to achieve, the law mandated that all students must demonstrate proficiency in reading and mathematics by 2014 (Ravitch, 2016, p. 23). The NCLB Act also required school districts to report student achievement data and targeted student demographic data (DuFour et al., 2018).

The NCLB Act mandated all public schools to demonstrate adequate yearly progress or face federally imposed consequences, many of which were punitive (DuFour et al., 2018). The punitive approach to NCLB forced many states to lower academic standards, relent on high proficiency benchmarks, and implement less rigorous state-mandated assessments (DuFour et al., 2018). Many schools across America were not

demonstrating adequate yearly progress, so states began opposing the strict federal requirements (Glatthorn et al., 2019). In response to the growing opposition, Department of Education officials initiated a system of accountability waivers and empowered states to establish their school accountability measures (Glatthorn et al., 2019).

According to Merrow (2017), NCLB sparked more than 16 years of unrelenting school reform efforts (p. xxxiv). High-stakes testing, tied to federal oversight and strict accountability, defined America's national education strategy under NCLB (Ravitch, 2016). With President Bush's departure from the White House, NCLB eventually evolved into the Obama era's controversial corporate-reform model known as Race to the Top (RTTT) (Merrow, 2017).

The RTTT was the Obama administration's solution to NCLB (DuFour et al., 2018). The RTTT also reflected President Obama's commitment to ensuring a complete and competitive education for all children in America, regardless of their geographic location (Glatthorn et al., 2019). Under RTTT, the federal government earmarked approximately \$4 billion for state-level competitive grants (Wexler, 2020, p. 243). With 19 scorable categories on a 500-point scale, grant applications proved to be complex and cumbersome for most state education officials (Wexler, 2020, p. 243). Nevertheless, U.S. Department of Education officials remained deeply committed to each of the five goals associated with RTTT:

1. Designing and implementing rigorous standards and high-quality assessments by encouraging states to work jointly toward a system of common academic standards
2. Attracting and keeping great teachers and leaders in U.S. classrooms

3. Supporting data systems that inform decisions and improve instruction
4. Using innovative and effective approaches to turn around struggling schools
5. Demonstrating and sustaining education reforms. (Glatthorn et al., 2019, p. 53)

States had few options but to fully embrace each RTTT requirement to receive federal RTTT grants and NCLB accountability waivers (DuFour et al., 2018). Many states revised their teacher evaluation laws in response to the unwavering federal requirements (DuFour et al., 2018). Of those states competing for RTTT grants, “one-half of the states included student achievement scores in the teacher evaluation process, and 18 states weakened their teacher tenure protections” (DuFour et al., 2018, p. 17).

The RTTT became even more controversial when the U.S. Department of Education started pressuring states to implement rigorous college and career readiness standards (Gewertz, 2015). According to Gewertz (2015), the phrase *college and career readiness standards* was “widely interpreted as code language for the Common Core” (p. 3). Because RTTT competitive grants required the adoption of rigorous learning standards, many state education officials felt compelled to adopt the already established Common Core State Standards (CCSS) (Koretz, 2017). Kentucky was the first state to officially adopt the CCSS in 2010 (Goldstein, 2019, p. 2). The Obama administration was further criticized for using federal funds to pay the Smarter Balanced Assessment Consortium (SBAC) and the Partnership for Assessment of Readiness for College and Careers Consortium to develop Common Core assessments (Koretz, 2017).

In 2009, the National Governors Association and the Council of Chief State School Officers jointly convened to address ongoing concerns with public education and

the lingering dissatisfaction with NCLB (DuFour et al., 2018, p. 15). Just one year earlier, the same two groups, in collaboration with Achieve, Inc., published a joint report entitled, *Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education* (Duncan, 2018). Authors of *Benchmarking for Success* strongly encouraged states to “upgrade state standards by adopting a *common core* of internationally benchmarked standards in math and language arts for grades K–12” (Duncan, 2018, p. 141). According to Duncan (2018), the term *common core*, used in this context, was most likely how the CCSS received their name. The CCSS were designed to be:

1. Research and evidence-based
2. Clear, understandable, and consistent
3. Aligned with college and career expectations
4. Based on rigorous content and the application of knowledge through higher-order thinking skills
5. Built upon the strengths and lessons of current state standards
6. Informed by other top-performing countries to prepare all students for success in our global economy and society. (Corestandards.org, 2021d)

The CCSS were intended to help teachers across the country have a shared, or *common*, understanding of grade-level academic requirements in relation to college and career readiness (Glatthorn et al., 2019).

The CCSS were not only transformative in terms of how students were taught and what they were expected to learn, but they were also intended to “raise the bar and level the playing field for schools across the country” (An & Cardona-Maguigard, 2019, p. 2). Wexler (2018) noted the CCSS were never intended to be a national curriculum; instead,

they were designed to guide teachers toward better instruction without specifying what must be done to meet the standards. The CCSS were also intended to resolve a significant NCLB accountability flaw associated with the comparability of student achievement data (Goldstein, 2019). Because NCLB empowered states to implement their learning standards and assessments, it was not feasible for states to compare student achievement data (Goldstein, 2019).

Of significance to this study, the English Language Arts & Literacy Standards (ELALS) were specifically created to ensure that students were adequately prepared for post-secondary success (Corestandards.org, 2021c). According to Duncan (2018), the successful implementation of the ELALS would make it possible for students to read and comprehend any text and write well using evidence directly from any text they were reading (Duncan, 2018). The ELALS were built upon College and Career Readiness Anchor Standards (Corestandards.org, 2021b). Common Core workgroups used the following criteria in establishing standards:

1. Goal: the standards as a whole must be essential, rigorous, clear, specific, coherent, and internationally benchmarked
2. Essential: the standards must be reasonable in scope and sequence in defining the knowledge and skills students should have
3. Rigorous: the standards will include high-level cognitive demands
4. Clear and Specific: the standards should provide sufficient guidance and clarity so that they are teachable, learnable, and measurable
5. Teachable and Learnable: the standards must provide sufficient guidance for the design of curricula and instructional materials, they must also be

reasonable in scope, instructionally manageable, and promote depth of understanding

6. Measurable: student attainment of the standards should be observable and verifiable
7. Coherent: the standards should convey a unified vision of the big ideas and supporting concepts within a discipline and reflect a progression of learning that is meaningful and appropriate
8. Grade-by-Grade Standards: the standards will have limited repetition across the grades or spans to help educators align instruction to the standards
9. Internationally Benchmarked: the standards will be informed by the content, rigor, and organization of standards of high-performing countries.

(Corestandards.org, 2021a)

The ELALS were completely integrated, comprehensive in nature, and logically organized in four major strands: reading, writing, speaking and listening, and language (Corestandards.org, 2021c).

While comprehensive in nature, the ELALS were also recognized for what they are *not*:

1. The standards define what all students are expected to know and be able to do, not how teachers should teach
2. While the standards focus on what is most essential, they do not describe all that can or should be taught
3. The standards do not define the nature of advanced work for students who meet the standards prior to the end of high school

4. The standards set grade-specific standards but do not define the intervention method or materials necessary to support students
5. It is also beyond the scope of the standards to define the full range of supports appropriate for English language learners and for students with special needs
6. While the English Language Arts Standards and content area literacy components described herein are critical to college and career readiness, they do not define the whole of such readiness. (Corestandards.org, 2021c)

According to Duncan (2018), the CCSS, including the ELALS, precisely reflected what teachers around the country desired—fewer standards, clearer standards, and higher standards.

While many educators across the country praised the CCSS for being more rigorous, focused, and less fragmented than previous educational standards, many others condemned the standards along political lines and ideologies (Koretz, 2017). According to some critics, the CCSS were forced on teachers and students without any evidence of the Common Core's impact or the effects they would have (Koretz, 2017). Hirsch (2020), among those critics, claimed the CCSS had yet to improve standardized test scores or close the achievement gap among various populations and disaggregated subgroups. According to Hirsch (2020), student achievement had not improved due to the pervasive absence of specific and essential content within the CCSS.

The most hostile criticism of the CCSS came from conservative politicians who believed the federal government was endeavoring to mandate a national curriculum through the CCSS and RTTT competitive grants, thereby usurping the Constitution's Tenth Amendment (Duncan, 2018). In response to the criticism, Michael Cohen,

president of the national education nonprofit Achieve and avid proponent of the CCSS, said, “The Common Core often got conflated with other policy tools, like testing or accountability indicators or teacher evaluation, which made them much more controversial” (as cited in An & Cardona-Maguigad, 2019, p. 3). Concerns regarding the federal government’s overreach caused many states, including Missouri, to repeal the CCSS and replace them with state-developed learning standards (Dillon, 2016).

With a five to one vote, the Missouri Board of Education approved the CCSS in June 2010 (Otto, 2014, p. 1). However, the adoption of CCSS in Missouri proved to be contentious considering the growing political divide over education (Reischman, 2013). Many Missourians believed the Obama administration was backhandedly forcing states, including Missouri, to adopt the CCSS to receive federal NCLB accountability waivers (Reischman, 2013). Conversely, proponents of the CCSS said the adoption of the Common Core in Missouri would increase academic rigor and make it easier to compare Missouri’s student achievement data to other Common Core states (Otto, 2014).

In February 2015, a Missouri judge ruled “the state’s membership in a federally funded testing consortium charged with creating an assessment aligned to the CCSS is illegal and the state should stop paying fees to the SBAC” (Strauss, 2015, p. 1). Consequently, lawmakers mandated the MODESE to immediately end its relationship with the SBAC, which resulted in a \$4.2 million appropriation cut to the MODESE budget (Crouch, 2015, p. 1). According to Peter Herschend, who was president of the Missouri State Board of Education at the time of the controversy, “The money taken out was an absolute frontal attack of the perception of the Common Core” (as cited in Crouch, 2015, p. 3). The SBAC was one of only two multi-state consortia to receive

federal funds to develop Common Core assessments (Strauss, 2015).

As a legislative remedy to Missouri's education standards crisis, House Bill 1490 (2014) became law on July 14, 2014 (MODESE, 2014, Key Education Legislation). HB 1490 included the following directives:

1. Mandates work groups for English language arts, mathematics, science, history, and government, whenever the MODESE develops, evaluates, modifies, or revises academic performance or learning standards
2. Requires the Missouri State Board of Education to adopt and implement academic performance standards beginning in the 2016–2017 school year and align the statewide assessment system to the new standards as needed
3. Authorizes the MODESE to pilot assessments from the Smarter Balanced Assessment Consortium during the 2014–2016 school years although the results of the statewide pilot will not be used for teacher evaluations or to lower any school district's accreditation. (MODESE, 2014, Key Education Legislation)

Even though Missouri abandoned the CCSS and the SBAC assessments, the Common Core remained in use by many states that initially adopted them in 2010 (Associated Press, 2017, p. 1). However, student achievement has not improved among the states that have abandoned the CCSS and the Common Core assessments (An & Cardona-Maguigad, 2019). Lardieri (2018) indicated that student achievement data have not improved in many states that raised academic standards. In 2015, RTTT was replaced with the Every Student Succeeds Act, thus, returning many NCLB federal controls to the individual states (DuFour et al., 2018, p. 22). The legacies of the NCLB Act and the

RTTT have been defined in terms of federal oversight and punitive sanctions (DuFour et al., 2018). According to DuFour et al. (2018) “While NCLB might punish schools, RTTT provided the tools to punish individual teachers and principals” (p. 17).

Conceptual Framework: Guaranteed and Viable Curriculum

For the past several decades, academic standards have been at the forefront of educational reform in the United States (Apex Learning, 2017). The standards movement forced many teachers to resolve a longstanding educational quandary: how to best implement excessive content standards while at the same time giving students sufficient learning opportunities in the instructional time available (Hoegh et al., 2020). This quandary was particularly challenging because many states’ standards were not only excessive in number, but many of the standards were also poorly written (DuFour et al., 2021). Marzano (2017) provided this scenario: “A teacher receives the standards from the state or district. These standards represent the content to teach. Unfortunately, such a process is almost impossible to execute” (p. 18). Adding to the quandary is a prevailing belief among many educators that state learning standards and course content are essentially the same (Marzano, 2017).

In 2003, Marzano’s concept of a guaranteed and viable curriculum was introduced in his book, *What Works in Schools* (Kramer & Schuhl, 2017, p. 55). The concept was simple yet quite powerful: regardless of a child’s teacher, every student should have the same opportunity to learn content that is deemed essential (Marzano et al., 2018). Marzano’s (2003) concept of a guaranteed and viable curriculum was derived from two interconnected factors: opportunity to learn and time to learn. While each factor alone strongly correlates with student achievement, their interconnected relationship led

Marzano to merge the two factors into a single school-level factor—guaranteed and viable curriculum (Marzano, 2003). Thus, a curriculum is viable when there is sufficient instructional time to teach the curriculum that is essential for all students to learn (Summers, 2021a). Of Marzano’s five school-level factors, a guaranteed and viable curriculum has the strongest correlation to academic achievement (Marzano & Eaker, 2020). As such, a guaranteed and viable curriculum provides the necessary foundation for effective classroom instruction and high student achievement (Summers, 2021a).

For a curriculum to be guaranteed, it must also be viable; that is, sufficient time is available during the school year for teachers to successfully implement the curriculum as it is intended (Marzano & Eaker, 2020). In the absence of curricular viability, the quality and breadth of content coverage could vary widely from one grade-level or course-level teacher to another, eventually leading to “curricular chaos” among teachers (Schmoker, 2018, p. 23). To establish curricular viability and avoid chaos, teachers must have a manageable number of learning standards, adequate instructional time for teaching the content, and sufficient classroom resources to effectively support student learning (Marzano et al., 2018). According to Hattie and Yates (2014), many teachers feel rushed to cover curriculum in the time provided, and consequently, students have little time for deeper levels of learning. Therefore, if curriculum is only covered superficially or, worse yet, if essential content is not taught at all, it is unreasonable to expect students to perform well on assessments (Hattie & Yates, 2014).

Because state standards are vast in scope and sequence, school teams are often left on their own to determine what curricular content is most essential for students to learn (Eaker, 2020). As cited by Schmoker (2018), most schools’ curricula include more

academic standards than can ever be taught and learned in a typical 180-day school year (p. 45). When determining essential content for a guaranteed and viable curriculum, Marzano (2003) recommended the following five actions:

1. Identify and communicate the content considered essential for all students versus that which is considered supplemental or necessary only for those seeking post-secondary education
2. Ensure that essential content can be addressed in the amount of time available for instruction
3. Sequence and organize the essential content in such a way that students have ample opportunities to learn it
4. Ensure that teachers address the essential content
5. Protect the instructional time that is available. (pp. 25–31)

It should be the priority of every school leader to fully implement Marzano’s action steps to embed a guaranteed and viable curriculum within a school’s culture (Marzano & Eaker, 2020). When these steps are fully implemented, “any willing team of teachers can produce a curriculum that is superior to what prevails in the majority of schools” (Schmoker, 2018, p. 45).

Embedding a guaranteed and viable curriculum within a school’s culture will undoubtedly have a positive impact on teaching, learning, and student achievement (Marzano & Eaker, 2020). Once a guaranteed and viable curriculum has been implemented, teachers and school leaders must monitor the curriculum’s overall effectiveness (Dempsey, 2017). Monitoring can be accomplished by addressing the answers to four guiding questions:

1. Does our school have an agreement and common understanding of the essential content that all students need to know, understand, and be able to do?
2. Are performance criteria established and communicated to all stakeholders?
3. Does our school have a process for monitoring the implementation of a guaranteed and viable curriculum?
4. Does our school have structures that provide ongoing support to teacher and school leaders for implementing the curriculum with fidelity? (Dempsey, 2017, pp. 2–4)

When teachers agree on the specific standards and content to be learned by all students, they can plan more effective instruction, provide more meaningful and relevant learning experiences, and move closer in the direction of standards-based grade reporting (Eaker, 2020).

According to Schmoker (2018), teacher effectiveness improves significantly when teachers identify and implement a common, coherent curriculum. Therefore, establishing a guaranteed and viable curriculum relies on the work of highly functioning teachers and collaborative teams (Marzano & Eaker, 2020). Once teachers integrate academic learning standards with effective instruction, aligned assessment, and mutual accountability for teaching the standards, student achievement will improve (Reeves, 2019).

While implementing a guaranteed and viable curriculum makes common sense and is seemingly straightforward, implementation can be challenging for many teachers and school leaders (Marzano et al., 2018). According to Schmoker (2018), even though a guaranteed and viable curriculum significantly impacts student achievement, very few schools have actually implemented a guaranteed and viable curriculum. Challenges may

stem from entrenched teacher autonomy, differing opinions among grade-level teachers on what is considered the most essential content, and curricular coverage mindsets among teachers steeped in traditional instructional approaches (Marzano et al., 2018). Ironically, the development and implementation of a guaranteed and viable curriculum is best accomplished by teams of teachers who share their collective expertise and knowledge (Marzano & Eaker, 2020).

Collaborative teams build shared knowledge and consensus on essential grade-level or course-level content and skills to focus their instructional attention on collaboratively identified learning targets and outcomes (Kramer & Schuhl, 2017). According to Eaker (2020), the most effective collaborative teams identify specific learning targets from the most essential content. Schmoker (2018) recommended the following procedures for establishing a guaranteed and viable curriculum:

1. Determine the approximate number of days you have to actually instruct, after subtracting for days devoted to assemblies or to taking state or local assessments
2. Once instructional days have been determined, review state or national documents and estimate, in writing, the approximate number of days it will take to teach each one
3. Add the number of days it will take to teach. If it exceeds the number you have to teach, you will need to thoughtfully subtract topics and standards until you achieve viability, a match between the most essential standards you want to teach and the number of days you have to teach them
4. Apportion the standards by grading period in a logical progression of units,

topics, or skills

5. Match topics to texts or to teaching resources as appropriate
6. Add focus/guiding questions
7. Establish expectations for major benchmark writing assignments
8. Create lessons, units, and common assessments, beginning with unit or quarterly assessments. (pp. 48–51)

When a guaranteed and viable curriculum is solidly in place, teachers can effectively and efficiently provide instruction and assessments that are genuinely aligned to targeted student outcomes (Kramer & Schuhl, 2017). In the words of Hoegh (2020), “The big idea here is the written, taught, and learned curricula align, and teachers organize the curriculum to provide sufficient time for student learning to occur” (p. 129). Implementing an organized and aligned curriculum relies on focused sequencing of instruction, appropriate pacing of instruction, and high-quality methods of instruction (Valdez et al., 2019). As such, the development and implementation of a guaranteed and viable curriculum is a controllable variable within a school district (Eaker et al., 2021). In high-achieving schools, all students are exposed to a guaranteed and viable curriculum and thrive as a result (Buffum et al., 2018). The Highly Reliable Schools Model identified six indicators of a guaranteed and viable curriculum:

1. The school curriculum and accompanying assessments adhere to state and district standards
2. The school curriculum is focused enough that teachers can adequately address it in the time they have available
3. All students have the opportunity to learn the critical content of the curriculum

4. The school establishes clear and measurable goals that are focused on critical needs regarding improving overall student achievement at the school level
5. The school analyzes, interprets, and uses data to regularly monitor progress toward school achievement goals
6. The school establishes appropriate school- and classroom-level programs and practices to help students meet individual achievement goals when data indicate interventions are needed. (Marzano et al., 2018, pp. 107–108)

Unpacking and Prioritizing Academic Standards

Educational standards are at the center of all student learning experiences (Schimmer et al., 2018). According to the Learning First Alliance (2018), successful schools ensure that all classroom instruction is fully aligned to state learning standards. Regardless of their inherent flaws, evaluating students against a backdrop of academic standards is significantly more beneficial than evaluating students on the traditional bell curve (Reeves, 2019). For schools to have a guaranteed and viable curriculum, essential content, otherwise known as priority standards, must first be identified and then studied by the teachers implementing the standards (Marzano et al., 2017). The careful identification and clarification of academic standards will lead to a more fully integrated approach to curriculum, instruction, and assessment (Heflebower et al., 2019).

Before standards can be prioritized, however, they must first be unpacked in such a way that teachers fully understand each standard's academic purpose and level of rigor (Kramer & Schuhl, 2017). According to Eaker (2020), "Many state standards are far too broad or vague, so teams must determine the most essential learning expectations for students and determine what each essential learning looks like in student work if the

expectation is met” (p. 189). Unpacking standards requires teachers to break down each standard into smaller, more discrete learning targets that specify in exact terms what students must learn (Kramer & Schuhl, 2017). While some educators use terms like unwrapping standards or deconstructing standards, the process is the same in that teachers must analyze each academic standard closely enough to discern the smaller subset concepts and skills that lead directly to the standard’s accomplishment (Bailey & Jakicic, 2019). As teachers gain more knowledge and clarity about the standards they are asked to teach, they become more confident and instructionally equipped to help all students learn the required academic standards (Schimmer et al., 2018).

Unpacking standards helps teachers clarify the educational intent of each standard and identify the learning targets embedded within the standards (Bailey & Jakicic, 2019). Unpacking educational standards is necessary given that many teachers are simply handed state or district learning standards that have already been created with little, if any, input from the teachers who will be teaching the standards (Marzano, 2017). When unpacking educational standards, teachers should consider the following four-step process:

1. Individually or collectively annotate the standards
2. Using a graphic organizer or template, reference the annotated standard to collectively identify the specific learning targets that reflect what students will know and do
3. Identify any academic language or vocabulary students should master
4. Examine the rigor of the learning targets. (Bailey & Jakicic, 2019, pp. 63–65)

This structured four-step process will enable teachers to better understand academic

standards, and, in turn, improve instruction and assessment (Bailey & Jakicic, 2019).

Teachers might also consider using a seven-step process to unpack learning standards:

1. Identify the priority standards for a particular unit or topic of instruction
2. Circle or highlight the verbs and underline the knowledge or concepts
3. Identify learning targets
4. Determine the level of rigor for each learning target and consider the type of assessment that matches the rigor expectations
5. Identify key vocabulary
6. Determine a logical learning progression
7. Determine potential scaffolds or supports. (Friziellie & Schmidt, 2020, p. 153)

Upon completing this seven-step process, teachers should proceed with developing curriculum maps, units of study, pacing guides, assessments, and lessons aligned to established proficiency targets (Friziellie & Schmidt, 2020).

Teachers are responsible for implementing a vast number of state learning standards throughout the school year (Heflebower et al., 2019). Many teachers agree, however, that some learning standards are more significant than others (Marzano & Eaker, 2020). According to Reeves (2019), when teachers are asked which learning standards are most important, their obvious answer should be—certainly not all of them. Because of this, teachers must work in collaboration to prioritize the standards, giving more time to essential content and skills and less time to other standards that are not identified as essential (Marzano & Eaker, 2020). Once learning standards are prioritized, teachers will have a better understanding of essential course content and will be able to implement appropriately paced classroom instruction (Heflebower et al., 2019). This will

ensure that students can practice the skills associated with all standards (Lalor, 2017).

In a professional learning community, the prioritization of learning standards is a collaborative responsibility that will ultimately lead to a guaranteed and viable curriculum (Marzano & Eaker, 2020). However, teachers cannot guarantee a curriculum if all learning standards are of equal importance and receive an equal amount of instructional focus (Jakicic, 2017). It is impossible to establish a guaranteed and viable curriculum until deliberate steps are taken to prioritize learning standards by reducing the standards to a manageable number for instruction (Schmoker, 2018). Once the standards are reduced to a viable number, teachers are not only more likely to teach them, but they are more likely to teach them to an intellectual depth that dramatically increases student learning (Schmoker, 2018).

Prioritizing academic standards makes it possible for teachers to share essential learning targets with students and their parents and determine what learning activities will most efficiently lead to the mastery of essential learning targets in each unit of study (Lalor, 2017). Because of this, the identification of priority standards is a necessary action for schools to develop a quality system of standards-based assessment (Jakicic, 2017). Priority standards are at the center of classroom assessment and grade reporting (Heflebower et al., 2019). According to Jakicic (2017), high-quality classroom assessments rely on the identification and teaching of priority standards.

Immense value is added to learning standards when they are comprehensively analyzed, synthesized, and prioritized to the extent that every teacher allocates sufficient time for instruction and maintains an instructional focus necessary for student learning to occur (Reeves, 2019). When prioritizing standards and essential content for a guaranteed

and viable curriculum, three longstanding criteria should be considered: endurance, leverage, and readiness (Stuart et al., 2018). These criteria should be contemplated considering three guiding questions:

1. Is the essential content being taught something a student will need in the future?
2. Will learning this essential content be necessary for learning in other academic disciplines or subject areas?
3. Is learning this essential content a critical step in a student's vertical preparation? (Stuart et al., 2018, p. 17)

While many schools begin the laborious process of unpacking and prioritizing educational standards, very few complete the process, leaving many teachers unable to determine which academic standards are most important (Kramer & Schuhl, 2017). To keep this from happening, school administrators must ensure that teachers are given clear direction, adequate time, supportive professional development, and sufficient opportunities for purposeful collaboration (Marzano et al., 2018). According to Heflebower et al. (2019), "Teachers need time to process with one another, try new ideas, receive feedback from peers, and over time, change existing philosophies. A culture of support, trust, and modeling is important" (p. 135). Without this level of professional support for unpacking and prioritizing standards, teachers will not become "critical consumers" of the standards they teach (Friziellie & Schmidt, 2020, p. 155).

However, Reeves (2019) warned administrators to not "get too deep into the weeds of how to implement standards" without first helping teachers understand the why of standards; otherwise, administrators will face inevitable anger and resentment from

teachers who are being asked to work on something without a clear purpose (p. 2). When adequate professional support is given to teachers for unpacking and prioritizing standards, a guaranteed and viable curriculum is more manageable and achievable for teachers and students alike (Eaker et al., 2021).

Missouri HB 1490

Jay Nixon, Missouri Governor, signed HB 1490 on July 14, 2014 (MODESE, 2014, Key Education Legislation). Before the bill's 132–19 approval in the Missouri House, HB 1490 was “amended to include a specific timeline for replacing the previously adopted CCSS, to authorize the Missouri State Board of Education to replace the CCSS no later than October 2015, and to authorize the administration of all existing first semester Common Core Smarter Balanced Assessments” (Otto, 2014, p. 1). HB 1490 provided a legal mechanism for rewriting and adopting new Missouri Learning Standards (Otto, 2014). More than that, however, HB 1490 authorized the state legislature to have more direct control over developing the state's new learning standards (Otto, 2014). According to the bill's sponsor, Bob Bahr, State Representative from District 102, “My crusade against the Common Core was never against the standards per se. For me, it was more of a state sovereignty issue. We lost control of education. It was whose standards they were, not what standards they were” (as cited in Crouch, 2015, p. 6). Bahr was adamantly opposed to the federal government's unabashed role in actively promoting the CCSS and using federal funds to develop the SBAC exams for use in Missouri and other Common Core states (Crouch, 2015).

As specified in HB 1490, workgroups, comprised of working public school educators and parents, had until October 1, 2015, to rewrite the Missouri Learning

Standards and have the standards ready for complete implementation during the 2016–2017 school year (HB 1490, 2014, p. 10). State government leaders and other designated stakeholders from across Missouri appointed actively employed public school teachers, administrators, university professors, and parents of school-age children to serve on K–5 and 6–12 workgroup committees in the four core subject areas (HB 1490, 2014, pp. 1-2). Under the new law, workgroup participants represented each of the geographic regions within the state (HB 1490, 2014).

The revised Missouri Learning Standards were officially adopted in April 2016 (MODESE, 2016, p. 1). In total, the MODESE collected more than 3600 comments on the new standards from educators and citizens across the state (Dillon, 2016, p. 1). In April 2016, the MODESE released a document entitled *Missouri Learning Standards Talking Points* (MODESE, 2016, p. 1). The document’s main message was, “The Missouri Learning Standards further define our high expectations for what Missouri students should know and be able to do in each course and grade-level, helping ensure they graduate prepared for college, career, and life” (MODESE, 2016, p. 1). In part, the document included the following talking points:

1. The Show-Me Standards define what students should learn by the time they graduate from high school. These standards have been in place since 1996
2. The revised Missouri Learning Standards were developed by Missourians for Missouri students. These expectations are challenging, yet attainable, for students in our state
3. Department staff incorporated feedback from Missouri educators, legislators, academic researchers, and the public, who submitted more than 3600

comments about the academic expectations

4. Local school districts will continue to develop their own curriculum as they have in the past. Teachers will continue to develop their own lesson plans to help students achieve expectations within the new standards
5. School districts will use the new grade- and course-level expectations when developing the local curriculum they teach in their schools
6. The Department will develop new assessments to measure student progress toward the expectations within the new Missouri Learning Standards.

(MODESE, 2016, pp. 1–2)

Missouri Learning Standards

On January 18, 1996, the Show-Me Standards were officially established in Missouri (MODESE, 2021j, Show-Me Standard section). The content and process standards within the Show-Me Standards were identified to help teachers provide more focused instruction concerning essential content and key skills (MODESE, 2021g). The 73 Show-Me Standards are intended to be used by local school districts to develop high-quality curriculum, develop aligned assessments, and deliver more effective classroom instruction (MODESE, 2021j, Printable Version Placemat section). The Show-Me Standards consisted of 33 performance standards and 40 knowledge standards that identified the knowledge and skills all students must learn before graduating from high school (MODESE, 2021j, Printable Version Placemat section). The Show-Me Standards addressed four broad goals:

1. Students in Missouri public schools will acquire the knowledge and skills to gather, analyze, and apply information and ideas

2. Students in Missouri public schools will acquire the knowledge and skills to communicate effectively within and beyond the classroom
3. Students in Missouri public schools will acquire the knowledge and skills to recognize and solve problems
4. Students in Missouri public schools will acquire the knowledge and skills to make decisions and act as responsible members of society. (MODESE, 2021j, Printable Version Placemat section)

According to the MODESE (2021j), “These standards do not represent everything a student will or should learn. However, graduates who meet these standards should be well-prepared for further education, work, and civic responsibilities” (Printable Version Placemat section). Authority for the Show-Me Standards was found within Section 160.514, Revised Missouri Statutes, and the Code of State Regulations, 5 CSR 50-375.100 (MODESE, 2021j, Printable Version Placemat section). The Show-Me Standards are a product of the 1993 Outstanding Schools Act (MODESE, 2021j, Printable Version Placemat section).

In 1996, Missouri educators developed grade-level expectations for the first time in the state’s history (MODESE, 2021g, About the Missouri Learning Standards section). Grade-level expectations eventually evolved into course-level expectations at the secondary school level (MODESE, 2021g). Course-level expectations provided secondary teachers with specific learning objectives aligned directly to the MODESE’s new end-of-course assessments (MODESE, 2021g).

The latest revisions of the Missouri Learning Standards are also aligned to the Show-Me Standards (MODESE, 2021g). The Missouri Learning Standards continue to

serve as “a road map for learning expectations in each grade and course” (MODESE, 2021g, About the Missouri Learning Expectations section). While the Missouri Learning Standards were never intended to be a curriculum, they provide a solid framework for improving curricular alignment, grade-level or course-level content, and aligned classroom assessments (MODESE, 2021g).

The MODESE has recently identified and disseminated the state’s first-ever priority standards for English language arts, mathematics, science, and social studies (MODESE, 2021h). According to the MODESE (2021i), priority standards were derived from the Missouri Learning Standards and define the essential course-level expectations that are most essential and required for a student’s future success. According to the MODESE (2021i), a priority standard serves three important purposes:

1. It provides opportunity for students to demonstrate a thorough understanding across genres and contents
2. It acts as an umbrella and should incorporate other supporting expectations
3. It drives learning towards endurance, leverage, and sustainability. (p. 1)

Priority standards are intended to positively impact curriculum development initiatives, instructional practices, classroom assessments, and the Missouri Assessment Program (MODESE, 2021h). Priority standards provide a solid foundation for effective curriculum, instruction, and assessment (MODESE, 2021h). When priority standards are properly aligned to classroom assessments, data from those assessments can be used to better support students in acquiring essential knowledge and skills (MODESE, 2021h).

Given the importance of priority standards in developing aligned curriculum, instruction, and assessment, the MODESE released a curriculum resource entitled,

Priority Standards for Leveraging Learning in English Language Arts (MODESE, 2021i). This resource is designed to help Missouri teachers and schools develop new content area priority standards or improve existing content area priority standards (MODESE, 2021i). The MODESE priority standards were never intended to replace existing grade-level and course-level expectations (MODESE, 2021i).

Priority standards are used to support an instructional practice known as acceleration of learning (MODESE, 2021a). This MODESE endorsed instructional practice is designed to ensure that all Missouri students experience consistent grade-level instructional materials, learning tasks, assessments, and assignments (MODESE, 2021a). Acceleration of learning “requires educator focus on moving forward rather than backward, using scaffolds to fill in only the most critical gaps, not in isolation, but at the moment they are needed within grade-level work” (MODESE, 2021a, p. 1).

With priority standards, teachers are equipped with a shared understanding of essential grade-level content that provides a framework for consistently delivering standards-aligned, grade-level instruction (MODESE, 2021a). However, the MODESE reminded teachers that the prioritization of learning standards does not necessitate the elimination of other standards (MODESE, 2021a). The MODESE’s Task Force for Learning Acceleration developed a variety of research-based instructional resources designed to help teachers effectively use priority standards within their classrooms and schools (MODESE, 2021a).

Missouri End-of-Course Assessments

The Missouri Assessment Program was established in response to the 1993 Outstanding Schools Act (MODESE, 2021d, History of the Missouri Assessment

Program section). The Outstanding Schools Act mandated the “establishment of statewide grade-span assessments designed to measure the Show-Me Standards in grades 3, 7, and 11 in communication arts; grades 4, 8, and 10 in mathematics; and grades 3, 7, and 10 in science” (MODESE, 2021d, History of the Missouri Assessment Program section). Upon passage of the NCLB Act in 2001, all states were required to report schoolwide student proficiency data (MODESE, 2021d). Performance data from statewide assessments are used “to diagnose individual student strengths and weaknesses in relation to the instruction of the Missouri Learning Standards” (MODESE, 2021d, History of the Missouri Assessment Program section).

According to the MODESE (2019), end-of-course assessments are an indispensable component of a fully integrated and comprehensive support system for curriculum, instruction, and assessment. As of 2010, all end-of-course assessments have been administered online (MODESE, 2021d, History of the Missouri Assessment Program section). According to the MODESE (2021c), “End-of-course assessments are taken when a student has received instruction on the Missouri Learning Standards for an assessment, regardless of a student’s grade-level” (End-of-Course section). As of the 2014–2015 school year, all students have been required to complete end-of-course assessments in Algebra I, Biology, English II, and Government (MODESE, 2021c, End-of-Course section).

In 2016, the MODESE (2020a) released a testing calendar for the newly implemented end-of-course assessments (p. 1). As a result of this action, new English and mathematics end-of-course assessments were developed by Questar Assessment and implemented during the 2017–2018 school year (MODESE, 2020a, p. 1). The English II

end-of-course assessment was designed to measure student achievement in reading literary texts, reading informational texts, and writing (MODESE, 2020a).

Assessment specialists used Missouri end-of-course assessment blueprints to ensure that all state assessments are correctly aligned to state learning standards (MODESE, 2021f). Blueprints serve as essential alignment tools for linking content area objectives to assessment questions at the appropriate weight (MODESE, 2021f). According to the MODESE (2021f), blueprints “along with item specifications, performance level descriptors, and the practices and processes documents provide strong content validity and reliability for the assessment system” (p. 1).

Missouri teachers with classroom teaching experience and content knowledge expertise, designated MODESE staff, Regional Professional Development Center facilitators, and Questar assessment development specialists developed the end-of-course assessments (MODESE, 2020b). As test items were developed, “Questar kept records to maintain a workflow that generated items in assessment strands and course-level expectations as required by the test blueprint” (MODESE, 2020b, p. 18). Additionally, Questar specialists closely monitored each test item’s clarity, alignment to learning standards, level of complexity, and congruence with item specifications (MODESE, 2020b). As test items were selected and approved for each end-of-course assessment, Questar assessment specialists endeavored to balance content coverage with overall difficulty (MODESE, 2020b).

Questar Assessment, the MODESE’s assessment contractor, calculated a student’s end-of-course assessment scale score by using points earned from correct responses (MODESE, 2020a). Scale scores were reported when students had a valid attempt during

any end-of-course assessment session (MODESE, 2020a). Student scale scores can range between 325 to 400, with 400 being the threshold for proficiency, and are used to determine a student’s overall achievement level on the assessment (MODESE, 2020a, p. 2). The four achievement levels, “advanced, proficient, basic, and below basic, describe in specific terms what students know and can do in terms of the content and skills tested on the end-of-course assessment” (MODESE, 2020a, p. 15). The MODESE end-of-course assessment reports provide school districts with various data to help identify students who require additional academic support or intervention (MODESE, 2020a). While end-of-course assessment data are used to meet state and federal accountability requirements, data are also used to show evidence of public-school students’ academic progress across Missouri (MODESE, 2020a).

As teachers prepare students for end-of-course assessments or other summative assessments, it is recommended that teachers refer to the MODESE’s Item Specifications (MODESE, 2021e). The Item Specifications document is a teacher-created resource that provides a foundation for the assessment development process by including all course-level expectations arranged by domains and strands (MODESE, 2021e). Item specification components include:

1. *Expectation Unwrapped* breaks down a list of clearly delineated content and skills students are expected to know and be able to do upon mastery of the expectation
2. *Depth of Knowledge Ceiling* indicates the highest level of cognitive complexity that would typically be assessed on a large-scale assessment
3. *Item Format* indicates the types of items used in large scale assessments

4. *Content Limits/Assessment Boundaries* are parameters that item writers should consider when writing large scale assessments
5. *Sample Stems* are examples that address the specific elements of each expectation and address varying depth of knowledge levels
6. *Text Types* suggest a broad list of text types for both literary and informational expectations
7. *Calculator Designation* (mathematics only) indicates whether a calculator will be available for certain test questions
8. *Stimulus Materials* (science and social studies only) defines types of stimulus materials that can be used in the item stems
9. *Possible Evidence* (science only) indicates observable methods in which students can show understanding of expectations. (MODESE, 2021e, Item Specifications section)

This assessment resource is reflective of the MODESE’s commitment to providing Missouri teachers with an “integrated program of testing, accountability, and curricular instructional support” (MODESE, 2020b, p. 4).

Curricular Resources

Highly effective schools empower teachers to select curricular resources aligned to learning standards and provide teachers with the necessary time to develop new resources or adapt existing resources (Learning First Alliance, 2018). According to Summers (2021b), resources are instructional tools that have been carefully and intentionally selected to optimize a student’s mastery of content and skills. Teachers in highly effective schools also have access to exemplary resources designed to support

curriculum and instruction (Learning First Alliance, 2018). Learning experiences, combined with purposeful and engaging resources, contribute significantly to a guaranteed and viable curriculum (Lalor, 2017). An effective teacher serves as the primary resource provider during classroom instruction (Marzano, 2019).

Resources are categorized as either informational or material (Marzano, 2019). Informational resources include written text such as books and articles, informational handouts, websites, videos, and certain nonlinguistic representations; while material resources include items like electronic devices, technology, models, building materials, and other consumable products such as pencils, markers, and paper (Marzano, 2019). Teachers must ensure that curricular resources are readily available and easily accessible as resources are needed to support student learning (Marzano, 2019). In fact, “providing resources involves teachers anticipating student needs as they progress through their tasks and being ready to address them at the right time with information, materials, or coaching” (Marzano, 2017, p. 50).

As teachers select and evaluate curricular resources, attention should be given to three guiding questions:

1. Is the resource an integral part of the learning process?
2. Does this resource include a process that will be repeated in subsequent units?
3. Does this tool support school values? (Lalor, 2017, pp. 149–150)

The thoughtful selection of high-quality learning resources and materials requires a significant amount of time and research (Glatthorn et al., 2019). The process for selecting resources must ensure that all resources are aligned not only to state and local learning standards but also to the school’s mission, vision, and strategic plan (Summers, 2021b).

Once resources have been carefully selected, teachers and administrators should conduct a resource allocation analysis based on data and information derived from the following questions:

1. Does the school's allocation of resources reflect its educational priorities?
2. Does the school's allocation of resources seem adequate for achieving the outcomes desired?
3. Does the allocation of resources seem to be cost-effective?
4. Is the allocation of resources equitable? (Glatthorn et al., 2019, pp. 180–181)

Whatever process teachers use to select and acquire curricular resources, teachers must be clear on how resources will be used to support the written curriculum and the successful attainment of learning goals and student achievement outcomes (Glatthorn et al., 2019). The same process applies to limiting or eliminating curricular resources that are no longer relevant or viable (Lalor, 2017).

As teachers endeavor to implement a guaranteed and viable curriculum, school administrators should demonstrate high levels of support by actively participating in content area meetings, becoming lead learners of the standards, and ensuring that all classroom instruction is aligned to the essential standards (Eaker et al., 2021). When school administrators collaborate with teachers on all matters related to curriculum, instruction, and assessment, they not only increase leadership capacity but also nurture professional relationships based on personal commitment and collective responsibility (Valdez et al., 2019). To better support the growth and development of teachers, school administrators should provide every teacher with the following resources along with professional support for effectively using the resources:

1. Current state or provincial standards
2. Recommended standards from professional organizations
3. District curriculum guides
4. A list of prerequisite skills that colleagues at the next course or grade-level have established as essential for success at that level
5. Assessment frameworks
6. Data on student performance on past assessments
7. Examples of student work and specific criteria that could be tested in judging the quality of student work
8. Recommendations and standards for workplace skills
9. Recommendations on standards and curriculum design from experts in the field. (DuFour et al., 2021, pp. 155–156)

The professional resource most often utilized by classroom teachers is a traditional curriculum guide (Glatthorn et al., 2019). A high-quality curriculum guide is comprehensive in nature and “not only details objectives and activities, but also contains a statement of philosophy, suggestions for evaluation, and lists of materials” (Glatthorn et al., 2019, p. 208). Without the necessary resources, it is unreasonable to believe that teachers and students will be successful in their respective roles (DuFour et al., 2021). According to Summers (2021b), providing resources to teachers without meaningful support and job-embedded professional learning can often lead to frustration and ineffective use of the resources.

Summary

In Chapter Two, an extensive review of the literature was presented. A historical

framework provided a thorough understanding of the people and events that shaped the American standards movement. The conceptual framework for this study was based upon the seminal research of Marzano and his colleagues. Of particular importance to this study was Marzano's (2003) concept of a guaranteed and viable curriculum. Given the complex nature of academic learning standards, detailed procedures for unpacking and prioritizing academic standards were provided in the chapter.

Next was a review of Missouri HB 1490, a bill that legislatively required the elimination of CCSS and the subsequent rewriting of new Missouri Learning Standards. Literature pertaining to the development and implementation of the new Missouri Learning Standards was also presented. Because state-mandated tests were directly aligned to the Missouri Learning Standards, an overview of the end-of-course assessments was provided. Chapter Two concluded with a review of literature relating to the selection and use of high-quality curricular resources within a guaranteed and viable curriculum

In Chapter Three, the problem and purpose of this study are restated. The seven research questions and hypotheses introduced in Chapter One are reviewed. Chapter Three also includes a detailed description of the research design, population, and sample. Instrumentation, including matters of reliability and validity, are described along with the procedures for data collection. Chapter Three concludes with an overview of the study's data analysis procedures and ethical considerations.

Chapter Three: Methodology

In Chapter Three, the design of the study is presented. First, the problem associated with curricular viability is reviewed. Following a review of the problem, an overview of the study's purpose is given. A list of research questions and hypotheses used to guide the study are provided. The research questions and hypotheses are followed by a precise and expansive description of the research design, population and sample, instrumentation, and data collection procedures. The statistical analysis used to answer the research questions and to test the research hypotheses is described. Chapter Three concludes with a review of various ethical considerations and safeguards associated with the study.

Problem and Purpose Overview

Students will achieve at higher levels when the curriculum they are learning is both guaranteed and viable (Marzano & Eaker, 2020). The curriculum cannot be guaranteed unless it is first deemed viable; that is, teachers have enough instructional time during the school year to adequately implement the curriculum as it is written (Marzano, 2017). Schmoker (2018) highlighted the problem by indicating that most curricula found within the United States contain a disproportionate number of standards in relation to the number of days teachers have available for instruction. Marzano (2017) contended that most state standards are excessive and cannot be taught in the time available during a typical school year.

The purpose of this study was to determine if there is a correlation between teachers' perceptions of the guaranteed and viable nature of Missouri Learning Standards and student achievement on English II end-of-course assessments. An analysis of teacher

perceptions and student achievement data correlated to those perceptions may lead to discussions and decisions that more positively impact student learning and, consequently, improved student performance on state-mandated end-of-course assessments. Given the current lack of research associated with the guaranteed and viable nature of Missouri Learning Standards, this study is unprecedented and necessary (C. Neale, personal communication, July 14, 2020).

Research Questions and Hypotheses

The following research questions and hypotheses guided the study:

1. What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H1₀: There is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H1_a: There is a significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

2. What is the correlation between teachers' perceptions regarding this extent to which Missouri Learning Standards are guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H2₀: There is no significant correlation between teachers' perceptions regarding

the extent to which Missouri Learning Standards are guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H2_a: There is a significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

3. What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H3₀: There is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H3_a: There is a significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

4. What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H4₀: There is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H4_a: There is a significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

5. What is the correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H5₀: There is no significant correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H5_a: There is a significant correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

6. What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment and the percentage of students who score

advanced and proficient on the English II end-of-course assessment?

H6₀: There is no significant correlation between teachers' perceptions regarding the extent to which the Missouri Learning Standards for English II are appropriately aligned to end-of-course assessments and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H6_a: There is a significant correlation between teachers' perceptions regarding the extent to which the Missouri Learning Standards for English II are appropriately aligned to end-of-course assessments and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

7. What is the correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

H7₀: There is no significant correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

H7_a: There is a significant correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment.

Research Design

When beginning statistical research, it is necessary to identify a research design

that includes the specific procedures used for inquiry (Creswell & Creswell, 2018). Since various relationships among multiple variables were examined, a quantitative research design was selected for this study (Creswell & Creswell, 2018). A survey instrument was developed to collect quantitative data on the variables of interest, and those data were analyzed using statistical tools and procedures (Creswell & Creswell, 2018). A correlational research design was used to measure and describe the relationship between the variables (Creswell & Creswell, 2018). The Pearson correlation coefficient was first conceived by Francis Galton but was popularized in 1895 by Karl Pearson, a founder of modern statistics (Spiegelhalter, 2019, p. 58). The Pearson r , also known as the product-moment correlation coefficient, is the most common statistical technique for estimating correlation among multiple variables (Mills & Gay, 2019). Correlation coefficients were sought to express the relationships between pairs of variables in this study (Mills & Gay, 2019).

Population and Sample

Before sampling can occur, the population must first be defined (Mills & Gay, 2019). Because an entire population of subjects is seldom available, a distinction must be made between the target population and the accessible population (Fraenkel et al., 2019). According to Mills and Gay (2019), the target population represents an entire population of research subjects for whom it is hoped to generalize results. The accessible population represents those subjects who are most available or most likely to be selected for participation in a study (Fraenkel et al., 2019).

The target population of this study included all currently employed and fully certified teachers in Missouri who taught English II and administered the English II end-

of-course assessment at the time of this study. By sampling a larger population, the results from this study were more likely to be generalizable (Fraenkel et al., 2019). The actual sample consisted of 53 actively employed and fully certified public-school teachers in Missouri who taught English II and administered the English II end-of-course assessment. A minimum sample of at least 30 is considered necessary to establish the existence of relationships in correlational research; however, “the higher the validity and reliability of the variables to be correlated, the smaller the sample can be, but not fewer than 30” (Mills & Gay, 2019, p. 225).

A purposive sample derived from the accessible population of public-school English II teachers in Missouri was used for this study. Given the purpose of this study, personal judgment was used to select the sample (Fraenkel et al., 2019). In so doing, knowledge and awareness of the population were utilized to decide whether the sample would represent all English II teachers and yield the data necessary for this study (Fraenkel et al., 2019). According to Mills and Gay (2019), “purposive sampling, also referred to as judgment sampling, is the process of selecting a sample that is believed to be representative of a given population” (p. 159). A significant disadvantage associated with purposive sampling is the potential for erroneous judgment by the researcher and sample inaccuracies (Fraenkel et al., 2019).

Instrumentation

Survey

Cross-sectional surveys are used in research to describe the characteristics of a predetermined target population (Fraenkel et al., 2019). Most surveys include the following characteristics: information is gathered from a population of people so that

particular characteristics within the population can be described, data are collected by asking people specific questions, and a sample of the population provides information rather than the entire population (Fraenkel et al., 2019). For survey research, quantifiable responses are collected from a population or sample (Mills & Gay, 2019). Various online survey products, such as Qualtrics, enhance and expedite the collection and analysis of survey data (Creswell & Creswell, 2018).

For this study, a cross-sectional survey was developed to measure teacher perceptions using a five-point Likert-type scale within a predetermined population (Fraenkel et al., 2019). The survey instrument was created to include units of analysis that corresponded directly to each of the study's research questions (Fraenkel et al., 2019). The survey was reflective of the literature review and the conceptual framework upon which the study was based. All survey items were aligned to the works of Bailey and Jakicic (2019), Friziellie and Schmidt (2020), Hoegh (2020), Kramer and Schuhl (2017), Marzano (2003, 2018, 2019, 2020), Marzano and Eaker (2020), and Schmoker (2018).

Secondary Data

English II end-of-course assessments for 2017–2018 and 2018–2019 served as instruments for this study. Missouri end-of-course assessments are used to measure student achievement in terms of proficiency (MODESE, 2020b). The first English II end-of-course assessment was administered in the 2008–2009 school year (MODESE, 2021d, History of the Missouri Assessment Program). Two new operational test forms (A and B) were developed for English II during the 2017–2018 assessment cycle, with another set of operational tests (C and D) developed and administered for the 2018–2019 assessment

cycle (MODESE, 2020b, p. 2).

According to the Standards for Educational and Psychological Testing, Standard 1.1 stated:

The test developer should set forth clearly how test scores are intended to be interpreted and consequently used. The population(s) for which a test is intended should be delimited clearly, and the construct or constructs that the test is intended to assess should be described clearly. (as cited in MODESE, 2020b, p. 3)

Considering this standard, the MODESE (2020b) identified five purposes for administering end-of-course assessments: “to measure and reflect students’ mastery toward postsecondary readiness, to identify students’ strengths and weaknesses, to communicate expectations for all students, to serve as the basis for state and national accountability plans, and to evaluate programs” (p. 3). According to the MODESE (2020b), end-of-course assessments are only one part of an integrated system of assessment, instructional support, and accountability.

Reliability

For the purpose of this study, reliability refers to the extent to which an instrument is both consistent and repeatable (Creswell & Creswell, 2018). Simply defined, “reliability is the degree to which a test consistently measures whatever it is measuring” (Mills & Gay, 2019, p. 182). Field-testing was necessary to improve the overall presentation of the survey and to ensure clarity of instructions and questions as they appeared on the survey instrument (Creswell & Creswell, 2018). Before beginning the research, a field test was conducted with four English II teachers at a non-participating public school district in Missouri to ensure the reliability of the survey

created for this study. Based on participant feedback, minor revisions were made to provide clarity and measure what was meant to be measured.

The MODESE must ensure that all state-mandated end-of-course assessments used for school accountability purposes yield highly reliable results (MODESE, 2019). In accordance with the Standards for Educational and Psychological Testing, “Appropriate evidence of reliability/precision should be provided for the interpretation for each intended score use” (as cited in MODESE, 2019, p. 73). The MODESE EOC Technical Report (2019) provided “evidence that scores from the Missouri end-of-course assessments measure student achievement in a reliable manner and any measurement error associated with students’ scores is reasonable, especially at the proficient cut score” (p. 73).

End-of-course assessment reliability can be determined “via the correlation of scores on forms assumed to be parallel (equivalence reliability), from test-retest data (stability reliability), or a single test administration (internal consistency reliability)” (MODESE, 2019, p. 73). Reliability evidence for the school years 2017–2018 and 2018–2019 end-of-course assessments included the following: “internal consistency, standard error of measurement for raw scores, conditional standard error of measurement for scale scores, classification accuracy, and consistency, and rater agreement” (MODESE, 2019, p. 75). According to the MODESE (2019), a student’s actual academic ability cannot be perfectly measured on any assessment, given that all assessments have a known standard error of measurement due to inherent imprecision. The consistency of data derived from scores on a research instrument is necessary to make valid inferences regarding the data; therefore, high reliability and high validity are equally important concepts when

conducting research (Fraenkel et al., 2019).

Validity

In contrast to the reliability of an instrument, validity pertains to the accuracy, suitability, and useability of data-based inferences (Fraenkel et al., 2019). Quantitative research is validated when instruments yield scores upon which meaningful inferences can be made (Creswell & Creswell, 2018). Validity is dependent upon the kind of data being collected and the amount of data being collected to support generalizations and conclusions (Fraenkel et al., 2019). According to Creswell and Creswell (2018), “there are three forms of research validity: content validity, predictive or concurrent validity, and construct validity” with construct validity being the most significant (p. 153). The survey items were aligned to the conceptual framework and review of related literature to achieve construct validity.

English II end-of-course assessment scores represented the dependent variables associated with this study. According to the MODESE (2019), end-of-course assessment scores were used to determine students’ mastery of the Missouri Learning Standards. Student learning was determined by measuring performance on the Missouri Learning Standards and then converting assessment scores to performance levels (MODESE, 2020a). According to the MODESE (2019), “end-of-course assessments incorporate the meaning of the test scores by anchoring the achievement level cut scores to known scale score values” (p. 4). The MODESE (2019) published a yearly technical report “that provides details about the development and implementation of the Missouri end-of-course assessments and contributes to the argument for the validity of the interpretation and use of test scores for their intended purposes” (MODESE, 2020b, p. 4).

Data Collection

Permission to conduct this correlational study was obtained from the Lindenwood University Institutional Review Board. Once the Lindenwood University Institutional Review Board granted permission to conduct this study (see Appendix A), the data collection process began. Email addresses for all public-school superintendents in Missouri were collected from the MODESE and the Missouri Association of School Administrators websites. An email, including a site permission letter, a letter of invitation to participate, the Survey Research Consent Form, and the survey link, were delivered to all public-school superintendents. The superintendents were asked to approve the research request and forward the letter of invitation to all high school principals in each superintendent's school district. The principals were asked to forward the letter of invitation to those fully certified teachers who teach English II and administer the English II end-of-course assessment. The survey, administered through Qualtrics survey software, was designed to elicit responses pertinent to the research questions. Once the quantitative data were received and secured, the data analysis process began.

Secondary data from English II end-of-course assessments originated from the Missouri Assessment Program within the MODESE. These data were collected by the MODESE on an annual basis for accountability purposes. Secondary data from the 2017–2018 and 2018–2019 school years were collected for this study.

Immediately following the Institutional Review Board approval, a site permission letter (see Appendix B) was emailed to the superintendent of each public school district in Missouri requesting permission to invite English II teachers to anonymously participate in this study. Once site permission was given, a letter of invitation (see

Appendix C), the survey instrument (see Appendix D), and the Survey Research Consent Form (see Appendix E) were emailed to each public-school superintendent with a request to forward those documents to all high school principals in their respective school districts. Upon receipt of those documents, high school principals were asked to disseminate the letter of invitation, the informed consent, and the survey instrument to all currently employed English II teachers and encourage participation.

Data Analysis

Data are collected from an instrument for researchers to make inferences or interpretations of the statistical results (Creswell & Creswell, 2018). Data from quantitative research are used to study relationships among multiple variables using statistical analyses and procedures (Creswell & Creswell, 2018). Correlational research is used to identify possible relationships between two or more nonmanipulated variables (Fraenkel et al., 2019).

In this correlational study, a correlation coefficient was used to describe the relationships between the independent and dependent variables (Fraenkel et al., 2019). Specifically, results from survey research provided a numeric description of teacher perceptions to generalize about the target population being studied (Creswell & Creswell, 2018). Once the quantitative data were received and secured, teachers' perceptions were correlated to results on English II end-of-course assessments.

Researchers use the Pearson correlation to summarize positive or negative relationships between variables by using a single number (Fraenkel et al., 2019). Pearson correlation coefficients are mere statistical summaries of relationships and should not be used to infer causation (Spiegelhalter, 2019). As demonstrated in many statistical

applications, “the x -axis represents a quantity known as the independent variable, and interest focuses on its influence on the dependent variable plotted on the y -axis” (Spiegelhalter, 2019, p. 60).

Because this study involved analyzing two or more nonmanipulated variables, a correlation coefficient was used to analyze the data (Fraenkel et al., 2019). When conducting correlational research, assumptions are made regarding the linear relationship of variables (Mills & Gay, 2019). The correlation coefficients were expressed as a decimal ranging between 0.00 and +1.00 or -1.00 (Fraenkel et al., 2019, p. 334).

Ethical Considerations

Three ethical principles must be addressed before beginning a study: protecting those who participate, maintaining strict confidentiality of all research data, and justifying the use of subject deception (Fraenkel et al., 2019). Because this study involved collecting data from teachers about their perceptions regarding the guaranteed and viable nature of Missouri Learning Standards, precautions were taken to protect all participants while also maintaining a strong sense of research integrity (Creswell & Creswell, 2018). Researchers must consider ethical questions about “personal disclosure, authenticity, and credibility of the research report, the role of researchers in cross-cultural contexts, and issues of personal privacy through forms of Internet data collection” (Creswell & Creswell, 2018, p. 88). Researchers must also adhere to established codes of ethical conduct throughout the study (Mills & Gay, 2019).

Following the National Research Act of 1974, Institutional Review Boards are required to carefully examine and approve all research studies using a set of clearly established criteria (Fraenkel et al., 2019, p. 67). Institutional Review Boards exist to

protect research subjects from potential risks of harm in addition to human rights violations (Creswell & Creswell, 2018). Once the Institutional Review Board was satisfied that there was no risk or minimal risk compared to the study's benefits, approval to begin the study was granted (Mills & Gay, 2019).

It was critical to assess all potential risks associated with this study. The following were considered: data collection and management and participant characteristics.

According to 45 CFR 46.102:

Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. (as cited in Lindenwood Guidance for Risks in Social, Behavioral, and Educational Research, 2018, p. 1)

Participants could become identifiable during the research process. Identification could occur through a flaw in the data collection process or a feature of the research design. Therefore, strategies were used to anonymize data at the point of collection, and participants were allowed participants to opt-out of parts of data collection. Also, a large sample size was used to reduce the likelihood of specific participants being identified. Furthermore, none of the outcomes from this research were linked to a particular teacher, school building, or school district.

Safeguards were established to ensure confidentiality and anonymity to maintain research integrity throughout the entire data collection and data analysis phases of this study. Safeguards taken included, but were not limited to, the following.

To Ensure Confidentiality

The names of survey respondents were not collected for this study. Data for this study were collected in ways that did not necessitate the identification of any participant. Primary data in the form of survey results and secondary data from the MODESE were stored, maintained, and supervised in the form of electronic files on a password-protected, highly secured electronic device for at least three years. After three years, all data associated with this study will be permanently erased and destroyed using industry-leading tools and technology.

To Ensure Anonymity

All data associated with this study were collected anonymously through an online Qualtrics survey instrument or the MODESE website. All participation was strictly voluntary, and personally identifiable information was not collected for this study.

To Ensure the Sharing of Data

The details of this study, including instrumentation, methodology, and data analysis, were made available to the public in an approved dissertation published by Lindenwood University located in St. Charles, Missouri.

Summary

In this chapter, an overview of the problem and purpose was provided. The research questions and hypotheses associated with this study were identified. The research design was discussed in detail. The population and sample were articulated along with a description of the instrumentation. An overview of the data collection and data analysis procedures was also shared. Chapter Three concluded with an explanation of the ethical considerations associated with this study.

Chapter Four begins with a review of the study's purpose and a description of the data collection process. The target population and the survey instrument are described in detail. Chapter Four concludes with an analysis of quantitative data used to answer the seven research questions and hypotheses.

Chapter Four: Analysis of Data

The purpose of this study was to determine if there was a correlation between teachers' perceptions of the guaranteed and viable nature of Missouri Learning Standards and student achievement on English II end-of-course assessments. When the curriculum is deemed viable, teachers have enough instructional time to implement the written curriculum (Marzano, 2017). Because most curricula taught in American schools have a disproportionate number of academic standards in relation to the number of days available for instruction, teachers do not have enough instructional time to implement the required curriculum adequately (Schmoker, 2018). Therefore, an analysis of English II teachers' perceptions, along with student achievement data correlated to those perceptions, may assist school leaders in determining whether teachers have enough instructional time during the school year to adequately implement the Missouri Learning Standards as they are currently written.

Data Collection

The target population of this study included all properly credentialed public school English II teachers in Missouri who were teaching English II and administering the English II end-of-course assessment at the time of this study. Of the approximate 794 eligible English II teachers in Missouri, 53 English II teachers from 32 Missouri school districts responded to the Qualtrics electronic survey used in this study. A minimum of at least 30 participants was considered necessary to establish the existence of relationships in this correlational study (Mills & Gay, 2019, p. 225).

A Qualtrics electronic survey instrument was used to collect demographic data and teacher perception data regarding the guaranteed and viable nature of English II

Missouri Learning Standards. The survey was designed to force responses for participants to move from one question to another. The survey consisted of 13 selected-response items and one open-ended item:

1. I am an English II teacher in the state of Missouri and not a web-based robot.
2. I have read the Survey Research Consent Form, and I am voluntarily participating in this study.
3. What is the name of your school district?
4. What is the approximate number of students enrolled in your school district?
5. How many total years have you been teaching?
6. How many total years have you been teaching English II?
7. I have enough instructional time during the school year to adequately teach all the Missouri Learning Standards for English II.
8. My school district requires the teaching of all Missouri Learning Standards for English II.
9. I believe the Missouri Learning Standards for English II are grade-level appropriate.
10. I believe the Missouri Learning Standards for English II are clearly written and understandable.
11. I have adequate professional support for unpacking and prioritizing the Missouri Learning Standards for English II.
12. I believe the Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment.
13. I have enough curricular resources to adequately teach the Missouri Learning

Standards.

14. What suggestions do you have for improving the Missouri Learning Standards for English II?

A five-point Likert-type scale was used for questions 7–13. The scale included response choices of *strongly agree*, *somewhat agree*, *neither agree nor disagree*, *somewhat disagree*, and *strongly disagree*.

The survey was reflective of the literature review and the conceptual framework upon which the study was based. The survey was developed to include units of analysis that corresponded directly to each of the research questions associated with this study (Fraenkel et al., 2019). The survey data were used as independent variables in this study. The Qualtrics electronic survey instrument included a link for participants to gather additional information regarding the survey data, rights as a participant, and the Lindenwood University privacy policy. Before completing the survey, participants were asked to carefully read the Survey Research Consent Form provided to each participant via email from each participant's building principal.

English II end-of-course assessment data for the years 2017–2018 and 2018–2019 were used to correlate teacher perceptions to student achievement. Data were collected from the Missouri Comprehensive Data System (MCDS) as reported annually by the MODESE. 2019 MSIP5 School APR Supporting Data Reports were used to gather the percent of students who scored proficient and advanced on 2017–2018 and 2018–2019 English II end-of-course assessments. For the purposes of this study, an average between the two years was used to determine the percentage of students who were proficient and advanced on the English II end-of-course assessment. The two-year average from the 32

school districts participating in this research was used to represent the dependent variable in this study.

Demographic Data

Fifty-three anonymous English II teachers from 32 Missouri public school districts completed the Qualtrics electronic survey between May 3, 2021, and May 23, 2021. All 53 anonymous participants answered each of the first six questions relating to demographics. One hundred percent of the respondents confirmed their eligibility to participate in the study (Question 1). One hundred percent of the respondents confirmed having read the Survey Research Consent Form (Question 2). One hundred percent of the respondents identified their school district as requested (Question 3).

Survey Question Four

What is the approximate number of students enrolled in your school district?

Fifty-three English II teachers from 32 Missouri public school districts responded to this question. Nineteen respondents (35.85%) were employed in school districts with 1–1,000 students. Thirteen respondents (24.53%) were employed in school districts with 1,001–3,000 students. Ten respondents (13.21%) were employed in school districts with 3,001–6,000 students. Seven respondents (13.21%) were employed in school districts with 6,001–9,000 students. Four respondents (7.55%) were employed in school districts with 9,001–12,000 students. There were no responses from teachers in school districts larger than 12,001 students. The standard deviation for this question was 1.29, and the variance was 1.65.

For survey question four, 35.85% of the respondents were employed in Missouri public school districts with a student population ranging from 11,000 students. 70% of

Missouri's 516 traditional public-school districts are in rural areas with an average enrollment of 488 students (Shelton, 2019, p. 3). Only 7.55% of the respondents were employed in Missouri public school districts with a student population ranging from 6,001–12,001 or more. Only 12% of Missouri's 516 traditional school districts are in suburbs or cities with an average enrollment of 9,298 students (Shelton, 2019, p. 3).

Survey Question Five

How many total years have you been teaching? Fifty-three anonymous English II teachers from 32 Missouri public school districts responded to this question. Twelve respondents (22.64%) had been teaching for 1–5 years. Fourteen respondents (26.42%) had been teaching for 6–10 years. Five respondents (9.43%) had been teaching for 11–15 years. Nine respondents (16.98%) had been teaching for 16–20 years. Eight respondents (15.09%) had been teaching for 21–25 years. Five respondents (9.43%) had been teaching for 26–30 years. Zero respondents had been teaching 31 or more years. The standard deviation for this question was 1.67, and the variance was 2.79.

For survey question five, 49.06% of the respondents had been teaching ten years or less, and 50.94% had been teaching eleven or more years. Comparatively, in 2020, the average years of teaching experience in Missouri was 12.6 (MODESE, 2021b). Only 9.43% of the respondents had been teaching for 11–15 years.

Survey Question Six

How many total years have you been teaching English II? Fifty-three anonymous English II teachers from 32 Missouri public school districts responded to this question. Twenty-four respondents (45.28%) had been teaching English II for 1–5 years. Eleven respondents (20.75%) had been teaching English II for 6–10 years. Eight respondents

(15.09%) had been teaching English II for 11–15 years. Six respondents (11.32%) had been teaching English II for 16–20 years. Four respondents (7.55%) had been teaching English II for 21–25 years. Zero respondents had been teaching English II 26 or more years. The standard deviation for this question was 1.31, and the variance was 1.71.

For survey question six, 45.28% of the respondents had been teaching English II five years or less. While 54.72% of the respondents had more than five years of English II teaching experience, only 7.55% of the respondents had been teaching English II for at least 21 years. The average years of English II experience among the 53 respondents were 10.6 years.

Survey Question Thirteen

What suggestions do you have for improving the Missouri Learning Standards for English II? The final survey item was an optional open-ended question. Eighteen English II teachers responded to this question. *Improving the standards* was the most recurring theme. Teacher comments included:

1. I have never felt that I have sufficient time to teach the standards.
2. Revising for clarity and paring them down.
3. Standards should not be covered over two grade-levels.
4. The standards are very vague as they are currently written.
5. DESE should narrow down the standards to 10–15 priority standards.
6. The standards should be explicit about what should be taught.
7. The standards should be less generic and more specific to each grade-level.
8. The standards need to be less broad and more specific.

9. Some standards are unnecessarily complicated.
10. Smaller, individual items should be included within each standard.
11. The standards should be more specific like the Common Core State Standards.
12. Having teacher input would help improve the learning standards.

Other miscellaneous comments pertained to the English II end-of-course assessment, the teaching of grammar, the use of MODESE released items, and the need for common literature textbooks.

Research Question One

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The first research question was focused on the viability of English II learning standards as correlated to student achievement on end-of-course assessments. In this correlational study, a correlation coefficient was used to describe the relationship between teachers' perceptions of curricular viability (independent variable) and student achievement (dependent variable). The Pearson correlation was used in this study to test hypotheses, answer research questions, and describe possible relationships between independent and dependent variables. The correlation coefficient in this study was expressed as a decimal ranging between 0.00 and +1.00 or -1.00 (Fraenkel et al., 2019, p. 334). Furthermore, "it is generally agreed that correlation coefficients below .35 show only a slight relationship between variables. Such relationships have almost no value in any predictive sense" (Fraenkel et al., 2019, p. 334). The first research question was analyzed using a web-based Pearson correlation coefficient calculator (Coefficient

Calculator, 2021).

The first research question was aligned to item seven on the survey instrument: *I have enough instructional time during the school year to adequately teach all of the Missouri Learning Standards for English II*. Of the 53 English II teachers who responded to this item, 27 (50.94%) indicated that they *strongly agree* or *somewhat agree* with the prompt. In contrast, 24 (45.28%) indicated that they *somewhat disagree* or *strongly disagree* with the prompt. Two respondents (3.77%) indicated that they *neither agree nor disagree* with the prompt. The standard deviation for this item was 1.35 and the variance was 1.81.

For survey item seven, the difference between those respondents who agreed with the prompt compared to those respondents who disagreed with the prompt was 5.66%, or three respondents. This indicated an approximate split among the 53 respondents. The mean for survey item seven was 3.0. This is an overall indication that respondents neither agreed nor disagreed with having enough instructional time during the school year to adequately teach all the Missouri Learning Standards for English II. Survey item seven had the lowest percentage of agreement at 50.94% and the highest percentage of disagreement at 45.28%.

The first research question was analyzed by conducting a correlation test with item seven from the survey instrument and an average of the 2017–2018 and 2018–2019 English II end-of-course assessments for each school district participating in the study. The Pearson correlation coefficient, when comparing teachers' perceptions of curricular viability and student achievement on the English II end-of-course assessment, was $r = 0.0507$. Although a positive correlation, the relationship between the two variables was

weak. The p -value for this correlation was .782879. Therefore, the p -value of .782879 was not significant at $p < .05$. The value of r^2 , the coefficient of determination, was 0.0026.

Because the relationship between teachers' perceptions of curricular viability and student outcomes on English II end-of-course assessments was weak, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment*, was not rejected.

Research Question Two

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The second research question was focused on the guaranteed nature of English II learning standards as correlated to student achievement on end-of-course assessments. In this correlational study, a correlation coefficient was used to describe the relationship between teachers' perceptions of the guaranteed nature of curriculum (independent variable) and student achievement (dependent variable). The second research question was analyzed using a web-based Pearson correlation coefficient calculator (Coefficient Calculator, 2021).

The second research question was aligned to item 8 on the survey instrument: *My school district requires the teaching of all Missouri Learning Standards for English II*. Of the 53 English II teachers who responded to this question, 41 (77.36%) indicated that they *strongly agree* or *somewhat agree* with the prompt. In contrast, four (7.55%)

indicated that they *somewhat disagree* or *strongly disagree* with the prompt. Eight respondents (15.09%) indicated that they *neither agree nor disagree* with the prompt. The standard deviation for this item was 0.97 and the variance was 0.94.

For survey item eight, 77.36% of the respondents agreed or strongly agreed with having a district requirement to teach all the Missouri Learning Standards for English II. Four of the 53 respondents, 7.55%, somewhat disagreed with the survey item. The mean for survey item eight was 1.75. This is an overall indication that respondents strongly agreed with being required by their school districts to teach all Missouri Learning Standards for English II. Survey item eight had the lowest percentage of disagreement at 7.55%.

The second research question was analyzed by conducting a correlation test with item eight from the Qualtrics survey instrument and an average of the 2017–2018 and 2018–2019 English II end-of-course assessments for each school district participating in the study. The Pearson correlation coefficient, when comparing teachers' perceptions of the guaranteed nature of Missouri Learning Standards and student achievement on the English II end-of-course assessment was $r = 0.2945$. Although a positive correlation, the relationship between the two variables was weak. The p -value for this correlation was .101802. Therefore, the p -value of .101802 was not significant at $p < .05$. The value of r^2 , the coefficient of determination, was 0.0867.

Because the relationship between teachers' perceptions of the guaranteed nature of Missouri Learning Standards and student outcomes on English II end-of-course assessments was weak, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are*

guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment, was not rejected.

Research Question Three

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The third research question was focused on the grade-level appropriateness of English II learning standards as correlated to student achievement on end-of-course assessments. In this correlational study, a correlation coefficient was used to describe the relationship between teachers' perceptions of grade-level appropriateness (independent variable) and student achievement (dependent variable). The third research question was analyzed using a web-based Pearson correlation coefficient calculator (Coefficient Calculator, 2021).

The third research question was aligned to item nine on the survey instrument: *I believe the Missouri Learning Standards for English II are grade-level appropriate.* Of the 53 English II teachers who responded to this question, 45 (84.91%) indicated that they *strongly agree* or *somewhat agree* with the prompt. In contrast, five (9.44%) indicated that they *somewhat disagree* or *strongly disagree* with the prompt. Three respondents (5.66%) indicated that they *neither agree nor disagree* with the prompt. The standard deviation for this item was 0.89 and the variance was 0.79.

For survey item nine, 84.91% of the respondents agreed or strongly agreed the Missouri Learning Standards for English II are grade-level appropriate. Five of the 53

respondents, 9.44%, disagreed or strongly disagreed. The mean for survey item nine was 2.0. This is an overall indication that respondents somewhat agreed that the Missouri Learning Standards for English II are grade-level appropriate. Survey item nine had the highest percentage of agreement at 84.91%.

The third research question was analyzed by conducting a correlation test with item nine from the survey instrument and an average of the 2017–2018 and 2018–2019 English II end-of-course assessments for each school district participating in the study. The Pearson correlation coefficient, when comparing teachers' perceptions of the grade-level appropriateness of the Missouri Learning Standards and student achievement on the English II end-of-course assessment, was $r = -0.2266$. Although a negative correlation, the relationship between the two variables was weak. The p -value for this correlation was .213591. Therefore, the p -value of .213591 was not significant at $p < .05$. The value of r^2 , the coefficient of determination, was 0.0513.

Because the relationship between teachers' perceptions of the grade-level appropriateness of the Missouri Learning Standards and student outcomes on English II end-of-course assessments was weak, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment*, was not rejected.

Research Question Four

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the

percentage of students who score advanced and proficient on the English II end-of-course assessment?

The fourth research question was focused on the clarity and understandability of English II learning standards as correlated to student achievement on end-of-course assessments. In this correlational study, a correlation coefficient was used to describe the relationship between teachers' perceptions of the clarity and understandability of the Missouri Learning Standards (independent variable) and student achievement (dependent variable). The fourth research question was analyzed using a web-based Pearson correlation coefficient calculator (Coefficient Calculator, 2021).

The fourth research question was aligned to item 10 on the survey instrument: *I believe the Missouri Learning Standards for English II are clearly written and understandable*. Of the 53 English II teachers who responded to this question, 31 (58.49%) indicated that they *strongly agree* or *somewhat agree* with the prompt. In contrast, 20 (37.74%) indicated that they *somewhat disagree* or *strongly disagree* with the prompt. Two respondents (3.77%) indicated that they *neither agree nor disagree* with the prompt. The standard deviation for this item was 1.13 and the variance was 1.27.

For survey item 10, 58.49% of the respondents agreed or strongly agreed the Missouri Learning Standards for English II are clearly written and understandable. Twenty of the 53 respondents, 37.74%, disagreed or strongly disagreed. The mean for survey item 10 was 2.70. This is an overall indication that respondents somewhat agreed the Missouri Learning Standards for English II are clearly written and understandable.

The fourth research question was analyzed by conducting a correlation test with item ten from the survey instrument and an average of the 2017–2018 and

2018–2019 English II end-of-course assessments for each school district participating in the study. The Pearson correlation coefficient, when comparing teachers' perceptions of clarity and understandability and student achievement on the English II end-of-course assessment was, $r = -0.1992$. Although a negative correlation, the relationship between the two variables was weak. The p -value for this correlation was .27488. Therefore, the p -value of .27488 was not significant at $p < .05$. The value of r^2 , the coefficient of determination, was 0.0397.

Because the relationship between teachers' perceptions of the clarity and understandability of the Missouri Learning Standards and student outcomes on English II end-of-course assessments was weak, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who score advanced and proficient on the English II end-of-course assessment*, was not rejected.

Research Question Five

What is the correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The fifth research question was focused on the adequacy of professional support teachers receive for unpacking and prioritizing the English II learning standards as correlated to student achievement on end-of-course assessments. In this correlational study, a correlation coefficient was used to describe the relationship between teachers'

perceptions of professional support (independent variable) and student achievement (dependent variable). The fifth research question was analyzed using a web-based Pearson correlation coefficient calculator (Coefficient Calculator, 2021).

The fifth research question was aligned to item 11 on the Qualtrics survey instrument: *I have adequate professional support for unpacking and prioritizing the Missouri Learning Standards for English II*. Of the 53 English II teachers who responded to this question, 36 (67.93%) indicated that they *strongly agree* or *somewhat agree* with the prompt. In contrast, 12 (22.64%) indicated that they *somewhat disagree* or *strongly disagree* with the prompt. Five respondents (9.43%) indicated that they *neither agree nor disagree* with the prompt. The standard deviation for this item was 1.23 and the variance was 1.52.

For survey item 11, 67.93% of the respondents agreed or strongly agreed with having adequate professional support for unpacking and prioritizing the Missouri Learning Standards for English II. Twelve of the 53 respondents, 22.64%, disagreed or strongly disagreed. The mean for survey item 11 was 2.21. This is an overall indication that respondents somewhat agreed with having adequate professional support for unpacking and prioritizing the Missouri Learning Standards for English II.

The fifth research question was analyzed by conducting a correlation test with item 11 from the survey instrument, and an average of the 2017–2018 and 2018–2019 English II end-of-course assessments for each school district participating in the study. The Pearson correlation coefficient, when comparing teachers' perceptions of adequate professional support for unpacking and prioritizing the Missouri Learning Standards and student achievement on the English II end-of-course assessment, was $r = 0.0128$.

Although a negative correlation, the relationship between the two variables was weak. The p -value for this correlation was .948028. Therefore, the p -value of .948028 was not significant at $p < .05$. The value of r^2 , the coefficient of determination, was 0.0002.

Because the relationship between teachers' perceptions of adequate professional support for unpacking and prioritizing the Missouri Learning Standards and student outcomes on English II end-of-course assessments was weak, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment*, was not rejected.

Research Question Six

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The sixth research question was focused on the alignment of English II learning standards to the English II end-of-course assessment as correlated to student achievement on end-of-course assessments. In this correlational study, a correlation coefficient was used to describe the relationship between teachers' perceptions of the alignment of Missouri Learning Standards to the English II end-of-course assessment (independent variable) and student achievement (dependent variable). The sixth research question was analyzed using a web-based Pearson correlation coefficient calculator (Coefficient Calculator, 2021).

The sixth research question was aligned to item 12 on the survey instrument: *I believe the Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment.* Of the 53 English II teachers who responded to this item, 28 (52.83%) indicated that they *strongly agree* or somewhat agree with the prompt. In contrast, 14 (26.42%) indicated that they *somewhat disagree* or *strongly disagree* with the prompt. Eleven respondents (20.75%) indicated that they *neither agree nor disagree* with the prompt. The standard deviation for this item was 1.18 and the variance was 1.40.

For survey item 12, 52.83% of the respondents agreed or strongly agreed the Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment. Fourteen of the 53 respondents, 26.42%, disagreed or strongly disagreed. The mean for survey item 12 was 2.64. This is an overall indication that respondents somewhat agreed the Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment. Survey item 12 had the highest percentage of neutrality (neither agreed nor disagreed) at 20.75%.

The sixth research question was analyzed by conducting a correlation test with item 12 from the survey instrument and an average of the 2017–2018 and 2018–2019 English II end-of-course assessments for each school district participating in the study. The Pearson correlation coefficient, when comparing teachers' perceptions of alignment and student achievement on the English II end-of-course assessment was, $r = -0.0228$. Although a negative correlation, the relationship between the two variables was weak. The p -value for this correlation was .904868. Therefore, the p -value of .904868 was not significant at $p < .05$. The value of r^2 , the coefficient of determination, was 0.0005.

Because the relationship between teachers' perceptions of the alignment of the

Missouri Learning Standards to the English II end-of-course assessment and student outcomes on English II end-of-course assessments is weak, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriately aligned to the English II end-of-course assessment and the percentage of students who score advanced and proficient on the English II end-of-course assessment*, was not rejected.

Research Question Seven

What is the correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The seventh research question was focused on the sufficiency of curricular resources to adequately teach the English II learning standards as correlated to student achievement on end-of-course assessments. In this correlational study, a correlation coefficient was used to describe the relationship between teachers' perceptions of the sufficiency of curricular resources (independent variable) and student achievement (dependent variable). The seventh research question was analyzed using a web-based Pearson correlation coefficient calculator (Coefficient Calculator, 2021).

The seventh research question was aligned to item 13 on the survey instrument: *I have enough curricular resources to adequately teach the Missouri Learning Standards for English II*. Of the 53 English II teachers who responded to this question, 44 (83.02%) indicated that they *strongly agree* or *somewhat agree* with the prompt. In contrast, five (9.43%) indicated that they *somewhat disagree* or *strongly disagree* with the prompt.

Four respondents (7.55%) indicated that they *neither agree nor disagree* with the prompt. The standard deviation for this item was 0.85 and the variance was 0.72.

For survey item 13, 83.02% of the respondents agreed or strongly agreed with having enough curricular resources to adequately teach the Missouri Learning Standards for English II. Five of the 53 respondents, 9.43%, disagreed or strongly disagreed. The mean for survey item 13 was 2.0. This is an overall indication that respondents somewhat agreed with having enough curricular resources to adequately teach the Missouri Learning Standards for English II. Survey item 13 had the second-highest percentage of agreement at 83.02% and the second-lowest percentage of disagreement at 9.43%.

The seventh research question was answered by conducting a correlation test with item 13 from the survey instrument and an average of the 2017–2018 and 2018–2019 English II end-of-course assessments for each school district participating in the study. The Pearson correlation coefficient, when comparing teachers' perceptions of resource sufficiency and student achievement on the English II end-of-course assessment, was $r = 0.3679$. Although a positive correlation, the relationship between the two variables was weak. The p -value for this correlation was .038299. Therefore, the p -value of .038299 was significant at $p < .05$. The value of r^2 , the coefficient of determination, was 0.1354.

Because the relationship between teachers' perceptions of the sufficiency of curricular resources and student outcomes on English II end-of-course assessments is significant, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment*, was rejected.

Summary

Fifty-three English II teachers from 32 Missouri public school districts participated in the study. The survey instrument used in the study was designed to collect both demographic and perception data. English II end-of-course assessment data from the 2017–2018 and 2018–2019 school years were analyzed for correlational purposes. Quantitative data were correlated to answer each of the seven research questions. The Pearson correlation coefficient was used to determine whether a relationship existed between each of the independent and dependent variables identified in this study. The null hypotheses were not rejected in all but one of the seven research questions.

Chapter Five includes a review of the major elements of the study and findings from the statistical analysis of data in Chapter Four. Each research question is further addressed in consideration of the analyzed data. Conclusions that resulted from the study are discussed in detail. Chapter Five concludes with implications for professional practice along with three recommendations for future research.

Chapter Five: Conclusions and Implications

This chapter includes a review of the major elements of the study and findings from the statistical analyses of data presented in the previous chapter. Each research question is addressed in consideration of the analyzed data. This chapter also includes a discussion of the conclusions that resulted from the study. Chapter Five concludes with several implications for practice along with three recommendations for future research.

The purpose of this study was to determine if a relationship existed between teachers' perceptions of the guaranteed and viable nature of Missouri Learning Standards and student achievement on English II end-of-course assessments. Given the current lack of research associated with the Missouri Learning Standards, this study is essential to the implementation of guaranteed and viable curricula and the improvement of student learning in Missouri. According to the professional literature, students achieve at higher levels when the curriculum they are learning is both guaranteed and viable (Marzano & Eaker, 2020).

Findings

Research Question One

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The Pearson correlation was used to determine whether a relationship existed between teachers' perceptions of curricular viability and student achievement on English II end-of-course assessments. Pearson correlation coefficients were used in this study to summarize increasing or decreasing relationships between dependent and independent

variables.

The Pearson correlation coefficient, $r = 0.0507$, indicated a weak relationship between teachers' perceptions of curricular viability and student achievement on English II end-of-course assessments. At the selected $p < .05$ level of significance, the p -value associated with this correlation, $p = .782879$, was not considered significant. Therefore, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who scored advanced and proficient on the English II end-of-course assessment*, was not rejected. For survey item seven, the average of all 53 responses indicated that teachers neither agreed nor disagreed with having enough instructional time during the school year to adequately teach all Missouri Learning Standards for English II. Survey item seven had the lowest percentage of agreement at 50.94% and the highest percentage of disagreement at 45.28%.

Research Question Two

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The Pearson correlation was used to determine whether a relationship existed between teachers' perceptions of the guaranteed nature of Missouri Learning Standards and student achievement on English II end-of-course assessments. The Pearson correlation coefficient, $r = 0.2945$, indicated a weak relationship between teachers' perceptions of the guaranteed nature of Missouri Learning Standards and student achievement on English II end-of-course assessments. At the selected $p < .05$ level of

significance, the p -value associated with this correlation, $p = .101802$, was not considered significant. Therefore, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are guaranteed and the percentage of students who scored advanced and proficient on the English II end-of-course assessment*, was not rejected. For survey item eight, the average of all 53 responses indicated that teachers strongly agreed they were required by their school districts to teach all Missouri Learning Standards for English II. Survey item eight had the lowest percentage of disagreement at 7.55%.

Research Question Three

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The Pearson correlation was used to determine whether a relationship existed between teachers' perceptions of the grade-level appropriateness of Missouri Learning Standards and student achievement on English II end-of-course assessments.

The Pearson correlation coefficient, $r = -0.2266$, indicated a weak relationship between teachers' perceptions of the grade-level appropriateness of Missouri Learning Standards and student achievement on English II end-of-course assessments. At the selected $p < .05$ level of significance, the p -value associated with this correlation, $p = .213591$, was not considered significant. Therefore, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who*

scored advanced and proficient on the English II end-of-course assessment, was not rejected. For survey item nine, the average of all 53 responses indicated that teachers somewhat agreed the Missouri Learning Standards for English II are grade-level appropriate. Item nine had the highest percentage of agreement at 84.91%.

Research Question Four

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The Pearson correlation was used to determine whether a relationship existed between teachers' perceptions of the clarity and understandability of Missouri Learning Standards and student achievement on English II end-of-course assessments. The Pearson correlation coefficient, $r = -0.1992$, indicated a weak relationship between teachers' perceptions of the clarity and understandability of Missouri Learning Standards and student achievement on English II end-of-course assessments. At the selected $p < .05$ level of significance, the p -value associated with this correlation, $p = .27488$, was not considered significant. Therefore, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who scored advanced and proficient on the English II end-of-course assessment*, was not rejected. For survey item 10, the average of all 53 responses indicated that teachers somewhat agreed the Missouri Learning Standards for English II are clearly written and understandable.

Research Question Five

What is the correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The Pearson correlation was used to determine whether a relationship existed between teachers' perceptions of professional support for unpacking and prioritizing the Missouri Learning Standards and student achievement on English II end-of-course assessments. The Pearson correlation coefficient, $r = 0.0128$, indicated a weak relationship between teachers' perceptions of professional support for unpacking and prioritizing the Missouri Learning Standards and student achievement on English II end-of-course assessments. At the selected $p < .05$ level of significance, the p -value associated with this correlation, $p = .948028$, was not considered significant. Therefore, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who scored advanced and proficient on the English II end-of-course assessment* was not rejected. For survey item 11, the average of all 53 responses indicated that teachers agreed with having adequate professional support for unpacking and prioritizing the Missouri Learning Standards for English II.

Research Question Six

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards for English II are appropriately aligned to the

English II end-of-course assessment and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The Pearson correlation was used to determine whether a relationship existed between teachers' perceptions of the alignment of Missouri Learning Standards to the English II end-of-course assessment and student achievement on the English II end-of-course assessments. The Pearson correlation coefficient, $r = 0.0228$, indicated a weak relationship between teachers' perceptions of alignment of the Missouri Learning Standards to the English II end-of-course assessment and student achievement on English II end-of-course assessments. At the selected $p < .05$ level of significance, the p -value associated with this correlation, $p = .904868$, was not considered significant. Therefore, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards for English II are appropriately aligned to end-of-course assessment and the percentage of students who scored advanced and proficient on the English II end-of-course assessment* was not rejected. For survey item 12, the average of all 53 responses indicated that teachers somewhat agreed the Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment. Survey item 12 had the highest percentage of neutrality (neither agreed nor disagreed) at 20.75%.

Research Question Seven

What is the correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The Pearson correlation was used to determine whether a relationship existed between teachers' perceptions of resource adequacy and student achievement on the English II end-of-course assessments. The Pearson correlation coefficient, $r = 0.3679$, indicated a weak relationship between teachers' perceptions of resource adequacy and student achievement on English II end-of-course assessments. At the selected $p < .05$ level of significance, the p -value associated with this correlation, $p = .038299$. At $p < .05$ was considered significant. Therefore, the null hypothesis, *there is no significant correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who scored advanced and proficient on the English II end-of-course assessment* was rejected. For survey item 13, the average of all 53 responses indicated that teachers somewhat agreed with having enough curricular resources to adequately teach the Missouri Learning Standards for English II. Survey item 13 had the second-highest percentage of agreement at 83.02% and the second-lowest percentage of disagreement at 9.43%.

Survey Question Thirteen

What suggestions do you have for improving the Missouri Learning Standards for English II?

The final survey item was an optional open-ended question. Eighteen English II teachers responded to this question. *Improving the standards* was the most recurring theme. Teacher comments included:

1. I have never felt that I have sufficient time to teach the standards.
2. Revising for clarity and paring them down.

3. Standards should not be covered over two grade-levels.
4. The standards are very vague as they are currently written.
5. DESE should narrow down the standards to 10–15 priority standards.
6. The standards should be explicit about what should be taught.
7. The standards should be less generic and more specific to each grade-level.
8. The standards need to be less broad and more specific.
9. Some standards are unnecessarily complicated.
10. Smaller, individual items should be included within each standard.
11. The standards should be more specific like the Common Core State Standards.
12. Having teacher input would help improve the learning standards.

Other miscellaneous comments pertained to the English II end-of-course assessment, the teaching of grammar, the use of MODESE released items, and the need for common literature textbooks.

Conclusions

It was the purpose of this study to determine the extent to which correlations existed between teachers' perceptions and student achievement. Perception data were collected from 53 public school English II teachers using via an electronic survey. Seven independent variables and one dependent variable were considered for this study. The independent variables included: the curricular viability of Missouri Learning Standards, the guaranteed nature of Missouri Learning Standards, the appropriateness of Missouri Learning Standards, the understandability of Missouri Learning Standards, professional

support for unpacking and prioritizing the Missouri Learning Standards, alignment of the Missouri Learning Standards to the English II end-of-course assessment, and the sufficiency of curricular resources for teaching the Missouri Learning Standards. Student achievement data from state-mandated English II end-of-course assessments served as the dependent variable in this correlational study.

Research Question One

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are viable and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The finding that there was no significant correlation between teachers' perceptions of the viability of the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment was contrary to the conceptual framework upon which this study was based and, therefore, did not align to Marzano's (2003) claim that time to learn and opportunity to learn have a significant impact on student achievement. Lack of time has proven to be a significant concern for classroom teachers who strive to implement effective instruction and assessment (Marzano, 2017). According to Reeves (2019), even with the hope of fewer and more focused standards, many teachers still believe there are too many educational standards and too little instructional time during a typical school year to teach the standards as they are prescribed.

As a result, the excessive nature of state standards makes it difficult for teachers to implement the curriculum as it is written (Marzano, 2017). According to Hattie and Yates (2014), teachers frequently report that instructional time is often rushed to

accommodate the excessive number of academic standards required to teach. As Marzano and Kendall concluded in 1999, there are too many academic standards and not nearly enough time to teach them (Hoegh et al., 2020, p. 3).

Research Question Two

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are guaranteed and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The finding that there was no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are guaranteed, and the percentage of students who scored advanced and proficient on the English II end-of-course assessment was contrary to the conceptual framework upon which this study was based and, therefore, is not aligned to Marzano's (2003) claim that a guaranteed and viable curriculum is the school-level factor this is most strongly correlated to student achievement (Hoegh, 2020). A likely factor associated with this incongruence may be found in grade-level teams or curriculum committees directed to ensure the development and implementation of a guaranteed and viable curriculum without fully understanding why the work is necessary and meaningful (Bailey & Jakicic, 2019). Additionally, schools rarely design and implement a guaranteed and viable curriculum (Marzano, 2017). This situation is likely a consequence of state standards being so vast in scope and sequence that school teams and curriculum committees are left to determine for themselves what curricular content is essential for all students to learn (Eaker, 2020).

Providing a guaranteed and viable curriculum is a fundamental prerequisite for raising student achievement (Marzano & Eaker, 2020). A guaranteed curriculum emerges

from a school's collective belief that students will be taught and will learn the prescribed curriculum regardless of the child's teacher (Kramer & Schuhl, 2017). In schools identified as highly effective, all students are exposed to a guaranteed and viable curriculum (Buffum et al., 2018).

Educational standards are guaranteed only when a school district requires classroom teachers, without exception, to teach all prescribed standards in specific courses and at specific grade-levels (Marzano & Eaker, 2020). Without a guaranteed and viable curriculum, it is unlikely that students will ever achieve at high levels (Hoegh, 2020). Therefore, "implementing a strategy of common, rigorous standards with differentiated resources and instruction can create excellence and equity for all students" (Eaker et al., 2021, p. 94).

Research Question Three

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are appropriate for their grade-level and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The finding that there was no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards were appropriate for their grade-level and the percentage of students who scored advanced and proficient on the English II end-of-course assessment was contrary to the conceptual framework upon which this study was based and, therefore, was not aligned to Eaker's claim that state standards are overly broad and are far too vague for practical implementation within a classroom (Eaker, 2020). This flaw with state standards requires teachers to identify

each content area's most essential learning expectations (Eaker, 2020).

Research Question Four

What is the correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards are clearly written and understandable and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The finding that there was no significant correlation between teachers' perceptions regarding the extent to which Missouri Learning Standards were clearly written and understandable and the percentage of students who scored advanced and proficient on the English II end-of-course assessment was contrary to the conceptual framework upon which this study was based and, therefore, was not aligned to Frizziellie and Schmidt's (2020) claim that some learning standards are overly complex structures that encompass multiple concepts, learning targets, or skills. When that is the case, teacher teams or curriculum committees must work through a process of "unwrapping, unpacking, deconstructing, or dissecting to ensure clarity of what mastery of the standards means" (p. 151).

According to Bailey and Jakicic (2019), educational standards are frequently complex, multifaceted, and open to interpretation. For a curriculum to be guaranteed and viable, grade-level teachers must reach a consensus on each standard's academic intent and the specific learning targets within each standard (Bailey & Jakicic, 2019). If this critical work is not accomplished, common subject area teachers, such as English II teachers, could interpret learning standards differently, leading to students in multiple English II classrooms learning different academic skills or concepts (Bailey & Jakicic,

2019). Kramer and Schuhl (2017) indicated that teachers are more supportive of students and can more efficiently address academic deficiencies when teachers clearly understand standards and course-level content.

Research Question Five

What is the correlation between teachers' perceptions regarding the extent to which there is adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The finding that there was no significant correlation between teachers' perceptions regarding the extent to which they received adequate professional support for unpacking and prioritizing the Missouri Learning Standards and the percentage of students who scored advanced and proficient on the English II end-of-course assessment was contrary to the conceptual framework upon which this study is based, and, therefore, was not aligned to Marzano's claim that many teachers are simply handed state standards that have already been developed (Marzano et al., 2018). The consequences of simply being handed state learning standards without further refinement or prioritization make it difficult for teachers to identify what is most essential for students to learn in the time available for instruction (Marzano et al., 2018).

Because all learning standards are not equally important, teachers must prioritize what is most important for students to learn (DuFour et al., 2021). Many teachers begin a process of unpacking and prioritizing learning standards but never finish, leaving many teachers unaware of what standards are most important to teach and how to teach them (Kramer & Schuhl, 2017). It is the responsibility of school administrators to ensure that

teachers have adequate professional support, including, but not limited to, clear direction, adequate time, reasonable opportunities for unpacking and prioritizing academic standards, and sufficient opportunities for meaningful collaboration with other teachers (Marzano et al., 2018). Without this level of professional support, teachers will not become “critical consumers of the standards” (Frizellie & Schmidt, 2020, p. 155). When adequate professional support is given to teachers for unpacking and prioritizing learning standards, a guaranteed and viable curriculum is more attainable, with essential standards paced in such a way that is realistically manageable for both teachers and students (Eaker et al., 2021).

Research Question Six

What is the correlation between teachers’ perceptions regarding the extent to which Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The finding that there was no significant correlation between teachers’ perceptions regarding the extent to which Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment and the percentage of students who scored advanced and proficient on the English II end-of-course assessment was contrary to the conceptual framework upon which this study was based, and therefore, was not aligned to the MODESE’s goal of having teachers use end-of-course assessments as part of “an integrated program of testing, accountability, and curricular instructional support” (MODESE, 2020b, p. 4).

This lack of understanding may result in some teachers not aligning classroom

instruction to the Missouri Learning Standards or using assessment resources made available by the MODESE. Due to test security requirements, teachers cannot view or discuss specific end-of-course assessment items (MODESE, 2020b). Such a breach would seriously compromise the integrity of the test (MODESE, 2020b). Because teachers cannot view specific assessment items, teachers must rely on item analysis reports to determine which standards were assessed during a given year. If teachers do not understand how to interpret and use data reports from the MODESE, it is unlikely they will know to what extent the Missouri Learning Standards for English II are truly aligned to the English II end-of-course assessment.

According to the MODESE (2020b), end-of-course assessments are used to determine a student's mastery of the Missouri Learning Standards. These annual assessments are used by the MODESE to inform a variety of stakeholders including school personnel, students, parents, citizens, and government officials about student performance in Missouri (MODESE, 2020b). Specifically, the English II end-of-course assessment measures student proficiency in the areas of reading literary texts, reading informational texts, and writing (MODESE, 2020b).

Research Question Seven

What is the correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri Learning Standards for English II and the percentage of students who score advanced and proficient on the English II end-of-course assessment?

The finding that there was a significant correlation between teachers' perceptions regarding the sufficiency of curricular resources to adequately teach the Missouri

Learning Standards for English II and the percentage of students who scored advanced and proficient on the English II end-of-course assessment was aligned to the conceptual framework upon which this study was based. Therefore, the result is consistent with the research-based practice of teachers taking time to methodically review textbooks, software, or other materials currently used for classroom instruction and determining whether different materials would be more appropriately aligned to learning standards (Glatthorn et al., 2019). The selection of high-quality learning resources not only requires a great deal of time and advanced planning, but selection also requires teachers to have a clear understanding of how the resources will be used to support instruction and improve student learning (Glatthorn et al., 2019).

Having a well-defined plan and clarity of purpose is necessary for teachers to serve as effective resource providers (Marzano, 2019). Lalor (2017) suggested teachers should consider the following questions when selecting or evaluating instructional resources: “is the resource an integral part of the learning experience, does this resource include a process that will be repeated in subsequent units, and does this tool support school values” (p. 149–150). Resources shown to significantly impact student learning include print resources, online resources, multimedia resources, informational handouts, nonlinguistic representations, technology tools, and consumable learning tools such as sticky notes, highlighters, and note cards (Marzano, 2019).

Implications for Practice

Educational standards serve as the framework for curriculum, instruction, and assessment (Schimmer et al., 2018). However, the curriculum must reflect a manageable number of educational standards (Schmoker, 2018). Marzano (2017) acknowledged that

many educators in the United States equate curricular content with state academic standards. Marzano further contended that most state standards are too excessive in breadth and are unlikely to be taught as prescribed during a typical school year (Marzano, 2017). Marzano and Eaker (2020) affirmed that a guaranteed and viable curriculum is fundamental for raising student achievement. Thus, without a guaranteed and viable curriculum, it is unlikely that students will achieve at high levels (Hoegh, 2020).

This study is significant because English II teachers in Missouri are expected to teach the Missouri Learning Standards, as written, during the instructional time provided. As a result, high school students in Missouri are expected to demonstrate proficiency of the standards on the English II end-of-course assessments. If teachers do not have enough instructional time to implement the Missouri Learning Standards, it is unlikely that students will demonstrate proficient performance on the state assessment (Marzano, 2003).

Teachers in effective schools, however, can teach the required standards in the time allowed for instruction (Marzano et al., 2018). Therefore, the implications for this study are critical given the lack of current research associated with the curricular viability and guaranteed nature of Missouri Learning Standards and how the standards are currently being implemented across the state. Given the existing gap in research, the outcomes of this study may be used by educators and policymakers to guide the development, refinement, and implementation of future learning standards. Furthermore, the outcomes of this study may be used by educators and school leaders to guide professional support for unpacking and prioritizing the Missouri Learning Standards across all subject areas and grade-levels.

Guaranteed and Viable Curriculum

A guaranteed and viable curriculum is a composite of opportunity to learn and time to learn (Hoegh, 2020). For a curriculum to be guaranteed, it must also be viable; that is, sufficient time is available during the school year for teachers to teach the curriculum as it is written and prescribed (Marzano & Eaker, 2020). According to Marzano (2017), an excessive number of educational standards lead to a curriculum that is both “bloated and cumbersome” (p. 20). Because state standards are often excessive in scope and sequence, school teams must determine what curricular content is most essential for all students to learn (Eaker, 2020).

Once a viable curriculum is in place, all students should be given the same opportunities to learn and master the educational standards, otherwise, it is unlikely that they will successfully learn the intended curriculum (Marzano et al., 2018). Therefore, in schools where students achieve high levels, all students are exposed to a guaranteed and viable curriculum (Buffum et al., 2018). Furthermore, Schmoker (2018) reinforced Marzano’s original claim that a properly sequenced, content-rich curriculum impacts student achievement more than any other school-level factor.

For curriculum to be guaranteed and viable, educational leaders must ensure the following:

1. The school curriculum and accompanying assessments adhere to state and district standards
2. The school curriculum is focused enough that teachers can adequately address it in the time they have available
3. All students have the opportunity to learn the critical content of the curriculum

4. The school establishes clear and measurable goals that are focused on critical needs regarding improving overall student achievement at the school level
5. The school analyzes, interprets, and uses data to regularly monitor progress toward school achievement goals
6. The school establishes appropriate school- and classroom-level programs and practices to help students meet individual achievement goals when data indicate interventions are needed. (Marzano et al., 2018, p. 107)

Once these success indicators are entirely in place, all students will be ensured the benefits of a guaranteed and viable curriculum, regardless of which teacher is assigned to students (DuFour et al., 2021). The ongoing effectiveness of a guaranteed and viable curriculum relies heavily on teachers holding one another accountable for teaching the agreed-upon knowledge, skills, and dispositions (DuFour et al., 2021). It is the work of collaborative teams to ensure that the implemented curriculum is both guaranteed and viable (Kramer & Schuhl, 2017). This result is best accomplished when teacher teams collectively accomplish the following:

1. Determine priority standards
2. Ascertain when students will be proficient with standards throughout the year
3. Create a sequence of units with pacing criteria
4. Establish what students will have to know and be able to do as a result of learning the standards in each unit
5. Document unit plans and identify district or school resources teachers can use for their instruction of the identified standards. (Kramer & Schuhl, 2017, p. 57)

It is equally important for building and district administrators to collaborate with teachers to establish and implement a guaranteed and viable curriculum (Hoegh, 2020).

Administrators and other school leaders demonstrate support for the establishment and implementation of a guaranteed and viable curriculum when they:

1. Ensure teachers identify the essential standards or content for the subject areas and grade-levels they teach
2. Provide time for school teams to articulate the knowledge and skills the essential content or standards encompass
3. Give an opportunity for school teams to examine the amount of time needed to adequately teach the essential standards or content
4. Determine protocols for ensuring the quality of assessments related to the essential content
5. Establish protocols for analyzing data related to classroom assessments
6. Make certain appropriate school- and classroom-level programs are in place to help all students achieve at optimum levels. (Hoegh, 2020, p. 130)

Finally, because Marzano's research on guaranteed and viable curriculum served as the conceptual framework for this study, therefore, it is important to highlight Marzano's original five action steps for implementing a guaranteed and viable curriculum:

1. Identify and communicate the content considered essential for all students versus that which is considered supplemental or necessary only for those seeking post-secondary education
2. Ensure that the essential content can be addressed in the amount of time available for instruction

3. Sequence and organize the essential content in such a way that students have many opportunities to learn it
4. Ensure that teachers address the essential content
5. Protect the instructional time that is available. (Marzano, 2003, pp. 25–31)

Once a guaranteed and viable curriculum is embedded within a school, the greatest equity issue in American public education will be solved (Eaker et al., 2021). Consequently, a guaranteed and viable curriculum will more likely be correlated to student achievement in Missouri.

Unpacking and Prioritizing Standards

Academic standards provide the foundation for student learning (Schimmer et al., 2018). According to Marzano and Eaker (2020), the development of a guaranteed and viable curriculum begins when collaborative teams “become students of the standards with the ultimate goal of ensuring their students receive not only a guaranteed and viable curriculum but also one aligned with high-stakes assessments students are likely to encounter” (p. 22). However, not all learning standards are of equal importance or power (DuFour et al., 2021). Therefore, teachers must unpack learning standards so that each standard’s intent and rigor are fully understood by the teachers implementing the standards (Kramer & Schuhl, 2017).

Unpacking, unwrapping, and deconstructing are synonymous terms used to describe teachers' actions to better understand the learning standards they are required to teach (Bailey & Jakicic, 2019). Unpacking standards requires teachers to break down standards intentionally and strategically into smaller learning targets to precisely identify the necessary knowledge and skills for student proficiency (Kramer & Schuhl, 2017).

When unpacking academic standards, teachers and school leaders should consider the following seven-step process:

1. Identify the priority standards for a particular unit or topic of instruction
2. Circle or highlight the verbs and underline the knowledge or concepts
3. Identify learning targets
4. Determine the level of rigor for each learning target and consider the type of assessment that matches the rigor expectations
5. Identify key vocabulary
6. Determine a logical learning progression
7. Determine potential scaffolds or supports. (Friziellie & Schmidt, 2020, p. 153)

Educators must take time to thoroughly investigate learning standards, engage in collaborative conversations designed to clarify their understanding of the standards, and collectively commit to base instructional decisions on their collective understanding of the standards (Schimmer et al., 2018). As teachers unpack learning standards and better understand each standard's scope and depth, new priority standards may emerge from the process (Kramer & Schuhl, 2017). It is important to note, however, that many schools begin a process of unpacking educational standards, but very few ever finish, leaving teachers unable to know which standards are most essential in each course or grade-level (Kramer & Schuhl, 2017).

After learning standards have been unpacked, they must be prioritized for teachers to implement a guaranteed and viable curriculum (Marzano, 2017). Furthermore, teachers must prioritize learning standards to focus their instructional time more clearly on what is most essential for students to know and be able to do (Heflebower et al., 2019). This

work is essential because priority standards provide a backdrop for student assessment and grade reporting (Heflebower et al., 2019). It is strongly recommended that collaborative teams identify no more than fifteen priority standards per course per year (Marzano et al., 2018).

Teachers use endurance, leverage, and readiness to determine which standards are most essential in a guaranteed and viable curriculum (Stuart et al., 2018). Endurance refers to the knowledge students are learning and whether the knowledge will be needed for the long term; leverage refers to learning content that will be used to support a student's learning in other disciplines; and readiness refers to the content being learned as a necessary step in the vertical preparation of students (Stuart et al., 2018). In addition to endurance, leverage, and readiness, two additional criteria should be considered: teacher judgment and assessment (Marzano et al., 2018). Teacher judgment refers to the extent to which educators are able to distinguish the most essential content from least essential content based on their knowledge of the subject matter (Marzano et al., 2018). Assessment refers to providing students with learning opportunities that are actually aligned to classroom assessments (Marzano et al., 2018).

Marzano identified a four-step process for prioritizing standards:

1. Analyze the standards to become familiar with the material
2. Individually rate the priority of each standard
3. Group the high-priority standards into topics, strands, or themes
4. Review the grouped standards and adjust as necessary for gaps or missing knowledge. (Marzano et al., 2018, p. 113)

After teachers have concluded the process of identifying an initial set of priorities, school

leaders must help teachers determine the extent to which the identified priority standards contribute to a guaranteed and viable curriculum (Marzano et al., 2018).

Missouri Learning Standards

The Missouri Learning Standards are aligned to the Show-Me Standards and provide a curricular foundation for the knowledge and skills all Missouri students need to acquire before graduation from high school (MODESE, 2021g). While the Missouri Learning Standards do not mandate curriculum, they provide direction for grade-level learning expectations (MODESE, 2021g). Missouri Priority Standards consist of enduring concepts or skills essential to helping all Missouri students master the big ideas specified within the priority standards (MODESE, 2021h).

According to Reeves (2019), all learning standards must be refined and focused. Hoegh (2020) acknowledged that while the prioritization of learning standards is a critical first step toward clarifying what is most important for students to learn, three important questions must be addressed beyond the mere identification of priority standards:

1. Will the teachers responsible for teaching the most important standards have a consistent understanding of the knowledge and skills contained within the standards?
2. Will students have a clear understanding of the knowledge and skills they need to demonstrate to show proficiency?
3. Will parents understand what their child needs to know and be able to do in a specific grade-level or course? (p. 3)

These critical questions are also relevant to the Missouri Learning Standards and school

districts across the state must thoroughly and systematically address each question.

For the Missouri Learning Standards to serve as a solid foundation for a guaranteed and viable curriculum, the following guidelines should be followed:

1. Make academic standards everybody's business. Everyone within the school community, including teachers, students, parents, and business leaders, should be familiar with the learning standards and their importance to student learning and achievement.
2. Focus, focus, focus. Because some state standards are complex, multifaceted, vague, and sometimes even ambiguous, it is necessary for teachers to make sense of them. As discussed previously, the best way to understand learning standards is to unpack and prioritize the standards. This will also ensure that the most essential standards are identified, taught, and assessed in the time available for instruction, thus, making them viable.
3. Make standards-based decisions. Successful implementation of the Missouri Learning Standards will require decision making that is based on helping all students learn the standards as they are intended. This includes hiring the best teachers, implementing highly effective instructional strategies, and acquiring curricular resources that are aligned to standards-driven curricula.
4. Invest in teachers. The most effective schools have the most effective teachers. Effective schools provide teachers with high-quality job-embedded professional development, collaboration with colleagues, instructional coaching, and meaningful supervision.
5. Demand helpful assessments that align with the curriculum. In order for

assessments to be meaningful measures of student performance, they must be appropriately aligned to the Missouri Learning Standards. This includes common formative assessments, summative assessments, and end-of-course assessments. If classroom teachers or school districts have concerns about the alignment between end-of-course assessments and the Missouri Learning Standards, concerns should be raised with the state education officials.

6. Approach accountability cautiously. Assessment data should be analyzed and used to make decisions about curriculum, instructional practices, intervention and remediation programs, curricular resources, and personnel.
7. When students are in trouble, intervene. Early intervention is critical to student success. Classroom teachers must be equipped with a variety of instructional resources and methodologies to effectively address learning difficulties as they occur in the classroom. (Glatthorn et al., 2019, p. 51)

When these guidelines are followed, school stakeholders will not only have a greater understanding of state learning standards, but students will also perform better in the classroom (Glatthorn et al., 2019).

Missouri End-of-Course Assessments

According to Koretz (2017), if standardized assessments are used correctly, they can provide teachers with invaluable information about student learning that is not always available from other types of assessment. The Missouri Assessment Program is responsible for assessing students' proficiency of grade-level or course-level subject matter that is aligned to state standards (MODESE, 2020b). The Missouri Assessment Program uses student achievement data to monitor the strengths and weaknesses of public

education across the state (MODESE, 2021d). End-of-course assessments are standards-based accountability assessments that are administered in courses where the Missouri Learning Standards are specifically targeted for instruction, regardless of the grade-level (MODESE, 2021c). The English II end-of-course assessment is designed to measure student proficiency in three content strands: reading literary text, reading informational text, and writing (MODESE, 2020a).

English II teachers should become familiar with the MODESE Item Specification components, “which includes all grade-level and course-level expectations arranged by domains and strands” (MODESE, 2021e, Item Specifications section). The Item Specifications were specifically designed to help teachers better understand what knowledge and skills might be tested by the Missouri Assessment Program (MODESE, 2021e). Teachers should use this document to guide their classroom assessment practices and gain more clarity of the Missouri Learning Standards (MODESE, 2021e). Item specification components include:

1. Expectation Unwrapped breaks down the content and skills students must know and be able to do upon mastery of the expectation
2. Depth of Knowledge Ceiling specifies the highest level of cognitive complexity that would be assessed
3. Item Format indicates the types of test items that would be used
4. Content Limits and Assessment Boundaries are parameters that item writers should consider when creating large scale summative assessments
5. Sample Stems address the specific elements of each grade-level or course-level expectation and also address varying depth of knowledge levels

6. Text Types suggests a broad list of text types for literary and informational expectations. Because the learning expectations are written in grade-level bands, the progression of learning expectations relies on increasing levels of text complexities. (MODESE, 2021e)

In addition to the Item Specification Document (MODESE, 2021e), English II teachers should also become familiar with the MODESE End-of-Course Blueprints (2021f). Blueprints provide a framework of assessment specifications to ensure that the Missouri Learning Standards are sufficiently assessed from year to year (MODESE, 2021e). According to the MODESE (2021f), “the blueprint links the assessments to the content areas acting as a tool to align objectives to the appropriate weight and questions across the strands” (p. 1).

For teachers to better prepare students for the English II end-of-course assessment, teachers should review released items from previous assessments to accurately understand performance expectations (Bailey & Jakicic, 2019). When teachers use sample items as part of the instructional process, students are more likely to understand how questions are worded and how to best answer them (Bailey & Jakicic, 2019). If the MODESE does not provide released items, teachers should consider using items from other sources aligned to the content, skills, and rigor found in the Missouri Learning Standards (Bailey & Jakicic, 2019). Model samples and exemplars from similar assessments should be shared so students understand the meaning of standards-based proficiency (Bailey & Jakicic, 2019).

As English II teachers endeavor to prepare students for proficiency on the English II end-of-course assessment, it is necessary for teachers to fully understand the end-of-

course assessment achievement level descriptors and how they can be used to improve student learning. Achievement levels are used to report student performance on end-of-course assessments (MODESE, 2020a). Each achievement level explains what students know and can do regarding the knowledge and skills being assessed (MODESE, 2020a). Standards of performance are written as descriptors (MODESE, 2020a). English II teachers should use achievement level descriptors to closely monitor a student's path to proficiency. This focus is necessary because students are more likely to achieve at high levels on state-mandated assessments if student learning has been closely monitored and supported throughout the school year (Kramer & Schuhl, 2017).

Finally, the MODESE should continue to seek feedback from teachers, students, administrators, and parents regarding the purpose and intended use of end-of-course assessments, the implementation and administration of end-of-course assessments, and the analysis of scores and reports. Additionally, the MODESE should provide English II teachers with updated released items, scoring guides, and exemplars. School leaders should ensure that teachers have the necessary training to use the MODESE resources effectively.

Curricular Materials and Resources

A quality curriculum includes learning experiences integrated with materials and resources that are purposeful and engaging (Lalor, 2017). To that end, the implementation of a quality curriculum relies on the thoughtful procurement of standards-aligned learning resources and ensuring that additional resources, if needed, are readily available to support student learning (Lalor, 2017, p. 154). The selection of instructional materials and resources is a collaborative process that requires a great deal

of time, research, and clarity of purpose (Glatthorn et al., 2019). Because teachers function as instructional resource providers, acquiring and utilizing high-quality resources are critical to student success (Marzano, 2019). When selecting or evaluating curricular materials and resources, teachers should answer these three essential questions to guide the process:

1. Is the resource an integral part of the learning experience?
2. Does this resource include a process that will be repeated in subsequent units?
3. Does this tool support school values? (Lalor, 2017, pp. 149-150)

According to Lalor (2017), teachers should select culturally competent resources “that address, in an unbiased way, the religion, races, and cultural practices of the students, as well as those who are different from them” (p. 151).

Marzano (2019) recommended that students be given opportunities to select teacher-provided resources that would be most beneficial to their learning. Resources include, but are not limited to, books, articles, and other print resources, online, electronic, and other multimedia resources, nonlinguistic representations, informational handouts, and various other consumable resources designed to support learning (Marzano, 2019). Lalor (2017) identified additional resources such as learning protocols, common templates, primary sources, checklists, exemplars, graphic organizers, and other tangible products. It is vital for teachers to understand that all curricular resources are selected and used to support student learning (Lalor, 2017).

While it is important for teachers to provide students with high-quality resources and materials, it is equally important for school administrators to provide teachers with useful resources to support the implementation of a guaranteed and viable curriculum

(DuFour et al., 2021). At the building level, all teachers must not only have access to the following resources, but teachers need to use them to improve classroom instruction:

1. Current state or provincial standards
2. Recommended standards from professional organizations
3. District curriculum guides
4. A list of prerequisite skills essential for student success
5. Assessment frameworks
6. Data on student performance
7. Examples of student work and specific criteria for evaluating student work
8. Recommendations and standards for workplace skills
9. Recommendations on standards and curriculum design from leading experts.

(DuFour et al., 2021, p. 155)

Furthermore, a resource allocation analysis is necessary for the improvement of teaching and learning (Glatthorn et al., 2019). A resource allocation analysis is based upon the following essential questions:

1. Does the school's allocation of resources reflect its educational priorities?
2. Does the school's allocation of resources seem adequate for achieving the outcomes desired?
3. Does the allocation of resources seem to be cost-effective?
4. Is the allocation of resources equitable? (Glatthorn et al., 2019, p. 180)

Finally, effective schools select curricular resources and materials aligned to state standards (Learning First Alliance, 2018). Highly effective schools rely on teachers to develop, adapt, and customize their instructional resources to better support student

learning (Learning First Alliance, 2018).

Recommendations for Future Research

It was the purpose of this study to determine the extent to which correlations exist between teachers' perceptions of the guaranteed and viable nature of Missouri Learning Standards and student achievement on English II end-of-course assessments. Of the seven hypotheses posed in the study, only one null hypothesis was rejected. The remaining six null hypotheses were not rejected. The six null hypotheses are contrary to the research used to develop the study's conceptual framework. Namely, Marzano's (2003) original claim that a guaranteed and viable curriculum significantly impacts student learning and achievement. While the conclusions reached in this study have significant implications for professional practice, more research is needed to better understand the disparity between the research findings of this study and Marzano's findings on the opportunity to learn, more specifically, a guaranteed and viable curriculum.

Replicated Correlational Study

While this study met the threshold for establishing relationships in correlational research, a larger sample may yield results that are more consistent with the alternative hypotheses associated with this study. Even though more than 500 Missouri school districts were invited to participate, only 32 school districts participated in the study. The target population for this study included more than 700 Missouri high school English II teachers; however, only 53 English II teachers responded to the research survey.

Some uncontrollable influences may have compromised a lower-than-expected response rate. For example, the survey was distributed during the second year of a global COVID-19 pandemic. During this unprecedented time, many superintendents declined

out-of-district research requests. Additionally, many teachers faced significant stress and anxiety attributed to teaching fully online, in a hybrid setting, or fully seated with students. Many teachers also faced insurmountable challenges associated with implementing a guaranteed and viable curriculum during the multi-year COVID-19 pandemic.

It is further recommended that this study be replicated in a time of post-pandemic normalcy. Finally, given that only two years of student achievement data were used in this study, it is recommended that the study be replicated when at least three or more years of data are available from the MODESE. A replicated study could be beneficial and could yield different findings and conclusions if the sample population of English II teachers was significantly larger than 53.

MODESE Curricular Implementation Study

Because end-of-course assessments are based on the Missouri Learning Standards, and the Missouri Learning Standards specify what all students must know and be able to do in each grade-level and course, it is imperative that all schools implement the standards to a high degree of fidelity. Even though the Missouri Learning Standards were never intended to be a statewide curriculum, they provide a solid foundation for developing and implementing guaranteed and viable curriculum in school districts across the state. Given the apparent importance of the Missouri Learning Standards, it is recommended that the MODESE conduct a curricular implementation study to determine the extent to which Missouri Learning Standards are taught and assessed in the state's public schools. Surveys, audit protocols, checklists, artifacts, and onsite interviews could be used to determine the actual alignment of local curriculum to state standards and the

degree to which the Missouri Learning Standards are both guaranteed and viable. Results from the MODESE study could be used to resolve course-level curricular gaps, vertical and horizontal scope and sequence concerns, and possible misalignment of Missouri Learning Standards to local curricula.

Additionally, results from this study could be used to identify professional development opportunities for teachers and administrators. The MODESE could use results from this study to revise current learning standards and improve the development and implementation of future learning standards. A MODESE curricular implementation study could be beneficial given the current lack of research on the Missouri Learning Standards, particularly their curricular viability.

Meta-Analysis Study

The last meta-analysis relating to school-level factors associated with high student achievement was conducted by Marzano more than twenty-one years ago. In 2003, Marzano's findings led to identifying school-level factors that correlated to student achievement. Of particular importance was a guaranteed and viable curriculum. This school-level factor is a composite of opportunity to learn and time to learn. Because guaranteed and viable are interdependent concepts, Marzano constituted them as a single factor. The concept of a guaranteed and viable curriculum remains at the center of most curriculum development efforts in the United States.

Therefore, it is recommended that another meta-analysis of school-level factors be conducted to determine the extent to which a relationship currently exists between guaranteed and viable curriculum and student achievement. New research findings and conclusions could significantly impact curriculum development initiatives and help guide

other standards-based reform efforts. A meta-analysis study could be beneficial given the lack of current research on guaranteed and viable curriculum and its impact on student achievement.

Summary

It was the purpose of this study to determine if there is a correlation between teachers' perceptions of the guaranteed and viable nature of Missouri Learning Standards and student achievement on English II end-of-course assessments. Seven research questions and hypotheses guided the study. This study was significant given the lack of current research associated with the Missouri Learning Standards and the extent to which the standards are guaranteed and viable.

Missouri Learning Standards are the product of HB 1490, which was signed into law on July 14, 2014, by Missouri Governor Jay Nixon (MODESE, 2014, Key Education Legislation section). HB 1490 was used as a legislative mechanism to repeal the CCSS adopted in 2010 (Otto, 2014, p. 1). The Missouri Learning Standards are aligned to the Show-Me Standards and specify the knowledge and skills required for student success in each grade-level and course (MODESE, 2021g). Marzano's (2003) groundbreaking concept of a guaranteed and viable curriculum served as the conceptual framework for this study.

In schools identified as highly effective, all students are exposed to a guaranteed and viable curriculum (Buffum et al., 2018). Unfortunately, a guaranteed and viable curriculum is found in very few schools throughout the United States (Schmoker, 2018). This situation is particularly problematic given that educational standards serve as the foundation for all academic learning experiences in school (Schimmer et al., 2018).

Chapter Two began with a historical review of the national standards movement dating back to the Old Deluder Satan Act and Thomas Jefferson's belief that "common people needed enough learning to cherish and defend their republic" (Taylor, 2019, p. 162). After Jefferson, Horace Mann inspired the common school movement designed to formally educate all ranks of society for the nation to be more united and prosperous (Hirsch, 2020). However, it was not until the Industrial Revolution that American schools would be changed forever, with students being required to take the same courses, learn the same content, and be measured in the same ways (Stuart et al., 2018). In 1983, *A Nation at Risk* ushered in a new era of standards-based accountability (Merrow, 2017). For the first time in the modern era, politicians and educational leaders focused their attention on the ills of public education. This focus would ultimately lead to several decades of school reform and unprecedented levels of federal involvement and control (Koretz, 2017). Chapter Two also highlighted several federal government mandates and initiatives that significantly impacted the national standards movement and school accountability.

As described in Chapter Two, Marzano's (2003) concept of a guaranteed and viable curriculum served as the conceptual framework for this study. A guaranteed and viable curriculum is the single most significant factor that impacts student learning and achievement (Marzano et al., 2018). Chapter Two also included an extensive review of literature on the importance of unpacking and prioritizing standards, the legislative impact of House Bill 1490, the adoption of new Missouri Learning Standards, the accountability role of Missouri end-of-course assessments, and the significance of high-quality curricular resources within a guaranteed and viable curriculum.

In Chapter Three, the design of the study was presented. The study's problem was identified and followed by an overview of the study's purpose. Seven research questions and hypotheses were also reviewed. Chapter Three included a description of the correlational research design used to measure and describe relationships between multiple independent variables and student achievement. A detailed discussion of the population, sample, and instrumentation was included. Chapter Three also outlined procedures and processes for collecting and analyzing data. In accordance with the National Research Act of 1974, Chapter Three concluded with the identification of three ethical considerations (Fraenkel et al., 2019, p. 57).

Chapter Four detailed the study's analysis of data. Fifty-three English II teachers from 32 Missouri public school districts responded to the survey instrument used for this study. The Qualtrics survey instrument was designed to collect both demographic and perception data from English II teachers in Missouri. Results from the survey data were used to represent the study's seven independent variables. English II end-of-course assessment data from 2017–2018 and 2018–2019 were used collectively to represent the study's exclusive dependent variable. These quantitative data were correlated to answer each of the seven research questions. The Pearson correlation coefficient was used to determine whether a relationship existed between the independent and dependent variables identified in this study. Of the seven null hypotheses, only one was rejected.

Chapter Five included a review of the major elements of the study and findings from the statistical analysis of data presented in Chapter Four. Each research question was further addressed in consideration of the analyzed data. Of the seven hypotheses posed in the study, only one null hypothesis was rejected. The remaining six null

hypotheses were not rejected. The six null hypotheses were contrary to the research used to develop the study's conceptual framework.

The chapter also included a discussion of the several conclusions and professional implications resulting from the study. While the conclusions reached in this study have significant implications for professional practice, more research is necessary to understand the disparity between the research findings of this study and Marzano's findings on the opportunity to learn, more specifically, the impact a guaranteed and viable curriculum has on student achievement. Chapter Five concluded with three recommendations for future research including a replicated correlational study, a MODESE curricular implementation study, and a meta-analysis study.

References

- An, S., & Cardona-Maguigad, A. (2019, December 3). *Common core: Higher expectations, flat results*. NPR. <https://npr.org/local/309/2019/12/03/784224482/common-core-higher-expectations-flat-results>
- Apex Learning. (2017, January 16). 3 reasons standards are essential to educational success. *Apex Learning*. <https://www.apexlearning.com/blog/3-reasons-standards-are-essential-to-educational-success>
- Associated Press. (2017, September 19). Most of the U.S. still uses common core, despite blowback. *Education Week*. http://www.edweek.org/ew/articles/2017/09/19/common-core-used-widely-despite-continuing_ap.html
- Bailey, K., & Jakicic, C. (2019). *Make it happen: Coaching with the 4 critical questions of PLCs at work*. Solution Tree Press.
- Buffum, A., Heckmann, S., Mattos, M., & Stuart, T. (2018). *Personalized learning in a PLC at work: Student agency through the four critical questions*. Solution Tree Press.
- Corestandards.org. (2021a). *Common core state standards initiative: Standards setting criteria*. <https://Corestandards.org/assets/criteria.pdf>
- Corestandards.org. (2021b). *English language arts standards*. <https://Corestandards.org/ELA-literacy/>
- Corestandards.org. (2021c). *English language arts standards: Key design features*. <https://Corestandards.org/ELA-Literacy/introduction/key-design-consideration/>
- Corestandards.org (2021d). *Read the standards*. <https://Corestandards.org/read-the-standards/>

- Creswell, J. D., & Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Crouch, E. (2015, June 4). Missouri legislature throws common core test out the window. *Saint Louis Today*. https://www.stltoday.com/news/local/education/missouri-legislature-throws-common-core-test-out-the-window/article_09441f40-b77a-5f0d-ae9f-7678a20d551a.html
- Dempsey, K. (2017, July 19). *Does your school have a guaranteed and viable curriculum?* McREL International. <https://mcrel.org/does-your-school-have-a-guaranteed-and-viable-curriculum/>
- Dillon, A. (2016, May 31). Missouri adopts new standards to replace common core. *Heartland Institute*. <https://www.heartland.org/news-opinion/news/missouri-adopts-new-standards-to-replace-common-core?source=policybot>
- DuFour, R., DuFour, R., & Reeves, D. (2018). *Responding to the Every Student Succeeds Act with the PLC at work process*. Solution Tree Press.
- DuFour, R., DuFour, R., Eaker, R., Mattos, M., & Muhammad, A. (2021). *Revisiting professional learning communities at work: Proven insights for sustained, substantive school improvement* (2nd ed.). Solution Tree Press.
- Duncan, A. (2018). *How schools work*. Simon & Schuster
- Eaker, R. (2020). *A summing up: Teaching & learning in effective schools and PLCs at work*. Solution Tree Press.
- Eaker, R., Hagadone, M., Keating, J., & Rhoades, M. (2021). *Leading PLCs at work districtwide: From boardroom to classroom*. Solution Tree Press.

- Fraenkel, J., Hyun, H., & Wallen, N. (2019). *How to design and evaluate research in education* (10th ed.). McGraw Hill Education.
- Friziellie, H., & Schmidt, J. A. (2020). PLC, HRS, and a guaranteed and viable curriculum. In R. Eaker., & R. J. Marzano (Eds), *Professional learning communities at work and high reliability schools: Cultures of continuous improvement* (pp. 149–187). Solution Tree Press.
- Gewertz, C. (2015, September 28). The common core explained. *Education Week*.
<http://www.edweek.org/ew/issues/common-core-state-standards/index.html>
- Glatthorn, A. A., Boschee, B. F., Boschee, F., & Whitehead, B. M. (2019). *Curriculum leadership: Strategies for development and implementation* (5th ed.). Sage.
- Goldstein, D. (2019, December 6). *After 10 years of hopes and setbacks, what happened to the common core?* The New Yorker.
<https://nytimes.com/2019/12/06/us/common-core.html>
- Hattie, J., & Yates, G. (2014). *Visible learning and the science of how we learn*. Routledge.
- HB 1490. 97th General Assembly Missouri. (2014).
<https://house.mo.gov/billtracking/bills141/biltxt/truly/HB1490T.htm>
- Heflebower, T., Flygare, J., Hoegh, J. K., & Warrick, P. B. (2019). *A teacher's guide to standards-based learning*. Marzano Research.
- Hirsch, E. D. (2020). *How to educate a citizen: The power of shared knowledge to unify a nation*. HarperCollins Publishers.

- Hoegh, J. K. (2020). Six action steps for a guaranteed and viable curriculum. In R. J. Marzano., & R. Eaker (Eds.), *Professional learning communities and high reliability schools: Cultures of continuous learning* (pp. 129–145). Solution Tree Press.
- Hoegh, J. K., Heflebower, T., & Warrick, P. B. (2020). *A handbook for developing & using proficiency scales in the classroom*. Marzano Resources.
- Jakicic, C. (2017, May 22). Are essential standards a part of the assessment process? *All Things Assessment*. <https://allthingsassessment.info/2017/05/22/essential-standards-and-the-assessment-process/>
- Koretz, D. (2017). *The testing charade: Pretending to make schools better*. The University of Chicago Press.
- Kramer, S. V., & Schuhl, S. (2017). *School improvement for all: A how-to guide for doing the right work*. Solution Tree Press.
- Lalor, A. (2017). *Ensuring high quality curriculum: How to design, revise, or adopt curriculum aligned to student success*. ASCD.
- Lardieri, A. (2018, May 23). *Despite higher academic standards, student performance is lacking*. U.S. News & World Report. <https://www.usnews.com/news/education-news/articles/2018-05-23/despite-higher-academic-standards-student-performance-is-lacking>
- Learning First Alliance. (2018). *The elements of success: 10 million speak on schools that work*. Learning First Alliance.

- Lindenwood University. (2018). *Guidance for risks in social, behavioral, and educational research*. <https://www.lindenwood.edu/files/resources/20180424-risks-in-sber-research.pdf>
- Marzano, R. J. (2003). *What works in schools: Translating research into action*. ASCD.
- Marzano, R. J. (2017). *The new art and science of teaching*. ASCD.
- Marzano, R. J. (2019). *The handbook for the new art and science of teaching*. ASCD. Solution Tree Press.
- Marzano, R. J., DuFour, R., Rains, C. L., & Warrick, P. B. (2018). *Leading a high reliability school*. Solution Tree Press.
- Marzano, R. J., & Eaker, R. (2020). Professional learning communities at work and high reliability schools: Merging best practices for school improvement. In R. Eaker., & R. J. Marzano (Eds), *Professional learning communities at work and high reliability schools: Cultures of continuous improvement* (pp. 1–30). Solution Tree Press.
- McTighe, J., & Curtis, G. (2019). *Leading modern learning: A blueprint for vision-driven schools* (2nd ed.). Solution Tree Press.
- Merrow, J. (2017). *Addicted to reform: A 12-step program to rescue public education*. The New Press.
- Mills, G. E., & Gay, L. R. (2019). *Educational research competencies for analysis and applications*. (12th ed.). Pearson Education.
- Missouri Department of Elementary and Secondary Education (2014). *Key education legislation*. <https://dese.mo.gov/governmental-affairs/legislation/2014-key-education-legislation>

- Missouri Department of Elementary and Secondary Education (2016). *Missouri learning standards talking points*. <https://wntigers.net/vimages/shared/vnews/stories>
- Missouri Department of Elementary and Secondary Education (2019). *End-of-course assessments technical report 2017-2018*. <https://dese.mo.gov/media/pdf/asmt-eoc-technical-report-2018-2019>
- Missouri Department of Elementary and Secondary Education (2020a). *End-of-course assessments guide to interpreting results 2019–2020*.
<https://dese.mo.gov/media/pdf/asmt-eoc-gir-1920>
- Missouri Department of Elementary and Secondary Education (2020b). *End-of-course assessments technical report 2018-2019*. <https://dese.mo.gov/media/pdf/asmt-eoc-technical-report-2018-2019>
- Missouri Department of Elementary and Secondary Education (2021a). *Acceleration of learning: Priority standards in Missouri*. <https://dese.mo.gov/media/file/currency-priority-standards-acceleration-of-learning-and-priority-standards>
- Missouri Department of Elementary and Secondary Education (2021b). *District faculty information*.
https://apps.dese.mo.gov/MCDS/Reports/SSRS_Print.aspx?Reportid=8fe5baf0-8b1e-4630-8fd6-55d3c9648234
- Missouri Department of Elementary and Secondary Education (2021c). *End-of-course*.
<https://dese.mo.gov//college-career-readiness/assessment/end-course>
- Missouri Department of Elementary and Secondary Education. (2021d). *Guide to the Missouri assessment program*. <https://dese.mo.gov/college-career-readiness/assessment/guide-missouri-assessment-program>

- Missouri Department of Elementary and Secondary Education (2021e). *Item specifications*. <https://dese.mo.gov/college-career-readiness/assessment>
- Missouri Department of Elementary and Secondary Education (2021f). *Missouri end-of-course blueprints*. <https://dese.mo.gov/media/pdf/asmt-eoc-blueprint>
- Missouri Department of Elementary and Secondary Education. (2021g). *Missouri learning standards*. <https://dese.mo.gov/college-career-readiness/curriculum/missouri-learning-standards>
- Missouri Department of Elementary and Secondary Education (2021h). *Priority standards*. <https://dese.mo.gov/college-career-readiness/curriculum/academic-standards/priority-standards>
- Missouri Department of Elementary and Secondary Education (2021i). *Priority standards for leveraging learning in English language arts*. <https://sites.google.com/view/priority-standards-mo-dese/home/english-language-arts?authuser=0>
- Missouri Department of Elementary and Secondary Education. (2021j). *Show-me standards*. <https://dese.mo.gov/sites/default/files/show-me-standards-placemat.pdf>
- Otto, B. (2014, April 15). Missouri house passes bill to find common core replacement. *Columbia Missourian*. https://www.columbiamissourian.com/news/k12_education/missouri-house-passes-bill-to-find-common-core-replacement/article_07a6f419-ca53-5b98
- Pearson Correlation Coefficient Calculator. (2021, June 7) Retrieved from <https://www.socscistatistics.com/tests/pearson>

Pollock, J. E., & Tolone, L. J. (2021). *Improving student learning one teacher at a time.*

(2nd ed.). ASCD.

Qualtrics. (2021, May 10) Retrieved from <https://qualtrics.com>

Ravitch, D. (2016). *The death and life of the great American school system: How testing and choice are undermining education.* Basic Books.

Reeves, D. (2019, November 3). Why standards? *Creative Leadership Solutions.*

<https://www.creativeleadership.net/blog/why-standards>

Reischman, C. (2013, September 15). Common core: Missouri's journey to

implementation. *The Missouri Times.* <https://themissouritimes.com/common-core-missouris-journey-implementation/>

Schimmer, T., Hillman, G., & Stalets, M. (2018). *Standards-based learning in action.*

Solution Tree Press.

Schmoker, M. (2018). *Focus: Elevating the essentials to radically improve student learning.* ASCD.

Shelton, A. (2019, November 21). *What works in rural districts? We don't know much but need to.* <https://www.sluprime.org/prime-blog/ruralessa>

Spiegelhalter, D. (2019). *The art of statistics,* Pelican.

Strauss, V. (2015, February 26). Judge rules Missouri's membership in common core testing group is illegal. *The Washington Post.*

<https://www.washingtonpost.com/news/answer-sheet/wp/2015/02/26/judge-rules-missouris-membership-in-common-core-testing-group-is-illegal>

- Stuart, T. S., Buffum, A., Heckmann, S., & Mattos, M. (2018). *Personalized learning in a PLC at work: Student agency through the four critical questions*. Solution Tree Press.
- Summers, C. (2021a, February 3). *Guaranteed and viable curriculum: The how*. Leading Learning Matters.
<https://leadinglearningmatters.wordpress.com/2021/02/03/guaranteed-viable-curriculum-the-how/>
- Summers, C. (2021b, May 13). *Guaranteed and viable curriculum: The what*. Leading Learning Matters.
<https://leadinglearningmatters.wordpress.com/2021/05/13/guaranteed-viable-curriculum-the-what/>
- Taylor, A. (2019). *Thomas Jefferson's education*. W. W. Norton & Company.
- Valdez, M., Ikemoto, G., Lamar, J. (2019). *What the research shows: Building ranks in action*. NASSP.
- Wexler, N. (2018, December 5). How academic standards can hold students back. *Forbes*. <https://forbes.com/sites/nataliewexler/2018/12/05/how-academic-standards-can-hold-students-back/?sh=302109b46d24>
- Wexler, N. (2020). *The knowledge gap: The hidden cause of America's broken education system and how to fix it*. Penguin Random House.

Appendix A

Lindenwood IRB Approval Letter

Apr 30, 2021 1:53:04 PM CDT

RE:

IRB-21-149: Initial - Teacher Perceptions of the Curricular Viability of Missouri Learning Standards as Correlated to Student Outcomes on End-of-Course Assessments

Dear Kevin Lowery,

The study, Teacher Perceptions of the Curricular Viability of Missouri Learning Standards as Correlated to Student Outcomes on End-of-Course Assessments, has been Approved as Exempt.

Category: Category 1. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

The submission was approved on April 30, 2021.

Appendix B

Site Permission Letter

Date: XXXX

RE: Permission to Conduct Research in the XXXX School District

To: XXXX, Superintendent of Schools

I am writing to request permission to conduct research in the [REDACTED]. I am currently pursuing my doctorate through Lindenwood University and in the process of writing my dissertation. The study is entitled, *Teacher Perceptions on the Curricular Viability of Missouri Learning Standards as Correlated to Student Outcomes on End-of-Course Assessments*. I am asking permission to survey each of the English II teachers in your school district.

If you agree, please sign below, scan this page, and email it to me at kgl356@lindenwood.edu.

Your approval to conduct this study will be greatly appreciated. I would be happy to answer any questions or concerns you may have regarding this study. If you have any questions or concerns, please email me or give me a call at [REDACTED] or [REDACTED].

Sincerely,

Kevin Lowery,
 Doctoral Student at Lindenwood University

Approved by:

Print name and title here

Signature

Date

Appendix C

Letter of Invitation

Date:

To:

My name is Kevin Lowery, and I am enrolled in the doctoral program for Instructional Leadership at Lindenwood University. The focus of my dissertation research is to examine teacher perceptions regarding the curricular viability of Missouri Learning Standards as correlated to student outcomes on end-of-course assessments. Specifically, I will be studying the extent to which English II teachers in Missouri public high schools have enough instructional time during the school year to fully implement the Missouri Learning Standards as they are currently written. The findings of this study may allow educators, school leaders, government officials, policymakers, and other educational researchers to determine if there is a correlation between the guaranteed and viable nature of English II learning standards to student outcomes on end-of-course assessments.

Permission to conduct research in the XXXX School District has been granted by your superintendent and your high school principal. To conduct my research, I am inviting English II teachers to complete a brief online survey that should take no more than ten minutes to complete.

Please click on this link to complete the survey: XXXXXXXX

Personal information acquired through this study will be coded to maintain privacy and anonymity. The researcher will securely store all files and all collected data on an encrypted electronic device. All research associated with this study will be permanently deleted after three years. Participation in this study is completely voluntary, and participants may withdraw at any time. There are no known risks associated with this research study. For further information, please refer to the Survey Research Consent Form.

I appreciate the XXXX School District's assistance with this study, and I am especially thankful for the teachers who will voluntarily offer their perceptions regarding the curricular viability of Missouri's English II learning standards. If you have any questions concerning this study or the survey, please feel free to contact me at [REDACTED] or by email at kgl356@lindenwood.edu. You are also welcome to contact my Dissertation Chair, Dr. Kathy Grover, via email at kgrover@lindenwood.edu. Again, thank you for participating in this study.

Respectfully,

Kevin Lowery

Please click on this link to complete the survey: XXXXXXXX

Appendix D

Survey Questions

*Teacher Perceptions of the Curricular Viability of Missouri Learning Standards
as Correlated to Student Outcomes on End-of-Course Assessments*

1. I am an English II teacher in the state of Missouri and not a web-based robot.
2. I have read the Survey Research Consent Form, and I am voluntarily participating in this study.
3. What is the name of your school district?
4. What is the approximate number of students enrolled in your school district?
5. How many total years have you been teaching?
6. How many total years have you been teaching English II?

The following statements will be measured using a Likert-type scale:

5 Strongly Agree 4 Agree 3 Somewhat Agree 2 Disagree 1 Strongly Disagree

7. I have enough instructional time during the school year to adequately teach all of the Missouri Learning Standards for English II.
8. My school district requires the teaching of all Missouri Learning Standards for English II.
9. I believe the Missouri Learning Standards for English II are grade-level appropriate.
10. I believe the Missouri Learning Standards for English II are clearly written and understandable.
11. I have adequate professional support for unpacking and prioritizing the Missouri Learning Standards for English II.
12. I believe the Missouri Learning Standards for English II are appropriately aligned to the English II end-of-course assessment.
13. I have enough curricular resources to adequately teach the Missouri Learning Standards for English II?

14. What suggestions do you have for improving the Missouri Learning Standards for English II? (optional open-ended)

Appendix E**LINDENWOOD****Survey Research Consent Form**

You are asked to participate in a survey being conducted by Kevin Lowery under the guidance of Dr. Kathy Grover at Lindenwood University. It will take approximately ten minutes to complete this survey. We are doing this study to examine teacher perceptions of the curricular viability of Missouri Learning Standards as correlated to student outcomes on end-of-course assessments. Specifically, the researcher will be studying the extent to which English II teachers in Missouri public high schools have enough instructional time during the school year to fully implement the Missouri Learning Standards as they are currently written.

Answering this survey is voluntary. We will be asking about 500 other people to complete the survey.

What are the risks of this study?

We do not anticipate any risks related to your participation other than those encountered in daily life. You do not need to answer any items that make you uncomfortable or you can stop taking the survey at any time.

We are collecting data that could identify you, such as the name of your school district, the enrollment of your school district, the total number of years you have been teaching, and the total number of years you have been teaching English II. Every effort will be made to keep your information secure and confidential. Only members of the research team will be able to see your data. We do not intend to include any information that could identify you in any publication or presentation.

Will anyone know my identity?

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the researcher in a secure location. The only people who will be able to see your data are: members of the research team, qualified staff of Lindenwood University, and representatives of state or federal agencies.

What are the benefits of this study?

You will receive no direct benefits for completing this survey. We hope what we learn may benefit other people in the future. The findings of this study may allow educators, school leaders, government officials, policymakers, and other educational researchers to determine if there is a correlation between the guaranteed and viable nature of English II learning standards to student outcomes on the end-of-course assessments.

If you have any questions about your rights as a participant in this research or concerns about the study, or if you feel under any pressure to enroll or to continue to participate in this study, you may contact the Lindenwood University Institutional Review Board Director, Michael Leary, at (636) 949-4730 or mleary@lindenwood.edu.

You can contact the researcher, Kevin Lowery, directly at [REDACTED] or kgl356@lindenwood.edu.

You may also contact Dr. Kathy Grover by email at kgrover@lindenwood.edu.

By clicking the link below, I confirm that I have read this form and decided that I will participate in the project described above. I understand the purpose of the study, what I will be required to do, and the risks involved. I understand that I can discontinue participation at any time by closing the survey browser. My consent also indicates that I am at least 18 years of age.

You can withdraw from this study at any time by simply closing the browser window. Please feel free to print a copy of this consent form.

Vita

Kevin G. Lowery earned his Bachelor of Arts degree in English from Drury University (1986), a Master of Science degree in secondary school administration from Missouri State University (1990), and an Education Specialist degree in school leadership from the University of Missouri at St. Louis (2007). After 34 years of exemplary service, Kevin retired from public education on July 1, 2021. Professional roles included teacher, assistant principal, principal, and Director of Curriculum and Instruction. Kevin served in various Missouri school districts, including Lebanon R-III, Bolivar R-I, Halfway R-III, Rockwood R-VI, Francis Howell R-III, and Bucklin R-II. Before his retirement, Kevin served as the Lebanon High School principal for 13 years. Kevin has served on various boards, including the National Association of Secondary School Principals, the Missouri Association of Secondary School Principals, the Lebanon Rotary Club, and the Bolivar YMCA.

Kevin was awarded the Missouri Association of Student Councils Administrator of the Year Award in 2018. In 2017, he received the Missouri Association of Secondary School Principals Consummate Professional Award. In 2016, Kevin received the Missouri Association of School Librarians Administrator of the Year Award. In 2014, he received the Outstanding Instructional Leadership Award from the Missouri Staff Development Council. In 2013, Kevin was named the Laclede County/American Red Cross Hometown Hero for Education. In 2012, he was recognized as the Southwest Missouri High School Principal of the Year. In 2006, Kevin received the Vision Award from the Central States Center for School Reform. Kevin was the Missouri recipient of the prestigious Milken National Educator Award in 2005.