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Standards-Based Grading Implementation: Rural Elementary Leaders' Perceptions of Useful Professional Development Practices

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Standards-Based Grading Implementation:

Rural Elementary Leaders' Perceptions of Useful Professional Development Practices

by

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Abstract

The ultimate goal of K-12 education is to prepare learners to be life-, career-, and college-ready. Elementary schools develop the foundational skills necessary for students to be successful in secondary education and beyond. The implementation of standards-based grading can significantly contribute to a transparent grading system that identifies and communicates what students know and are able to do. This qualitative study examined rural Minnesota elementary leaders' perceptions of effective professional development practices specific to the implementation of standards-based grading. Snowball sampling was employed to gain districts' names using standards-based report cards. Interviews were conducted utilizing a videoconferencing tool and eleven semi-structured questions were asked of eight interviewees. Participants identified job-embedded professional development practices that informed educators' beliefs and practices, as well as overcame challenges. Themes that occurred in all eight interviews included the intentional alignment of job-embedded professional development practices shifted educators' beliefs, practices, and assisted in overcoming challenges, influential leadership positions were crucial in implementation and sustainability, communicating the WHY with supporting evidence was necessary for all stakeholders, Professional Learning Communities (PLCs) served as the main framework to complete ongoing work, teacher ownership was fostered through collaboration in PLCs, and standards-based grading was a planning initiative rather than a cost initiative. This study suggests further research is needed to learn teachers', parents', and students' perceptions of effective practices for the implementation of standards-based grading.

Keywords: standards-based grading, professional development, Professional Learning Communities (PLCs)

Dedication

For all learners.

Every person has value and something to contribute.

"Be who God meant you to be and you'll set the world on fire."

~ St. Catherine of Siena

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"The journey to greatness often begins the moment our preference for ease and comfort are overpowered by our deep desires for challenge and contribution" (Burchard, 2020). My gratitude is immense for those that surround and support my deep desire to grow as a daughter of God, a wife and mother, and an educational leader.

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Table of Contents

List of Tables

List of Figures

List of Abbreviations

ELO	Essential Learning Outcome
ESSA	Every Student Succeeds Act
MCA	Minnesota Comprehensive Assessment
MDE	Minnesota Department of Education
MTSS	Multi-Tiered System of Supports
NAEP	National Assessment of Educational Progress
NCES	National Center for Education Statistics
NCLB	No Child Left Behind
PLC	Professional Learning Community
SBG	Standards-Based Grading

Chapter I: Introduction

Introduction to the Problem

Over the past 100 years in education, traditional grading practices have been rooted in teachers' individual beliefs and values and often encompass non-academic criteria such as students' effort, participation, and attendance (Brookhart et al., 2016; Chen & Bonner, 2017; O'Connor, 2009; Townsley, Buckmiller, & Cooper, 2019). America's century-old grading system has remained the status quo, even though there is a lack of research to support the single letter by subject grading approach (Guskey, 2011; Marzano, 2000). Such traditional grading practices are inconsistent, do not necessarily reflect what students know and can do, and vary significantly among educators even within the same schools (Cizek, Fitzgerald, & Rachor, 1997; Cox, 2011; Reeves, 2004; Reeves, 2008; Schimmer, 2016). Personal styles and beliefs drive teachers' decisions in grading practices, not research (Cizek, Fitzgerald, & Rachor, 1996; Guskey & Bailey, 2001; Peters, Kruse, Buckmiller, & Townsley, 2017). Traditional grading practices result in educators, parents, and students questioning what grades represent (Cizek, Fitzgerald, & Rachor, 1996). Although grades are the customary measure for schools' assessments, grades do not have a homogenous or standard meaning (Marzano, 2000; Pollio & Hochbein, 2015).

An alternative to a traditional grading approach is standards-based grading. Standards-based grading defines students' learning goals and describes what students should know and be able to do (Guskey, 2009; O'Connor, 2013). Unlike traditional grading practices, many studies have shown that standards-based grading practices communicate clear goals, reflect students' levels of knowledge, and provide ongoing feedback that facilitates learning (Aidman, Gates & Deterra Sims, 2001; Ainsworth, 2003; Buckmiller, Peters, & Kruse, 2017; Guskey & Bailey,

2001, 2010; Marzano, 2003; Salend, 2005; Stiggins, 2005). Therefore, standards-based grading is gaining momentum in schools (Iamarino, 2014; Peters & Buckmiller, 2014).

Statement of the Problem

A transition to a standards-based grading system is an example of a school reform initiative. Leaders have encountered several barriers when seeking to implement standards-based grading in their schools. Some of these barriers included disagreements about the purpose of grading, an increase in teachers' workload, and the lack of appropriate communication to educate parents on grading changes (Townsley, 2019; Townsley, Buckmiller, & Cooper, 2019). The most considerable barriers that prevented teachers from making the transition to standards-based grading included the lack of knowledge of the grading system and insufficient training for teachers to implement this new way of assessing students (St. Pierre & Wuttke, 2017; Townsley, Buckmiller, & Cooper, 2019).

Legislation mandating assessments. Assessments and grading practices are closely linked. Although both state and classroom assessments aim to gauge students' understanding of academic content, with traditional grading practices, there is not consistent and precise alignment between the state standards and the content assessed in the classroom. To understand the current grading challenges in the United States, a brief history of recent assessment trends is helpful. The United States Department of Education's Every Student Succeeds Act (ESSA) was signed into law in 2015 by President Obama, replacing the No Child Left Behind (NCLB) Act of 2002. For the first time in history, the ESSA required all educators to teach the same academic standards with the goal of life, college, and career readiness (U.S. Department of Education, n.d.). However, the primary focus of ESSA became standardized testing and accountability. There were no requirements for alignment of standards in curriculum, instruction, or assessment

practices within the classroom. Given the lack of alignment, there are concerns that the intent of ESSA may not have been realized.

ESSA encompassed protection for learners, including students with high-needs, supported innovations and interventions, invested in preschool programming, and ensured communication of statewide assessment data to all stakeholders (U.S. Department of Education, n.d.). The federal government mandated accountability measures, primarily data documenting student academic achievement, as a part of the ESSA. The National Assessment of Educational Progress (NAEP), also known as the Nation's Report Card, was the most extensive congressionally mandated assessment administered to a representative sample of students across the nation to measure student achievement of academic standards (National Assessment of Educational Progress, 2020). NAEP administered the mandated assessments in various subjects, most frequently in mathematics, science, reading, and writing (National Center for Education Statistics, 2020). The Nation's Report Card reported the assessment results by demographic groups, such as gender, race, and school location, rather than individual test scores. NAEP made state-to-state data comparisons of proficiency standards according to students' achievement levels (National Assessment of Educational Progress, 2020).

In addition to the sampling of student achievement measured by NAEP, federal reform acts such as the ESSA required state-level assessments. State accountability measures, such as the Minnesota Comprehensive Assessment (MCA), are administered yearly and are specific to students' grade levels and subject areas (Minnesota Department of Education, 2020). The state government uses the assessments to measure school performance and evaluate students' achievement on academic standards. Schools' performance levels determine how much money

is granted to the state from the federal government (Minnesota Department of Education, 2020; Minnesota Legislature, 2017).

Traditional grading not aligned with mandated standards. Within local school districts, teachers independently administer assessments, including quizzes, chapter or unit tests, and final exams (Minnesota Department of Education, 2020). Like state assessments, classroom assessments strive to measure students' understanding of academic content. However, with traditional grading practices, there is not consistent alignment between the state standards and the content assessed in the classroom. There is no evidence that classroom grading practices or assessments align with the academic standards, even though there is alignment between the academic standards and national and state accountability measures. Due to federal regulations, academic standards are lost in the *product* of accountability measures, rather than serving as the intended foundation of equity in the learning *process*.

Professional development. The lack of alignment between state standards and content assessed in the classroom is a conundrum that has led educational leaders to pursue standards-based grading and has resulted in the need for teachers' professional development (Battistone, Buckmiller, & Peters, 2016). Federal and state governments task school districts with providing teachers the professional development and support needed to implement teaching and learning practices to achieve student proficiency on the academic standards (Townsley, 2019; Townsley et al., 2019). According to Rude and Miller (2018), "The best investment that can help to assure the retention of highly effective educators in rural communities is the provision of high quality professional development programs" (p. 28).

Rural school districts face a greater challenge with providing professional development for their teachers due to less funding, resulting in reduced educational reform that could benefit learners (Showalter, Hartman, Johnson, & Klein, 2019).

Although more than 90% of teachers participate in professional development, most of the opportunities are traditional one-shot models (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). Historically, teacher professional development included transient introductory experiences to new ideas through courses, workshops, and one-day training activities. Following the initial professional development, teachers received little support to carry over their learning into their classrooms (Greenwood & Abbott, 2001; Hoekstra, Brekelmans, Beijaard, & Korthagen, 2009; Richter, Kunter, Klusmann, Lüdtke, & Baumert, 2011). Although singleton professional development opportunities may have introduced new ideas to teachers, these learning experiences seldomly produced instructional changes or improved student achievement (Desimone, Porter, Garet, Yoon, & Birman, 2002).

Follow-up support for teachers is necessary to facilitate and implement sustainable school reform initiatives. Studies have shown a gap between research findings in teaching and learning practices and in-classroom instructional practices due to teachers' lack of ongoing professional development opportunities within their schools (Greenwood & Abbott, 2001). Research indicated that the one-shot or sit-and-get format of professional development resulted in only a 5% to 15% return on classroom implementation. Job-embedded professional development practices, such as a coaching model, resulted in an 80% to 90% return on teachers' learning transfer (Owen, 2020). Darling-Hammond and Richardson (2009) found that professional development opportunities that last less than 14 hours made no impact on student learning. Studies showed "the largest effects were found for programs offering between 30 and 100 hours

spread out over 6-12 months" (Darling-Hammond & Richardson, 2009, p. 49). In response to this professional development research, over the past 20 years education has begun to transition from passive one-time professional development to active learning models for teachers (Desimone, 2009; Garet, Porter, Desimone, Birman, & Kwang, 2001). As the words attributed to Confucious state, "I hear and I forget; I see and I remember; I do and I understand" (Johnson-Glenberg, 2014, p. 280).

Schools in rural areas receive less funding due to population and enrollment (Showalter, Hartman, Johnson, & Klein, 2019). Rural school employees often take on multiple roles within one position, and small schools may struggle to incorporate teacher support programs due to budget constraints. Even when funding is available, there is generally a lack of research to guide school districts to effectively implement standards-based grading (Battistone, Buckmiller, & Peters, 2019; Pollio & Hochbein, 2015; Townsley, Buckmiller, & Cooper, 2019).

Purpose of the Study

The purpose of this study was to explore rural Minnesota elementary leaders' perceptions of effective professional development practices specific to the implementation of standards-based grading. The study explored rural elementary school leaders' perceptions of useful job-embedded professional development practices for implementing standards-based grading. Leaders were people who supported teachers through the transition to a standards-based grading system, including principals, Curriculum Directors, and superintendents. Findings add to research intended to guide school districts in effective professional development practices specific to implementing standards-based grading that are not reliant on per pupil funding.

Research Questions

This study aimed to answer the question, "What job-embedded professional development practices do rural elementary school leaders find useful for the implementation of standards-based grading?" The researcher addressed the following specific research questions.

Research Question 1. What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **beliefs** regarding a standards-based grading system?

Research Question 2. What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **grading practices** specific to a standards-based grading system?

Research Question 3. What **challenges** of implementing a standards-based grading system do rural elementary school leaders identify as solvable with job-embedded professional development strategies?

Significance of the Study

This study looked specifically at the job-embedded professional development practices that elementary leaders in rural southern Minnesota found useful with their schools' standards-based grading implementation. There is a lack of research to guide school districts in effectively implementing standards-based grading (Battistone, Buckmiller, & Peters, 2019; Pollio & Hochbein, 2015; Townsley, Buckmiller, & Cooper, 2019). Further work is needed for schools to align their curriculum, instruction, and assessment to the academic standards. State funding is present for job-embedded professional development opportunities. Research establishes that the missing piece is understanding how to utilize job-embedded professional development to achieve a successful reform of grading practices aligned to the academic standards (Battistone,

Buckmiller, & Peters, 2019; Townsley, Buckmiller, & Cooper, 2019). This study addresses the gap by analyzing job-embedded professional development opportunities used to implement standards-based grading in three rural Minnesota elementary school districts.

Research significance. More research on the significance between job-embedded professional development practices and standards-based grading is essential for school leaders and teachers (Townsley, Buckmiller, & Cooper, 2019). Research shows there is a lack of knowledge to guide school districts with effective implementation practices for standards-based grading (Battistone, Buckmiller, & Peters, 2019; Cox, 2011; Townsley, Buckmiller, & Cooper, 2019). Studies indicate that a key to a successful and sustainable implementation of standards-based grading requires thorough training for teachers (Brookhart et al., 2016; Erickson, 2011; McMunn, Schenck, & McColskey, 2003; O'Connor & Wormeli, 2011). According to Knight and Cooper (2019), school leaders could support teachers when implementing standards-based grading by considering teachers' hesitations, developing transitional schoolwide support, creating consistent expectations for grading, and providing professional development opportunities that are meaningful for teachers. Teacher professional development is the hinge on the standards-based grading door. Therefore, further research into effective professional development practices in the area of standards-based grading is needed.

Practical significance. This study contributed to the research on educational practices, specifically within professional development. The results added insight for educational leaders to consider when developing professional development plans in district funding, schools' initiatives, teachers' growth in curriculum design and instructional effectiveness, and strategically impacting student learning.

Standards positively impact student learning. Research indicated a correlation between standards-based teaching practices and higher academic achievement (Craig, 2011; Schoen, Cebulla, Finn, & Fi, 2003). Educational leaders change the approach to teaching and learning when schools utilize a standards-based model. Grading reform requires schools to focus on the intertwined alignment between curriculum, instruction, and assessment (Fullan, 2001; Knight & Cooper, 2019). Leaders need to support teachers in the development of curriculum, instruction, and assessment alignment practices.

Professional development impacts teacher effectiveness. Within a standards-based grading system, teachers specifically need a deep understanding of the purpose of assessments for student learning. Teachers typically receive little professional development in assessment techniques (Tognolini & Stanley, 2007). Successful professional development practices positively impact teacher pedagogy and student achievement (Reeves, 2010).

District leaders, such as principals and directors of teaching and learning, may greatly benefit from understanding the job-embedded professional development practices that can lead to a standards-based grading system's successful implementation and sustainability. Without research to guide schools in effective implementation practices, leaders may quickly abandon the transition to a standards-based grading system (O'Connor, 2018; Peters, Kruse, Buckmiller, & Townsley, 2017). Therefore, foundational work is imperative when considering such a grading reform.

"Moving to a guaranteed and viable curriculum involves a complex mix of challenging personal beliefs, rethinking instruction, and learning new ways to assess in a standards-based world" (Westerberg, 2016, p.47). According to Westerberg, time, resources, and expertise are needed to create a pedagogical infrastructure that supports a grading system based on a

guaranteed and viable curriculum. The pedagogical infrastructure needs to be in place before changes in grading practices occur. A critical component is professional development support, which often includes departmental teacher teams, curriculum coordinators, instructional coaches, and assessment specialists (Westerberg, 2016).

Understanding the job-embedded professional development practices that have led to the successful implementation of standards-based grading systems can guide leaders who desire to implement a grading system that fosters continuous improvement for learners. Leaders may further utilize teacher support systems and contribute to grading reform advancements.

Policy significance. Schools' grading systems must serve as a part of a learning cycle that supports student learning rather than just quantifying it (Guskey, 2011). Educational experts could argue that if leaders used ongoing job-embedded professional development within schools, school reform initiatives would be more likely to succeed (Reeves, 2010). If an initiative, such as standards-based grading, were implemented successfully, students would receive a more transparent, aligned, and intentional education (McClure, 2005).

Definitions of Terms

Academic Standards. The content descriptions for students to learn according to state statutes (Minnesota Department of Education, 2020).

Elementary School. Schools that serve students in preschool through sixth grade, which have a classification of "10" (Minnesota Department of Education, 2021).

Every Student Succeeds Act (ESSA). An act of the United States Department of Education that protects all learners, supports innovations and interventions, invests in preschool programming, and ensures statewide assessment data communication to all stakeholders (U.S. Department of Education, n.d.).

Formative Assessment. An assessment to check for understanding during learning, often ungraded, for feedback to drive future instruction (O'Connor, 2013).

Job-Embedded Professional Development Practices. Day-to-day methods for teacher learning designed to facilitate continuous improvement of instructional practices to enhance student achievement (Darling-Hammond & McLaughlin, 1995).

Minnesota Comprehensive Assessment (MCA). A federal and state accountability measure assessment based on the Minnesota academic standards. The MCAs are administered once a year based on students' grade levels (Grades 3-11) and subject areas (reading, math, and science) (Minnesota Department of Education, 2020).

National Assessment of Educational Progress (NAEP). The most extensive congressionally mandated assessment is given to a representative sample of students across the nation to measure student achievement. NAEP is also known as The Nation's Report Card (National Assessment of Educational Progress, 2020).

No Child Left Behind (NCLB). President Bush signed into law the 2002 act of the United States Department of Education to update the Elementary and Secondary Education Act of 1965. This act aimed to increase American education's competitiveness and close the achievement gap between minority students and their peers (Klein, 2015).

Professional Learning Communities (PLCs). A group of educators who work collaboratively in an ongoing process of collective inquiry and action research to improve student learning. PLCs function under the idea that the key to continuous learning is job-embedded learning for educators. (DuFour, DuFour, Eaker, & Many, 2006).

Rural Elementary School. An elementary school located in a non-metro area (Minnesota Rural Education Association, 2021).

Standards. The learning goals that describe what students should know and be able to do (Guskey, 2009; Guskey & Bailey, 2010; McClure, 2005).

Standards-Based Grading. A grading system based on students' progress towards proficiency levels of standards (Schimmer, 2016).

Summative Assessment. An assessment after learning to demonstrate what a student knows and can do, often graded (O'Connor, 2009).

Teaching and Learning. The process of educators assessing students' learning needs, establishing specific learning goals, designing curricular content, developing instructional strategies, implementing learning plans, and evaluating instructional outcomes (What is teaching-learning process, n.d.).

Traditional Grading Practices. A grading system based on traditional grading practices combines various elements, such as homework, quizzes, tests, participation, and extra credit, to determine a letter grade (A, B, C, D, F). With traditional grading practices, teachers average

scores and calculate total percentages to represent student achievement (Hooper & Cowell, 2014).

Organization of the Remainder of the Study

Chapter Two reviews literature related to the impact academic standards have had on the transition from traditional grading practices to standards-based grading. The methodology used, including data collection, data analysis, and the study's theoretical framework, are outlined in Chapter Three. Chapter Four presents the findings of the study. Chapter Five further discusses the results and implications of the study, including suggestions for additional research.

Chapter II: Literature Review

This literature review outlines the philosophy and supporting research on standards-based grading. The review of scholarly literature begins with a discussion on the limitations of traditional grading practices, along with the causes for change. Then an in-depth examination of the purpose and role of academic standards in education is made. An exploration of the connection between government-mandated standards and teaching and learning methods follows. The majority of the literature review analyzes research on the tenets of standards-based grading by comparing and contrasting the standards-based practices to traditional grading practices. Standards-based reporting is then defined, followed by an analysis of research on the effects of grading and how standards-based grading impacts student achievement. Barriers in shifting to standards-based grading are explained. Possible supports to remedy implementation challenges are discussed, including an exploration of current job-embedded professional development methods. The literature review concludes with contextual knowledge on change theory and the connection between implementing standards-based grading through job-embedded professional development to facilitate technical and adaptive change.

Limitations of Traditional Grading Practices

Teachers utilize traditional grading practices in a system that combines scores to average a total number of points, calculate a percentage, and determine a letter grade representing students' performances (Cox, 2011). Inconsistency exists in traditional grading practices, most of which is a compilation of knowledge and effort. Teachers may use scores from homework, quizzes, tests, participation, and extra credit. Grades tend to be less about what students know and more about what individual teachers value (Chen & Bonner, 2017). With such

inconsistency, students and parents have to track the meaning of grades from class to class (Schimmer, 2016).

There is little empirical research providing evidence of effective grading practices of any kind due to the wide range of variability among teachers (Townsley, Buckmiller, & Cooper, 2019). The lack of research combined with the limited education on grading practices within teacher preparation programs and minimal ongoing professional development has led teachers to make their own decisions about how to grade (Feldman, 2019). As a result, traditional report cards are not reliable measures of student achievement and learning progress (McTighe & Thomas, 2003). As inconsistent as grades may be, report cards serve as the primary communication tool of student performance between teachers, students, and parents (Pollio & Hochbein, 2015). Guskey (2011) prompted people to consider the following question, "Is the purpose [of grading] to select talent or develop it?"

Teachers often unintentionally skew students' grades when using traditional grading practices (Feldman, 2019). Yet, stakeholders deem traditional grading practices as acceptable. Examples of traditional grading practices include calculating average scores, entering zeros for missing or incomplete assignments, deducting points for late work, factoring in extra credit, and calculating effort and participation in academic scores (O'Connor, 2009). These grading methods can inflate and deflate grades in ways that create a false representation of what students know. Grading inconsistencies can cause students to pass classes because of *good enough* grades even though students do not understand the concepts. This difficulty shows itself when the knowledge gap becomes too large for students to pass solely on good behavior and work completion. On the contrary, traditional grading practices can also cause students to fail classes

even when the concepts are understood. Failure could be due to circumstances such as the need for a different completion timeline or a low score that pulls down the overall course grade.

In an experiment conducted by Reeves (2008), educators across the country were given a preset list of scores and asked to determine a final grade based on the scores. The experiment results included a range of grades from A to F. Westerberg (2016) explained that depending on the grading scale and methods selected by individual teachers, students could earn any grade between an A and an F for the same performance. "The difference between failure and the honor roll often depends on the grading policies of the teacher" (Reeves, 2008, p. 85). Reeves argued that for schools to address the failure rate, change needs to happen by creating a better grading system. Pollio and Hochbein (2015) also supported the need for change. They explained that educators must assess students' understanding of academic standards to consider grades as accurate student achievement measures.

Teachers' grading practices are directly correlated to instructional practices and assessments (Battistone, Buckmiller, & Peters, 2019; Brookhart et al., 2016). Historically, teachers assessed students' knowledge on the memorization of facts. Teachers appropriately measured and provided feedback on students' understanding of low-level skills (Townsley & Buckmiller, 2016). Throughout a predetermined period of time, teachers calculated and averaged scores to determine a single grade to represent students' knowledge for each subject area (Hooper & Cowell, 2014). Today's academic standards contain higher-level skills which require an update in teaching and learning practices, including alignment to content and grading. Many experts agree that educators should update today's grading practices to communicate more accurately WHAT students are learning and HOW they are learning (Guskey, 2014; Marzano, 2000; O'Connor, 2009; Reeves, 2008, Wormeli, 2006). "Even if grades remain

multidimensional measures of success in school[s], the dimensions on which grades are based should be defensible goals of schooling and should match students' opportunities to learn" (Brookhart et al., 2016, p. 836).

There is no significant research to determine whether grades can effectively measure students' academic achievement in relation to predetermined learning criteria (Brookhart, Guskey, Bowers, Mcmillan, Smith, Smith, & Welsh, 2016; Franklin, 2016; Knight & Cooper, 2019; Townsley, & Varga, 2018). Even with a lack of research, many schools are making the transition to standards-based grading. Hooper and Cowell (2014) found that "standards-based grading, as a philosophy, offers an improvement in the accuracy and relevancy of grade reporting. Grades are neither inflated nor deflated by mistakes on homework, completion grades, attendance, or behavior. Grades reflect mastery of standards" (pp. 74-75).

Academic State Standards

The concept of academic standards is not new in education. The standards movement began in the 1960s with basic content standards that were appropriate for what students should know for most jobs at the time (McClure, 2005). But as jobs changed, employers began seeking employees who could solve complex problems and navigate technology (McClure, 2005). Standards in education began to encompass what students should know and what they should be able to do (Guskey, 2009; Guskey & Bailey, 2010; McClure, 2005). Reeves (2010) stated that embracing academic standards "is a seismic shift from the presumption of the past that the primary function of schools was to compare students to one another rather than to an objective standard" (p. 57).

The development of more complex academic standards began in response to President Reagan's U.S. National Commission on Excellence in Education's 1983 report, *A Nation at*

Risk: The Imperative for Educational Reform. This report advised America's schools to increase the rigor of academic standards, implement standardized assessments, and hold both teachers and learners accountable to those standards (National Commission on Excellence in Education, 1983).

In 1989, President George H.W. Bush instituted the National Summit on Education, which spawned the National Goals Panel. This government entity supported national goals in education to be met by the year 2000. Through The Goals 2000: Educate America Act of 1993, federal grants were given to states to develop academic standards. This act led educational reform law to require standards and standardized testing (McClure, 2005). As of 2021, 41 states, four territories, and the District of Columbia had adopted the Common Core State Standards (Common Core State Standards Initiative, n.d.). The remaining nine states and one territory utilized state-adopted academic standards.

As of 2020, the Minnesota Department of Education (MDE) defined academic standards as the learning expectations for public school students in kindergarten through twelfth grade. Standards were identified as knowledge and skills the government expected learners to achieve for each content area by grade level (Minnesota Department of Education, 2020). The state required school districts to align curriculum and instruction to the state standards to provide all learners with a high-quality education. If subjects did not have state standards to follow for guidance, MDE required districts to develop local standards.

According to the ESSA (2020), all students must demonstrate proficiency in the academic standards, and schools cannot retain students if they fail to demonstrate an understanding of the standards. Even though this requirement is present, only 42.55% of elementary students in Grades three through six were considered on-track in reading, according

to the 2018-2019 MCA results (Minnesota Department of Education, 2019). Likewise, only 38.62% of elementary students in grades three through six were considered on-track in math, according to the 2018-2019 MCA results (Minnesota Department of Education, 2019). A noticeable gap exists between the federal requirement of teaching the academic standards and the standardized measurement results.

Connecting academic standards to teaching and learning using a curriculum design framework. The federal and state governments placed responsibility onto school districts to ensure educators teach the academic standards to all students (Pollio & Hochbein, 2015). With state academic standards in place, local districts decided how to design curriculum, instruction, and assessments for learning opportunities that allowed students to become proficient in the standards (Minnesota Department of Education, 2020). Schools strive to develop the whole learner by providing an education that prepares students to be life, college, and career ready (U.S. Department of Education, 2017). The purpose of academic standards is to serve as a map which creates consistency in learning expectations and continuity in learning progressions from grade to grade (Minnesota Department of Education, 2020). Academic standards contribute to developing a guaranteed and viable curriculum and equitable education for all public school students (Minnesota Department of Education, 2002; Reeves, 2010).

According to O'Connor (2009), "standards represent the goals of teaching and learning" (p. 1). Teaching and learning can be defined as the process of educators assessing students' learning needs, establishing specific learning goals, designing curricular content, developing instructional strategies, implementing learning plans, and evaluating instructional outcomes (What is teaching-learning process, n.d.). Academic standards articulate the government's student achievement expectations for each content area by grade level. Standards explain

WHAT must be learned by students (Minnesota Department of Education, 2020). Educators are guided by standards in making decisions about teaching and learning practices, which are HOW the standards are delivered through instruction and learned by students (Minnesota Department of Education, 2020).

According to MDE (2020), "If standards are the learning destination, then districts, schools, and educators determine the way students get there through curriculum and instruction" (p. 3). Schools commonly use curriculum design frameworks, such as Understanding by Design (UbD), to align curriculum and instruction to the standards. McTighe and Willis (2019) defined the Understanding by Design framework, also referred to as Backward Design, as a curriculum planning process that guides educators to design curriculum and instructional units with the end learning goals in mind. Learning goals are clear to teachers in their design, shared with students throughout learning, and drive feedback through descriptive success criteria. Educators develop transferable learning experiences that allow students to understand concepts and transfer skills applicable to future learning experiences (McTighe & Willis, 2019). Intentional planning avoids the "twin sins" of teaching, unaligned activity-based instruction and content coverage without student understanding (Wiggins & McTighe, 2011). McTighe and Willis (2019) described the following as tenets of the UbD Framework:

- Purposeful planning enhances learning.
- The framework helps create in-depth development of understanding and learning transfer.
- Authentic performance reveals student understanding.
- Teachers plan backward from long-term goals using a three-stage curriculum design process.
- Teachers serve as coaches of understanding to ensure the transfer of learning.

- Design standards guide regular curriculum reviews to enhance the quality of curriculum and instruction.
- Sharing of curriculum design plans is an effective and efficient practice for educators.

Academic standards do not require specific curricula. While school leaders often adopt specific curricular programs, these textbooks and tools serve as resources to achieve the standards' end goals. Local educators and educational leaders make decisions in curriculum adoptions to utilize resources that support the development of learning plans for students to become proficient in the standards (Minnesota Department of Education, 2020).The curriculum design framework ensures teachers use textbooks as a resource rather than the curriculum itself and that instructional choices align with the standards and students' needs.

"Assessment is the link between teaching and learning" (Fisher, Frey, Bustamante, & Hattie, 2021, p.1). The purpose of assessments is not only to determine a grade but to determine the next steps in learning (O'Connor, 2009; Tomlinson & Moon, 2013). As educators design curriculum and instruction, they purposefully construct standards-based goals, assessments, and instructional activities for student success. A meaningful educational experience's mission is to seamlessly integrate assessment into the curriculum and instruction plan to serve as an intricate part of the learning process (Licklider, 1997).

The relationship between assessments, personalized instruction, intrinsic motivation, and learning is visible in team sports, club activities, and interest courses, where grades are not used (Licklider, 1997; O'Connor, 2009). The focus is on feedback through the teaching and learning process. The UbD framework emphasizes authentic assessments aligned to established goals to set the stage for feedback to occur. Summative assessments are aligned to the standards and given at a particular time in instruction to gather a snapshot of students' learning (O'Connor,

2009; Stiggins & Chappius, 2005). Formative assessments also align to the standards. Educators give formative assessments throughout instructional units for learning (O'Connor, 2009; Stiggins & Chappuis, 2005). Teachers and students can monitor and adjust during learning rather than only at the end, increasing both teacher and student accountability. When a curriculum design framework like UbD is used by educators throughout a school system, intentional alignment to standards can increase curriculum and instruction effectiveness and consistency (Minnesota Department of Education, 2020).

Tenets of Standards-Based Grading: Compare and Contrast to Traditional Grading

Federal and state governments require schools to follow specific academic standards that describe what students should know and be able to do at each grade level for every subject (Guskey, 2009; Guskey & Bailey, 2010; McClure, 2005, U.S. Department of Education, 2017). With this expectation, many schools align their reporting systems to the standards for clarity on students' knowledge levels about preset criteria goals. When grades are based on students' proficiency levels, it is known as standards-based grading (Schimmer, 2016).

Grading practices in a standards-based model include reporting academic and behavioral achievements separately, aligning assessment and grading to academic standards, reporting on the most recent evidence of learning, and allowing reassessments of formative and summative work (Swan, Guskey, & Jung, 2014). A standards-based grading model includes learning-focused grades, timely-actionable feedback, and ongoing growth opportunities (Miller, 2013). This model can result in teaching and learning practices that are clear, focused, purposeful, and support the development of a growth-mindset and learner agency (Franklin, 2016; Knight & Cooper, 2019; Schimmer, 2016). As stated by Brookhart (2011), "grades are not about what students *earn*; they are about what students *learn*" (p. 12). The ultimate goal of standards-based

grading is to create a culture of students who can self-evaluate (Peters, Kruse, Buckmiller, & Townsley, 2017).

Table 1.

Traditional Grading Practices Versus Standards-Based Grading Practices

	Traditional Grading Practices	**Standards-Based Grading Practices**	**Practices Common to Traditional Grading and Standards-Based Grading**
Grade Criteria	Based on assessment types (tests, quizzes, homework)	Based on learning goals and academic standards	Grades can be reported using numbers or letters
Reporting Student Learning	Based on calculated percentages and letter grades	Based on proficiency levels of standards	Used to communicate student learning
Approach to Behaviors	Often includes zeros, late work deductions, extra credit, and work ethic within academic grades	Behaviors reported separately from academic achievement	Can communicate student performance for social emotional learning and academics
Individual vs. Group Work	Often includes individual achievement and group scores	Only measures individual achievement	Can be used for learners at various grade levels
Assessments	Records all assessment types in the grade book	Records only assessment types measuring achievement in the grade book	Grades can be supported by technology and communicated through learning management systems
Evidence	Averaging scores determine grades	Allows reassessments and bases grades on the most recent evidence	Uses multiple pieces of evidence
Performance Communication	Single grade per course	Multiple grades per course	Communicates performance to students, parents, and teachers

Adapted from "Standards-Based Grading System Vs. Traditional Grading System.," L. Davis, 2020.

Assessment and reassessment. Well-constructed assessments are vital to the learning process within a standards-based grading system. Through his research, Reeves (2010) determined, "assessment is most effective as a preventive rather than a remediating or punitive strategy" (p. 58). The purpose of assessment is to provide feedback on students' understanding of skills and the effectiveness of instructional strategies (Ainsworth & Viegut, 2006).

Assessment serves as a measure for learning, as learning, or of learning (O'Connor, 2009). Assessments for learning are formative strategies that provide students with feedback about their understanding and give teachers feedback about their instruction during learning to continue learning (DuFour, DuFour, Eaker, & Many, 2006; O'Connor, 2009). Research shows assessments for learning have a positively dramatic effect on student achievement (Ainsworth & Viegut, 2006; DuFour, DuFour, & Eaker, 2008; Stiggins, Arter, Chappuis, & Chappuis, 2004; Wiggins, 1998). Assessments as learning are formative measures that provide students with the opportunity to self-reflect, self-evaluate, and set goals (O'Connor, 2009). Educators give formative assessments throughout units of study to offer proactive, ongoing feedback. Formative work is considered practice and not included in the calculated grade.

Assessments of learning are summative methods used to measure whether or not students have met curricular goals. Work demonstrated through summative assessments is the primary evidence used to determine standards-based grades. Educators give summative assessments to evaluate students' understanding of learning concepts at the end of a learning period. Summative assessments are a reactive approach that provides evidence of proficiency levels (DuFour, DuFour, Eaker, & Many, 2006).

In a standards-based grading system, students are allowed to reassess. The opportunity to retake a summative assessment enables students to continue learning to achieve mastery, or

proficiency, in the required skills (Franklin, 2016; Guskey & Bailey, 2010; Schimmer, 2016; Westerberg, 2016). When students reassess, teachers replace the old scores with new scores to report the most recent evidence of students' growth and progress towards proficiency (Guskey, 2011; Wormelli, 2011).

Standards-based grading is a mindset shift in the purpose of assessments and grading. The focus is on the learning process rather than products (Schimmer, 2016), creating a transformational system rather than a transactional system. The key to educational reform is for educators to build capacity concerning assessments (Cizek, Fitzgerald, & Rachor, 1996). When educators report student progress with standards-based report cards, teachers connect learning materials, including assessments, to the standards and provide learners with consistent and purposeful feedback.

Most recent scores. In a traditional grading system, scores are ambiguously averaged together (Hooper & Cowell, 2014; Westerberg, 2016). When students reassess in a standards-based grading system, the most recent score is reported (O'Connor, 2009; Schimmer, 2016; Westerberg, 2016). Researchers found that students agree if a previous assessment does not reflect their current knowledge, then the most recent score should be reported. When the most recent score was not reported students felt their learning was misrepresented because scores were a combination of past performance and current understanding rather than a representation of what they presently knew (Guskey, 2001; Peters, Kruse, Buckmiller, & Townsley, 2017).

Beyond the K-12 educational setting, reassessment and the use of the most recent assessment performance is common practice. People can reassess multiple times and receive full credit for drivers' licenses, bar exams, CPA exams, auto mechanic certifications, teaching licensure examinations, and even within many college courses (O'Connor, 2009; Westerberg,

2016; Wormeli, 2011). Schimmer (2016) recommended establishing clear expectations to prevent students from taking advantage of the privilege to reassess by having students commit to social contracts that agree to authentic effort and targeted learning practice between reassessment opportunities. To prepare for life, career, and college, students benefit from the opportunity to self-reflect on areas of growth and apply new learning to reassessment opportunities to demonstrate current understanding (Westerberg, 2016).

Zeros, missing assignments, and late work. The use of zeros and deducting points from late work can significantly skew the grade book and misrepresent students' knowledge. On a traditional 100-point grading scale, there is a 10-point difference between an A, B, C, and D. The range of an F, however, is zero to 59 points. In the case of a zero given for an F, a 60 point spread exists versus the 10 point difference between the other letter grades. When teachers enter zeros into the grade book, they have significantly more weight than completed assignments (Westerberg, 2016). Students must then climb out of a 60 point deficit for a single missing task. This point discrepancy can pull down a grade for the remainder of a term causing students to give up once they realize they will not accumulate enough points to achieve the desired grade (Westerberg, 2016). Experts suggest teachers instead enter a 50 in the grade book when averaging scores (O'Connor, 2009; Reeves, 2004; Wormeli, 2006) or use an alternate grading scale. Although educators may argue that entering 50 points for work undone is awarding free points, Reeves (2004) attested that an F is an F whether at zero percent or 50%. When educators use zeros in the grade book, the scores focus more on work ethic than academic knowledge (Westerberg, 2016). Refraining from using zeros allows students to recover from an F and have final grades better represent their knowledge and skill set (Franklin, 2016).

Missing assignments are often recorded with zero in a traditional grading system. O'Connor (2009) recommended entering an "M" into the grade book for missing tasks as a flag to stakeholders that students' work has not yet been completed. The flagged missing assignment is not calculated into the grade. The practice of representing missing work with an "M" rather than zero allows the students' grades to express what students know and can do rather than what they have completed and handed in.

It is a common practice for educators to deduct points for late work within a traditional grading system. Deducting points for work not handed in on time serves as a punitive measure. However, the calculated grade on the assignment then becomes an inaccurate communication of student knowledge.

When educators incorporate zeros and deducted late work, they often unintentionally misrepresent grades, reduce validity, and erode communication accuracy on student proficiency (Westerberg, 2016). A standards-based grading system is anchored in reporting accurate information on students' academic performance. Therefore, a different perspective on zeros, missing work, and late work is applied.

Extra credit. A common traditional grading practice is offering extra credit. Westerberg (2016) made the case that extra credit is often non-academic efforts, such as students donating soup cans or boxes of tissues or attending a school's sporting event. When extra credit is academically related, it directly benefits the students who have higher grades. Rather than offering extra credit, educators could utilize reassessment practices and post the most recent score. Recording an updated student assessment would be more beneficial for student learning.

Reporting academics and behaviors separately. Experts concluded that when educators incorporated behaviors into grades, students were demotivated rather than motivated

(Guskey, 2011; Stiggins, 2004; Tomlinson, 2001; Wormeli, 2011). In a standards-based system, non-academic components, such as homework, participation, and extra credit, are reported separately from academic knowledge and skills, differing from traditional reporting methods (Iamarino, 2014). Teachers report behaviors and academic grades independently to precisely communicate academic proficiencies (Guskey, 1994, 2011; O'Connor & Wormeli, 2011). In a standards-based grading model, behaviors are either displayed through a separate grade or documented through behavior rubrics. When academic and non-academic components, such as behaviors, are reported separately, both learning and behavior communications are clarified for all stakeholders (Franklin, 2016).

The standards-based report card communicates what a student knows and can do, rather than comparing them to other learners (Guskey, 2011; O'Connor, 2009). Pollio and Hochbein (2015) proposed that standards-based grading practices provide a more valid approach to grading. Educators provide more accurate pictures of students' learning with standards-based grading in comparison to traditional grading methods through the use of aligned assessments, reassessments, appropriate reporting of missing and late work, elimination of extra credit, and separate reporting on behaviors (Marzano & Heflebower, 2011; Tomlinson, 2001; Wormeli, 2011). Buckmiller, Peters, and Kruse (2017) learned that most secondary students who were a part of a transition to standards-based grading found it more advantageous, justifiable, and representative of their understanding.

Standards-based grading scale. In a standards-based system, teachers use a unique grading scale to communicate students' proficiencies in a meaningful manner. Rather than grading as a numerical calculation, stakeholders view the grading scale as a means to share evidence of learning (O'Connor, 2009). Standards-based grading scales often use ratings such as

1, 2, 3, 4 or beginning, approaching, meeting, and exceeding. Although the numbers or words within the scale may vary, the approach is consistent. The number or words align to specific success criteria to communicate proficiency levels.

Table 2.

Sample Standards-Based Grading Scale

	Rating				
	NY	**1**	**2**	**3**	**4**
Performance Level	Not Yet	Beginning	Approaching	Meeting	Exceeding
Success Criteria	I can not yet provide evidence to demonstrate the knowledge and skills for the standard.	I can start to grasp the knowledge and skills for the standard, practicing with frequent guidance.	I can demonstrate the basic knowledge and skills for the standard, continuing to practice with occasional guidance.	I can demonstrate the knowledge and skills for the standard on my own, using appropriate strategies.	I can explain the standard and teach others, making insightful real-world connections to other ideas and concepts.

Adapted from "JWP Public Schools District-Wide General Rubric." by JWP Public Schools, 2018.

Table 3.

Sample Standards-Based Report Card Rubric

4th Grade Science Report Card Rubric	Assessment	**Beginning 1** *I can start to grasp the knowledge and skills for the standard, practicing with frequent guidance.*	**Approaching 2** *I can demonstrate the basic knowledge and skills for the standard, continuing to practice with occasional guidance.*	**Meeting 3** *I can demonstrate the knowledge and skills for the standard on my own, using appropriate strategies.*	**Exceeding 4** *I can explain the standard and teach others, making insightful real-world connections to other ideas and concepts.*
The Nature of Science & Engineering					
4.1.2.1.1 Design Process	Assessed Quarter 1 Chapter 2	I can ask questions about the world around me.	I can ask questions to define an engineering problem with occasional guidance.	I can ask questions to define an engineering problem.	I can ask questions to define an engineering problem to begin to develop a solution.
4.1.2.2.1 4.1.2.2.2 4.1.2.2.3 The Practice of Engineering	Assessed Quarter 1	I can tell how a design solution solves a problem with help.	I can identify the steps of the design process and tell how a design solution solves a problem.	I can apply the steps of the design process to generate ideas to test and evaluate a solution.	I can apply the steps of the design process to generate ideas to test and evaluate a solution and communicate the results effectively.
4.1.3.3.1 Nature of Science	Assessed Quarter 1 Chapter 1 Inventors/ Inventions	I can investigate (research) technology and inventions.	I can investigate and describe what I read about technology.	I can investigate and describe how technology and inventions change to meet peoples' needs and wants.	I can compare different ways that inventions change to meet peoples' needs and wants.
Physical Science					
4.2.1.1.1 4.2.1.2.1 4.2.1.2.2 Matter	Assessed Quarter 2 Chapter 7	I can observe the properties of the three states of matter.	I can observe and describe properties of the three states of matter.	I can observe and describe properties of the three states of matter: solid, liquid, and gas and give examples of each.	I can explain and show different properties of the three states of matter.

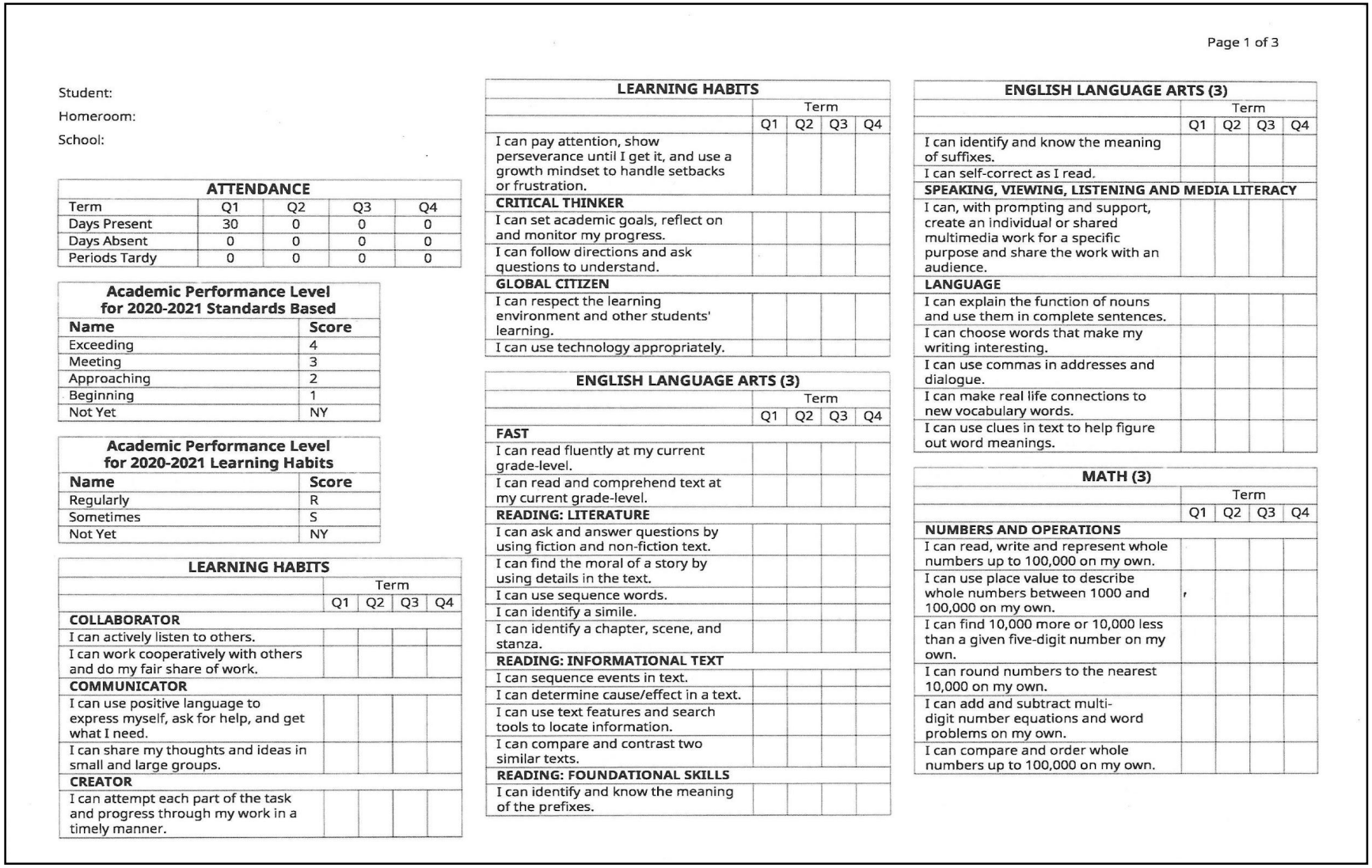
4.2.3.1.1 4.2.3.1.2 4.2.3.1.3 Energy and Heat	Assessed Quarter 3 Chapter 8	I can identify energy in different forms.	I can describe energy in different forms.	I can describe and compare energy in different forms, including heat and electromagnetism.	I can describe and compare energy in different forms and make real-world connections.
4.2.3.2.1 4.2.3.2.2 4.2.3.2.3 Electricity and Magnetism	Assessed Quarter 3 Chapter 9	I can identify ways to generate energy.	I can recognize energy being transformed or transferred from one location to another.	I can demonstrate energy being transformed or transferred from one location to another.	I can demonstrate and explain how energy is transformed or transferred from one location to another.
Earth Science					
4.3.1.3.1 4.3.1.3.2 Minerals and Rocks	Assessed Quarter 4 Chapter 5	I can state that rocks are made up of minerals.	I can explain the physical properties of rocks and minerals.	I can identify different types of rocks and minerals by their characteristics and physical properties.	I can sort and classify rocks and minerals by what I know about their physical properties.
4.3.2.3.1 Water Cycle	Assessed Quarter 4 Chapter 5	I can identify where water is on Earth.	I can identify how water moves through the water cycle.	I can identify the steps of the water cycle and describe how water changes from one state to another.	I can explain how water moves through the Earth system and describe why it changes.
4.3.4.1.1 Making connections with Real Life	Assessed Quarter 4	I can identify ways that humans interact with Earth systems.	I can describe how humans interact with Earth systems.	I can recognize how humans interact with and influence Earth systems.	I can make a connection to my world of how I interact with and influence Earth systems.
Life Science					
4.4.4.2.1 4.4.4.2.2 Microorganisms	Assessed Quarter 2	I can identify what a microorganism is.	I understand that microorganisms can affect a person's body.	I can recognize how microorganisms affect a person's body and describe internal defense systems and external prevention strategies.	I can explain a personal connection of how microorganisms affected a person's body.

From "4th Grade Science Report Card Rubric." By JWP Public Schools, Miller, A. & Roesler, C., 2020.

Standards-based report cards. Stakeholders expect educators to contribute to the growth and development of the whole child, which extends beyond academic content (Labaree, 2012). Standards-based report cards aim to communicate student achievement concerning academic standards and separately report on factors such as attendance and social and emotional learning elements. Reporting separately on these components increases communication, transparency, and accountability for all stakeholders (Franklin, 2016). An advantage of a standards-based grading report card is it communicates real details rather than combining numerous factors through symbolic information (O'Connor, 2009).

Figure 1.

Sample Standards-Based Report Card



Page 1 of 3

Student:

Homeroom:

School:

ATTENDANCE				
Term	Q1	Q2	Q3	Q4
Days Present	30	0	0	0
Days Absent	0	0	0	0
Periods Tardy	0	0	0	0

Academic Performance Level for 2020-2021 Standards Based	
Name	**Score**
Exceeding	4
Meeting	3
Approaching	2
Beginning	1
Not Yet	NY

Academic Performance Level for 2020-2021 Learning Habits	
Name	**Score**
Regularly	R
Sometimes	S
Not Yet	NY

LEARNING HABITS	Term			
	Q1	Q2	Q3	Q4
COLLABORATOR				
I can actively listen to others.				
I can work cooperatively with others and do my fair share of work.				
COMMUNICATOR				
I can use positive language to express myself, ask for help, and get what I need.				
I can share my thoughts and ideas in small and large groups.				
CREATOR				
I can attempt each part of the task and progress through my work in a timely manner.				

LEARNING HABITS	Term			
	Q1	Q2	Q3	Q4
I can pay attention, show perseverance until I get it, and use a growth mindset to handle setbacks or frustration.				
CRITICAL THINKER				
I can set academic goals, reflect on and monitor my progress.				
I can follow directions and ask questions to understand.				
GLOBAL CITIZEN				
I can respect the learning environment and other students' learning.				
I can use technology appropriately.				

ENGLISH LANGUAGE ARTS (3)	Term			
	Q1	Q2	Q3	Q4
FAST				
I can read fluently at my current grade-level.				
I can read and comprehend text at my current grade-level.				
READING: LITERATURE				
I can ask and answer questions by using fiction and non-fiction text.				
I can find the moral of a story by using details in the text.				
I can use sequence words.				
I can identify a simile.				
I can identify a chapter, scene, and stanza.				
READING: INFORMATIONAL TEXT				
I can sequence events in text.				
I can determine cause/effect in a text.				
I can use text features and search tools to locate information.				
I can compare and contrast two similar texts.				
READING: FOUNDATIONAL SKILLS				
I can identify and know the meaning of the prefixes.				

ENGLISH LANGUAGE ARTS (3)	Term			
	Q1	Q2	Q3	Q4
I can identify and know the meaning of suffixes.				
I can self-correct as I read.				
SPEAKING, VIEWING, LISTENING AND MEDIA LITERACY				
I can, with prompting and support, create an individual or shared multimedia work for a specific purpose and share the work with an audience.				
LANGUAGE				
I can explain the function of nouns and use them in complete sentences.				
I can choose words that make my writing interesting.				
I can use commas in addresses and dialogue.				
I can make real life connections to new vocabulary words.				
I can use clues in text to help figure out word meanings.				

MATH (3)	Term			
	Q1	Q2	Q3	Q4
NUMBERS AND OPERATIONS				
I can read, write and represent whole numbers up to 100,000 on my own.				
I can use place value to describe whole numbers between 1000 and 100,000 on my own.				
I can find 10,000 more or 10,000 less than a given five-digit number on my own.				
I can round numbers to the nearest 10,000 on my own.				
I can add and subtract multi-digit number equations and word problems on my own.				
I can compare and order whole numbers up to 100,000 on my own.				

MATH (3)	Term			
	Q1	Q2	Q3	Q4
I can recognize the relationship between multiplication and division and represent multiplication and division facts in multiple ways on my own.				
ALGEBRA				
I can interpret number sentences using multiplication and division of basic facts and unknowns on my own.				
GEOMETRY & MEASUREMENT				
I can use half units when measuring distances on my own.				
I can tell time and find elapsed time to the nearest minute, using digital and analog clocks on my own.				
I can identify relationships among units of time on my own.				
I can make change up to one dollar in several different ways using as few coins as possible on my own.				
I can use an analog thermometer to determine temperature to the nearest degree in Fahrenheit and Celsius on my own.				
I can sketch polygons with a given number of sides or vertices (corners), such as pentagons, hexagons and octagons on my own.				

SCIENCE (3)	Term			
	Q1	Q2	Q3	Q4
THE NATURE OF SCIENCE AND ENGINEERING				
I can provide evidence to support claims on my own.				
I can generate questions from scientific observations or investigations on my own.				
I can recognize that repeated scientific investigation will have similar results on my own.				
I can maintain records and explain my observations on my own.				

SCIENCE (3)	Term			
	Q1	Q2	Q3	Q4
PHYSICAL SCIENCE				
I can explain how sound works on my own.				
I can explain how shadows form and can change on my own.				
I can tell how light travels and is seen on my own.				
EARTH SCIENCE				
I can observe and describe seasonal changes on my own.				
I can recognize the pattern of moon shapes on my own.				
I can recognize that the Earth is one of several planets that orbit the sun, and that the moon orbits the Earth on my own.				
LIFE SCIENCE				
I can identify the characteristics of plants and animals on my own.				
I can compare adult plants and animals to their offspring on my own.				

SOCIAL STUDIES (3)	Term			
	Q1	Q2	Q3	Q4
CITIZENSHIP AND GOVERNMENT				
I can explain the importance of voting on my own.				
I can explain the importance of services provided by the government on my own.				
GEOGRAPHY				
I can use maps to identify landforms and locations around the world on my own.				
HISTORY				
I can identify the terms decade, century, and millennium on my own.				
I can create timelines in three different time scales - decade, century and millennium on my own.				
I can use historical records to answer basic questions on my own.				
I can tell about how inventions of the past changed our lives on my own.				

SOCIAL STUDIES (3)	Term			
	Q1	Q2	Q3	Q4
I can identify people or groups who have impacted history on my own.				
I can identify how the environment influenced the settlement of ancient people on my own.				
I can identify communication used by people of the past on my own.				
I can compare and contrast the daily life of people from the past on my own.				

PHYSICAL EDUCATION (3)	Term			
	Q1	Q2	Q3	Q4
I can demonstrate competency in motor skills and movement patterns, such as jumping and landing and transitioning from one skill to another.				
I can actively participate, move safely, and follow rules with minimal reminders. I can recognize the importance of rules and etiquette.				
I can recognize and state how the body and mind respond during and after physical activity.				
I can apply knowledge and skills to achieve and maintain a health enhancing level of fitness. (cardio, muscular, foods and strategies, etc.)				

MUSIC (3)	Term			
	Q1	Q2	Q3	Q4
CREATE				
I can create or improvise melodic patterns, on my own, containing the following pitches: DO, RE, MI, SOL & LA.				
I can organize chosen musical patterns into phrases, on my own, using Whole Note, Whole Rest, 4-Barred 16th Notes.				
I can arrange rhythmic or melodic patterns on my own, using feedback from others.				

MUSIC (3)	Term			
	Q1	Q2	Q3	Q4
PERFORM				
I can refine vocal and instrumental skills to perform a variety of music by consistently participating appropriately during rehearsals.				
I can perform music for a specific purpose, using technical accuracy, expression and interpretation most of the time.				
RESPOND				
I can identify and describe elements that make contrasting musical selections different from each other, on my own.				
I can explain personal preference of music selections by identifying 2 or more music elements that generate personal interest.				
CONNECT				
I can describe a memory, feeling or story associated with music that is listened to or performed on my own.				
I can describe cultural uses of music from a time period AND a place.				

STEAM (3)	Term			
	Q1	Q2	Q3	Q4
CRITICAL THINKER				
I can break projects into steps to help me problem-solve on my own.				
I can use editing tools in different formats.				
CREATOR				
I can use a variety of digital resources to create connections to learning goals on my own.				
I can consider composition of my original work on my own.				
COLLABORATOR				
I can work with a group and contribute by doing my part.				
I can provide feedback to others based on preset criteria on my own.				

STEAM (3)	Term			
	Q1	Q2	Q3	Q4
COMMUNICATOR				
I can create original work to tell a personal story on my own.				
I can use artwork to compare feelings and moods on my own.				
GLOBAL CITIZEN				
I can create a digital identity to keep myself safe on my own.				
I can explain how media artworks reflect real-world situations and culture on my own.				

4 - Exceeding
3 - Meeting
2 - Approaching
1 - Beginning
NY - Not Yet

From "3rd Grade Report Card." By JWP Public Schools, Anderson, B., Berding, M., Ling, B., & Roesler, C., 2020.

The Effects of Grading on Students

The effects of grading on students are the impetus for standards-based grading in educational reform. Stakeholders commonly agree that grades should represent academic success. Grades need to communicate students' knowledge and skill sets accurately. The purpose of grades should be more than a means of communication on past performances. Feedback on learning progress and academic achievement is the most prevalent purpose for grading (Marzano, 2000; Reeves, 2010, 2013). Grades impact students' self-efficacy and responses to future learning. O'Connor (2011) stated that students are the central recipients of assessment and grading feedback. Schimmer (2016) further explained that how teachers grade has either a positive or negative effect on students since it is a substantial portion of the educational experience. Therefore, educators must examine how grading affects students' learning and self-efficacy when selecting grading practices. Then educators and leaders can make grading practices decisions from knowledge rather than perception (O'Connor, 2009).

Grades as a motivational tool. Historically, educators have perceived grades as a motivational system for students (Marzano, 2000). Researchers agree that motivation as the purpose of grades is concerning (Guskey, 2011; Stiggins, 2004, 2005; Winger, 2005; Wormeli, 2011). When point accumulation is the focus of grading, it creates a culture of compliance and an attitude of "if the task is not graded, it is not worth doing" rather than a culture of learning that fosters developing intrinsic motivation. Grades must reflect proficiency, not reward compliance (Schimmer, 2016).

The lack of consistent and specific feedback within a traditional grading system places students on one of two academic self-efficacy cycles, feeling successful or like a failure. Students who do well and receive positive grades view assessment and grading as evidence of

their learning and success. These students tend to take risks and attempt challenges as opportunities for learning, creating a positive cycle of success (Stiggins, 2007). A study by Shim and Ryan (2005) with middle school students supported the idea of a positive cycle. Students indicated that higher grades corresponded to higher self-efficacy and intrinsic value.

Students who do not do well in school and receive low grades view assessment and grading as evidence of their failures (Stiggings, 2007). The below-expectation grades create no motivational value (O'Connor, 2009). Rather than taking on educational risks and challenges, students experience feelings of despair and pursue easy options for assignment completion, creating a negative cycle of failure (Stiggins, 2007). A cycle of high effort and low grades can create frustration expressed through negative behaviors (Guskey, 2006, 2011; Wormeli, 2006). According to Craig (2011), "There cannot be a more profound impact on the self-belief of a student than to receive a grade report that depicts them as a failure" (p. 24).

Intrinsic versus extrinsic motivation. Huisman (2016) classified two categories of motivation, intrinsic and extrinsic. Intrinsic motivation is performing an activity for its innate satisfaction. It is behavior driven by inherent interest (Cherry, 2020). Extrinsic motivation is performing an activity based on the outcome. It is reward-driven or the avoidance of punishment (Cherry, 2020).

When educators use grades as a motivational tool, it is problematic for students because it causes stakeholders to emphasize grades over the learning process (O'Connor, 2009). Kohn (1993) believed teachers should not use grades because they are extrinsic and deplete intrinsic motivation. Hattie and Timperley (2007) found that extrinsic strategies, such as praise, punishment, and rewards, were the least effective means for providing feedback to students. Their research indicated a negative correlation between extrinsic rewards and students' task

completion, further noting that the extrinsic rewards substantially diminished intrinsic motivation. Several studies found that students' interests in activities declined when teachers converted the task from voluntary to grade-based (Lepper, Greene, & Nisbett, 1973; Maehr & Stallings, 1972; Chambers & Condry, 1978). When researchers switched to a graded activity, the likelihood of a student returning to that activity was reduced. Students sought out answers rather than understandings and frequently chose the easiest path to earn the extrinsic reward. Some students shut down and did not perform the tasks in fear of punishment (Hattie & Timperley, 2007). Greenstein (2015) found that extrinsic rewards were fruitless and negatively impacted intrinsic motivation due to the transfer of responsibility to self-regulate and to self-motivate. Although students may be motivated to avoid low grades and the attached consequences (Guskey & Bailey, 2001), no evidence supports low grades as motivators. In contrast, when students worked on activities out of interest, they were intrinsically motivated. Students sought out deeper understandings and persevered through difficult tasks (Hattie & Timperley, 2007).

Educators are presented with the challenge of cultivating intrinsic motivation while also maintaining grading and reporting expectations. To connect intrinsic motivation to grading practices, students must have ongoing opportunities to experience a sense of growth in learning and optimism (Schimmer, 2016). Students are responsible for learning, and educators are responsible for creating a conducive learning environment (O'Connor, 2009). The alignment of goals, assessments, and instructional practices to the academic standards sets the stage for an educational experience that helps students develop a sense of growth towards learning objectives (Schimmer, 2016). To create a learning environment built on intrinsic interest, Kohn (1993) recommended focusing on the three C's of motivation: content, choice, and collaboration. In this

type of setting, students are included in designing or choosing assessments, creating criteria, documenting achievement, and communicating their learning (Stiggins, 2001). When students trust that the purpose of assessments is to provide meaningful feedback, their intrinsic motivation prospers, improving their academic achievement and self-efficacy (Crooks, 1988; Kagan, 1994; Marzano, 2000).

Self-efficacy. Stiggins' (2005) theory of Assessment for Learning identified self-efficacy as the key to students' success. When students believe in themselves, learning happens. Stiggins (2005) stated, "Students are deciding whether success is within or beyond reach, whether the learning is worth the required effort, and so whether to try or not" (p. 5). Traditional grading practices, such as using zeros, averaging scores to calculate one final grade, and grading homework, "might serve to dismantle students' beliefs about their potential success" (Schimmer, 2016, p. 23). Stiggins (2005) contended that educators should replace punitive and daunting grading systems with grading models that cultivate hope and continuous progress through intrinsic motivation. When educators contemplate the purpose of grades and the grading system, they should consider the dynamic environment created by schools' cultures of assessment and should purposefully design instruction to facilitate learning for all students (Schimmer, 2016; Stiggins, 2005).

The Impact of Standards-Based Grading on Student Achievement

Several studies have shown a correlation between standards-based practices and increased academic achievement (Post, 2014; Schoen, Cebulla, Finn, & Fi, 2003). Researchers have identified specific strengths in standards-based grading, including increased student ownership, choice, differentiation, clarity, communication, growth mindset, and a connection to high-stakes testing (Brookhart et al., 2016; Knight & Cooper, 2019). Research supports the

theory that a growth mindset will lead to academic success because of the attention given to the development of knowledge and skills as a process, which pairs well with a standards-based grading model (Franklin, 2016). A study conducted by Franklin discovered when faced with challenges, students from standards-based grading systems exhibited higher level growth mindset responses in effort, intellectual self-belief, and goal setting.

Table 4.

Fixed Mindset Versus Growth Mindset

Mindset Characteristic	Fixed Mindset	Growth Mindset
Praise	Prefers praise of their natural intelligence and ease of performance	Prefers praise of their effort and hard work
Goal-setting	Only takes on challenges in areas of known strength, avoiding true challenges out of fear of revealing lack of skill, giving up easily when challenged	Embraces challenges with the goal of mastery, motivated by the opportunity to learn something new
Effort	Sees effort as an indicator of failure	Sees effort as a path to proficiency
Self-Efficacy	Blames failure on others and becomes discouraged, equating success and failure with personal self-worth	Sees failure as an area for improvement and opportunity for growth, being motivated to work harder and push through setbacks

Note. Adapted from Franklin, A. (2016). *Growth mindset development: Examining the impact of a standards-based grading model on middle school students' mindset characteristics* (Doctoral dissertation), p. 12. Copyright 2016 by Anne E. Franklin.

Researchers have found that standards-based grading positively impacts students' self-efficacy and motivation (Stiggins, 2005; Stiggins & Chappuis, 2008). In a standards-based grading model, students are active participants in the learning process due to effective feedback that allows learners to monitor where they are in their learning and determine the next steps to

continue learning (Stiggins, 2005). Through a review of research on learning, Hattie (2008) synthesized that when students received specific feedback on their current levels of understanding regarding predetermined objectives, their achievement significantly increased.

The limitations of traditional grading practices negatively affect students. Educators can remedy many of these limitations through the implementation of standards-based grading (O'Connor, 2011). A reform in the grading system can transition students from asking questions such as, "Will this be graded?" and "How much is this worth?" to "Can you help me understand this?" and "Can I get feedback on this?"

Barriers in Shifting to Standards-Based Grading

Traditional grading practices are deeply rooted and accepted in our culture. Therefore, the reform of grading practices is most difficult due to the change itself (Brookhart et al., 2016). Change is not popular on account of the challenge and opposition that is involved in transformation (Reeves, 2010). A barrier in shifting to standards-based grading is parents' and students' familiarity and comfortability with traditional grading practices (Guskey & Jung, 2013; Marzano, 2000; Schimmer, 2016; Spencer, 2012). Most parents and many older students have interacted with a traditional grading system, including an A-F grading scale, throughout their entire educational experience (Marzano, 2000; Peters, Kruse, Buckmiller, & Townsley, 2017). On the contrary, standards-based ratings such as 1, 2, 3, 4 or beginning, approaching, meeting, and exceeding do not have cultural meaning for stakeholders to interpret (Guskey, Swan, & Jung, 2011). Secondary students and parents inquire how GPAs, scholarships, and college admissions will be affected by standards-based grading (Brookhart, 2011). Transitioning to a new grading system is a paradigm shift for all stakeholders, building capacity for teachers,

parents, and students is necessary for a successful change in grading practices to occur (Peters, Buckmiller, & Townsley, 2017).

A standards-based report card as a communication tool allows stakeholders to continuously monitor progress towards learning goals (Marzano, 2003). It is essential for leaders to build educators' levels of understanding, so teachers can provide an experience where students and parents feel success with the grading system. Peters and Buckmiller (2014) noted that when schools utilized intentional planning and ongoing communication with students, parents, and teachers, schools experienced an easier transition to standards-based grading.

It is not typical for teachers to receive formal training for grading and reporting practices. Targeted coaching and professional development are needed when shifting to a new grading system (Peters, Kruse, Buckmiller, & Townsley, 2017). Consequently, a significant barrier for schools to make the switch is the lack of training and preparation for teachers, which results in teacher resistance (Battistone, Buckmiller, & Peters 2019; Guskey & Bailey, 2010; St. Pierre & Wuttke, 2017; Townsley, Buckmiller, & Cooper, 2019).

For schools to appropriately transform grading practices to be standards-based, ongoing conversations and feedback with all stakeholders are a must (Peters & Buckmiller, 2014; Peters, Kruse, Buckmiller, & Townsley, 2017). Researchers agree that for successful implementation of standards-based grading, teachers need ongoing training, support, and a team approach to acquire skills and knowledge (Battistone, Buckmiller, & Peters 2019; Henry, Purtell, Bastian, Fortner, Thompson, Campbell, & Patterson, 2014; Peters & Buckmiller, 2014). Support from leaders to build educators' capacity to design and align curriculum and instruction can help teachers avoid the common misunderstanding that standards-based reform is the same as test-based reform. Tomlison (2000) called test-based reform standards-based reform's evil twin. This

misunderstanding can lead to covering the standards rather than teaching for learning (Tomlinson, 2000). Consistent professional development can serve as an avenue for leaders to continuously grow a standards-based mindset and debunk misconceptions through ongoing learning and teamwork.

The reasons supporting standards-based grading are enough to make many schools consider the shift. In Iowa, 79% of school administrators, who do not currently use standards-based grading, are considering the change as a part of their five-year vision (Townsley, Buckmiller, & Cooper, 2019). For these visionary education leaders, the benefits outweigh the risks.

Further research in standards-based grading practices would benefit school leaders, especially at the secondary level, and in the effectiveness of using alternative grading systems as a whole (Franklin, 2016; Knight & Cooper, 2019; Townsley, & Varga, 2018). Researchers agree that the process of implementing a standards-based grading system is a challenging endeavor, even in favorable conditions (Hooper & Cowell, 2014; Peters, Kruse, Buckmiller, & Townsley, 2017). It is common for schools to experience an implementation dip before seeing positive results (Peters, Kruse, Buckmiller, & Townsley, 2017). This dip can serve as a reason for educational leaders to abandon the transition to return to comfortable territory. It is not the standards-based grading system itself that is the cause for change, but the educational philosophy that acts as a catalyst for strengthening instruction, assessment, and communication (Layne, 2018). Ultimately, a standards-based grading implementation's effectiveness depends on the district's execution (Tomlinson, 2000).

Job-Embedded Professional Development Practices

Cizek, Fitzgerald, and Rachor (1996) found that an absence of intentional training on assessment leads to unsuitable discrepancies in teaching and learning practices. A lack of training results in an assortment of assessment and grading practices that diminish academic achievement, learner agency, transparency of learning progress, and competence to define learning success criteria. Standards-based grading can address all of these concerns if implemented with fidelity, which requires appropriate professional development.

According to the Minnesota Department of Education (MDE)(2020), the purpose of professional development is to improve student learning. Minnesota Statute requires districts to develop a plan approved by local school boards (Minnesota Department of Education, 2018). The plan must include ongoing professional development opportunities to progress towards the use of best practices to improve student achievement of academic standards. The professional development plan must also address how to meet the needs of diverse student populations, utilize an inclusive curriculum, enhance staff collaboration, teach violence prevention, support site teams with proper skills in management and finance, and effectively use technology to enhance student engagement through digital and blended learning (Minnesota Legislature Officer of the Revisor of Statutes, 2020).

Educational leaders may facilitate and guide change, but teachers hold the responsibility for implementing change within schools (Guskey, 1994). Therefore, school systems must support change by meeting teachers' needs in professional learning. Leaders can facilitate change when they provide opportunities to learn in context (Fullan, 2006). There are numerous benefits to standards-based grading, such as the alignment to academic standards, transparency in grading, and consistent expectations for students (O'Connor, 2009; Schimmer, 2016;

Westerberg, 2016). Because of these benefits, educational leaders need to identify the best professional development practices to implement standards-based grading practices successfully in schools.

Minnesota Department of Education (2020) requires districts to reserve a minimum of 2% of the basic revenue for all staff employees' professional development. Professional development opportunities include workshops or conferences, substitute teachers, teachers' evaluation, and in-service professional development. Local districts determine the distribution of professional development funds. At the end of a school year, any remaining funds carry over to the following year for future professional development activities (Minnesota Department of Education, 2020). Districts may use professional development funds to pay position salaries that engage in professional development opportunities, such as researching, designing, coaching, or coordinating professional development for staff (Minnesota School Boards Association et al., 2014).

Barriers of transforming professional development. Discredited professional development experiences of yesterday continue to captivate schools today (Reeves, 2010). Schools' professional development opportunities are disjointed and unfocused (Reeves, 2010). "If we expect teachers and school leaders to improve professional practices and decision making, then we must first give them different knowledge and skills than they received in the past." (Reeves, 2010, p.15).

An extensive gap exists between what teachers anticipate from professional development and what they receive (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). Teachers hope for opportunities to learn and grow and instead often receive experiences to be trained and comply (Reeves, 2010).

Any true transformation will naturally include challenge and opposition (Reeves, 2010). Leaders should not wait for teacher buy-in before implementing initiatives. Reeves (2010) advocated for evidence to supersede the generally accepted belief that teacher buy-in must exist before implementing needed changes.

Research shows robust leadership and teaching influence student achievement (Goodlad, 1984; Haycock, 1998; Marzano, Waters, & McNulty, 2005; Reeves, 2006). But "vision without implementation is counterproductive" (Reeves, 2010, p. 57). Principals are the primary professional learning leaders in schools. Since principals' time is limited due to administration, discipline, and political matters, they need a feasible method for disseminating leadership (Reeves, 2010). The primary job of the principal is to transform professional learning from the transfer of information into opportunities for practice (Reeves, 2010). "It is not the case that we need a new theory of effective professional learning; what we need is a practical mechanism to turn our ideals into reality" (Reeves, 2010, p. 23).

Effective professional development. Effective professional development is directly related to students' and teachers' needs, and it allows for "application, practice, reflection, and reinforcement" (Reeves, 2010, p. 23). Deliberate practice leads to growth and improvement (Coyle, 2009). Reeves (2010) described deliberate practice as the performance of tasks focused on a specific component, skilled coaching, feedback, self-reflection, and most importantly, immediate feedback application. To impact learning, a radical transformation from one-way transmissions to focused deliberate practice is needed (Reeves, 2010).

According to Reeves (2010), there are three key qualities of professional learning: (1) a student learning focus, (2) conscientious measurement of decisions, and (3) a focus on people and practices over programs. Reeves contends the most important variable for enhancing student

achievement is not a specific program or position, but the extent of program implementation. It is not enough to just have an instructional coach on staff or to say teachers meet in professional learning communities. Collaboration must be a pillar of a continuous-learning culture. When specific teaching practices impact student achievement the source of influence is systematic observation and consistent sharing amongst colleagues. The focus is on people and practices rather than programs.

Educational leaders should apply efficacious classroom feedback and assessment strategies to create professional learning systems that provide teachers with timely-actionable feedback (Reeves, 2010). When schools pair effective learning practices with a clear focus, educators can experience exceptional rewards both in and out of the classroom (Gallagher, 2009). Reeves (2010) recommended to focus all professional learning on teaching, curriculum, assessment, and leadership. A review of literature by Poskitt (2014) found the following common characteristics as optimal for professional learning:

- Sufficient, dedicated time for professional learning over a sustained period of time
- Multiple professional learning activities such as coaching, mentoring, and peer observation
- Active teacher learning, content focus, specific learning goals, measurement of changes in student achievement, and collaborative involvement of teachers such as communities of practice, professional learning communities, and common planning time
- The role of outside expertise
- Professional reading
- The active role of the senior leadership team - particularly involvement of the school principal

- Use of assessment to focus teaching and enhance student self-regulation, and the notion of sustainability

  (pp. 544-545)

Sustainable changes require the integration of reflective practices (Fullan, 2006; Platt, 2018). When educators know the changes they are implementing are causing desired outcomes, they are likely to persevere and not abandon the initiative (Guskey, 1994). In a study on elementary teachers' perceptions of implementing standards-based grading, Platt (2018) found that teachers perceived standards-based grading positively when the focus was on student achievement improvements, teaching and learning practices, proficiency in standards, and communication. Consequently, educational leaders need to guarantee teams consistently evaluate, reflect on, and communicate the results of their standards-based grading implementation (Platt, 2018).

Leaders who incorporate successful professional learning build capacity for all staff, not just classroom teachers, as they are all seen as educators for the children they work with each day (Reeves, 2010). Job-embedded professional development is useful in supporting new hires when implementing standards-based grading. As teachers join school teams, novice teachers in standards-based grading need personalized coaching and on-going support to appropriately and accurately learn the district's system and expectations (Peters, Kruse, Buckmiller, & Townsley, 2017). New and veteran teachers alike need sufficient time embedded into their schedules to collaborate with colleagues and school leaders to sustain such a grading reform (Fullan, 2001; Platt, 2018). In conclusion, learners are learners regardless of their age. What teachers need is the same thing as what students need, to be continuous learners who are motivated to ceaselessly develop knowledge and skills over time (Fullan, 2008). Without establishing how to implement

standards-based grading in schools effectively, students may miss the opportunity to benefit from the consistent expectations of learning goals founded on evidence-based practices that encourage continuous learning while being fair and transparent (Battistone Buckmiller, & Peters, 2019; Marbouti, Diefes-Dux, & Madhavan, 2016; Westerberg, 2016).

Change Theory

Change Theory is "theoretical and empirically grounded knowledge about how change occurs (Reinholz & Andrews, 2020). According to this theory, there are two types of change, technical and adaptive. Technical change requires people to change behaviors or routines to quickly solve identified problems that suit their beliefs and values (Daly & Chrispeels, 2008; Heifetz, Grashow, & Linsky, 2009). Adaptive change requires people to change their routine behaviors and their minds, values, and beliefs. This process can be complex and messy (Wang, 2018). Since change is a personal experience, researchers recommend keeping individuals at the center of the change process (Drago-Severson et al., 2012; Hall & Hord, 2015).

When considering professional development within schools, Guskey (1994) recommended growing awareness of change as an individual process and as an organizational process. Individual teachers are responsible for the change itself, but professional development supports teachers in transforming the required changes into habitual practices (Guskey, 1994).

A school reform initiative, such as transitioning to standards-based grading, is both a technical and an adaptive change. The largest reason schools struggle to transition to standards-based grading is because of the adaptive change, which requires teachers to move away from grading based on their own beliefs and values (Brookhart et al., 2016; Chen & Bonner, 2017). Technical changes are often top down and can be made quickly by the school leader. Adaptive change is more complex. Therefore, adaptive change in education is uncommon (Neumann,

2013). Yet, when leaders can proactively focus on both technical and adaptive changes, schools can be more effective in implementing reform (Taylor & La Cava, 2011; Uline, Miller, & Tschannen-Moran, 1998).

Connecting Standards-Based Grading to Job-Embedded Professional Development

A lack of teacher training and support in assessments has been an area of growth in American education for years (Cizek, Fitzgerald, & Rachor, 1996). In a study conducted by Platt (2018), results indicated that regularly scheduled professional development for building capacity on research-supported standards-based grading practices positively affected elementary teachers' perceptions of implementation. What most positively affected teachers' perceptions of standards-based grading implementation was when teachers experienced advancements in student learning, curriculum, instruction, assessment, and communication (Platt, 2018). To effectively implement standards-based grading, Marzano (2000) recommended professional development for teachers for identifying priority standards, developing proficiency scales, assessment writing, and building capacity of best practices in grading.

Summary

This literature review provided background on academic standards, traditional grading practices, standards-based grading philosophy and practices, effects of grading on students, the impact of standards-based grading on student achievement, barriers in shifting to standards-based grading, job-embedded professional development practices, and change theory. The literature shows that although more research is needed to solidify the effectiveness of standards-based grading, many teachers, administrators, and schools are exploring a standards-based grading model. As stated by Knight and Cooper (2019), "Although grading is the focal point of standards-based grading, it is not just a grading reform, but an educational reform" (p. 89). The

literature provides strong evidence to suggest that in an educational reform movement, the cornerstone of change should be standards-based grading practices.

Chapter III: Methodology

Purpose of the Study

The purpose of this study was to examine rural elementary school leaders' perspectives on effective professional development practices specific to the implementation of standards-based grading. This study's findings added to the research in standards-based grading by exploring rural elementary school leaders' perceptions of professional development practices that were useful for implementing a standards-based grading system within their schools. Participants worked as leaders during a standards-based grading implementation in rural Minnesota elementary schools that have utilized a standards-based report card for two or more years. The research design was guided by change theory, which focuses on the importance of individuals being at the center of the change process (Wang, 2018). Understanding rural elementary school leaders' perceptions of job-embedded professional development practices can guide other educational leaders who seek to implement a standards-based grading system and increase overall student achievement. This chapter explains the research design, including the research questions and objectives, approach and methodology, instrumentation and measures, data collection, and data analysis.

Application of Theoretical Framework

This study aimed to identify the job-embedded professional development practices that rural elementary school leaders perceived to be successful for implementing a standards-based grading system. This study incorporated change theory, both technical (practice) and adaptive (belief), as is evident in the research questions and interview protocol.

Figure 2.

Conceptual Framework

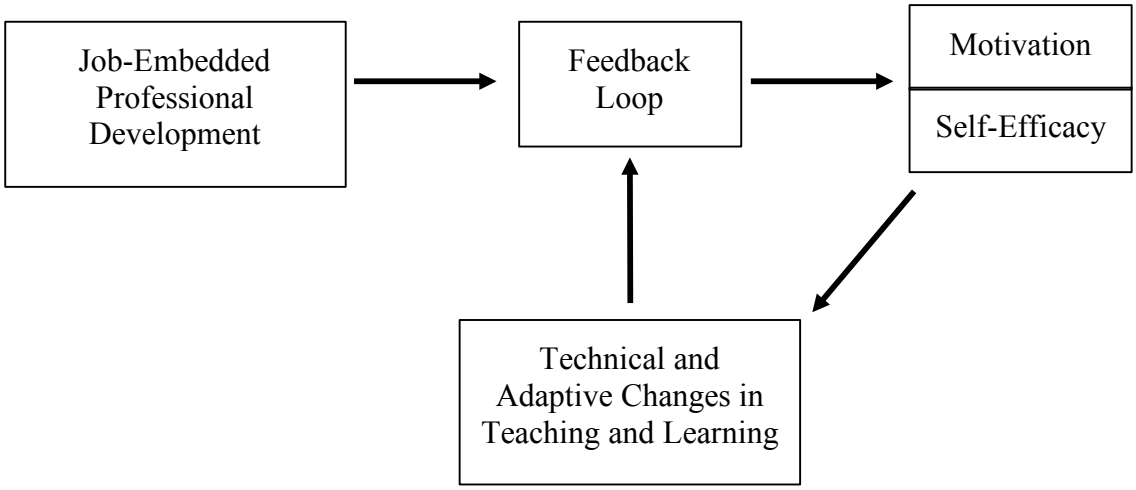


Figure 2. The conceptual framework represents the theory that job-embedded professional development supports a feedback loop for educators' learning, fosters motivation and self-efficacy, and results in technical and adaptive changes in teaching and learning practices.

Research Design

Qualitative research seeks to understand people's experiences by collecting data in words (Merriam & Tisdell, 2016). Participants can provide in-depth and rich information about real-life experiences (Merriam & Tisdell, 2016). Qualitative studies are useful for examining practical problems in systems bound by a finite number of potential participants (Creswell & Creswell, 2018).

This qualitative study consisted of semi-structured interviews with eight interviewees working in kindergarten through fifth grade at three different rural Minnesota public school districts. Purposive sampling was used to select participants working within public elementary schools utilizing standards-based grading and standards-based report cards for two or more

years. The researcher collectively analyzed the data from the three sites to establish findings.

Research Questions

This study aimed to answer the question, "What ongoing teacher professional development practices do rural elementary school leaders find useful for the implementation of standards-based grading?" The researcher addressed the following specific research questions.

Research Question 1. What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **beliefs** regarding a standards-based grading system?

Research Question 2. What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **grading practices** specific to a standards-based grading system?

Research Question 3. What **challenges** of implementing a standards-based grading system do rural elementary school leaders identify as solvable with job-embedded professional development practices?

Protocols

Semi-structured interview questions in this qualitative research study explored rural elementary school leaders' experiences implementing a standards-based grading system. The qualitative interviews consisted of a small number of open-ended questions to elicit the participants' perspectives and opinions (Creswell & Creswell, 2018; Orcher, 2014). The semi-structured format provided a guide for the interviews. The design afforded the researcher flexibility to adjust or add questions based on participants' responses, thus acknowledging participants' unique experiences (Merriam & Tisdell, 2016; Orcher, 2014). In the semi-

structured interviews, the researcher probed using follow-up questions to gain further insight through clarification and elaboration from participants (Merriam & Tisdell, 2016).

Interview questions were designed based on the research questions using a semi-structured approach to allow for flexible conversations (Merriam & Tisdell, 2016). Interviews began with a neutral descriptive question to establish rapport and gather demographic data. Further questions assessed participants' experiences, perspectives, and opinions (Merriam & Tisdell, 2016; Orcher, 2014). The researcher then explored questions specifically related to the change theory-aligned research questions. Participants talked about their experiences transitioning from a traditional grading system to a standards-based grading system, specifically the job-embedded professional development practices that guided their work.

Protocol field test. The best way to determine if interview questions will lead to data related to the research questions is to conduct a pilot interview or a field test with individuals who will not be a part of the actual study (Merriam & Tisdell, 2016; Orcher, 2014). The researcher field-tested the interview protocol with the dissertation advisor, a dissertation peer group, and expert teachers in the field who were not involved in the study. The field-tested feedback was utilized to develop clear, intentional questions to collect meaningful data (Merriam & Tisdell, 2016).

The interview protocol was adjusted based on feedback from the dissertation advisor, a dissertation peer group, and expert teachers in the field. Changes included rewording questions to be more open-ended, more clearly aligning the interview protocol to the research questions, and the addition of a specific question on funding.

Table 5.

Interview Protocol

Research Objective	**Change Theory**	**Interview Question**
Opening		1. Please describe standards-based grading at _____ Elementary School.
RQ1. Identify job-embedded professional development practices rural elementary school leaders perceive to have influenced educators' grading **beliefs**.	Adaptive Change	2. Tell me about the time you transitioned to standards-based grading. What was that process like for you?
RQ2. Identify job-embedded professional development practices rural elementary school leaders perceive to have influenced educators' grading **practices**.	Technical Change	3. What helped to change daily practices of teachers utilizing standards-based grading? (i.e. in coaching sessions, PLCs, workshop days, professional development days, curriculum writing) Follow-Up Questions: - What did training look like in your district? - How much time (frequency and total) was/is dedicated to training? - How were the trainers trained?
RQ2. Identify job-embedded professional development practices rural elementary school leaders perceive to have influenced	Technical Change	4. What were the key roles or positions in your school's implementation of standards-based grading? Why were they key roles?

educators' grading **practices**.		
RQ3. Identify **challenges** of implementing a standards-based grading system that could be resolvable with job-embedded professional development practices.	Adaptive Change & Technical Change	5. As your school transitioned to standards-based grading, what were the most significant challenges? What support did you provide to educators to overcome those challenges?
RQ3. Identify **challenges** of implementing a standards-based grading system that could be resolvable with job-embedded professional development practices.	Adaptive Change & Technical Change	6. What support do you wish you could have provided to overcome the challenges?
RQ3. Identify **challenges** of implementing a standards-based grading system that could be resolvable with job-embedded professional development practices.	Technical Change	7. As a rural school district, how was the standards-based grading implementation funded?
RQ1. Identify job-embedded professional development practices rural elementary school leaders perceive to have influenced educators' grading **beliefs**.	Adaptive Change	8. How do you train and support new teachers to gain an understanding of the WHY to use standards-based grading versus the traditional grading practices?
RQ1. Identify job-embedded professional development practices rural elementary school leaders perceive to have influenced educators' grading **beliefs**.	Adaptive Change	9. What do you think about standards-based grading now that you have done it for 2 or more years? What experiences are behind your beliefs?

Closing	10. Suppose a school was to start a journey to standards-based grading; what would you recommend to them?
Closing	11. Is there anything more regarding implementing standards-based grading that you would like to share? Follow-Up Question: Are there any other schools or contacts that you would recommend for participation in this study?

Sampling Design

Snowball sampling, a purposive sampling method for qualitative research, was employed to gain districts' names using standards-based report cards at the elementary level. Through the snowball sampling method, the researcher asks participants to recommend names of other potential participants for the researcher to recruit, leading to a sample of participants who fit the study's criteria (Merriam & Tisdell, 2016; Orcher, 2014). Through this method, participants who have valuable information to share through personal interviews were selected (Orcher, 2014). Since the participants were purposively established using Snowball sampling, both the researcher and the participants could conclude that participants had meaningful experiences to contribute to the study. This assumption may have contributed to an increased comfortability for participants to share personal experiences (Merriam & Tisdell, 2016).

Purposive sampling required the researcher to know potential participants' specific characteristics before selecting the sample (Creswell & Creswell, 2018). Before choosing the population of participants, purposive sampling was utilized to identify participants' attributes to ensure the sample represented the predetermined criteria. The selection criteria included:

- Participants worked in a rural public elementary school in Minnesota.
- Each school's participants represented grade levels kindergarten through grade five.
- Leaders maintained a leadership position within their school throughout the transition from traditional grading to a standards-based grading system.
- Leaders' schools had experience using the school's standards-based report cards for a minimum of two years.

Small sample sizes are standard in qualitative research, with a median sample size of 14 participants (Orcher, 2014). The sample for this qualitative study consisted of a total of eight leaders from rural elementary schools in three different Minnesota public school districts.

Data Collection Procedures

Correspondence with schools began with an initial contact, a district-level Director of Curriculum with direct oversight of schools that had implemented standards-based report cards. As school leaders shared potential participant districts and elementary schools, the researcher contacted the leaders via email to learn if the schools would be willing to participate (Appendix A). The researcher shared the study's purpose, that the school was identified as having implemented standards-based grading, and explained the opportunity to contribute to a study to provide information to schools seeking to implement a standards-based grading system. The researcher explained the confidentiality and participant protection processes, including the removal of identifiers through the data collection and analysis process.

Leaders who responded affirmatively then identified leaders who met the participant criteria. Invitations to participate (Appendix B) were emailed to the leaders from the list. The researcher kept careful notes of invitations and responses. A total of 12 leaders were invited to

participate in the study. Eight leaders accepted the invitation, one leader declined as he did not meet the required criteria, and three leaders did not respond to the invitation.

Leaders who accepted the invitation to participate and met the criteria were contacted again via email to notify the participants of the date, time, access link, and code name of the calendar meeting invitation (Appendix D). Interview questions and the informed consent letter were attached to the email (Appendices E and C). Interviews took place at a time convenient for the participant. An online video conference software was used for the remote meetings.

To begin each interview, the researcher asked for permission to record the interview. Upon consent, the researcher confirmed that the participant signed and agreed to the informed consent form, reviewed the study's purpose, and highlighted the research goals. The participants affirmed their consent and understanding. The researcher continued by following the semi-structured interview protocol (Appendix D). Following each interview, the researcher wrote a memo to reflect on each participant's responses, identifying emerging themes that occurred throughout the interview discussion.

Data Analysis

All audio recordings were transcribed. The researcher kept a detailed code journal to document and store all transcriptions. The researcher listened to the audio recordings and checked the transcriptions for accuracy. All identifier language, including names and schools, was removed. Interviewees received copies of the transcripts to verify accuracy.

All transcripts were read two times to gain an overall sense of the interviews. Meaning units, sentences, or phrases related to the research questions were identified and underlined in the interviews' third and fourth readings. The researcher included notes and thoughts in the margin.

Transcripts were read two more times. A list of possible codes was created for each

research question that represented the meaning units. Merriam and Tisdell (2016) refered to this process as naming the different categories. Codes were documented with keywords. Meaning units were organized by codes in a code journal.

The researcher reviewed code frequency. Codes that appeared minimally in the transcripts were identified. Codes that crossed over or seemed to overlap were combined. Through this process, themes emerged, and a detailed definition of each theme was developed. A noted analysis challenge was identifying codes as impacting beliefs and/or practices due to participants overlapping both and transitioning between the two within responses. Member checking was utilized to validate the interview responses by the participants. A qualitative methodologist was consulted to review notes, analysis, and a summary narrative for each step of theme development.

The code journal and two interview transcripts were shared with an external coder to strengthen the coding process' reliability and findings. The transcripts were different from those previously shared with the qualitative methodologist. Inter-rater reliability meetings were held to determine the percent consistent coding between the external coder and the researcher's coding.

The researcher and external coder reached 94% coding consistency on the first transcript and 97% accuracy on the second transcript. The external coder noted overlaps in codes that existed. Further discussion identified how the overlap supported the interconnectedness of the codes, leading to the overall themes for each research question. Participants' responses addressed multiple research questions within individual interview questions. Clarification through discussion occurred to connect responses to the appropriate research questions. Several items were added to the coding of the transcripts, mostly within the second transcript. The

insight from the external coder helped the researcher to appropriately identify all contents of the interviews. The adjustments were made in the code journal and the coded transcripts. The external coder questioned the difference between the "stakeholder communication" and "parent feedback" codes, suggesting to either combine the codes or to clarify the definitions of each since the topics were closely related. Clearly defined definitions were added by the researcher. In four instances, the external coder recommended a coding review when the codes "consistency," "ongoing work," "alignment," and "job-embedded professional development" were discussed. The external coder recommended using the code "ongoing work" for all. This was an area the researcher and external coder agreed to disagree. However, the definition of alignment was revised.

Reliability, Validity, and Trustworthiness

Reliability is consistency, which can be achieved in a qualitative study through detailed procedural documentation that supports the study's conclusions (Creswell & Creswell, 2018; Merriam & Tisdell, 2016). This study's consistent measures included documentation of all procedural steps through an audit trail, checking transcripts, and cross-checking codes.

The accuracy of a qualitative study's findings can be checked by utilizing one or more validity procedures (Creswell & Creswell, 2018; Merriam & Tisdell, 2016). This study maintained validity through member checking, the use of detailed descriptions, and clarification of bias.

Member checking was employed to validate interview responses by participants to determine the accuracy of the study's findings (Creswell & Creswell, 2018; Merriam & Tisdell, 2016). The initial analysis was shared with respondents to determine if the participants'

experiences were accurately captured. Solicited feedback prevented the misinterpretation of participants' experiences (Merriam & Tisdell, 2016).

Bias is the background that impacts the researcher's interpretation of a study's findings, such as gender, culture, history, and experiences (Creswell & Creswell, 2018; Merriam & Tisdell, 2016). The researcher had experience with an elementary school implementing standards-based grading, which allowed the researcher to relate to the respondents' experiences. Regardless of beliefs, practices, or challenges that the respondents shared, it was imperative to remain neutral and not share personal views to skew the responses. A bracketing interview was conducted to help identify bias for the researcher to become aware of preconceived notions. An outside source asked the researcher the interview questions, which were then coded, and emerging themes were identified. A paragraph summary and a list of themes are listed in Appendix F. With the awareness of bias, neutrality could be preserved. It was essential to establish rapport with the interview participants and keep neutrality present when discussing the content. When neutrality is maintained with the content, the bias can add value to the interviews through meaningful questions and communication (Merriam & Tisdell, 2016).

Limitations and Assumptions

Limitations. In this qualitative study, leaders' experiences were examined with a transition from traditional grading systems to standards-based grading in three rural Minnesota elementary public schools. The findings may or may not be transferable to other settings. An area of limitation is that the process of transitioning from a traditional grading system to a standards-based grading system was not observed. Participants were asked to share what caused changes in practices. Leaders' interpretations of how the process happened may be selective and subjective.

Another area of limitation was the sample size. A limited number of participants from each school participated. Therefore, the study is limited to the sample and cannot be generalized. The researcher identified themes based on the respondents' experiences, which may have differed from other leaders.

The study was limited to exploring schools that have utilized a standards-based report card for a minimum of two years. There may be districts that utilize standards-based learning and grading that do not use a standards-based report card or districts that utilize standards-based report cards without strong standards-based learning practices to support the report card.

Another limitation of this study is that only leaders' perceptions were gathered. Leaders may not have an accurate awareness of whether teachers were actually persuaded to change their grading beliefs. Future studies may add to this study's findings by exploring elementary teachers' perceptions of useful professional development practices in implementing standards-based grading.

Delimitations. A delimitation of the study was the setting of rural Minnesota elementary schools. The researcher chose rural schools because of the lesser funding received due to size and population and the limited leadership personnel who address multiple roles within small districts. It was essential to explore pedagogical initiatives, such as standards-based grading, in rural schools specifically since they receive less government funding than urban districts due to student population (Nolan, 2017; Wan et al., 2012).

Another delimitation of the study was the boundary of time. Interviews were one hour or less. Participants may not have had time to build the necessary rapport to share challenges comfortably or go in-depth with their experiences. The researcher intentionally designed the

interview protocol to use the interview time efficiently. Interviews were recorded so the researcher could solely focus on the participants throughout the interviews.

Assumptions. This study does not assume that the only way to implement standards-based grading is through job-embedded professional development. However, this study is based on the assumption that district leaders can utilize job-embedded professional development practices to support teachers through the implementation of a standards-based grading system.

Ethical Considerations

It is of the utmost importance to protect participants from harm when conducting research (Creswell & Creswell, 2018; Merriam & Tisdell, 2016). Ethical misconduct can occur throughout any stage of the research process. The Belmont Report (1979), which contains ethical guidelines for researchers to protect human subjects, includes three main principles that every researcher expects to follow. The principles are to maintain respect for persons, beneficence, and justice. These ethical considerations were made a priority in this qualitative research study.

Respect for persons. Respect for persons was maintained through the informed consent process. Participants signed an agreement to show their voluntariness, awareness of the proposed process, and potential risks and benefits (Creswell & Creswell, 2018; Merriam & Tisdell, 2016; Patten & Newhart, 2018). The informed consent granted permission for the participant to withdraw from the study at any time (Patten & Newhart, 2018; Research Ethics, n.d.; Roberts, 2010). Informed consent was given throughout the study, both in written form and verbal affirmation during the interview, as documented in the video recordings.

Confidentiality and privacy contributed to the participants' protection. Purposeful attention was given to the included demographic information, as not to allow unintended

identification of participants. The researcher used pseudonyms to represent participants' responses to maintain confidentiality. The researcher withheld identifier language but made general references to the participating schools.

Special consideration was given to how the data was communicated and stored (Creswell & Creswell, 2018). Throughout the transcripts, the researcher used pseudonyms and kept the transcripts on a laptop with a password only known to the researcher. The researcher used a confidential transcription service to transcribe digital recordings, which the researcher destroyed after completing the study.

Beneficence. The tenet of ethical research that is most important is the principle of beneficence, which states that research should "do no harm" (Patten & Newhart, 2018, p. 35). When conducting research, there can be potential for harm to occur, both physical and psychological. It is a researcher's job to minimize any risks (Orcher, 2014; Patten & Newhart, 2018; Research Ethics, n.d.). The benefits of the study greatly outweighed the risks. There was no potential for physical harm in this study. The only potential for psychological harm would have been if a participant were to have had a negative experience with their transition to standards-based grading and the interview caused an emotional response.

Justice. Justice means to treat participants fairly, conduct procedures equally, and share risks and benefits of studies with all. Participants were not judged or exploited based on any account, including ethnic, racial, or socioeconomic status (Patten & Newhart, 2018; Research Ethics, n.d.).

Chapter IV: Results

Introduction

The purpose of this study was to explore rural Minnesota elementary leaders' perceptions of effective professional development practices specific to the implementation of standards-based grading. This study was conducted utilizing Google Meet, a video conferencing tool. A standard interview protocol of eleven semi-structured questions was used for all eight participants. A multi-step data analysis process was used to find answers to three research questions. Data was organized into codes and then reviewed to determine themes. The construction and analysis of codes and themes followed qualitative data analysis best practices (Merriam, 2009). This chapter includes a thorough description of the sample, the research questions, and the themes that emerged from the interviews. Finally, a summary of the findings is presented.

Discussion of Sample

The criteria for participants required they worked in a rural elementary school that served kindergarten through fifth grade students in a leadership position throughout a transition to standards-based grading and that the leaders' elementary schools had experience using standards-based report cards for a minimum of two years. Due to the relatively small sample size of eight respondents and the need to protect the identity of participants, limited demographic information was collected. However, descriptive notes about interviews, including the dates and times were maintained by the researcher.

The respondents that participated in the study were from three different rural public school districts located in southern Minnesota. The schools all served kindergarten through fifth grade students. The student populations of the schools ranged from 234 to 528 students. All

participants held a leadership position throughout their schools' implementations of standards-based grading. Demographic and interview information is summarized in Table 6, sorted chronologically by the interview dates.

Table 6.

Data Collection Overview

Participant	Leadership Role During Implementation	Gender	Number of Years-Experience with Standards-Based Grading	Date of Interview
B	Principal	M	5-6 years	April 19. 2021
C	Director of Curriculum	F	5 years	April 22, 2021
D	Principal	M	5 years	April 22, 2021
A	Principal	F	5-6 years	April 29, 2021
E	Principal	M	5 years	May 3, 2021
F	Principal	F	5 years	May 6, 2021
G	Curriculum, Instruction, and Assessment Director	F	5-6 years	May 28, 2021
H	Superintendent	M	5-6 years	June 3, 2021

Research Questions

This study aimed to answer the question, "What job-embedded professional development practices do rural elementary school leaders find useful for the implementation of standards-based grading?" The researcher addressed the following specific research questions.

Research Question 1. What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **beliefs** regarding a standards-based grading system?

Research Question 2. What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **grading practices** specific to a standards-based grading system?

Research Question 3. What **challenges** of implementing a standards-based grading system do rural elementary school leaders identify as solvable with job-embedded professional development practices?

Introduction to Themes

Themes were codes that occurred in all eight interviews. Several themes emerged which related to change theory and crossed over between beliefs, practices, and challenges. A careful analysis of the interview transcripts identified five themes that explained the job-embedded professional development practices that rural elementary leaders attributed to developing educators' beliefs around grading. Another five themes emerged to describe how leaders facilitated the change of educators' grading practices when transitioning to standards-based grading. Finally, five themes emerged when discussing implementation challenges and how leaders guided their teams to overcome those challenges.

Table 7.

Research Questions and Their Relation to Discovered Themes

Research Question	Themes
RQ1 - What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **beliefs** regarding a standards-based grading system?	Theme 1 - Communicating the WHY and the HOW built capacity for grading changes and informed educators' beliefs Theme 2 - The intentional act of aligning school-wide initiatives shifted educators' beliefs Theme 3 - The use of research built understanding and informed educators' beliefs Theme 4 - Influential leadership positions contributed to changing educators' beliefs Theme 5 - The commitment to sustaining a standards-based grading system influenced educators' beliefs
RQ2 - What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **grading practices** specific to a standards-based grading system?	Theme 1 - Focused collaboration influenced educators' grading practices Theme 2 - The intentional act of aligning curriculum, instruction, and assessment to standards shifted educators' grading practices Theme 3 - The use of research supported change in educators' grading practices Theme 4 - Influential leadership positions contributed to changing educators' grading practices Theme 5 - A culture of collective commitment transformed educators' grading practices

RQ3 - What **challenges** of implementing a standards-based grading system do rural elementary school leaders identify as solvable with job-embedded professional development practices?	Theme 1 - Utilization of data developed an understanding of the WHY for standards-based grading Theme 2 - Time, a multi-year plan, and ongoing work developed an understanding of the HOW for standards-based grading Theme 3 - The integration of standards-based grading into PLC work supported educators Theme 4 - Communication and collaboration elicited a unified effort Theme 5 - Existing dollars and professional development practices were repurposed to implement standards-based grading at little to no extra cost

Professional Development Perceived to Have Influenced Educators' Beliefs Regarding a Standards-Based Grading System

What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' beliefs regarding a standards-based grading system? The job-embedded professional development practices that rural elementary school leaders perceive to have influenced educators' beliefs regarding a standards-based grading system include stakeholder communication, alignment of initiatives and curriculum development to standards, the use of research, strong local leadership, and a commitment to ongoing work.

Theme 1 - Communicating the WHY and the HOW built capacity for grading changes and informed educators' beliefs. The theme, communicating the WHY and the HOW built capacity for grading changes and informed educators' beliefs, appeared in eight out of eight interviews. The theme consisted of four codes central to communication and was used when

respondents talked about intentional conversations with stakeholder groups, including teachers and parents, behind the WHY and HOW of standards-based grading, specifically with separating behaviors from learning.

Stakeholder communication. Seven out of eight participants mentioned the importance of communicating the WHY and the HOW of their schools' transition to standards-based grading with stakeholders throughout the process. Stakeholder communication influenced educators' beliefs by building capacity on standards-based grading for teachers, parents, and students. This code was used when participants talked about outgoing communication from the school to stakeholders or incoming communication to administration from educators or parents that provided opportunities for response to implementation. Participants shared examples of stakeholder communication, such as the development of websites, newsletters, parent information nights, surveys, site team collaboration meetings, and design team meetings. When discussing the importance of having a clear understanding as to why an organization would move to standards-based grading, Participant H said, "it's communicating that clarity…over and over again, and then over-communicating it, about why we're doing this, what the data tells us."

The WHY. Eight out of eight participants discussed the importance of clearly communicating the WHY behind a transition from traditional grading to standards-based grading practices. It was a key component that was mentioned sixty-six times throughout the eight interviews. According to Participant A, it is important to focus on the WHY with stakeholders, especially the educators, because the transition to standards-based grading is "a mindset shift." Participant C noted that teachers want leaders to help them learn why they should change their views on grading and when that does not happen it leads to frustration. Seven participants specifically noted the importance of communicating the WHY with parents. Participant E stated,

> I think all of this is so much more important than a report card. Yes, a report card is how we communicate to parents, but it's the true teaching, it's the instruction and the learning that happens in the classroom that is even more important.

The HOW. Six out of eight participants discussed the importance of communicating the HOW of a transition to standards-based grading with stakeholders. This code was used when participants talked about communicating a specific framework, plan, or timeline with stakeholders to build their understanding for how their school would transition from traditional grading to standards-based grading. Participants noted that this was also a challenge. Participant B said,

> I think that the first thing is just...you just got to take that step and just say, "All right, we're going to do this, and there's going to be mistakes." I mean, there's not a perfect way. But let's identify where we want to go, and just kind of work backwards on how to get there.

Sharing the planning decisions with teachers and parents was repeatedly noted as a necessary practice for a successful transition and a sustainable implementation.

Separating behaviors from learning. Six out of eight participants specifically discussed separating behaviors from learning as an impactful topic for influencing beliefs. Participants identified separating behaviors from learning as the catalyst for the shift in beliefs to standards-based grading. It was also identified as the initial practice to begin discussions with teachers and parents. The separation of behaviors from learning within the grade book and on report cards contributed to a system of transparent communication. Participant H discussed the importance of separating behaviors from learning and shared,

> We wanted to acknowledge that learning behaviors is important because we feel like we partner with parents in that work, but we also felt it was necessary for us to really do a deep dive and understand, do students understand the content so that we can intervene if need be.

Participant B stated,

> You know, our business is learning. And not to incentivize learning with extra credit or take points away, and then lower a grade because a kid was late or didn't have their name on their paper. Just really, reaffirming that yeah, let's tackle the behavior and the learning separately is just a big aha, and I think refreshing for staff, too.

Theme 2 - The intentional act of aligning school-wide initiatives shifted educators' beliefs. The theme, the intentional act of aligning school-wide initiatives shifted educators' beliefs, appeared in eight out of eight interviews. The theme consisted of seven codes all focused on alignment and was used when respondents talked about job-embedded professional development, alignment, consistency, Professional Learning Communities (PLCs), assessments, and data as influential factors on educators' beliefs.

Job-embedded professional development. Eight out of eight participants confirmed the importance of job-embedded professional development. The job-embedded professional development code represented built-in collaboration structures noted by leaders as influential to building teachers' capacity for standards-based grading. All participants noted how these structures were already in place, but were repurposed to align with the standards-based grading implementation. Examples of job-embedded professional development practices shared by participants included staff development days, staff meetings, coaching sessions, trainings or conferences, summer curriculum writing, late starts, and most notably, PLCs. Participant B

stated they simply try to, “maximize the time we have with people.” Participant D echoed this sentiment by saying, “it really did lean on staff meetings and it leaned a lot on the PLC work. It's part of the embedded process that we have.”

Alignment. Eight out of eight participants discussed the importance of alignment. The alignment code represented ways leaders connected teachers’ work to create alignment throughout their schools. Each participant contributed to the collective idea that standards-based grading is not a stand-alone initiative and how important it was to align all of the work in their schools to create clarity and continued progress. Participant G stated, “So in a nutshell, I would say it was bigger than standards-based grading.” Participant A provided an in-depth explanation when stating,

> We look at our profile of a graduate, our district mission and vision, our district priorities and...everything that encompasses all of those entities. It's a reflection of why “standards-based grading.” We want to personalize our learning for our students. We want to make learning meaningful. We want to make learning relevant. When you look at the meaningful component, standards-based grading really does add a depth of understanding to what a student really is proficient in and what they maybe need additional practice with.

Participant B advised,

> Start aligning your goals with your budget, with your initiatives, and as soon as you start getting tighter alignment, people feel like they've got the energy to be able to do it when they're not being pulled in so many different directions.

Consistency. Eight out of eight participants discussed the importance of consistency. The consistency code identified efforts with the goal of creating transparency and equity from

class to class and school to school within a district. According to Participant C, standards-based grading "got the three buildings [within their district] on the same page with just their wording and their language." Achieving consistency was possible through the work of PLCs. Participant B elaborated by saying,

> That's where all the PLC work comes, both horizontally amongst a grade and vertically amongst the school and two schools and three schools, to keep it uniform. And not just for our sake, but for our students and parents, so it's not one thing in one school, [and] a different thing in another school.

Participant A discussed how consistency influenced educators' beliefs by stating, "it takes a little bit of the opinion out of the teacher's grading perspective with just a letter grade." The participant further explained by saying, "I think that consistency has really, I think, been clarified, which is good for teachers. I think it's also very good for parents to know that we have consistent approaches, assessments, and reporting processes."

Professional learning communities (PLCs). Eight out of eight participants discussed the importance of PLCs. This code was used for all specific mentions of PLCs within a district's job-embedded professional development framework. Participants consistently identified PLCs as the professional development structure used to inform educators' beliefs and progress standards-based grading work. Participant E said, "I just keep thinking of our PLC concept and that is the framework, that's the structure to allow that to grow." Participants connected the four corollary questions of a PLC from DuFour's model to the end goal of standards-based grading because, as Participant B explained,

> That's where really, a lot of this work lands when you identify those four questions about what do we want kids to know? That's our standards. We really started making PLCs be

> less about the housekeeping things and really, more focused on those four questions. The PLC process, I think, is really the foundational component to a successful standards-based grading framework.

Essential learning outcomes (ELOs). Seven out of the eight participants specifically discussed the importance of developing ELOs. This topic was mentioned using various titles, including ELOs, Power Standards, Priority Standards, and I Can Statements. The ELOs code established the importance of teachers identifying priority standards to influence beliefs and was mentioned thirty-two times throughout seven interviews. Identifying ELOs was commonly the first step for teachers embarking on the standards-based grading work. Participant A said,

> How we got to where we are now is our grade level teachers identified critical ELOs...outcomes that were necessary to be proficient in...to move forward to the next grade level.

Participant F noted how the teachers' work of identifying ELOs naturally progressed to standards-based grading by saying,

> Because we had just spent so much time choosing our power standards and working through how assessments relate to standards, and all of that, it wasn't a hard next step for the group because they were seeing the need to shift. How we report out about the standards then needed to change, to support the way we teach standards.

Assessments. Eight out of eight participants discussed the importance of assessments. The assessments code was used when participants discussed formative and summative assessments used within classrooms. Leaders perceived the act of teachers aligning assessments to standards as influential to teachers' beliefs. Teachers learned by doing. Participant F said, "We had to relate if our assessments were actually assessing the standards or just assessing." The

participants discussed how the next step after assessment alignment is utilizing assessment data, as Participant D stated, “to be responsive to the needs of the kids.”

Data. Eight out of eight participants discussed the importance of data. Data consisted of review and analysis of statistical information from standardized tests, progress monitoring assessments, and classroom assessments. The participants explained how data supported stakeholders’ understanding of the WHY, influenced the beliefs of reluctant staff by building a sense of urgency, and served as a measure of success to see if the implementation changes were working for students. Participant A stated, “We pulled data and survey feedback into [conversations] to continue to showcase the WHY behind standards-based grading.” Participant H explained how data supported a mindset shift for teachers by saying,

> The data was a big game changer for us because it was really straightforward and very objective. We really had to kind of take the approach with the more reluctant staff of really showing data that demonstrated to a point where they really couldn't debate it any longer.

Participant G echoed the use of data to influence teachers’ beliefs by explaining that data “leads itself to the next discussion with staff about, ‘Okay, we've got work to do here and this is what the data is telling us.’” Participants discussed the interconnectedness between standards-based grading and reporting practices with instruction and intervention. Participant B shared,

> We've seen a much greater alignment with what we wanted, which is a tighter alignment with our standardized assessment, to our progress report, to kids who've been identified through our MTSS (Multi-Tiered System of Supports) system that should be. So the necessary intervention supports or enrichment supports are happening.

Theme 3 - The use of research built understanding and informed educators' beliefs.

The theme, the use of research built understanding and informed educators' beliefs, appeared in eight out of eight interviews. This theme consisted of codes that were used when participants discussed research as an essential component that influenced educators' beliefs. Research codes were used when respondents talked about obtaining researched-based knowledge by participating in book studies, conversing with other school districts engaged in standards-based grading, reading and discussing relevant research articles, and training with external experts.

Book studies. Book studies were discussed by six out of the eight participants as a capacity building method used to inform educators' beliefs about standards-based grading. Participant F commented,

> There have been lots of book studies over time...It gives [teachers] a common knowledge and a common goal and it's a way to still approach an action afterwards. [Teachers] did some book studies about grading and they wanted to dig deep into why are schools [using] standards-based grading and what's the purpose...It was more about the teachers choosing these different resources and reading books together, and then going through the process in their PLCs.

Participant H shared how an initial book study served as an entry point for informing teachers' beliefs on grading practices, which resulted in the initiative gaining momentum within the staff.

> [Standards-based grading] started to gain some momentum with some of our staff that...did a book study as well. We read the book ..."Fair Isn't Always Equal"...That was one of the texts that we read...we talked about zero-based grading, we talked about that and what does that mean? And what happens when you get a zero versus getting a 59%? And how that impacts the overall grading process.

Participant G noted how the knowledge and common language derived from book studies served as a foundation for decision making,

> We did a book study...I brought a small team together, one from each grade level where we read a [standards-based grading] book...by Guskey...and we just went around and we used that as an opportunity to say, "Let's talk about the specifics." And I'll give you an example of a specific where this group had to make a decision on. Are we going to put the entire ELO, the entire standard, on that report card or are we going to put an abbreviated version on that report card? It's a decision we had to make and it was a big decision. There were people who argued both ways...there's advantages and disadvantages to both.

External experts. The use of external experts was discussed by six out of the eight participants as a capacity building method used to inform educators' beliefs about standards-based grading. External experts included collaborating with other school districts, participating in site visits at schools involved in standards-based grading, working with consultants, partaking in trainings, and attending conferences. Participant E shared how connecting with other districts involved in standards-based grading created opportunities to reflect on their beliefs and make decisions that would be best for their learners.

> We used other schools to really kind of gauge what they had and then where we wanted to end up...It was with the help and the guidance of other surrounding districts. And we looked at bigger districts, we looked at smaller districts, we looked at very expansive and detailed and almost hard to read report cards, and some that were bordering on way too simple. And you try to find what works for your district. So I think just by looking to see what else is around, that did help us out.

Theme 4 - Influential leadership positions contributed to changing educators' beliefs. The theme, influential leadership positions contributed to the implementation of standards-based grading, appeared in eight out of eight interviews. The theme consisted of four codes referencing key roles and was used when respondents talked about specific leadership positions perceived to have influenced educators' beliefs.

Curriculum director. Eight out of eight participants discussed the importance of the Curriculum Director role. This position went by various titles in different districts, such as Curriculum, Instruction, and Assessment Director and Director of Teaching and Learning. This role contributed to a unified administrative team and teacher support. Participant B commented on how the "Curriculum and Assessment Director was instrumental in leading this, even from a district perspective." The Curriculum Director role was described as a supportive link between building principals. As Participant G explained, "my job is to try to support the buildings to do their work...to provide that support to the principals and then each building...had a principal."

Principals. Eight out of eight participants discussed the importance of the principal position as an influential role in the implementation of standards-based grading. Participant A noted the important collaboration that collectively influenced educators' beliefs when saying, "The real, I think, instrumental people that again, led the charge and did the most, I think, behind the scenes and the on-scene work [were] the principals and the Director of Curriculum, Instruction, and Assessment." Participant B noted the critical role of the principal "as an instructional leader" and the impact that has on teachers' beliefs when the principals understand a standards-based approach to learning and grading.

Professional learning community (PLC) or site team leaders. Eight out of eight participants discussed the importance of the PLC or site team leaders, which can be defined as

teacher leaders who represent their grade levels. The PLC leaders emerged as administrators' go-to people, the first to be trained, and the team that collaboratively made informed decisions for their schools. Participant E said, "We worked with our leadership teams a lot and it was about mindset. I think you lean on teacher leaders." Participant D stated,

> So it's not me as the principal coming in and telling teams what to do. But it's building that shared knowledge as a leadership team. And then that's distributed throughout the building in a manner where they're empowered to do the work.

Coaches. Five out of eight participants discussed the importance of coaches. Leaders perceived coaches to be influential in informing educators' beliefs because coaches were available to answer teachers' questions in real-time. Participant A described coaches as "the message carriers." Participant B echoed that sentiment when explaining how coaches are extensions of the principals. Participant G stated that coaches "made a difference because anytime people had questions, there was really somebody at their fingertips that they could answer."

Theme 5 - The commitment to sustaining a standards-based grading system influenced educators' beliefs. The theme, the commitment to sustaining a standards-based grading system influenced educators' beliefs, appeared in eight out of eight interviews. The theme consisted of seven codes referencing sustainable practices and was used when respondents talked about practices that were perceived to have influenced educators' beliefs, such as a multi-year transition, ongoing work, time, teacher ownership, and new teacher orientation.

Multi-year transition. Seven out of eight participants discussed the practice of following a multi-year transition as a meaningful act for informing educators' beliefs. A multi-year transition plan assisted in breaking the entire process down into understandable steps, provided

time for teachers to learn and experience the WHY of standards-based grading, and allowed for teachers to make connections between action steps to understand the overall goal of transitioning grading systems. "It wasn't going to happen overnight," stated Participant E. With such a mindset shift, participants mentioned how important it was for teachers to know it would take time. Participant E elaborated by saying, "We didn't want to overwhelm people, but it was just kind of this slow trickle and almost a gradual release to I'd say again, inform, engage, and build momentum and capacity with some of our teacher leaders." Participant A said,

> It took years to go through the entire process. But it was the process that...teachers can look back and say...it all led to this. You couldn't see it at the time. We knew we would get there. So making sure that they understood too, that these activities that we might be participating in or doing are going to lend itself eventually.

Ongoing work. Seven out of eight participants discussed ongoing work as influential on educators' beliefs. To maintain teacher ownership, the process needs to be ongoing. Factors that contributed to the ongoing work of standards-based grading were revised academic state standards, curriculum purchases, new teachers joining school teams, and further alignment of school systems, such as the Multi-Tiered System of Supports. Participant D provided an example when stating,

> One thing that has become pretty apparent in the last year though, is that the work we did to identify what we deemed as essential sevenish years ago, a lot of those teachers are gone now. They've either retired or moved...and so it's time for us to come back and probably go through the process again.

Time. Seven out of eight participants discussed time as a factor that influenced educators' beliefs about standards-based grading. Leaders stressed the importance of giving

teachers time to read, research, discuss, collaborate, and contribute to the development of standards-based grading in order to understand the need and process, informing their beliefs. Participant B stated,

"We were really cognizant of what time and work teachers needed to be sure that they had their answers to their questions in hand, and were feeling comfortable and confident with doing what we expected." Participant D explained the connection between beliefs and time by saying,

> It's a mindset. It's really shifting it to understand that the traditional view of prep time, while it's necessary to make phone calls, go to the bathroom, breathe, answer emails...if you're going to do the work the right way, you also see that as a time to collaboratively plan and to work together. So while we call our Wednesday mornings for us, where they have their PLC time, truly if they're doing the right work, they're also taking a couple of times where they have their common planning time and using that in the same manner. And I'll say our high performing teams do that frequently.

Teacher ownership. Teacher ownership was discussed by eight out of the eight participants as an influential component on educators' beliefs. Teacher ownership refers to the individual investment that is built when a teacher does the work of developing standards-based grading elements, such as identifying essential learning outcomes and writing them as kid-friendly *I Can Statements*. Participants explained that when teachers did the work, rather than having it handed to them from another school, it formed their understanding of the need to shift to a standards-based grading system that supported the learning cycle, aligned curriculum to the standards, and transparently communicated students' knowledge and skill sets. Participant A said it was crucial to really let teachers "have a voice in [the process]." Several participants spoke to the level of accountability that was created when teachers were the ones identifying

ELOs, writing proficiency scales, and aligning assessments. Participant C said, "I like that [standards-based grading] is fully transparent. And I also think it holds teachers accountable and students and parents. I think it holds everybody [accountable], like this is what we're looking for." Participant D explained the importance of teacher investment by saying,

> You have to collaborate on this. It can't be somebody handing it to you. The analogy that I frequently use is that every time, whenever I rent a car, I never clean it out. I never wash it. I have to fill it up because that's part of the gig. And the reason I do that is because I'm not invested in that car. My own car, I do. Because I'm paying for that. I need that to last five, 10 years. And so if somebody is just going to hand you a book and say, "Here are your standards, and you need to teach these," you're not invested in it. You're not owning that process at all. And therefore, how are your kids going to own it?

Orientation. New teacher orientation was discussed by seven out of eight participants as influential for educators' beliefs. A mentoring program was also mentioned as a related job-embedded professional development practice by four of the eight respondents as an ongoing extension of the new teacher orientation program. Participants' schools did not specifically train teachers in standards-based grading, but it was a component incorporated into new teacher orientations, mentoring programs, and ongoing PLC meetings. Participant G said, "I don't know that we continued to try and train teachers on standards-based grading, but it was embedded and it was part of our daily experience already." Participant H noted flexibility and patience in the learning process for new teachers by saying, "There's going to be a lot of grace and space for learning how to do [standards-based grading]. So we also provided that and just a clear understanding that we were going to fail forward with this."

Professional Development Perceived to Have Influenced Educators' Grading Practices Regarding a Standards-Based Grading System

What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' grading practices specific to a standards-based grading system? The job-embedded professional development practices that rural elementary school leaders perceive to have influenced educators' grading practices specific to a standards-based grading system included focused collaboration, the alignment of curriculum, instruction, and assessment to standards, the use of research, and external experts.

Theme 1 - Focused collaboration influenced educators' grading practices. The theme, focused collaboration influenced educators' grading practices, appeared in eight out of eight interviews. The theme consisted of three codes common to collaboration and was used when respondents talked about job-embedded professional development practices intentionally used throughout their schools to provide opportunities for teachers' collaboration.

Eight out of eight participants confirmed job-embedded professional development practices served as the avenue for transitioning teachers' grading practices to be standards-based. Examples of job-embedded professional development practices shared by participants included staff development days, staff meetings, coaching sessions, trainings or conferences, summer curriculum writing, late starts, and most prominently, PLCs.

Professional learning communities (PLCs). Eight out of eight participants revealed PLCs as the fundamental job-embedded professional development structure that influenced teachers' grading practices. PLCs were esteemed as a framework for purposeful collaboration that became deeply rooted in the schools' professional cultures. Participant D expressed this by saying, "This is how we operate at [our school]. We are a PLC, this is what we do in our PLC."

The four corollary questions of a PLC from DuFour's model informed teachers' standards-based grading practices. Participant C affirmed the importance of PLCs in the standards-based grading process by saying,

> I think the PLC was probably the biggest piece [that has changed the daily practices of teachers]. [PLCs] really emphasize the team, the collaboration, you are the ones that are analyzing the data, you're the ones that are creating the assessments.

Collaboration. Eight out of eight participants noted intentional collaboration as a shift in teachers' grading practices when job-embedded professional development was aligned to the standards-based grading implementation. Participant A said collaboration included "breaking into small groups, talking, evaluating, reevaluating. Just letting them share too, what they're doing, things that are working well, things that they're seeking more guidance on." Participant D connected collaboration and the work of PLCs by saying,

> When you're focused on the four questions [of a PLC], and really understand that, you need to lean on each other to really learn from one another and engage in that active inquiry, and [identify] what are we going to do to support student learning. And if your school isn't going to do that, that's fine, but you better figure out somebody that's going to help to engage and empower people in the process to create this. Because just downloading it from Teachers Pay Teachers, or whatever, is not going to meet the needs of kids.

Theme 2 - The intentional act of aligning curriculum, instruction, and assessments to standards shifted educators' grading practices. The theme, the intentional act of aligning curriculum, instruction, and assessments to standards shifted educators' grading practices, appeared in eight out of eight interviews. The theme consisted of six codes regarding alignment

and was used when respondents talked about practices that contributed to aligning all work within an elementary school.

Alignment. Eight out of eight participants discussed how the act of aligning curriculum, instruction, and assessments to the standards shifted teachers' grading practices. Leaders discussed aligning curriculum to standards both horizontally and vertically, as well as aligning programs and practices throughout schools to best support students' learning. After transitioning to standards-based grading Participant B said,

> We've seen a much greater alignment with what we wanted, which is a tighter alignment with our standardized assessment, to our [standards-based] progress report, to kids who've been identified through our MTSS (Multi-Tiered System of Supports) system that should be so the necessary intervention supports or enrichment supports are happening.

Consistency. Eight out of eight participants identified the development of consistency as influential on educators' grading practices. Leaders defined progress towards achieving consistency through the development of common knowledge, common language, common ELOs, common assessments, common goals, and program alignment. Participant H explained how all indicators of progress should tell a consistent story about individual students.

> When we started to do some comparative analysis between what were the benchmark assessments, or the MCAs for that matter, telling us versus what grade they were given, that told us a story, and the story was there was a disconnect there.

Participant G said that before the transition to standards-based grading

> They were all over the place and nobody had any consistency. It brings equity and consistency to what we want kids to learn. I don't think that standards-based grading solves all the problems in the world, but it brings us closer to identifying if kids really

learned what we asked them to learn. I do believe when we talk about equity, that standards-based grading helps us get closer to that.

Essential learning outcomes (ELOs). Seven out of eight participants discussed the impact developing ELOs had on teachers' grading practices. ELOs were repeatedly identified as the initial entry point for teachers to begin standards-based work. All participants stated that teachers' work with ELOs happened within PLCs. Participant D addressed this interconnectedness when stating, "Well, if you haven't identified what's essential out of the standards, then you might as well not function as a PLC, because you're not doing the work then." Participant B articulated the same connection between ELOs and PLCs when reflecting on advice they would give to anyone considering a transition to standards-based grading by stating,

> Do you have a PLC process in place so you can identify your essential learning outcomes? What is important to you as a school in terms of learning? Is that embedded? And if not, that's where I would say you should start.

Assessments. Eight out of eight participants discussed the impact on grading practices when teachers developed assessments, including evidence-based and common assessments. Participants noted a shift in assessments as end-of-unit-tests to formative and summative checks to determine students' levels of understanding, which became a part of teachers' grading practices. Participant B said,

> That's the assessment piece that comes along with standards based grading. Formative assessment, summative assessment, when you talk about it's not just a test. We use that language now. This is a formative, this is a summative, and all that has been clearly trained and identified, and all that work happened, really, in our PLCs.

Data. Eight out of eight participants referenced data as an influential factor on educators' grading practices. The role of data in standards-based grading impacted teachers' responses to student understanding, effected next steps in students' learning, and served as a resource in collaborative conversations. Participant B said,

> Looking at data, that's a big part of this...How are our kids doing? If we never look at data to see how our kids are doing, whether it's in a formative assessment or in a standardized assessment, it's hard to do what you just ask. An important aspect of the work is looking at the data that you have and just asking questions on why that is, why that happens to be.

Separating behaviors from learning. Six out of eight participants discussed the importance of separating behaviors from learning and how that influenced teachers' grading practices. Participants identified the practice of separating behaviors from learning as the most impactful shift in grading that occurred, noting that it was a mindset shift. Participant B said, "We can consequence the behavior and hold kids accountable for the learning at the same time." The separation of behaviors from learning within the grade book and on report cards contributed to a system of transparent communication. Participant C explained that separating behaviors and learning "gives a really accurate picture of where kids are at." Participant E noted separating behaviors from learning as the biggest challenge by saying,

> I think some of the biggest challenges are maybe, and I'll just say probably more of a traditional mindset where assessment or grading wasn't happening for learning. You did have things like responsibility being measured. So if a student brought in an assignment late, they were docked points. At the beginning of the year, students are given credit or

points for bringing a box of Kleenex. That's not about learning. So we really try to tie it back into learning.

Participant A explained the importance of separating behaviors from learning by sharing,

> They might be an *A* student and not do homework, but they shouldn't be penalized for not handing in a piece of paper for compliance. They're showing you in the classroom that they're performing well. So being able to separate those two and that was hard. But again, we adapted and adjusted and kept bringing them the WHY.

Theme 3 - The use of research supported change in educators' grading practices.

The theme, the use of research supported change in educators' grading practices, appeared in eight out of eight interviews. This theme consisted of research codes that were used when participants discussed research as an essential component that influenced educators' grading practices. Research included book studies, conversing with other school districts engaged in standards-based grading, reading and discussing relevant research articles, and training with external experts.

Book studies. Six out of eight participants mentioned book studies as an impactful practice for shifting teachers' grading practices. Participants explained that it was the collaborative practice of reading and discussing research that was impactful, more so than any specific book itself. Participant G said they used book studies as an opportunity to let people "talk about the specifics" of standards-based grading. Book studies were noted as a practice that assisted in gaining momentum with staff, which mostly occurred in PLCs.

External experts. Six out of eight participants discussed the impact working with external experts had on shifting teachers' grading practices. The external experts code was used when participants mentioned collaborating with other school districts, participating in site visits

at schools involved in standards-based grading, working with consultants, partaking in trainings, and attending conferences. Participant H explained how reaching out to other districts influenced their teachers' grading practices by saying,

> We started to study other school districts that had made this move, which made it feel more doable for staff. Because I think it was a daunting task to begin with, but once they started to kind of see that other districts [had done it] and what they were doing and utilizing the tools they were using, it just made it a lot easier for staff to make that transition.

Theme 4 - Influential leadership positions contributed to changing educators' grading practices. The theme, influential leadership positions contributed to changing educators' grading practices, appeared in eight out of eight interviews. The theme consisted of four codes specific to key roles within a district and was used when respondents talked about positions or committees that were influential in changing educators' grading practices.

Curriculum director. Eight out of eight participants identified the Curriculum Director role as key for the implementation of standards-based grading. Participants described Curriculum Directors as a main contributor to organizing the behind the scenes planning of the standards-based grading initiative. Curriculum Directors were mentioned when participants discussed overseeing coaches, planning professional development opportunities, and leading site teams. Participant E shared,

> [Our Director of Curriculum has] just been tremendous...she truly understood the idea of a struggling reader and what it means...to get them to grade level. But what are those benchmarks, those standards and how do we scaffold that? She was really, again, leading

> the charge...Over the course of the last four or five years [that work] has kind of been our roadmap, but she's driven it for us. No doubt about it.

Principal. Eight out of eight participants identified the principal as a key role in influencing teachers' grading practices. Participants described principals as the instructional leaders of their buildings who are responsible for supporting the teachers and following through with the frameworks put in place by the districts. Participant B stated,

> I think it's the principals being able to talk the language with their teachers on that daily ongoing basis. The principals were really kind of leading [the standards-based grading] work...with their building goals and [teachers'] individual goals, just kind of really making sure that [the teachers were] working on their assessments and that they were moving kids forward.

Participant E stated,

> I'd speak for all of our principals by saying, we believe that we've got a process through the professional learning community concept where we've got a structure in place, but giving time, giving resources, and giving that knowledge to our teachers is so important.

PLC or site team leaders. Eight out of eight participants identified PLC or site team leaders as influential in shifting teachers' grading practices. Participants described these team leaders as the teachers who were able to disseminate information to their teams, making a standards-based grading transition possible. Participant C elaborated on the importance of PLC leaders by saying, "They had...this leadership rep that came to work with [the Director of Curriculum] in the summer and then they were kind of the shepherd. We really emphasized with the teacher leaders that were here, 'Okay, now it's on you.'"

Coaches. Five out of eight participants shared that they had coaches who assisted in their transition to standards-based grading, which influenced teachers' grading practices. Participant B described coaches as instructional leaders who were extensions of the principal, adding "they're a support network for our teachers." Participants emphasized the important role of coaches with onboarding new staff and working with the site teams.

Theme 5 - A culture of collective commitment transformed educators' grading practices. The theme, a culture of collective commitment transformed educators' grading practices, appeared in eight out of eight interviews. The theme consisted of five codes relevant to commitment and was used when respondents talked about teacher ownership, ongoing work, and supportive administration that contributed to the dedication and perseverance needed to progress towards a standards-based grading transition.

Teacher ownership. Eight out of eight participants discussed the importance of teacher ownership and how teacher investment contributed to the collective commitment of PLC teams and their schools. Common attributes emerged such as accountable, empowered, involved, and professional. Participant D stated,

> It wasn't handed to them. They were actively [involved] in the work. They had a lot of say, they were empowered to do a lot of different things. And with the idea that, you know what, if this is wrong, then next year we'll change it, you know? And that's kind of that collective inquiry and that cycle of learning that the teachers are involved in. And I don't think they even necessarily realize that they're involved in that way.

Participant F shared that teacher ownership is "a shift in some power that I have experienced, and I love it."

Ongoing work. Seven out of eight participants addressed the concept of standards-based grading as ongoing work, which influenced teachers' grading practices. Factors that contributed to the ongoing work included revised academic state standards, new curriculum purchases, individual teacher perspectives, adjusted assessments, and clarified rigor of standards. A collective understanding and commitment was needed by teams to sustain the ongoing work of a standards-based grading system. Participant E said,

> I think just knowing that it's ongoing work. It's probably never done. I used the phrase, this is nothing we'd want to laminate. I mean, this is good for a whiteboard. It's a good Google Doc, because as soon as you land on something, you have to be ready to change it or to pivot just a little bit.

Supportive administration. Seven out of eight participants described supportive administration as a crucial component of their school's collective commitment for shifting teachers' grading practices. The supportive administration code was used when participants described leadership as contributing to the collective commitment by doing the work *with* the teachers, answering questions, responding to needs, and providing professional development. Participant F shared,

> So just supporting teachers is...a huge goal of the leadership and the admin staff and appreciating and recognizing [teachers] for being professionals that want to shift and research and not always be waiting for [administration] to bring the next step to them.

Participants also commented on the importance of having all administrative leaders on the same page so they could collectively support their staff. Participant H said,

> You have to build a leadership team that believes in one another and isn't afraid to question one another in meetings and to have good discussions...you are building a really

cohesive team because if you have one team member that doesn't believe in moving this initiative forward, it won't because there's just enough chinks in the armor to try to break it down.

Multi-year transition. Seven out of eight participants identified a multi-year transition as a key element for teams to persevere through a change to a standards-based grading system. "Go slow to go fast" emerged as a common mindset that influenced teachers' grading practices. Participant B said, "It's easy to want to say, 'Let's do standards-based grading. And if all we do is just change how our report card looks, then we'll be doing it.' [But] there's a lot more to it than that." Participants shared that several years of work occurred before their standards-based grading report cards were launched, including identifying ELOs and aligning assessments. Participant G shared,

> We spent a good year or two pulling [ELOs] out...Every team did that... and really at the time, I was not thinking about standards-based grading. I was just thinking about what is it that we want our kids to know? So it took a lot...of time and...effort from our entire team...After about a year and a half, two years, they had identified their ELOs, step one of the PLC process. Step two was...how are you going to know if they learned it? So that's when we started to create common assessments and...that took us about two and a half years...Now what do our common assessments look like so that we can start having conversations about [PLC questions] number three and four? Did [students] learn or did they not? We [then started] having conversations...about how are we now going to share that information with our parents and then we had to talk about what's the purpose of grading?

Challenges of Implementing a Standards-Based Grading System Solvable With Job-Embedded Professional Development

What challenges of implementing a standards-based grading system do rural elementary school leaders identify as solvable with job-embedded professional development practices? The challenges of implementing a standards-based grading system identified by rural elementary leaders as solvable with job-embedded professional development practices were the use of data to support the WHY for standards-based grading, time, a multi-year transition, ongoing work to contribute to sustainability, practices aligned to PLCs supported educators, communication and collaboration elicited a unified commitment, and repurposing existing funds to support a standards-based implementation.

Theme 1 - Utilization of data developed an understanding of the WHY for standards-based grading. The theme, utilization of data developed an understanding of the WHY for standards-based grading, appeared in eight out of eight interviews. The theme consisted of four codes central to shifting to a standards-based mindset and was used when respondents talked about the WHY behind standards-based grading, using data to support a shift, and building consistency of learning expectations and experiences.

The WHY. Eight out of eight participants discussed the challenge of understanding the WHY behind standards-based grading. Participants communicated the challenge of change itself for teachers and parents who were used to a traditional grading system that seemingly worked for them. Participant E shared, “I think some of the biggest challenges are maybe...more of a traditional mindset where assessment or grading wasn't happening for learning.” The use of data to support the need for change opened the discussion with teachers as to why a change in grading was needed. Participant A stated,

> I think the more that you can provide the research and the WHY I think the more apt it is to get the buy-in that you really need because it's a mindset shift. You have to have the buy-in to make [a] good mindset shift.

Data. Eight out of eight participants discussed how the intentional use of data assisted in overcoming challenges of a standards-based grading implementation. Data consisted of review and analysis of statistical information from standardized tests, progress monitoring assessments, and classroom assessments. When speaking about overcoming the challenge of reluctant staff, Participant H said a solution was,

> Providing data that you can't refute it. So you provide the data and then you also provide this ease of understanding, which is when you go out and you actually find ways to connect teacher to teacher so they can ask questions of one another.

PLCs served as the catalyst of common collaborative time for teachers to review and respond to data. Participant B said,

> We recognized that we wanted to do PLCs as kind of our mechanism to get the work done. We recognized that there was inconsistencies and discrepancies between our standardized tests and our report cards, and as a result of that, kids who should have been identified as needing intervention through RTI (Response to Intervention), MTSS (Multi-Tiered System of Supports), weren't. And so, we knew that the kids were slipping through the cracks or being promoted to the next grade with a lack of support, and even knowing what their needs were.

Consistency. Eight out of eight participants mentioned consistency as an element that assisted in overcoming the question of why a shift to standards-based grading was necessary. This code was used when participants discussed creating alignment from class to class or school

to school. Participants specifically noted how the lack of a common understanding can result in frustration. Participants shared the struggle of getting everyone on the same page and making standards-based grading sustainable across multiple elementary buildings within a district. Participant B shared that it is "more challenging than maybe face value." Participant C explained how bringing leadership representatives from each building together to develop common ELOs, proficiency scales, and to share assessments assisted in creating consistency between buildings and increased collaboration.

Theme 2 - Time, a multi-year transition, and ongoing work developed an understanding of the HOW for standards-based grading. The theme, time, a multi-year transition, and ongoing work developed an understanding of the HOW for standards-based grading, appeared in eight out of eight interviews. The theme consisted of four codes related to the HOW of standards-based grading and was used when respondents talked about contributing components, including time, a multi-year transition, and ongoing work.

The HOW. Six out of eight participants identified communicating the HOW of a standards-based grading implementation as a challenge. This code was used when participants discussed communicating components of the HOW, including strategic steps and a timeline that built an understanding for how their school would transition from traditional grading to standards-based grading. To overcome this challenge, participants recommended providing ongoing support for teachers, specifically through PLCs. Participant B said, "provide the framework for the HOW and teach [the framework] and train on [the framework]." Participant A recommended "taking the time...to go slow versus trying to push...This is a major, significant change for a district. So, creating a timeline [of] when...you want to be able to do this."

Participants shared that learning the WHY for teachers was made possible through PLC work where research, collaboration, and discussions occurred. Participant B said,

> We went from making [PLCs] optional to mandatory. We went from having just a few of our staff formerly trained, to really, I would say, [a] critical mass where over 75 percent of our staff were formally trained on the PLC process. Because that's where really, a lot of this work lands.

Time. Seven out of eight participants addressed time as a challenge for implementing standards-based grading. Participants explained how teachers often communicate time as a hurdle for developing initiative plans due to the demand on educators with teaching, preparing lessons, and providing feedback for their learners. Participants said the barrier of time could be removed for educators through intentional planning of job-embedded professional development practices, including staff meetings, staff development days, and most notably, PLCs. Participant A shared,

> I think the biggest challenge was [time], "How long is this going to take? Are we going to invest time in this and then have it not be something that we continue to use? Is this just one of those new hat initiatives that is going to fade away?" They can't get that time back. So [the] approach was really to just go slow...and provide that background...as to why this is something that we really should be...considering. Just planning that time in.

Participant D addressed overcoming the challenge of time by saying, “Time, right? I mean, that is always going to be an issue no matter what you do. And our teachers here are meeting now weekly [in PLCs], if not more than weekly, around that work.”

Multi-year transition. Seven out of eight participants discussed the importance of going slow to make progress over time in the transition to standards-based grading. All participants

spoke to taking several years to make the transition. The multi-year transition code was used when participants spoke to going slow and taking multiple years to support teachers with the standards-based grading implementation. Participant C reflected on the challenge of moving slowly, but how it was necessary and beneficial to do so when saying, "It did help I think going slow in reflecting. In the moment, it was hard." Participant E recommended, "Start small, I think have a realistic three to five-year plan." Participant G shared how going slow and utilizing the PLC process can overcome the challenge of a multi-year transition plan by saying,

> ELOs and common assessments have to be in place and you have to spend some good quality time on that before you can just, in my opinion, before you can just transfer, because if you just transfer to standards-based grading and you do it in a year, I don't know if you get to the depth that you want to get to with it, otherwise it just becomes a task. So...that's what I would recommend, is that people take good quality time through the PLC process and identify what it is they are going to teach and what they're going to assess.

Ongoing work. Seven out of eight participants identified ongoing work as a challenge that is necessary to overcome for a sustainable implementation of standards-based grading. The concept of an initiative being ongoing work was a mindset shift for educators. This code was used when participants discussed challenges of refining, reviewing, revising, and adjusting work related to standards-based grading. Participant A said, "I don't think you can ever master standards-based grading. I think you can continue to refine, enhance, and make it meaningful." Factors that contributed to the ongoing work of standards-based grading included revised academic state standards, new curriculum purchases, individual teacher perspectives, adjusted

assessments, and clarified rigor of standards. Participant C explained that "it's ongoing. It's never done. And that's been a hard conversation too for some [teachers]."

Theme 3 - The integration of standards-based grading into PLC work supported educators. The theme, the integration of standards-based grading into PLC work supported educators, consisted of five codes related to support and appeared in eight out of eight interviews. The theme was used when respondents talked about practices, including PLCs, PLC or site team leaders, and coaches, that supported educators through implementation challenges.

Alignment of professional development. Eight out of eight participants discussed how alignment overcame the challenge of implementing a new initiative. Participants explained how aligning all job-embedded professional development practices to focus on the same initiative made the implementation manageable for educators. Participant B stated,

> We really just aligned all of our PD staff development days, all of that was really aligned those first few years. So we weren't trying to...juggle four or five different initiatives and things, that this was the singular one thing that we were doing.

Professional learning communities (PLCs). Eight out of eight participants discussed how PLCs served as a valuable framework to overcome challenges of implementing standards-based grading. Participants shared the importance of functioning as a PLC by using DuFour's four corollary questions, which directly aligned with the work of standards-based grading. Participant D said,

> Whatever you make a priority you're going to get results in, right? So...for us, [standards-based grading] was a priority. But it was also...under that big umbrella of functioning as a PLC. And this just aligned right with that.

Participant B shared, “the PLC process, I think, is really the foundational component to a successful standards-based grading framework.”

Teacher ownership. Eight out of eight participants discussed the challenge of fostering teacher ownership when embarking on a standards-based grading implementation. All participants noted how teacher ownership was the most imperative component in implementing standards-based grading. Participant D shared,

> We talked a lot about being invested and you can be given things, but that doesn't mean you're invested in the work, right? And so for us to really meet the needs of kids, we need to understand what the standard is saying and what it takes to meet the needs of the standard.

Participants shared how teacher ownership was cultivated as PLC teams collaborated to develop common ELOs, assessments, and proficiency scales. Participant D said, “the PLC process really does lend itself to that ownership.”

PLC or site team leaders. Eight out of eight participants discussed the importance of PLC or site team leaders in the PLC structure, which aided in overcoming challenges when implementing standards-based grading. Participant B described their site team as a rotating group of teacher leaders who are “in charge of all things learning.” PLC or site team leaders served as their grade level’s representative and played a pivotal role in providing the teacher’s perspective and communicating feedback on standards-based grading progress. Participant B shared,

> A lot of time, our site team members are always our yes, absolutely people. They will do anything that you want, kind of people, and we knew that. And we also needed to get a lot of our laggers, our naysayers, involved in this if we really wanted to see some

movement and shift. And so, we were intentional about seeking people out who typically aren't out front leading to get their input and so on.

Coaches. Five out of eight participants discussed the influence coaches had on supporting the work of the PLC and aiding progress in the shift to standards-based grading. Coaches were identified as a key role in helping to overcome challenges of a standards-based grading transition. Coaches were described as people who built teacher capacity by answering questions and assisted progress in teacher ownership. Participant G said,

> I would say [developing] the ELOs was the biggest challenge and what did we do to fix it? We continued to provide support. Meetings after meetings, PLC meetings, staff meetings to provide that support. Same with [proficiency] scales and the job embedded PD that we had with our coaches.

Participant G recommended using any available funding to add a coaching program to support teachers through the challenge of communicating the HOW when transitioning to standards-based grading. "If there's money, I would say job-embedded PD is always a helpful piece because I think you can get more done with coaches and not all rural districts, I suppose, can afford coaches."

Theme 4 - Communication and collaboration elicited a unified effort. The theme, communication and collaboration elicited a unified effort, appeared in eight out of eight interviews. This theme consisted of four codes, stakeholder communication, collaboration, and teacher ownership, and was used when respondents talked about teacher and/or parent involvement, communication, and feedback in regards to overcoming challenges in a transition to standards-based grading.

Stakeholder communication. Seven out of eight participants discussed the importance of ongoing communication with stakeholders, including feedback from teachers and parents. This code was used when a participant talked about outgoing communication from the school to stakeholders or incoming communication to administration from educators or parents that provided opportunities for response to implementation. Participant B shared,

> Communication was a barrier...with our parents after we got our teachers moving in the right direction. It was how do we make this relevant and understandable for parents? And I really felt like everybody really jumped in at that to help with the communication around the WHY and the HOW. I think there's probably more now, how do we continue to sustain it now that we're five or six years [in]? Everybody has a tendency to become complacent.

Participant F said, "It's always us responding to the people around us." Participants noted parent meetings as a helpful practice in overcoming the challenge of stakeholder communication, as well as making the work visible and transparent, which contributed to clarifying the WHY behind a change to standards-based grading. Participant F recommended to "talk to kids, parents, teachers, and listen to them about their experiences with grading."

Collaboration. Eight out of eight participants identified collaboration as a challenge or a tool to overcome challenges when implementing standards-based grading. This code was used when participants mentioned collaboration as a method that contributed to the development of a unified effort. Participant H mentioned how important it was to "find ways to connect teacher to teacher." Participant C explained how time to collaborate was a challenge and said, "My wish would be that I could have engaged with all teachers throughout the process during the school

year and not just a day in the summer...every year." Participant H spoke about how collaboration throughout a team translates to effective leadership.

> You have to build a leadership team that believes in one another, and isn't afraid to question one another in meetings and to have good discussions. But that you are building a really cohesive team because if you have one team member that doesn't believe in moving this initiative forward, it won't. Because there's just enough chinks in the armor to try to break it down. So I believe with a very cohesive leadership team that was all rowing in the same direction.

Theme 5 - Existing dollars and professional development practices were repurposed to implement standards-based grading at little to no extra cost. The theme, existing dollars and professional development practices were repurposed to implement standards-based grading at little to no extra cost, appeared in eight out of eight interviews. The funding code was used when respondents talked about the use of staff development dollars to support a standards-based grading implementation.

Job-embedded professional development. Eight out of eight participants confirmed job-embedded professional development as a way to overcome challenges in transitioning to a standards-based grading system. The job-embedded professional development code was used when participants mentioned built-in collaboration structures noted by leaders as influential in overcoming challenges. All participants stated how these structures were already in place, but were repurposed to align with the standards-based grading implementation. Examples of job-embedded professional development practices shared by participants included staff development days, staff meetings, coaching sessions, trainings or conferences, summer curriculum writing, late starts, and most notably, PLCs. PLCs were influential in overcoming challenges because

administrators could remove the barrier of time and collaborate with PLC or site team leaders who then could collaborate with their PLC teams. Participant G shared, "Our school district made a commitment to job-embedded PD."

Staff development funds. Eight out of eight participants discussed the use of existing staff development dollars to fund the implementation of standards-based grading. Participants shared the practice of realigning and repurposing current staff development money to support the planned initiative. Participant F stated,

> It would be staff development funds for any kind of meetings or books, maybe some Title II funds, but there wasn't a lot of money spent on the implementation...and it was very dependent on the leader's ability to learn and lead the process.

Rather than the challenge lying in the funding itself, it lied in the alignment and design of the job-embedded professional development practices. Participant A said, "It wasn't really a cost spending initiative. It was more of a planning initiative." Participant G stated, "We don't need any [additional] funding. We just need time, energy, effort, consistency, [and] intentionality." Participant B recommended,

> Start aligning your goals with your budget, with your initiatives, and as soon as you start getting tighter alignment, people feel like they've got the energy to be able to do it when they're not being pulled in so many different directions.

If a district had extra money to support a standards-based grading initiative, Participant G recommended,

> If there's money, I would say job-embedded PD is always a helpful piece because I think you can get more done with coaches and not all rural districts, I suppose, can afford

coaches. I don't need funding to implement standards-based grading, but more funding would give me coaches to help support the work.

Summary of Findings

The purpose of this study was to explore rural Minnesota elementary leaders' perceptions of effective professional development practices specific to the implementation of standards-based grading. The study explored rural elementary school leaders' perceptions of useful job-embedded professional development practices for implementing standards-based grading.

Data from the research identified important components that consistently supported the shift of teachers' beliefs and practices. Communication, alignment of curriculum to standards, alignment of professional development practices, research, strong leadership, and commitment were discovered to be the most influential components in shifting teachers' beliefs. Collaboration through PLCs, alignment of curriculum to standards and of professional development practices, research, leadership, and a collective commitment to ongoing work emerged as the most influential factors in shifting teachers' grading practices. Data also addressed commonly experienced challenges and specific components that aided leaders in guiding their teams to overcome those challenges. The most frequently cited challenges were the clear development and communication of the WHY and the HOW for transitioning to standards-based grading, fostering teacher ownership, involving stakeholders, and repurposing professional development to maximize funding. Respondents identified PLCs and teacher ownership as the most effective means of overcoming challenges throughout the implementation process.

Table 8.

Summary of Discovered Themes

Common Themes	Beliefs	Practices	Challenges
Alignment	Theme 2 - The intentional act of aligning school-wide initiatives shifted educators' beliefs	Theme 2 - The intentional act of aligning curriculum, instruction, and assessment to standards shifted educators' grading practices	Theme 5 - Existing dollars and professional development practices were repurposed to implement standards-based grading at little to no extra cost
Influential Leadership	Theme 4 - Influential leadership positions contributed to changing educators' beliefs	Theme 4 - Influential leadership positions contributed to changing educators' grading practices	
Communication	Theme 1 - Ongoing communication built capacity for grading changes and informed educators' beliefs		Theme 4 - Communication and collaboration elicited a unified effort
Professional Learning Communities		Theme 1 - Focused collaboration influenced educators' grading practices	Theme 3 - The integration of standards-based grading into PLC work supported educators
Research and Supporting Evidence	Theme 3 - The use of research built understanding and informed educators' beliefs	Theme 3 - The use of research supported change in educators' grading practices	Theme 1 - Utilization of data developed an understanding of the WHY for standards-based grading

Collective Commitment	Theme 5 - The commitment to sustaining a standards-based grading system influenced educators' beliefs	Theme 5 - A culture of collective commitment transformed educators' grading practices	Theme 2 - Time, a multi-year transition, and ongoing work developed an understanding of the HOW for standards-based grading

Concept map. A concept map is presented in Figure 3. The concept map provides a visual representation of the interconnectedness of beliefs, practices, and challenges.

Figure 3.

Concept Map

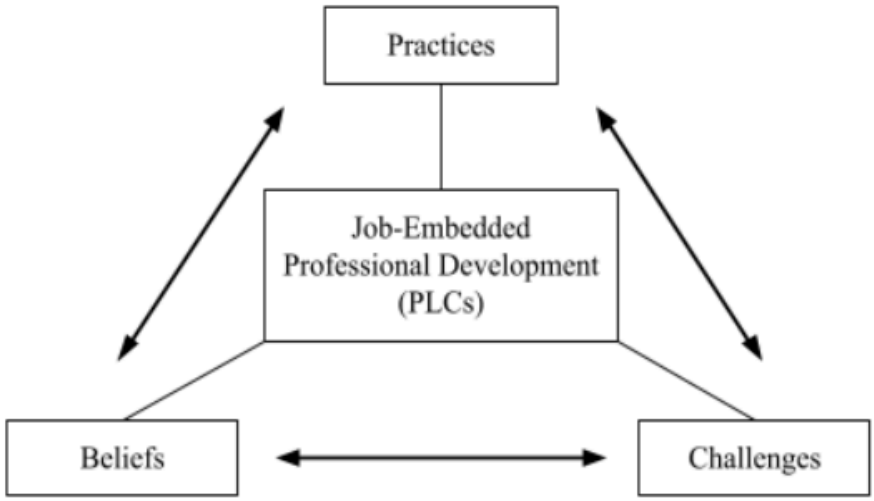


Figure 3. The concept map represents the interconnectedness of how job-embedded professional development, primarily PLCs, informed, influenced, and supported teachers' beliefs, practices, and challenges with a standards-based grading implementation.

Chapter V: Discussion, Implications, Recommendations

Overview of the Study

The purpose of this study was to explore rural Minnesota elementary leaders' perceptions of effective professional development practices specific to the implementation of standards-based grading. The study explored rural elementary school leaders' perceptions of useful job-embedded professional development practices for implementing standards-based grading.

Eight respondents from three different school districts participated in the study. All participants were interviewed utilizing a video conferencing tool, Google Meet. Interviews were transcribed, coded, and analyzed to identify themes. Following multiple iterations of coding and feedback from a qualitative methodologist and an external coder, a total of sixteen themes emerged for the three research questions.

Research Questions

This study aimed to answer the question, "What job-embedded professional development practices do rural elementary school leaders find useful for the implementation of standards-based grading?" This study answered the following specific research questions.

Research Question 1. What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **beliefs** regarding a standards-based grading system?

Research Question 2. What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **grading practices** specific to a standards-based grading system?

Research Question 3. What **challenges** of implementing a standards-based grading system do rural elementary school leaders identify as solvable with job-embedded

professional development practices?

Conclusions

Traditional grading practices have been rooted in teachers' individual beliefs and values and often encompass non-academic criteria such as students' effort, participation, and attendance (Brookhart et al., 2016; Chen & Bonner, 2017; O'Connor, 2009; Townsley, Buckmiller, & Cooper, 2019). The combination of teacher autonomy in grading practices and a lack of research-based training has led schools to a destination of good intentions full of discrepancies. Findings from this study directly aligned to this age-old problem, which served as the catalyst for a change in the participating districts' grading systems. As Participant H explained,

> When we started to do some comparative analysis between what were the benchmark assessments, or the MCAs for that matter, telling us versus what grade [students] were given, that told us a story, and the story was there was a disconnect there.

Standards-based grading practices communicate clear goals, reflect students' levels of knowledge, and provide ongoing feedback that facilitates learning (Aidman, Gates & Deterra Sims, 2001; Ainsworth, 2003; Buckmiller, Peters, & Kruse, 2017; Guskey & Bailey, 2001, 2010; Marzano, 2003; Salend, 2005; Stiggins, 2005). Therefore, the participating districts began an ongoing journey to develop intentional and transparent grading systems.

This study's findings supported the research that says educational leaders may facilitate and guide change, but teachers hold the responsibility for implementing change within schools (Guskey, 1994). School systems must support change by meeting teachers' needs in professional learning. Leaders can facilitate change for educators when they provide opportunities to learn in context (Fullan, 2006).

According to the Change Theory, there are two types of change, technical and adaptive. Technical change requires people to change behaviors or routines to quickly solve identified problems that suit their beliefs and values (Daly & Chrispeels, 2008; Heifetz, Grashow, & Linsky, 2009). Adaptive change requires people to change their routine behaviors and their minds, values, and beliefs. This process can be complex and messy (Wang, 2018). This study's findings supported the research on Change Theory. Technical changes, such as attending PLC meetings and changing teachers' grade books, were changes in routines that were quick solutions. Adaptive changes, such as utilizing research, collaborating in team discussions, and communicating with stakeholders were more complex and influenced educators' mindsets and beliefs. Findings supported research that described adaptive change as messy and complex (Wang, 2018). Participants' responses indicated that the transition to standards-based grading was nonlinear and took perseverance to achieve progress.

Since change is a personal experience, researchers recommended keeping individuals at the center of the change process (Drago-Severson et al., 2012; Hall & Hord, 2015). The findings of this study supported the effectiveness of keeping individuals at the center of change, which was achieved through the practice of PLCs, aligning all professional development to support the work of PLCs, administrative and coaching support, and stakeholder communication. When leaders proactively focus on both technical and adaptive changes, schools can be more effective in implementing reform (Taylor & La Cava, 2011; Uline, Miller, & Tschannen-Moran, 1998).

The study aimed to identify the job-embedded professional development practices that rural elementary school leaders perceived to have influenced educators' beliefs and practices, as well as assisted in overcoming challenges when implementing standards-based grading. The study explored rural elementary school leaders' perceptions with the intent of adding to research

to guide school districts in effective professional development practices specific to implementing standards-based grading that are not reliant on per pupil funding. Rural elementary school leaders perceived PLCs to have been the most significant job-embedded professional development practice to have influenced educators' beliefs and practices. Rural elementary school leaders also perceived PLCs to have assisted in overcoming challenges of implementing a standards-based grading system.

The findings in this study were consistent with the research showing the largest effects for professional development "were found for programs offering between 30 and 100 hours spread out over 6-12 months" (Darling-Hammond & Richardson, 2009, p. 49). All eight participants identified PLCs as the primary job-embedded professional development framework that removed the barriers of time and support for a change initiative. Participants stated their teachers spend on average one hour a week throughout the school year collaborating on standards-based grading components through the four corollary questions of a PLC, in addition to teacher workshop days and curriculum writing times, which correlates with Darling-Hammond and Richardson's (2009) range of effective professional development time.

Several themes occurred repeatedly in all eight interviews. The simplicity of the themes is surprising. However, upon close examination the ongoing commitment needed to make these themes a reality takes special dedication.

Intentional alignment of job-embedded professional development practices shifted educators' beliefs, practices, and assisted in overcoming challenges. Alignment was a common theme that emerged in response to all three research questions about beliefs, practices, and challenges. Participants shared how the intentional alignment of all professional development components contributed to the shift of educators' beliefs and grading practices.

Alignment was consistently mentioned as a practice that overcame the challenge of time and the need for ongoing work, which made the standards-based grading implementation manageable and sustainable. The alignment of schools' professional development was organized by key roles such as the districts' Curriculum Directors and principals, who described standards-based grading as a planning initiative. Rural schools have smaller student populations resulting in less state and federal dollars due to per pupil funding. However, districts are required to set a percentage of federal dollars for staff development. All eight participants explained how those existing dollars and professional development practices were repurposed to implement standards-based grading at little to no extra cost. This insight could assist rural schools in tearing down the barrier of time and money.

Influential leadership positions were crucial in the implementation and sustainability of standards-based grading. All of the participants in this study described the importance of influential leadership positions when implementing standards-based grading. Key roles that emerged within this theme included Curriculum Directors, principals, PLC or site team leaders, and coaches. Participants explained how teacher ownership needed to occur for standards-based grading to happen and how influential leadership teams needed to first be established to support teachers.

Communicating the WHY and the HOW with research and supporting evidence was necessary for influencing educators' beliefs and practices. Identifying a school's common WHY, communicating that to stakeholders, and using research and supporting evidence was an ongoing process for the participants' districts that they continue to work on years later. Participants noted the intentional utilization of data as a way to develop an understanding of the WHY for standards-based grading. The use of data built a sense of urgency for stakeholders and

removed the barrier of a fixed mindset because the data showed a need for change to increase effectiveness for students. Research served as a foundational tool for building educators' knowledge of standards-based grading and was noted as a predominant entry point for discussion of beliefs and grading practices. Participants shared that research was used to inform educators on grading practices and assisted in creating a mindset shift for the purpose of grading. Research also served as the catalyst for educators to change their grading practices since it developed the WHY for standards-based grading. Research included book studies, conversing with other school districts engaged in standards-based grading, reading and discussing relevant research articles, and training with external experts. Participants stated reading research most commonly occurred in teachers' PLCs.

PLCs served as the main framework for teachers to foster ownership and complete the ongoing work of a standards-based grading system. Participants identified job-embedded professional development practices as necessary for implementing standards-based grading. All participants discussed the practice of teacher teams functioning as PLCs as a significant method of collaboration. All participants discussed the necessity of teachers investing in the work rather than having the work of standards-based grading handed to them. PLCs were identified as crucial for informing educators' practices and for overcoming challenges with implementation by serving as the framework for teachers to collaborate on ongoing work, such as aligning ELOs, assessments, and rubrics.

A collective commitment to standards-based grading contributed to sustainability. A collective commitment to the work of implementing a standards-based grading system was a common theme that emerged from participants' responses for all three research questions. A collective commitment to a standard-based grading implementation influenced educators'

beliefs, transformed educators' grading practices, and involved stakeholders in the transition process. Participants defined collective commitment as the dedication and perseverance to continue the work of a grading transition through several years of work. Data revealed teacher ownership, supportive administration, and stakeholder input as influential components of collective commitment.

Implications for Practice

To develop and implement a standards-based grading system, districts should work to create cohesive leadership teams, develop their WHY using data evidence, align all job-embedded professional development practices, and intentionally use PLCs to support and empower teachers.

To sustain a standards-based grading system, districts should have cohesive leadership teams continue to learn and grow together in ways such as through research-based conversations and book studies, keep reviewing their WHY using data evidence that impacts schools' Multi-Tiered System of Supports' programs, align all job-embedded professional development, intentionally use PLCs to support and empower teachers, and keep doing the ongoing work through a proactive multi-year transition plan. It is never ending, in a good way. Schools should continue to review standards, the levels of rigor, and how to adapt learning for individual students' needs.

Recommendations for Future Research

This study adds information to the knowledge of effective job-embedded professional development practices for implementing standards-based grading systems. To understand the implementation of standards-based grading systems in more depth, it would be beneficial to hear the perspectives of teachers, parents, and students. Future research could also explore the

standards-based grading system implementation in an urban or suburban school setting to determine if the findings from this study are transferable to different geographic areas of the state. Another consideration for future research is to conduct quantitative studies to investigate the before and after of student achievement on standardized assessments and life-, career-, and college-readiness in relation to standards-based grading.

Concluding Comments

Establishing a consistent and transparent grading system contributes to an equitable education for all students. Standards-based grading paired with PLCs can serve as a framework for creating an educational environment where ongoing alignment is a part of educators' culture of continuous improvement. As a result, leaders and teachers develop a learning environment where students are supported through a continuous learning cycle based on evidence and data with opportunities for responses to learning to occur. Although the transition from traditional grading to standards-based grading is messy and complex, the collective commitment that results in alignment and transparency on what students know and can do may be well worth the challenges. Educators live out a mission of preparing students to be life-, career-, and college-ready. As Participant H stated, "When I hand a student their diploma, can I honestly look them in the eye and say, 'We gave you everything that we believe you need to be successful' or the opportunities to anyway." An aligned and transparent grading system, such as standards-based grading, contributes to educators being able to answer a resounding "Yes" to this question.

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Appendix A

Phone and Email Script - Rural Elementary School Principal

Dear Principal _____,

Your school is one elementary school in rural Minnesota that met the criteria for my study. It is an honor to extend the invitation below.

You are invited to participate in a study about job-embedded professional development practices that lead to the implementation of standards-based grading. You were selected as a possible participant because you lead a school that utilizes a standards-based grading system, including a standards-based report card for your elementary learners. You are uniquely positioned to provide valuable information about identifying the job-embedded professional development practices that your team utilized to reach this implementation.

If you decide to participate, we will schedule a remote interview via Google Meet. You will be asked to share the names of leaders who may be interested in participating in the study as potential participants. The interview should take approximately 60 minutes and will be digitally recorded for transcription purposes. Audio files will be deleted after being transcribed. You will receive a copy of the transcription to check for accuracy.

Confidentiality is highly valued in this study. All participant names and identifiers will be deleted from transcripts, and transcripts will be identifiable only by a number. Transcripts will be stored on a password-protected computer to which only the researcher will have access. No one will be identifiable in any written reports or publications.

Your participation in this study is voluntary, and you may choose not to participate without affecting your relationship with Bethel University. If you decide to participate, you may withdraw from the study at any time without penalty, and your information will be destroyed. There are no anticipated risks for participating in this study and no compensation for participation.

If you are willing to participate, you will be emailed an informed consent letter to sign and the interview questions to review. We will then schedule a day and time for our interview. Thank you for your consideration!

Appendix B

Phone and Email Script - Rural Elementary School Leader

Dear _____,

Your school is one elementary school in rural Minnesota that met the criteria for my study. It is an honor to extend the invitation below.

You are invited to participate in a study about job-embedded professional development practices that lead to the implementation of standards-based grading. You were selected as a possible participant because your school utilizes a standards-based grading system, including a standards-based report card for your elementary learners, and your school leader recommended your input. You are uniquely positioned to provide valuable information about identifying the job-embedded professional development practices that your team utilized to reach this implementation.

If you decide to participate, we will schedule a remote interview via Google Meet. The interview should take approximately 60 minutes and will be digitally recorded for transcription purposes. Audio files will be deleted after being transcribed. You will receive a copy of the transcription to check for accuracy.

Confidentiality is highly valued in this study. All participant names and identifiers will be deleted from transcripts, and transcripts will be identifiable only by a number. Transcripts will be stored on a password-protected computer to which only the researcher will have access. No one will be identifiable in any written reports or publications.

Your participation in this study is voluntary, and you may choose not to participate without affecting your relationship with Bethel University. If you decide to participate, you may withdraw from the study at any time without penalty, and your information will be destroyed. There are no anticipated risks for participating in this study and no compensation for participation.

If you are willing to participate, you will be emailed an informed consent letter to sign and the interview questions to review. We will then schedule a day and time for our interview. Thank you for your consideration!

Appendix C

Informed Consent

Standards-Based Grading Implementation: Rural Elementary Leaders' Perceptions of Useful Job-Embedded Professional Development Practices

You are invited to participate in a study about effective professional development practices specific to implementing standards-based grading. The purpose of this study is to explore the perceptions of rural elementary school leaders regarding the job-embedded professional development practices that were useful in implementing standards-based grading. You were selected as a possible participant because your school utilizes a standards-based grading system, including a standards-based report card for your elementary learners. You are uniquely positioned to provide valuable information about identifying the job-embedded professional development practices that your team utilized to reach this implementation.

If you decide to participate, I will schedule a 60-minute interview that will be conducted via Google Meet. You will be contacted again after the interview is transcribed to review interview transcripts to ensure accuracy. The estimated total time for the interview and subsequent review of the transcript should be no more than a total of 90 minutes. There are no anticipated risks other than the possible discomfort that may be associated with being interviewed and recorded for transcription purposes. Possible benefits to participating may be time for reflecting on current professional development and grading practices. You will also be provided with the research findings if desired.

Any information obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission. In any written reports or publications, no one will be identified or identifiable, and only aggregate data will be presented. Audio files will be destroyed once the transcription is complete. The interview transcript will be stored on a password-protected computer to which only the researcher will have access.

Your decision to participate will not affect your future relations with Bethel University in any way. If you decide to participate, you are free to discontinue participation at any time without affecting the relationship. Should you experience discomfort, you could, for example, skip a question, stop the interview, or ask to continue the interview at a later date.

This research project has been reviewed and approved in accordance with Bethel's Levels of Review for Research with Humans. If you have any questions about the research and/or research participants' rights or wish to report a research-related injury, please call Dr. Tracy Reimer, Bethel University, (651)635-8502, t-reimer@bethel.edu.

You will be offered a copy of this form to keep.

You are making a decision whether or not to participate. Your signature below indicates that you have read the information provided above and have decided to participate. You may withdraw at any time without prejudice after signing this form should you choose to discontinue participation in this study.

_____ _____

Signature Date

_____ _____

Signature of Investigator Date

Appendix D

Phone and Email Script - Interview Invitation

Dear _____,

Thank you for agreeing to participate in this study about job-embedded professional development practices that lead to the implementation of standards-based grading. It is an honor to have the opportunity to speak with you.

We will schedule a remote interview via Google Meet for _____(date) at _____(time). The interview should take approximately 60 minutes. The access link is _____ and the code name of the calendar meeting invitation will be _____. As a reminder, the interview will be digitally recorded for transcription purposes. Audio files will be deleted after being transcribed. You will receive a copy of the transcription to check for accuracy.

Confidentiality is highly valued in this study. All participant names and identifiers will be deleted from transcripts, and transcripts will be identifiable only by a number. Transcripts will be stored on a password-protected computer to which only the researcher will have access. No one will be identifiable in any written reports or publications.

Your participation in this study is voluntary, and you may choose not to participate without affecting your relationship with Bethel University. If you decide to participate, you may withdraw from the study at any time without penalty, and your information will be destroyed. There are no anticipated risks for participating in this study and no compensation for participation.

Please see the attached informed consent letter to sign and the interview questions to review. I look forward to visiting with you at our scheduled time. Thank you for your time!

Appendix E

Interview Protocol

1. Please describe standards-based grading at _____ Elementary School.

2. Tell me about the time you transitioned to standards-based grading. What was that process like for you?

3. What helped to change daily practices of teachers utilizing standards-based grading? (i.e. in coaching sessions, PLCs, workshop days, professional development days, curriculum writing)
   Follow-Up Questions:
   - What did training look like in your district?
   - How much time (frequency and total) was/is dedicated to training?
   - How were the trainers trained?

4. What were the key roles or positions in your school's implementation of standards-based grading? Why were they key roles?

5. As your school transitioned to standards-based grading, what were the most significant challenges? What support did you provide to educators to overcome those challenges?

6. What support do you wish you could have provided to overcome the challenges?

7. As a rural school district, how was the standards-based grading implementation funded?

8. How do you train and support new teachers to gain an understanding of the WHY to use standards-based grading versus the traditional grading practices?

9. What do you think about standards-based grading now that you have done it for 2 or more years? What experiences are behind your beliefs?

10. Suppose a school was to start a journey to standards-based grading; what would you recommend to them?

11. Is there anything more regarding implementing standards-based grading that you would like to share?

    Follow-Up Question:

    Are there any other schools or contacts that you would recommend for participation in this study?

Appendix F

Bracketing Interview Memo

A bracketing interview was conducted to help identify bias for the researcher to become aware of preconceived notions. An outside source asked the researcher the interview questions, which were then coded, and emerging themes were identified.

The researcher has experienced a shift in transitioning from traditional grading practices to standards-based grading at the elementary level. This shift occurred as the researcher worked in a coaching role. Through the bracketing interview, the researcher became aware of the bias notion that the experienced shift to standards-based grading had less to do with the grading itself and more to do with the structure of learning.

Identified Themes:

A high level of detail and organization was behind standards-based grading.

- Level of detail required (i.e. alignment of ELOs, rubrics, depths of knowledge, success criteria, assessments)
- There is a lot of behind the scenes planning that occurs to get to the point of a viable report card that truly and transparently communicates what students know and can do.
- The researchers' experience with standards-based grading started as a way to achieve the district initiative of personalized learning.
- Domino effect - teachers' beliefs were influenced by developing rubrics, creating alignment of expectations between the standards and classroom curriculum
- Reading and research provides the training that is needed to make a shift to standards-based grading.

Support for teachers came through alignment of job-embedded professional development practices.

- Alignment - Connecting PD days to the PLC Leadership Team to PLCs to book studies and external experts and site visits to coaching provided teachers with the support to influence daily practices.
- The ongoing coaching support is what made forward movement a reality for the researchers' district.

The largest barriers to shifting to standards-based grading included teacher self-efficacy, time, and parents' mindset.

- Teacher self-efficacy was the largest barrier to transitioning to standards-based grading.
- Reading research was instrumental in overcoming the barrier of teachers taking the change personally.
- Time was the next largest barrier to transitioning to standards-based grading.
- Providing extra prep time and reutilizing PLCs was crucial in overcoming the barrier of time.
- Shifting parents' mindset continues to be a barrier.

Teacher buy-in, coaching, and the role of the principal are key to creating a successful and sustainable transition to standards-based grading.

- Principal support for teachers is imperative to keep teachers progressing through a timeline to achieve the goal of standards-based reporting.
- Early-adopter teachers were key to the success of the implementation.

- New teacher training: onboarding at orientation, through coaching, and a book study.

Funding standards-based grading can occur through staff development and QComp dollars.

- QComp assisted in funding the initiative.
- Staff development dollars were repurposed to support the initiative of standards-based grading.

Standards-based grading is the right work.

- Standards-based grading is clear and transparent.
- The deliberate practice of standards-based grading domino affects instructional practices.

A successful standards-based grading implementation can occur through collaboration, research, and communication.

- Talking to schools that have gone through the implementation is an important step to gain insight and guidance.
- Read, research, and study grading practices.
- Educate parents and students along the way.
- Focus on learning before talking about grading.

Appendix G

Themes

Research Question 1.

What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **beliefs** regarding a standards-based grading system?

Communication	Alignment	Research	Influential Leadership Positions	Commitment
• The WHY (mindset) **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Stakeholder Communication **7/8 = 88%** *(1,2,3,5,6,7,8)* • The HOW **6/8 = 75%** *(2,3,4,5,7,8)* • Separate behaviors vs. learning **6/8 = 75%** *(1,2,3,5,6,8)* • ~~Letter grades/grade calculation~~ ~~**4/8 = 50%**~~ ~~*(2,3,6,8)*~~ • ~~More support needed~~ ~~**4/8 = 50%**~~ ~~*(2,3,4,5)*~~	• JEPD **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Alignment **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Consistency (transparent, equitable) **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • PLCs **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Data **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Assessments **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • ELOs **7/8 = 88%** *(1,2,3,4,5,6,7)* • ~~Technology~~ ~~**4/8 = 50%**~~ ~~*(1,3,5,8)*~~ • ~~Rigor~~ ~~**4/8 = 50%**~~ ~~*(3,4,6,7)*~~ • ~~Scales/Rubrics~~ ~~**3/8 = 38%**~~ ~~*(2,3,7)*~~ • ~~Personalized Learning/ Student-Centered~~ ~~**3/8 = 38%**~~ ~~*(1,6,8)*~~ • ~~Strategic~~ ~~**3/8 = 38%**~~ ~~*(1,3,8)*~~	• Book studies **6/8 = 75%** *(2,3,4,6,7,8)* • External Experts [Other districts: *(1,5,6,8)*, Research: *(1,7)*, Outside experts: *(5,6)*, Training: *(2,6)*] **6/8 = 75%** *(1,2,5,6,7,8)*	• Curriculum Director/Curriculum, Instruction, & Assessment Director/Director of Teaching and Learning **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Principals **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • PLC Leaders/Site Team Leaders **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Coaches **5/8 = 63%** *(1,2,5,6,7)* • ~~Technology Director~~ ~~**3/8 = 38%**~~ ~~*(1,3,8)*~~	• Teacher Ownership/ accountability **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Ongoing work **7/8 = 88%** *(1,2,3,4,5,6,7)* • Time **7/8 = 88%** *(1,2,3,4,5,6,7)* • Slow/multi-year transition **7/8 = 88%** *(1,2,3,4,5,6,7)* • Orientation **7/8 = 88%** *(1,2,3,5,6,7,8)* • ~~Mentoring program~~ ~~**4/8 = 50%**~~ ~~*(1,3,5,7)*~~ • ~~Domino effect (momentum)~~ ~~**3/8 = 38%**~~ ~~*(3,5,8)*~~

RQ 1 (Beliefs) Themes:

- Theme #1: Communication
    - Descriptor - Communicating the WHY and the HOW built capacity for grading changes and informed educators' beliefs
    - Definition - Stakeholders' mindset on grading was shifted by focusing on the WHY and the HOW of standards-based grading.
- Theme #2: Alignment
    - Descriptor - The intentional act of aligning school-wide initiatives shifted educators' beliefs
    - Definition - The data-driven practice of strategically developing standards-based curriculum, including ELOs, assessments, and proficiency scales, led to consistent, transparent, and equitable learning opportunities for learners.
- Theme #3: Research
    - Descriptor - The use of research built understanding and informed educators' beliefs
    - Definition - Observations and research obtained from outside of one's district from entities such as site visits, collaborative conversations, research articles, and book studies shifted educators' beliefs.
- Theme #4: Influential Leadership Positions
    - Descriptor - Influential leadership positions contributed to the implementation of standards-based grading
    - Definition - Professional positions and/or committees that participants perceived as effective supported the transition to standards-based grading.
- Theme #5: Commitment
    - Descriptor - The commitment to sustaining a standards-based grading system influenced educators' beliefs
    - Definition - A commitment to work that occured over time contributed to the sustainability of a standards-based grading implementation.

Research Question 2.

What job-embedded professional development practices do rural elementary school leaders perceive to have influenced educators' **grading practices** specific to a standards-based grading system?

Collaboration	Alignment	Research	Influential Leadership Positions	Collective Commitment
• PLCs **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Collaboration **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • ~~Domino effect (momentum)~~ ~~**3/8 = 38%**~~ ~~*(3,5,8)*~~	• JEPD **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Alignment **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Consistency (transparent, equitable) **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Assessments **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Data **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • ELOs **7/8 = 88%** *(1,2,3,4,5,6,7)* • Separate behaviors vs. learning **6/8 = 75%** *(1,2,3,5,6,8)* • ~~Letter grades/grade calculation~~ ~~**4/8 = 50%**~~ ~~*(2,3,6,8)*~~ • ~~Personalized Learning/ Student-Centered~~ ~~**3/8 = 38%**~~ ~~*(1,6,8)*~~	• Book studies **6/8 = 75%** *(2,3,4,6,7,8)* • External Experts [Other districts: *(1,5,6,8)*, Research: *(1,7)*, Outside experts: *(5,6)*, Training: *(2,6)*] **6/8 = 75%** *(1,2,5,6,7,8)*	• Curriculum Director/Curriculum, Instruction, & Assessment Director/Director of Teaching and Learning **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Principals **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • PLC Leaders/Site Team Leaders **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Coaches **5/8 = 63%** *(1,2,5,6,7)* • ~~Technology Director~~ ~~**3/8 = 63%**~~ ~~*(1,3,8)*~~ • ~~Superintendent~~ ~~**4/8 = 50%**~~ ~~*(1,6,7,8)*~~ • ~~Administration~~ ~~**3/8 = 38%**~~ ~~*(1,7,8)*~~ • ~~MTSS Committee~~ ~~**2/8 = 25%**~~ ~~*(2,6)*~~ • ~~SPED Director~~ ~~**2/8 = 25%**~~ ~~*(2,7)*~~ • ~~Talent Development~~	• Teacher Ownership/ accountability **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Ongoing work (commitment, dedication, perseverance) **7/8 = 88%** *(1,2,3,4,5,6,7)* • Supportive Administration **7/8 = 88%** *(1,2,3,4,5,6,7)* • Slow/multi-year transition **7/8 = 88%** *(1,2,3,4,5,6,7)*

			~~Facilitator (TOSA)~~ ~~**1/8 = 13%**~~ ~~*(3)*~~ • ~~Reading Specialists~~ ~~**1/8 = 13%**~~ ~~*(2)*~~ • ~~Community Ed Director~~ ~~**1/8 = 13%**~~ ~~*(7)*~~	

RQ 2 (Practices) Themes:

- Theme #1: Collaboration
    - Descriptor - Focused collaboration influenced educators' grading practices
    - Definition - Intentionally aligned job-embedded professional development opportunities contributed to the culture of collaboration for educators within a school district.
- Theme #2: Alignment
    - Descriptor - The intentional act of aligning curriculum, instruction, and assessments to standards shifted educators' grading practices
    - Definition - The data-driven practice of strategically aligning standards-based curriculum, including ELOs, assessments, and rubrics, created consistent, transparent, and equitable learning opportunities for learners.
- Theme #3: Research
    - Descriptor - The use of research supported change in educators' grading practices
    - Definition - Observations and research obtained from outside of one's district from entities such as site visits, collaborative conversations, research articles, or book studies shifted educators' practices.
- Theme #4: Influential Leadership Positions
    - Descriptor - Influential leadership positions contributed to changing educators' grading practices
    - Definition - Professional positions and/or committees that participants perceived as effective supported the transition to standards-based grading.
- Theme #5: Collective Commitment
    - Descriptor - A culture of collective commitment transformed educators' grading practices
    - Definition - Individual perseverance contributed to an overall culture of dedication and investment towards the ongoing work of standards-based grading.

Research Question 3.

What **challenges** of implementing a standards-based grading system do rural elementary school leaders identify as solvable with job-embedded professional development practices?

The WHY	The HOW	Integration	Communication & Collaboration	Funding
• The WHY (mindset) **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Data **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Consistency (transparent, equitable) **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • ~~Book studies~~ **~~6/8 = 75%~~** *~~(2,3,4,6,7,8)~~* • ~~Separate behaviors vs. learning~~ **~~6/8 = 75%~~** *~~(1,2,3,5,6,8)~~* • ~~Letter grades/grade calculation~~ **~~4/8 = 50%~~** *~~(2,3,6,8)~~*	• Time **7/8 = 88%** *(1,2,3,4,5,6,7)* • Slow/multi-year transition **7/8 = 88%** *(1,2,3,4,5,6,7)* • Ongoing work **7/8 = 88%** *(1,2,3,4,5,6,7)* • The HOW **6/8 = 75%** *(2,3,4,5,7,8)* • ~~Technology~~ **~~4/8 = 50%~~** *~~(1,3,5,8)~~* • ~~Record keeping~~ **~~2/8 = 25%~~** *~~(1,3)~~* • ~~Background knowledge~~ **~~1/8 = 13%~~** *~~(1)~~*	• Alignment **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • PLCs **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Teacher Ownership/accountability **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • PLC Leaders/Site Team Leaders **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Coaches **5/8 = 63%** *(1,2,5,6,7)* • ~~External Experts [Other districts: *(1,5,6,8)*, Research: *(1,7)*, Outside experts: *(5,6)*, Training: *(2,6)*]~~ **~~6/8 = 75%~~** *~~(1,2,5,6,7,8)~~*	• Collaboration **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Stakeholder Communication **7/8 = 88%** *(1,2,3,5,6,7,8)* • ~~Parent feedback~~ **~~4/8 = 50%~~** *~~(1,3,6,8)~~* • ~~Rigor~~ **~~4/8 = 50%~~** *~~(3,4,6,7)~~* • ~~Trust~~ **~~1/8 = 13%~~** *~~(8)~~*	• JEPD **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • Staff Development Funds **8/8 = 100%** *(1,2,3,4,5,6,7,8)* • ~~Title II~~ **~~2/8 = 25%~~** *~~(3,6)~~*

RQ 3 (Challenges) Themes:

- Theme #1: The WHY
    - Descriptor - Utilization of data developed an understanding of the WHY for standards-based grading
    - Definition - Data assisted in building stakeholders' capacity for the WHY behind standards-based grading.
- Theme #2: The HOW
    - Descriptor - Time, a multi-year transition, and ongoing work developed an understanding of the HOW for standards-based grading
    - Definition - Time, a multi-year transition, and ongoing work assisted in building stakeholders' capacity for the HOW behind a transition to standards-based grading.
- Theme #3: Integration
    - Descriptor - The integration of standards-based grading into PLC work supported educators
    - Definition - The integration of standards-based grading into job-embedded professional development practices and support positions, such as PLCs, PLC or site team leaders, and coaches supported teachers with implementation.
- Theme #4: Communication and Collaboration
    - Descriptor - Communication and collaboration elicited a unified effort
    - Definition - Communication and collaboration created a unified effort to overcome challenges.
- Theme #5: Funding
    - Descriptor - Existing dollars and professional development practices were repurposed to implement standards-based grading at little to no extra cost
    - Definition - Existing staff development dollars were repurposed and all job-embedded professional development time was aligned to support a standards-based grading implementation.