

A MULTIPLE CASE STUDY ON THE LIVED EXPERIENCES OF FIVE UPPER
ELEMENTARY SCHOOL TEACHERS WHO TRANSITIONED FROM TRADITIONAL
GRADING PRACTICES TO STANDARDS-BASED GRADING PRACTICES

by

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ABSTRACT

MEGHAN A. FRAZIER. A Multiple Case Study of the Lived Experiences of Five Upper Elementary School Teachers Who Transitioned From Traditional Grading Practices to Standards-Based Grading Practices. (Under the direction of DR. REBECCA SHORE)

Through a qualitative multiple case study, the researcher's goal in conducting this study was to investigate and understand the experiences of five upper elementary teachers in grades three through five who transitioned from traditional grading practices to standards-based grading (SBG) practices at one elementary school. Using Albert Bandura's Social Cognitive Theory (SCT) as a framework, this study examined how the five teachers experienced the initial training and subsequent implementation in their transition from traditional grading practices to standards-based grading practices. The researcher also aimed to understand teacher self-efficacy toward the new grading practice based on the training received at the onset of the implementation. A recruitment survey was sent to 79 certified teachers at the study site, chosen based on its convenience and recent implementation of SBG, and yielded the minimum of five participants meeting the criteria to participate in the study. Two of the total five study participants were part of a pilot study conducted in the fall of 2019. The researcher conducted semi-structured face-to-face interviews using an interview protocol established in the pilot study. In order to identify underlying themes present in the five interviews, the researcher used a constant comparison method of analysis (Leech & Onwuegbuzie, 2007). Common themes present in the five case studies include grades as communication, frustration with SBG transition, support from colleagues as useful or not useful, and lack of preparation at the pre-service level. Findings from this study align with the current body of knowledge on the inequities present in the use of traditional grading, the lack of specific grading instruction in teacher preparation programs as well as continued support at the district or school level, and the positives of SBG moving

teachers toward best practices. Findings from this study also support teachers' self-efficacy being tied to the quality of training they receive when making a change in practice.

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Second, I would be remiss if I did not acknowledge how I came to write this dissertation. Grading is a contested topic in both the classroom and the world of research. Studies have found inequities in traditional grading practices, and social media has become a platform for grading experts to share their findings. However, it was in the classroom and at home that the issues with traditional grading came to the forefront for me. I am the parent of the child who received poor grades due to lack of homework completion, yet he scored at or above proficient in his assessments. What does this say about fair and equitable grading practices? The research here is not intended to tout one grading practice as better than the other. I simply hope that sound, sustainable training at both the pre-service and in-service levels can be created through the experiences shared in this research study.

DEDICATION

This dissertation is dedicated to my family.

Todd—You have supported me in my life-long pursuit of education from day one. I love that your name is on each of the three degrees I earned because you were by my side for it all. I think I am done now. 11:11

Cade—This paper and my passion to ensure students are assessed equitably is because of you. You made it through school, and you knew exactly what you wanted to do with your life...and you are doing it. I am so proud of the man you have become and your dedication to serving our country.

Eve—The fact that you, my daughter, get to see me earn both my master's and doctorate degrees is something I treasure. However, you do not need to see me earn a degree to go where I know you are going. You are quite literally the most intelligent and brave woman I know, and your system of values will take you far. A little competition sprinkled in will take you even further.

Mom and Dad—The two greatest teachers in my life. You taught me about love, life, and working hard for your family.

Otto Bahn—You literally sat by me through this whole dissertation.

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Chapter 1: Introduction

Overview

Next to teacher pay, one of the most discussed topics in education is grading. Scroll through Twitter to find a professional learning network (PLN) made up of educators such as Rick Wormeli and Matt Townsley, who frequently tweet about more equitable grading practices in the classroom, along with groups such as the Standards-Based Classroom and Modern Measures who “challenge traditional assessment and grading practices” (Modern Measures, n.d.). After reading the posts, educators may begin to wonder if a century-old system of traditional grading, which uses percentages and letter grades to note student performance and still permeates the secondary grade levels, will finally make a move into standards-based grading, a practice that focuses on a student’s mastery of a learning objective, or standard, thanks to social media.

While grading has remained largely the same since the inception of the modern school, K-12 education as a whole received a failing grade in 1983 with the publication of *A Nation at Risk* (National Commission on Excellence in Education). However, it was not until the late 1990s and early 2000s that a noticeable change occurred in the K-12 education world with the Improving America’s Schools Act (IASA) of 1994 and the No Child Left Behind Act of 2001 (Hamilton et al., 2008; Vatterott, 2015). With these acts came the emphasis on standards and the Standards-Based Reform (SBR) movement, which included the mass adoption of state or Common Core standards and state standardized assessments across the nation (Hamilton et al., 2008; Vatterott, 2015). While primary grade levels moved to standards-based grading practices, upper elementary and secondary grade levels still primarily utilize traditional grading practices, which research has found to be problematic when it comes to promotion, retention, and class

rank (Allen, 2005; Brookhart, 1993; Brookhart, 1994; Cox, 2011; Ladas, 1974; McMillan, 2001; McMillan et al., 2002; Randall & Engelhard, 2009; Randall & Engelhard, 2010; Rugg, 1918; Sadler, 2010).

Using a multiple case study of five upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices, this study provides an in-depth description of the teachers' grade reform experiences. The researcher also aims to understand the teachers' experiences with the professional development provided in this implementation and their self-efficacy toward the new grading practice. The purpose of this research is to describe the experience of these five upper elementary teachers after they transitioned from traditional grading practices to standards-based grading practices.

Statement of the Problem

The turn of the twentieth century brought much change to American society, economics, and education. Urbanization increased during this time, boosting the urban population approximately 50 percent by 1899 (Urban & Wagoner, 2014). Industrialization continued through the turn of the century with factories increasing, thus creating both curriculum changes as well as the need for highly educated workers (Urban & Wagoner, 2014). Schools and politics started to come together during this time, and schools were becoming a reflection of society as more states mandated school attendance through legislation. By 1918, all 48 states of the Union had compulsory attendance laws (Urban & Wagoner, 2014).

It has been said that the modern school system mirrors the assembly lines made famous by Henry Ford in 1913 ("Ford's assembly line starts rolling," 2009). Around this time, modern schools were sorting students into academic tracks that, hopefully, suited their cognitive abilities and matched their future careers (Feldman, 2019). This tracking was aided by the use of grades

in the form of the A-F scale, which is where many grade reform proponents believe students receive unequal educational opportunities based on non-academic factors such as race, class, and gender (Feldman, 2019). Over 100 years later, students are still tracked based on age and academic ability, but it can be supported that the beliefs behind learning have moved beyond the assembly line mentality to include the belief that all students can learn and grow in the classroom. However, the current grading system with the use of percentages and letter grades has yet to change since its inception at Mount Holyoke in 1897 (Durm, 1993).

As early as 1912, education researchers were already studying and discussing the grading disparities (Kirschenbaum et al., 1971). In an article published in 1918, an education researcher stated that the problem with grading had been evident for the last ten years and noted it was common practice for teachers, especially secondary teachers, to fail approximately 30 percent of their students (Rugg, 1918). There was increasing evidence as early as 1920 that grades reflected both subjective criteria and personal values of the teachers assigning those grades (Kirschenbaum et al., 1971). Research continues to support the suggested implicit bias included in grading. These biases can be seen when teachers use behaviors such as participation and attitude when they award points (Feldman, 2019).

Over 50 years later, Kirschenbaum et al. (1971) wrote an informative fiction book titled *Wad-ja-get?* The book fictionalized current grading issues through a conversation between a teacher and his students. In the book, the students asked the teacher how he graded poetry, which brings up the issue of grading a student's creativity. Students also questioned what was included in their grades, stating that teachers should make sure the non-academic variations were eliminated if grades were important in determining students' futures (Kirschenbaum et al., 1971).

The conversation between the teacher and his students also brings up the point that teachers have very little, if any, instruction on grading while in their undergraduate teacher education programs (Barnes, 1985; Battistone et al., 2019; Chen & Bonner, 2017; Cizek et al., 1995). Beginning teachers, whether in their student teaching year or within their first three years of teaching, rely heavily on their cooperating and mentor teachers as well as their colleagues when it comes to developing their grading practices. Since teachers have little to no instruction on grading, they typically fall back to how they were graded in school (Allen, 2005; Chen & Bonner, 2017), which can perpetuate the cycle of grading disparities. Once teachers begin their teaching career, there remains little to no instruction or follow-up training on grading and measurement. However, with the increased voice provided by Twitter and other social media outlets, many educators are bringing the topic of equity in grading to the forefront, and some school districts are beginning to implement common grading principles.

In North Carolina, one school district implemented such grading principles at the middle and high school level (“High School Curriculum & Instruction/Grading Principles,” 2018). While it is not policy, the principles promote grading based on knowledge of academic standards as well as allowing students to recover from failure. The principles also state that grading procedures should lessen the effect of late assignments, homework, and attitude. Through the principles, the district’s goal is to increase equity in grading; therefore, professional learning communities, or PLCs, “must agree on and use the same grading procedures” (“High School Curriculum & Instruction/Grading Principles,” 2018). This may help with the issue of differential grading; however, research shows that there continues to be a disparity in teachers’ grading practices within the same department (Marzano, 2000). For example, all Biology teachers must agree on

how they weigh the variety of student work they receive, such as homework and assessments. However, there could be inconsistencies between how the Biology and Chemistry teachers grade, which still affects a student's overall GPA and, at times, more significant academic opportunities beyond high school.

While this particular school district in North Carolina recommends PLCs use the same grading procedures within a content area to include each assignment's weight, or how much it counts within the final average, there may be school districts that do not have similar grading principles in place. Differential weighting of assignments is when teachers teaching the same course assign different weights to the coursework (Marzano, 2000). In a study conducted in 1996 by the Mid-continental Regional Educational Laboratory (McREL), researchers found that two co-teachers having the same information regarding the students assigned different grades to 42.3 percent of the class (Marzano, 2000). In one case, the teachers differed by two letter grades, with one teacher assigning the student an A and the other teacher assigning the student a D for the same assignment. Table 1 depicts a portion of the grade discrepancies between the two teachers assigning grades to the same group of students.

Table 1*Grades Assigned by Two Teachers to Same Students*

Student	Grade from Teacher #1	Grade from Teacher #2
Zack	A	B
Jose	A	A
Brian	B	B
Zed	A	A
Terrel	A	A
Lynne	B	C
Natalie	B	B
Nadine	A	D
Ashley	A	B
Sasha	A	C

Note: From “Teachers Weight Assessments Differently,” by R. J. Marzano, 2000, *Transforming Classroom Grading*, p. 5. Copyright 2000 by the McREL Institute.

For the most part, teachers have autonomy over their instructional planning and practices; however, when it comes to traditional grading practices, this autonomy may be deemed arbitrary and could negatively affect a student’s future. The idea of mastery of a skill is subjective, and it falls on the teacher to determine what success means. Essentially, a student passing or failing is at the teacher’s whim (Kirschenbaum et al., 1971). When teachers do not use the same standards for success, students suffer in the form of college acceptance, scholarship attainment, and program choice. It is recommended that these standards for success be communicated to students and be analogous across all grade levels and subject areas. While the social context is not the same today, Kirschenbaum et al. (1971) bring up a good point on how grades can affect a student’s future:

We need to know what we’re doing especially when the grades these days can determine who gets sent to Vietnam and who stays behind, or when our grading systematically screens out black kids from getting some of the benefits in this world. (p. 162)

While influences outside the field of education, such as politics, continue to promote standards-based reform in education through state assessment and accountability, current grading practices appear to be misaligned to this educational reform movement. Why does this element of education seem to be the one encountering such resistance to change? With the high national visibility behind education, reform of grading practices seems to be akin to the third rail of a railroad track, meaning it is too controversial of a topic to touch (Erickson, 2010). It seems that school districts and building-level leaders who want to approach the topic of grade reform continue to encounter the same barriers as those over a century ago encountered. Common understanding based on past practice is that grades should be a normal distribution overall, a bell curve; however, a normal distribution assumes there are no interventions (Guskey, 2011). The goal of teaching is for all students to learn the required curriculum; therefore, the concept of a bell-shaped distribution of grades does not match this goal (Guskey, 2011).

Another common barrier to grade reform is ranking students based on their overall grade point average (Guskey, 2011). When non-achievement factors such as effort are included in grades, those grades do not adequately reflect students' knowledge of specific learning criteria. These practices of incorporating effort, behavior, cooperation, and attendance into a student's overall course grade tend to be greater at the secondary level (Marzano, 2000). If teachers are using arbitrary grading procedures, students taking the same course with different teachers can, essentially, do the same work at the same level yet receive a different overall course grade (Marzano, 2000). This brings up another common barrier to grade reform—the averaging of coursework to one final grade for the entire semester-long or year-long course. This results in the “hodgepodge grade” (Cross & Frary, 1999; Guskey, 2011; McMillan, 2001; McMillan et al.,

2002). Table 2 depicts the differences seen across the grade levels when teachers report the use of non-achievement factors in their grading.

Table 2

Percentage of Teachers Reporting Use of Effort, Behavior, Cooperation, and Attendance in Determining Grades

Grade Level	Effort	Behavior	Cooperation	Attendance
K (n = 79)	31%	7%	4%	8%
1-3 (n = 110)	29%	8%	4%	8%
4-6 (n = 158)	30%	8%	8%	10%
7-9 (n = 151)	36%	10%	8%	18%
10-12 (n = 151)	36%	14%	9%	24%

Note: From “Teachers Consider Factors Other than Academic Achievement,” by R. J. Marzano, 2000, *Transforming Classroom Grading*, p. 5. Copyright 2000 by the McREL Institute.

With the No Child Left Behind legislation came accountability, which led to school leaders and politicians looking to measure how well students were learning what they were taught (Vatterott, 2015). While the literature is sparse, differential grading has been seen in the relationship between a student’s end-of-course (EOC) state exam grade and the final grade the student received in the course (Clark, 2009; Rauschenberg, 2014). If the course curriculum is written around specific content standards and teachers grade students on mastery of those standards, end-of-course exam performance should correlate with the student’s final course grade (Rauschenberg, 2014). However, a study conducted to determine the consistency of course grades showed that over the span of two test administrations, one in the 2007-2008 school year and one in the 2009-2010 school year, nearly 10 percent of the 239,345 students who took the Algebra I end-of-course exam failed the course yet passed the state assessment (Rauschenberg, 2014). This may cause some concern as a math course tends to teach more content-specific skills

over an English course that can be deemed more subjective in assessing a student's skills (Rauschenberg, 2014).

A study conducted on the disparities of Georgia's state assessment scores as they correlate to course grades is similar. Clark's (2009) study of the 2007 end-of-course test for eight subject areas indicated grade inflation in some Georgia school districts relative to the end-of-course test scores. As noted in the study, this is concerning as the final course grades heavily influence college and scholarship acceptance and could be a false indicator of post-secondary success (Clark, 2009).

There has been a great deal of research focused on grading as well as research focusing on districts moving from traditional grading practices to standards-based grading practices (Allen, 2005; Brookhart, 1993; Brookhart, 1994; Cox, 2011; McMillan, 2001; McMillan et al., 2002; Randall & Engelhard, 2009; Randall & Engelhard, 2010; Sadler, 2010). However, there is a limited amount of research conducted on the experiences of the teachers going through a grade reform process within a school and the effectiveness of the training provided to implement the change. This study adds to the grade reform literature by identifying common themes in those experiences in order to contribute to the effective development of training to promote sustained change in practice.

Purpose of the Study

The researcher's goal in conducting this study was to investigate and understand the experiences of five upper elementary teachers who transitioned from traditional grading practices to standards-based grading practices over the course of one to three years at their elementary school. Grading practices have been a topic of research since the current education format began over a century ago (Kirschenbaum et al., 1971; Rugg, 1918). As the research continues to show

adverse effects of traditional grading practices, standards-based grading has made a move from strictly primary grades into upper elementary and even secondary grade levels (Townsley, 2018; Townsley & Wear, 2020). Using Albert Bandura's Social Cognitive Theory (SCT) as a framework, this study examined how five upper-level elementary teachers in grades three through five experienced the initial training and subsequent implementation in their transition from traditional grading practices to standards-based grading practices. The researcher also aimed to understand teacher self-efficacy toward the new grading practice based on the training received at the onset of the implementation.

Research Question

The researcher used a multiple case study design to understand the complex phenomena of educational change (Yin, 2018). A multiple case study design allows for an in-depth focus on both the individual teacher experience and the overall organizational process of transitioning to a new grading practice (Yin, 2018). To thoroughly describe the experiences of the five upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices, the researcher followed one main research question: What was the experience of five upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices? However, due to the importance of the professional development, or training, provided to prepare for the new grading practice, the following sub-question was examined: What are the teachers' perceptions of the effectiveness of the professional development provided to teachers in building their self-efficacy toward the required use of standards-based grading?

Subjectivity Statement

As a high school English teacher for eleven years, the researcher never thought twice about her grading practices. Until the time she left the classroom to go into school administration, she gave zeros for no homework and extra credit for bringing in tissues and reams of paper. It was not until her experience as a principal intern at a Title I elementary school and later as an assistant principal at the same level that she began to question how teachers assign grades to students. Sitting in an IEP meeting for a fourth-grade student solidified her interest in finding out how teachers develop their grading practices and what they consider when assigning a grade. As usual, during an IEP meeting, the exceptional children (EC) teacher reviewed the student's current and past grades. At the time of the meeting, the student was making As and Bs in all of his fourth-grade classes, which included reading, social studies, science, and math. However, in the previous grade level, which used a standards-based grading system, the student made level ones and level twos on grade-level reading and math standards, which equated to showing no progress (level one) and showing minimal progress (level two). How can a student be so far behind grade level one year as noted by his levels using SBG and then make As and Bs the next year? What do these grades mean, and what do they communicate to the student's future teachers?

Later, as a school administrator at the high school level and parent of high school-age students, the researcher saw first-hand the inequities in grading across school levels, school buildings, and even across the hall. Her child consistently brought home course grades in the high 60s and 70s; however, he consistently scored proficient or higher on summative and state assessments. Is the course grade he received a fair assessment of his knowledge of the content, or is it a symbol of the fact he did not complete homework? The researcher often wondered how

and why a teacher, including herself, came up with their grading practices and a justification for why they grade in that manner. As more school districts move to standards-based grading practices, the researcher is interested in teachers' experiences when they are faced with a grade reform situation.

Definition of Terms

The following definitions were used throughout this dissertation.

- *Grades and Grading*: The use of letters or numbers to summarize, symbolize, and communicate the average of scores obtained by a student throughout a set period (Allen, 2005; Marzano, 2000). The act or process of placing a letter or number on an assignment or report card as the symbol of student achievement (Brookhart, 2009).
- *Standards*: Content-specific learning criteria, to include specific skills and knowledge, set forth by states and/or districts; intended to give direction to teachers for instructional planning and educational improvement (Guskey, 2000).
- *Academic Achievement*: A student's ability to show mastery of content-specific learning criteria or standards.
- *Non-Academic Factors or Non-Achievement Factors*: Non-content-specific factors teachers consider when assessing students and assigning grades, such as effort, attitude, attendance, behavior (Guskey & Link, 2018).
- *Traditional Grading*: A grading system in which students complete assignments and a teacher assigns letter or percentage grades; teachers may include achievement and behaviors in grades; teachers average accrued grades to come up with final letter grade for the course (Marzano & Heflebower, 2011).

- *Standards-Based Grading*: Students are assessed on content-specific learning criteria or standards; grades are given with respect to the skills or knowledge demonstrated by the student based on the criteria of the standard (Guskey, 2000).
- *Standards-Based Reform*: Attempted change in education as a reaction to national and state-mandated standards in curriculum (Hamilton et al., 2008).
- *Change*: An attempt by district-level or building-level leadership to implement new and sustainable programs, policies, and/or procedures.
- *Self-efficacy*: A person's belief in their ability, mastery, and influence of specific actions that can affect motivation, performance, and emotional health (Weiner & Craighead, 2010).
- *Pre-service Teacher*: A student, usually an undergraduate, enrolled in a teacher preparation program.
- *In-service Teacher*: A teacher employed by a school teaching a group of students.

Theoretical Framework

The theoretical framework used to analyze this multiple case study's interview data was Albert Bandura's (1999) Social Cognitive Theory. Bandura's Social Cognitive Theory (SCT) looks at the cause of human behavior through the lens of behavior, environment, and personal factors to equally cause influence on the others "bidirectionally" (Bandura, 1999, p. 23). This model of SCT ties into this research study in that it helps to explain how teachers develop grading criteria and practices through events such as their own experiences as students, working with cooperating teachers as student teachers, and even working with assigned mentors once they become beginning teachers in schools. Through observation of cooperating teachers, mentors, and colleagues, student teachers and beginning teachers gain knowledge of various rules of

grading as well as various strategies. However, this knowledge acquisition can go back as far as when the teacher was a young student. One of the elements of Bandura's (1999) SCT is the idea of "learning from response outcomes" (p. 25). When a student receives a good grade, it is typically accompanied by a positive feeling. Just as a bad grade is typically associated with a negative feeling. Teachers may bring these feelings with them as they observe their cooperating teacher grade during their student-teacher experience or when they begin to grade student work as a new teacher. This learned and observed behavior soon becomes the observer's own behavior and knowledge. The Social Cognitive Theory is used to help explain how the plethora of social interactions teachers have affect their ability to change a long-standing practice, such as the use of traditional grading practices.

In his studies on the theory of behavioral change, Bandura (1977) posits that performance-based procedures are shown to be effective in promoting psychological changes. To further this idea, Bandura (1977) notes, "cognitive events are induced and altered most readily by experience of mastery arising from effective performance" (p. 191). When looking at changing teachers' practices, leaders may need to think about how personal experience of mastery and teachers' self-efficacy play into their acceptance or push-back of the new practice (Bandura, 1977; Dam et al., 2017; Fullan, 1985).

Assumptions, Delimitations, and Limitations

In conducting this study, the researcher assumes that all participants have completed a teacher preparation program. The North Carolina Department of Public Instruction (NCDPI) allows for lateral entry, or alternate pathway, licensure when it aligns to the potential educator's academic study (North Carolina Department of Public Instruction, n.d.). Therefore, school districts typically only employ lateral entry teachers in the secondary grade levels where the

focus is on a specific content area in which they received a degree, such as Biology or American History. Those teaching at the elementary level typically do not have a specific content focus that would align to an academic study in college, such as English or Chemistry, as much of their academic study's focus is on how to teach over what they teach. With that being said, the study site's district does not hire lateral entry teachers at the elementary level.

Only those teachers who teach in the upper elementary grade levels, third grade through fifth grade, were included in this study. Additionally, the researcher only included those upper elementary teachers who experienced the full three-year transition from traditional grading practices to standards-based grading practices beginning with the 2016-2017 school year at the study site. Upper elementary teachers who did not experience the study site's initial training were not included in this study. While elements of district- and building-level leadership were mentioned at times during this study, the focus was on the experiences of those teachers who meet the study's selected criteria.

One limitation to this study is that the participants were selected based on convenience of access for the researcher from a single elementary school within a mid-sized school district in the South. Due to this limitation, findings from this study may be less transferable to the experiences of teachers from other schools, districts, or even states. Another limitation of this study is that the researcher had a past supervisory relationship with the selected study participants. Being that qualitative case study research relies on thick, rich descriptions of an individual's experience, this past relationship helped establish rapport and provided an environment where the participants felt safe and openly shared their grade reform experiences. It was important for the researcher to effectively communicate that the participant's involvement in this study was not

evaluative as the researcher was no longer in a supervisory role at the study site at the time of the interviews.

Summary

To develop the background to the research topic, the researcher included the problem statement, the purpose of the study, the research question, the subjectivity statement, and the definitions of terms in chapter 1. The problem statement underlines the common issues found in grading practices dating back to the turn of the 20th century. With teachers' entrenched practices when assessing student achievement, a change to standards-based grading practices could be difficult if not thoroughly planned with sustainability in mind. The purpose of this research was to highlight the experiences of five upper elementary teachers who transitioned from traditional grading practices to standards-based grading practices in order to thoroughly describe these experiences and add to the body of literature on grade reform. The researcher concluded this chapter with a subjectivity statement in order to position herself within the research. To help the reader, a list of commonly used terms when discussing traditional grading practices and standards-based grading is included in this chapter.

Chapter 2 includes a review of the relevant studies on the topic of grading. Specific attention is placed on the history and law of grading as well as how pre-service and in-service teachers prepare to grade. The following chapter will also include a summary of the literature on traditional grading practices and standards-based grading practices. Chapter 2 concludes with a contextualization of the research study and research question.

Chapter 2: Literature Review

Introduction

“Grade high, lay low, and show a video.” This is a phrase once spoken by a high school Physical Education teacher, and based on reports by veteran principals, there is a good possibility that the colleagues surrounding this PE teacher agreed with the sentiment. Grading is synonymous with school, but grading can also be synonymous with stressed teachers, as well as upset students and parents. Sadly, ample research suggests that these sentiments have not changed or improved over time. Over a century ago, H. O. Rugg (1918) stated that one of the main causes of failure in public schools was due to the mismarking of grades. The question of “what do grades mean?” still exists in schools and homes of school-age children today.

While the clear meaning behind grades and grading practices is in question, the use of grades is relatively consistent across the country. At its most basic definition, many academics and educators agree that a grade is a measure of the academic knowledge attained by a student. Grades are the summary and condensed description of a student’s performance (Alm & Colnerud, 2015). Some academics add that assigning a grade uses an explicit standard to show achievement (Ladas, 1974), and achievement is the ability to identify the knowledge or skill attained through performance or observation (Sadler, 2010). At the secondary level, grades are used for college admissions, class rankings, and scholarships (Sadler, 2010). These definitions lead one to believe grades communicate achievement, they are objective, and they are based on measurable qualities, yet a student’s grades may include non-achievement factors, which can lack adequate information about actual academic achievement (Kunnath, 2017; McMillan, 2001).

A teacher at any grade level, from elementary to higher education, makes thousands of decisions regarding assessment on any given day, and these decisions can have lasting social, emotional, and academic effects for students (Tierney et al., 2011). A teacher's decisions are meaningful to a student's progress throughout their school life, and one area of decision-making that is especially crucial is grading (Kunnath, 2017). Teachers' grading decisions affect students beyond the classroom; however, due to the many inconsistencies in teacher grading practices and the inclusion of non-academic factors, some of these grading decisions can have adverse outcomes for students (Brookhart, 1993; Brookhart, 1994; Sadler, 2010). The following review of literature will begin with the history and legal aspects of grading. It will then move into the inconsistencies of traditional grading practices followed by the pros and cons of standards-based grading. Next, the researcher will review the literature pertaining to pre-service teacher preparation in grading and in-service teacher development of grading practices followed by a review of the literature supporting change and professional development. Table 3 summarizes the topics and research sources reviewed.

Table 3

Identified Themes in the Literature

Theme	Sources
Historical & Legal Aspects of Grading	
History of Grading	Alexander & Alexander, 2012; Chansky, 1974; Chartier, 2003; Durm, 1993; Euben, 2001; Gregory, 2005; Kirschenbaum et al., 1971; Schneider & Hutt, 2014
Law of Grading	Chansky, 1974; Chartier, 2003; Euben, 2001; Gregory, 2005; Kirschenbaum et al., 1971; McElligott & Brookhart, 2009; Russell, 2011
Teacher Preparation for Grading	
Pre-Service Teacher Grading Preparation	Allen, 2005; Barnes, 1985; Battistone et al., 2019; Bergman, 2018; Brookhart, 1993; Brookhart, 1994; Brookhart, 2003;

	Brookhart, 2015; Chen & Bonner, 2017; Cizek et al., 1995; Cox, 2011; Cross & Frary, 1999; Frary et al., 1993; Ladas, 1974; Link, 2018; McMillan, 2001; McMillan et al., 2002; Olsen & Buchanan, 2019; Randall & Engelhard, 2010; Rugg, 1918; Sadler, 2010; Tierney et al., 2011; Wise et al., 1991
In-Service Teacher Grading Development	Allen, 2005; Brookhart, 1993; Brookhart, 1994; Brookhart, 2015; DeBoer et al., 2007; Impara et al., 1993; Ladas, 1974; McMillan, 2001; Randall & Engelhard, 2009; Tierney et al., 2011; Wise et al., 1991; Rugg, 1918;
Current Grading Practices	
Traditional Grading Practices: Inconsistencies	Allen, 2005; Brookhart, 1993; Brookhart, 1994; Cox, 2011; Guskey, 2011; Guskey, 2015; Guskey, 2020; Guskey & Link, 2018; Kirschenbaum et al., 1971; Ladas, 1974; McMillan, 2001; McMillan et al., 2002; Marzano, 2000; Randall & Engelhard, 2009; Randall & Engelhard, 2010; Rugg, 1918; Sadler, 2010; Wormeli, 2018; Vatterott, 2015
Standards-Based Grading Practices: Pros and Cons	Guskey & Bailey, 2010; Hattie, 1992; Jung & Guskey, 2007; Knight & Cooper, 2019; Marzano, 2000; Marzano & Heflebower, 2011; Munoz & Guskey, 2015; Peters & Buckmiller, 2014; Swan et al., 2014; Townsley, 2018; Vatterott, 2015; Wormeli, 2018
Making Change in Schools	
Changing Practices	Bandura 1977; Birman et al., 2000; Dam et al., 2017; Evaluation Exchange, 2005; Fullan, 1994; Fullan, 2001; Garet et al., 2001; Guskey & Yoon, 2009; Labone & Long, 2016; Marzano, 2000; O'Connor et al., 2018; Vatterott, 2015
Professional Development	Bandura, 1977; Borko et al., 2010; Cizek et al., 1995; Fishbein & Ajzen, 2010; Fullan, 1985; Fullan, 2016; Guskey, 1986; Guskey & Link, 2018; Guskey & Yoon, 2009; Ingvarson et al., 2005; Labone & Long, 2016; Sahin & Yildirim, 2015; Simon et al., 2010; Wayne et al., 2008

Historical & Legal Aspects of Grading

History of Grading

Like most of the country's educational practices, the foundation of grading student performance is thought to have originated in England, and Yale University is said to have had the first system of grading among American universities (Durm, 1993). Yale president Ezra Stiles used a classification system in 1785 to determine the "perceived learnedness of response" of their students' public examinations, and it was said to have replicated a "classification scheme" used by the Cambridge Mathematical Tripos examination (Schneider & Hutt, 2014, p. 203). Stiles' diary noted, "Twenty Optimi, sixteen second Optimi, twelve Inferiores, ten Performs" that first year (p. 203). However, this system did not last long as Americans thought this British way of classification was "anti-democratic" and ranking systems were soon replaced by honors appointments and eventually by a system of grading that ran from four to zero (p. 204).

Along with Yale, universities such as William and Mary, Harvard, and The University of Michigan were also using grading systems to rank students (Durm, 1993). In 1817, William and Mary used four categories to distinguish students, some of which went beyond academics and included behavior. For example, one category noted that a student was "orderly, correct and attentive" (Schneider & Hutt, 2014, p. 204). Other systems included whether a student "attended chapel" or "showed up to class" (2014, p. 204). It was at Harvard, in 1883, that the first letter grade appeared on a student report card (Durm, 1993); however, for the next decade, the school fluctuated between percentages, letter grades, and simple notations of "passed with distinction," "passed," and "failed" (Durm, 1993, p. 297). Mount Holyoke's grading system, which began

around 1897, was to become the standard of grading for the next century (Durm, 1993). It was here that instructors began to use the system that combined the point scale with the letter grade.

The literature on the history of grading shows a period where grading practices evolved between the first reported grades in the late 1700s to the modern system of traditional grading established in the late 1800s. However, the following century brought little changes to assessing and reporting student learning. This lack of evolution to focus grades solely on student achievement without including behaviors hints at a social construct that seems to promote tradition over the equitable assessment of learning.

Law of Grading

Whether it was the intended purpose or not, course grades have historically been used in schools to differentiate students (Durm, 1993; Schneider & Hutt, 2014). Today, at the K-12 grade levels, grades are typically used to determine if a student should be promoted to the next grade level or retained in their current grade level (Alexander & Alexander, 2012). With a student's future riding on a grade, grading practices found their way into the courts. However, history shows the courts have been hesitant to make judgments in the matter of academics and schooling, preferring to leave student evaluations to the professionals: the teachers (Alexander & Alexander, 2012; Chansky, 1974; Chartier, 2003; Euben, 2001; Gregory, 2005).

Prior to 1975, many of the court cases dealing with grades used the Barnard Principles, the three principles established from the 1913 *Barnard v. Inhabitants of Shelburne* case (Russell, 2011). This particular case involved a student being expelled from school due to a low grade without a hearing. The three principles used in subsequent court cases state: "courts should distinguish between academic decisions and cases of misconduct; courts should grant broad

deference to purely academic decisions; and courts may require less due process for academic decisions than disciplinary decisions” (Russell, 2011, p. 36).

The courts have typically ruled that grades may not be reduced due to disciplinary actions on the student’s part that are not related to academics (Gregory, 2005). This was established based on the ruling in *Katzman v. Cumberland Valley School* (1984) where an eleventh-grade student drank wine on a school field trip, was expelled due to the incident, and received failing grades for the marking period (Russell, 2011). Similar to this case, *Smith v. City of Hobart* (1993) further established that the court historically ruled in favor of the student when grading sanctions were seen as disciplinary (Russell, 2011). Like *Katzman v. Cumberland Valley School* (1984), the *Smith v. City of Hobart* (1993) case involved a student who was suspended for drinking alcohol while traveling to an off-campus Biology class. The student’s grade dropped 20 percentage points due to the suspension. The court specified that a grade should reflect the student’s academic progress and performance (811, F. Supp at 397, as cited in Russell, 2011). The court further noted that reducing the grade based on behavior misrepresented the student’s academic record and could affect college entrance and other post-secondary plans (Russell, 2011).

While the two cases noted above ruled in favor of the student, there continues to be little success in bringing academic challenges involving grades to court (Chartier, 2003; McElligott & Brookhart, 2009). The issue remains in the broad interpretation of what a grade means, and this is the case at the classroom, school building, district, state, and court level. Whether it is the teacher, the principal, the superintendent, or the judge, each person in those areas tends to have their interpretation of what a grade includes and how it is calculated. However, when a behavior is factored into a grade, such as for disciplinary measures, the court is likely to find the grade

“arbitrary or capricious” and rule in favor of the student (Chansky, 1974; Chartier, 2003; Euben, 2001; McElligott & Brookhart, 2009; Russell, 2011).

The lack of literature regarding the laws of grading could be due to the fact that the courts remain consistent in their rulings that teachers are the experts in this area. However, as long as the legal foundation remains unsystematic and the historical underpinnings of including behaviors in grades remain systematic, grade reform may continue to face barriers.

Teacher Preparation for Grading

Pre-Service Teacher Preparation

One of the underlying problems in grading is due to a lack of measurement and grading instruction at the pre-service teacher level as well as little district level and administrator involvement in grading practices (Barnes, 1985; Battistone et al., 2019; Chen & Bonner, 2017; Cizek et al., 1995). Teachers in the United States largely have autonomy over their grading practices, which can be problematic when they have little training in grading practices before becoming practicing teachers (Chen & Bonner, 2017). Many pre-service teachers tend to follow the same grading practices used on them as students rather than those they may have learned in their teacher preparation program (Allen, 2005). The literature on the topic of grading and measurement references a gap between theory and practice when it comes to measurement instruction for pre-service teachers (Allen, 2005; Battistone et al., 2019; Brookhart, 1993; Brookhart, 1994; Brookhart, 2015; Cox, 2011; Link, 2018; McMillan, 2001; McMillan et al., 2002; Randall & Engelhard, 2010; Sadler, 2010). The gap seems to fall between grading on achievement alone, which is what the measurement textbooks recommend (Battistone et al., 2019; Cross & Frary, 1999; Frary et al., 1993), and inclusion of non-achievement factors (Allen, 2005; Brookhart, 1994; Cox, 2011; Ladas, 1974; McMillan, 2001; McMillan et al., 2002;

Randall & Engelhard, 2009; Randall & Engelhard, 2010; Rugg, 1918; Sadler, 2010). The literature also notes that teachers who received assessment and grading instruction at the pre-service level rarely follow the recommendations of instructors and textbooks once they enter the in-service level. Instead, they begin to take on the instructional practices of their cooperating teachers and colleagues, which also includes grading practices (Tierney et al., 2011). As a result of little grading instruction at the pre-service level, many in-service teachers also fall back on grading practices they experienced or observed as students (Allen, 2005; Chen & Bonner, 2017).

In-Service Teacher Grading Development

Teachers typically develop grading and assessment philosophies throughout their years of teaching (Tierney et al., 2011), which could stem from the experiences noted above or pressures they feel from both students and colleagues. DeBoer et al. (2007) found that the need for social approval plays a part in teachers' grading practices. This can be seen as approval from students in grading easy or the approval from colleagues in grading hard. Teachers who received little to no training in grading and measurement are less likely to seek out or return for more training in grading and measurement (Impara et al., 1993; Wise et al., 1991).

While the curriculum, or what is taught, is usually dictated by the school district or school-building leadership, teachers tend to have autonomy over their grading practices. Much like the courts not wanting to be involved in the process, many district-level and building-level leaders do not get involved with their teachers' day-to-day grading practices. However, many studies have found that teachers within the same department may have different grading principles in use. These individual grading principles suit them, their course content, and their structure (Ladas, 1974). Due to the varying degree of criteria included in individual teacher grades, grading practices have become a combination of many grading elements. Much of a

teacher's grading criteria are based on what the teacher deems important to emphasize in teaching and learning (Allen, 2005; Brookhart, 1994; Brookhart, 2015; Randall & Engelhard, 2009; Rugg, 1918).

Over a century ago, Rugg (1918) emphasized that teachers create their grading principles and standards. Today, academics are still finding this to be true. Susan Brookhart's work on the topic of grading spans over 20 years, and little has changed in what could be deemed the root cause of the grading problems across the county—grades reflect what the individual teacher feels is important to learn, which can include academics and factors such as responsibility, as well as the difference in perception of what are achievement and non-achievement factors (Brookhart, 1994; Brookhart, 2015).

The inclusion of teachers' philosophies in grading practices could result in a variety of issues, and the variability and inconsistency in weight of one of the non-achievement factors from teacher to teacher within the same subject area and school building could affect a student's acceptance to college, attainment of scholarships, and class rank (Allen, 2005; Rugg, 1918). The potential effects of the inconsistencies of grading practices could be detrimental to a student's future, as well as the credibility of the education system as a whole.

Current Grading Practices

Traditional Grading Practices

Academics have studied teachers' grading practices from all levels, including elementary, secondary, and higher education. Many of the studies note common elements within grading practices. The first common element is the inclusion of non-achievement factors in the calculation of student grades (Allen, 2005; Brookhart, 1994; Cox, 2011; Ladas, 1974; McMillan, 2001; McMillan et al., 2002; Randall & Engelhard, 2009; Randall & Engelhard, 2010; Rugg,

1918; Sadler, 2010). Non-academic factors include, but are not limited to, effort and behavior. Sadler (2010) stated that a student putting forth effort was simply a variable, not academic achievement. Sadler further stated that elements such as behavior and effort do not provide evidence of academic achievement and can lower the fidelity of grades and common grading practices. Effort can also be seen as a non-academic factor to bump grades when a student's effort is deemed high by teachers (Brookhart, 1993; Randall & Engelhard, 2010). When given grading scenarios looking at achievement, ability, effort, and behavior, teachers were more likely to pass a student sitting on the bubble of an F to a D when effort and behavior were higher than achievement or ability (Randall & Engelhard, 2010).

Unfortunately, behavior rather than the achievement of standards often becomes a common factor in students' final grades on their report cards. Randall and Engelhard's 2010 study found that behavior was a primary factor when teachers had a borderline student or a student who was sitting between two final grade levels, such as sitting between a C and a B. Furthermore, their 2009 study found that elementary and middle school teachers used behavior to decide whether to pass or fail a student who typically performs at a lower achievement level. Students with good behavior received higher grades from teachers (Randall & Engelhard, 2009), while those showing low effort and inappropriate behavior did not receive the bump in grade like those who showed low achievement and ability but high effort and good behavior (Randall & Engelhard, 2010).

Much of the literature on grading shows that achievement makes up the majority of a student's grade; however, effort and other behavioral factors are frequently considered in the overall grade (Brookhart, 1994; Cox, 2011; Guskey & Link, 2018; McMillan, 2001; McMillan et al., 2002). In his study of 1,483 secondary teachers, McMillan (2001) found that teachers at this

level were more apt to use non-achievement factors in their grading practices than teachers of other grade level spans. Completing classwork and homework was also a common factor in grades (Cox, 2011; McMillan, 2001). Teachers look at quality and completion of work, engagement, and participation, as well as the number of zeros when factoring final grades (McMillan, 2001). Cox's (2011) study, which included teacher interviews, raised the question of the true meaning of grades when one teacher reported that a student's effort and completion of homework were requirements of receiving an A, even if a student performed well on the course tests.

An additional element of using non-achievement factors in grading practices involves the perspective that grades can be considered payment for work done. Brookhart's (1993) study of 84 in-service teachers, 40 of which had measurement instruction, found that grades functioned as compensation for work done. Brookhart (1993) found that most teachers in the study believed rewards in the form of grades made the statement that effort and other factors such as good behavior are important. Some teachers believe a student's internal motivation decreases as they reach the secondary level, and teachers begin to use grades as external motivation (Randall & Engelhard, 2009). Studies have indicated that there is also an assumption that older students will not take practice exercises seriously if there is not a grade attached to the output (Sadler, 2010).

Standards-Based Grading Practices

Even though the topic of traditional grading and its inconsistencies has been written about since the early 1900s, it was not until the implementation of No Child Left Behind and the Common Core State Standards that a potential need for grade reform became a reality when student grades did not match their performance on standardized tests (Vatterott, 2015).

Proponents of standards-based grading practices believe that to make grading more objective and

eliminate the multitude of individual criteria brought into the grading system, it would be beneficial for all grade levels to transfer to standards-based grading. This grading system focuses on what a student knows and can do based on the given standards, and it propels teachers to look at product, process, and progress in order to clarify the meaning behind each grade and provide both students and parents a more accurate picture of academic performance (Guskey & Bailey, 2010; Swan et al., 2014).

Pros

Academics believe one of the most significant benefits to standards-based grading is that it provides a clear picture of students' progress in specific areas (Knight & Cooper, 2019; Marzano, 2000; Marzano & Heflebower, 2011; Munoz & Guskey, 2015; O'Connor, 2017; Peters & Buckmiller, 2014; Townsley, 2018; Vatterott, 2015; Wormeli, 2018). While the actual act of assigning a grade to a student is still based on the teacher's judgment, which can be largely subjective, standards-based grading allows a teacher to look at a student's progress based on specific learning objectives (Munoz & Guskey, 2015). Specific feedback on learning objectives helps teachers communicate with both students and parents concerning growth in specific areas (Marzano, 2000; Vatterott, 2015). According to research conducted by Hattie (1992), providing feedback is one of the most effective strategies to increase student achievement. Feedback can also be seen as non-punitive as there is no letter or percentage grade attached (Vatterott, 2015). Providing feedback on formative assessments throughout the learning plan allows students to make mistakes, learn from their mistakes, and move toward mastery, as they are not worried about a poor grade. This ability to assess a student's progress also allows the teacher to individualize each student's instruction as they now know where a student's deficits fall within the standards (Marzano, 2000; Munoz & Guskey, 2015; Vatterott, 2015). Standards-based

grading can be beneficial to special education teachers as it allows teachers to communicate with families on the student's specific needs based on their Individualized Education Plan (IEP) goals (Jung & Guskey, 2007).

There are three possible elements in grading student work: product, process, and progress (Guskey & Bailey, 2010). The product is the student's demonstration of what they know and can do, while the process is how the student came to the final product. This can include work habits (Munoz & Guskey, 2015). Progress looks at the student's growth throughout the learning. Traditional grading can include all three of these elements in one grade, making it difficult for students, parents, and college admissions offices to gain insight into the actual achievement, or learning, that took place. Standards-based grading tends to look at the product and progress. Teachers will look at the summative assessments and the student's growth over the period of learning to determine the student's achievement in the specific learning objective (Marzano, 2000; Munoz & Guskey, 2015; Vatterott, 2015). Non-achievement factors, such as effort, behavior, and attendance, are not factored into standards-based grades, and there is no averaging of assignment grades (Marzano, 2000; Marzano & Heflebower, 2011; Munoz & Guskey, 2015; Vatterott, 2015).

While there are many journal articles and books concerning the benefits of standards-based grading by the recognized scholars in SBG, such as Marzano, Guskey, and Wormeli, there is a lack of in-depth research studies on the topic of standards-based grading. Eight themes regarding teaching and learning emerged in one study by Knight and Cooper (2019), which investigated the effects of standards-based grading on teaching, learning, assessment, and student behavior. Six of the eight themes dealt with positive aspects of standards-based grading practices. The six positive themes based on the use of standards-based grading included: more

purposeful planning, instruction, and assessment; clear communication of achievement; environment conducive to learning through mistakes; meeting student needs; shift toward a growth mindset; and student ownership of learning over time (Knight & Cooper, 2019). Table 4 shows the differences between traditional grading practices and standards-based grading practices.

Table 4

Differences in Grading Practices

Traditional Grading Practices	Standards-based Grading Practices
Knowing and understanding	Applying, analyzing, and synthesizing
Learning defined by what students know	Learning defined by what students can do with what they know
Evidence of learning is repeating back	Evidence of learning is application of skills
Rigor is defined as more content	Rigor is defined as more complex

Note: From “How Learning is Defined,” by C. Vatterott, 2015, *Rethinking Grading: Meaningful Assessment for Standards-Based Learning*, p. 28. Copyright 2015 by ASCD.

Cons

One of the areas of pushback when moving to standards-based grading is that teachers question how they will motivate students to complete work or teach them responsibility if there are no grades attached. Knight and Cooper’s (2019) study found that participants had to create alternative ways to promote good behavior since standards-based grading only allows assessment of specific learning objectives—not behaviors. While this can be seen as “one more thing” to many teachers, the participants of the study used the opportunity to discuss the “why” of proper classroom behaviors as well as “shifting the environmental focus from the consequence to the

learning” (Knight & Cooper, 2019, p. 82).

The use of standards-based grading practices takes time. For standards-based grading to be effective, scholars feel teachers must take the time individually and with their professional learning community (PLC) to understand the standards of their content area (Munoz & Guskey, 2015). However, this can be overwhelming as many content areas have upwards of 15 to 20 standards. Swan et al. (2014) suggest standards-based grading address no more than six standards. This limited focus could help steer change toward using standards-based grading as many school districts have already established “power standards,” or essential standards for each content area. The essential standards are used in the grading process. Teachers have also reported that the actual reporting of grades in the standards-based grading system can be time-consuming; however, the ability to provide specific feedback to students and parents outweighed the negative for most teachers (Peters & Buckmiller, 2014).

Many grading experts believe that standards-based grading is effective in communicating student achievement in specific learning objectives (Knight & Cooper, 2019; Marzano, 2000; Marzano & Heflebower, 2011; Munoz & Guskey, 2015; Peters & Buckmiller, 2014; Townsley, 2018; Vatterott, 2015; Wormeli, 2018); however, even the use of standards-based grading can be difficult in communicating the achievement level of students with special needs and IEPs (Jung & Guskey, 2007). When using standards-based grading, teachers often question how to assess students on grade-level standards when the students are performing below grade level. Teachers of students served under the Individuals with Disabilities Education Act (IDEA) who have Individualized Education Plans (IEP) often wonder if it is the regular education teacher or the special education teacher in charge of assigning grades to the student. Many experts believe that even standards-based grading practices fall short in effectively communicating the achievement

levels of students with disabilities (Jung & Guskey, 2007).

Making Change in Schools

Changing Practices

Change is difficult, and in the case of changing a grading practice, teachers tend to push back when they do not understand a process. The Constructivist Theory maintains, “learning occurs when the *status quo* is challenged” (Labone & Long, 2016). Many long-standing thoughts on traditional grading practices have been disrupted with a change from traditional grading to standards-based grading. To promote successful change, academics note there are a few elements that must be considered in order to receive positive outcomes: planning (Evaluation Exchange, 2005), purpose or focus (Birman et al., 2000; Garet et al., 2001; Labone & Long, 2016), content-specific (Birman et al., 2000; Garet et al., 2001; Guskey & Yoon, 2009; Labone & Long, 2016), as well as feedback and follow-up (Guskey & Yoon, 2009; Labone & Long, 2016).

Fullan (2001) notes that at least three dimensions are affected when new programs or policies are introduced in schools: the use of new curriculum or resources, the use of new teaching strategies, and the possible need to change beliefs. He further states that in order for the change to affect the outcome positively, the change has to “occur in practice along the three dimensions” (Fullan, 2001, p. 31). One way to help change teachers’ beliefs when looking at grade reform is to come to common ground when looking at the purpose of grades and grading (Marzano, 2000; O’Connor et al., 2018; Vatterott, 2015). According to Dam et al. (2017), from a shared idea of purpose, the group making the implemented change not only needs to begin changing their behavior, in this case how they grade student achievement, but they also need to be motivated to make a change. Some research suggests that one of the first steps to initiating grade reform in a district or building could be distributing a staff survey that assesses teachers’

beliefs and motivation for change in grading practices (Marzano, 2000; Vatterott, 2015). It is suggested, however, that change should not be mandated (Fullan, 1994; O'Connor et al., 2018). It is recommended that educational leaders allow teachers to test the idea in order to gain experience and see results (O'Connor et al., 2018). This experience can then increase the teachers' self-efficacy and motivation to take on a new way of grading student achievement (Bandura, 1977).

Professional Development

A teacher's sense of self-efficacy in a practice could be tied to the professional development received as training for a new instructional practice. The quality of professional development may also be a factor in the teacher's change in behavior. Fishbein and Ajzen (2010) noted three conditions should be present for new behavior to occur: the individual must have the necessary knowledge and skill to perform the new behavior, the environment must be conducive to the new behavior, and the teacher must have a positive intent to perform the behavior. Fullan (1985) supports these conditions by noting that teachers must have experience with the new behavior, which increases their self-efficacy in order to change their belief in the practice. This experience and subsequent mastery of the behavior comes in the form of professional development (Bandura, 1977; Guskey, 1986). In the few studies available on standards-based grading practices, professional development in grading practices is noted as an area for further research (Cizek et al., 1995; Guskey & Link, 2018; Simon et al., 2010). However, it is also noted as one of the main areas for promoting successful and sustainable change in grade reform (Townsend, 2018).

Guskey (1986) states that "high quality" professional development is key in nearly every educational change implementation (p. 5). In order for staff development to be effective, it

should be specific to the teachers' instructional area and goals as well as relevant to their day-to-day procedures (Borko et al., 2010; Guskey, 1986). It is recommended that professional development be within the school and connected to processes and procedures already in place, such as PLCs, as this promotes a collaborative change environment (Borko et al., 2010; Fullan, 2016).

The research available concerning professional development indicates that for professional learning to occur, teachers need to be actively engaged in the process of learning new concepts or strategies (Guskey & Yoon, 2009; Ingvarson et al., 2005; Labone & Long, 2016; Wayne et al., 2008). Self-reflection has been another professional development strategy noted as producing a positive change in teacher learning (Sahin & Yildirim, 2015). While active engagement has been shown to be a characteristic of effective professional development (Guskey & Yoon, 2009; Ingvarson et al., 2005; Labone & Long, 2016; Wayne et al., 2008), training content specific to the teachers' areas of teaching can surpass the importance of structure when it comes to teachers transferring their learning to the classroom (Guskey & Yoon, 2009; Labone & Long, 2016; Wayne et al., 2008). The content of the professional development needs to be relevant to the teachers' daily work and aligned to the focus of the school (Labone & Long, 2016; Wayne et al., 2008).

Labone and Long (2016) note seven principles of effective professional development: experiential, participant-driven, collaborative, connected to and derived from teachers' work with students, supported by modeling coaching and collective problem-solving, connected to and integrated with school change, and sustained and ongoing. Concerning grade reform, these principles could encourage teachers to use their current students' work to learn, process, and implement the change from traditional grading to standards-based grading. Teachers could use

already established grading scenarios to develop new philosophies on grading in early sessions and then begin to use current student work to develop new grading processes as they progress through the implementation. It is recommended that both of these training strategies be done in a group setting as research has shown that teachers collaborating with colleagues over current student work promotes the transfer of learning from professional development sessions to the classroom (Ingvarson et al., 2005).

Summary

In this chapter, the researcher reviewed the literature on grading, focusing on how the long-standing practice of grading student work came to be through a review of both the historical and legal foundations, how teachers prepare for and develop their grading practices, the practices of traditional grading and standards-based grading, and how change occurs in schools and the use of professional development to make a change. Multiple studies and scholarly articles about the inclusion of non-achievement factors when traditional grading practices are in use were noted. While there are some downsides to the use of standards-based grading practices, much of the literature promotes the positive use of this grading practice as it focuses on and communicates actual student achievement of content-specific criteria or standards.

Through the literature review, the researcher brought to the forefront the reality that grading continues to be an unsystematic tradition rooted in historical and legal underpinnings. The researcher discussed the inconsistencies seen in the current, widely used system of letter grades and percentages and reviewed the current literature on the pros and cons of standards-based grading. Locating research on the inequities in traditional grading practices was not a difficult task, nor was it difficult to find research on the benefits to student achievement when standards-based grading is implemented; however, little research exists on teachers' experiences

going through grade reform. As noted in the review, successful change includes in-depth planning, a set purpose or focus, content-specific material, purposeful feedback, and follow-up (Birman et al., 2000; Evaluation Exchange, 2005; Garet et al., 2001; Guskey & Yoon, 2009; Labone & Long, 2016;). Effective change also requires training in the form of professional development, and that professional development should be relevant to the teachers' established daily practices and done within a collaborative setting (Borko et al., 2010; Fullan, 2016; Guskey, 1986;). In chapter 3, the researcher will describe the methodology of this qualitative multiple case study, including specifics regarding the research design, participant selection, data collection and analysis, as well as strategies for quality.

Chapter 3: Methodology

Introduction

The daily life of a teacher involves a great deal of social interaction with students and staff at their school. This interaction can occur in the form of professional learning community (PLC) meetings to informal hallway conversations between classes. Using Bandura's (1999) Social Cognitive Theory (SCT) as a framework, these interactions help teachers construct the knowledge and meaning to become one within the educational environment, which also includes the social, cultural, and historical norms of this setting. When a change in practice is implemented in a school building, these social interactions can play a large role in the sustainability of the change as well as the teachers' feelings of self-efficacy toward this change (Fullan, 1985; Fullan, 2016; Ingvarson et al., 2005; Labone & Long, 2016; Munoz & Guskey, 2016). While the practice being changed is the same for all, the teachers involved in the change have differing experiences and come away from the provided training, or professional development, with differing beliefs in their ability to follow the implemented change (Bandura, 2000).

The researcher centered this qualitative study on the experiences of the five study participants with the intent to understand their individual experiences and viewpoints of grade reform (Mertens, 2015). The researcher investigated the *what* and *how* of the study participants' individual experiences in order to pull out detailed, in-depth descriptions of their common experiences (Creswell & Poth, 2018; Merriam & Tisdell, 2016). As a former teacher, it was important for the researcher to use Husserl's concept of bracketing for two main reasons (Creswell & Poth, 2018). The first reason is so the researcher's experiences in grading did not project into the responses of the study participants, and the second reason to use the concept of

bracketing is that traditional grading practices are deeply ingrained with established societal viewpoints that shape common understandings about grading practices used in schools at all levels.

With this qualitative study, the researcher aimed to capture and understand the experiences of five upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices (SBG). The researcher began by allowing the five participants to reflect on how they developed their grading practices as in-service teachers as well as how their experiences at the pre-service teacher level prepared them to grade student work through semi-structured one-on-one interviews. The teachers were allowed to voice their perceptions on the actual preparation and training they received by school district and school building leadership to transition from traditional grading practices to standards-based grading practices. The researcher analyzed these reflections, perceptions, and experiences using Albert Bandura's (1999) Social Cognitive Theory (SCT) as the theoretical framework. By examining the professional development provided to implement this grade reform, district- and school-level leadership could increase the sustainability and teacher self-efficacy of implementing change in long-standing educational practices, such as grading.

Chapter 3 includes a brief statement of the problem, the research question and sub-question, as well as the research design and rationale. The researcher also discusses participant selection, instrumentation, data collection and analysis, along with strategies for quality, risks, benefits, and ethical considerations.

Statement of the Problem

Current grading practices, especially those used at the secondary level, have been in place since the late 1800s (Durm, 1993; Schneider & Hutt, 2014). In line with the historical

background of grading, the legal background of grading has held firm that grading practices should be placed in the teacher's hands. School districts put that autonomy of grading on the teachers through policy with a few stipulations, set forth by the few court cases dealing with student grades, as to what are fair grading principles so as not to fall into the category of "arbitrary and capricious," which is when the court tends to rule in favor of the student (Chansky, 1974; Chartier, 2003; Euben, 2001; McElligott & Brookhart, 2009; Russell, 2011).

Along with the long-standing, problematic practice of including non-academic factors such as effort, participation, and attendance into what grading researchers term "hodgepodge grading" (Allen, 2005; Brookhart, 1994; Cox, 2011; Ladas, 1974; McMillan, 2001; McMillan et al., 2002; Randall & Engelhard, 2009; Randall & Engelhard, 2010; Rugg, 1918; Sadler, 2010), research shows there is a gap between theory and practice when it comes to what pre-service teachers are advised to practice concerning grading student work and what is actually practiced during their in-service teaching years (Battistone et al., 2019; Cross & Frary, 1999; Frary et al., 1993). While the research shows instruction on grading at the undergraduate teacher preparation level to be minimal with little transfer to in-service teaching, research does show that those who receive instruction in grading at the pre-service level tend to grade more equitably based on student academic achievement over behaviors (Bergman, 2018; Brookhart, 1993).

Grading research has also focused on the inclusion of teachers' philosophies in grading practices, which could result in various issues (Brookhart, 1994; Brookhart, 2015; Wise et al., 1991). When teachers within the same content area have different grading practices, the variability and inconsistency in weight of one of the non-achievement factors from teacher to teacher could affect a student's acceptance to college, attainment of scholarships, and class rank

(Allen, 2005). The potential effects of the inconsistencies of grading practices could be detrimental to a student's future, as well as the credibility of the education system as a whole.

Even though many states adopted Common Core State Standards and emphasize standards-based instruction and assessment through the accountability model, grading practices continue to be misaligned within school districts, buildings, departments, and same content areas (Brookhart, 1993; Brookhart, 1994; Sadler, 2010). Some school leaders understand there is a need for grade reform, and some educators have implemented a change in grading practices by moving toward standards-based grading. However, along with the literature on the inconsistencies of grading, there is also literature on the inconsistency of change in education through ineffective professional development. In this study, the researcher highlights common themes in the experiences of five upper elementary teachers who experienced grade reform and contributes to the effective development of training to promote sustained change in practice and increase teacher self-efficacy in equitable grading practices.

Research Question

The researcher used a qualitative multiple case study design in order to understand the complex phenomena of educational change (Yin, 2018). Using a multiple case study design for this research allowed for an in-depth focus and description on both the individual teacher experience and the overall organizational process of transitioning to a new grading practice (Mertens, 2015; Yin, 2018). To thoroughly describe the experiences of the five upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices, the researcher followed one main research question: What was the experience of five upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices? However, due to the importance of the professional

development, or training, provided to prepare the study participants for the new grading practice, the following sub-question was examined as well: What are the teachers' perceptions of the effectiveness of the professional development provided to teachers in building their self-efficacy toward the required use of standards-based grading?

Research Design: Multiple Case Study

A multiple case study design is fitting for this study as the method allows the researcher to take an in-depth look at the social experiences the five teachers went through during the grade reform being examined (Yin, 2018). Investigating the experiences of the selected participants and how their environment may have influenced their change, as framed by Bandura's (1999) Social Cognitive Theory, allowed the researcher to tease out the important contextual elements needed to support sustained change in educational practice (Yin, 2018). Bandura's SCT further supports the constructivist approach of a multiple case study design because the researcher was able to highlight the elements needed for successful grade reform by capturing the individual viewpoints of the participants while still focusing on the collective experiences and how they provided information for future success in education reform (Yin, 2018).

Case study research centers around a "case" to be studied, and the defined cases studied in this research include the five individual experiences of the upper elementary school teachers transitioning from traditional grading practices to standards-based grading practices (Yin, 2018). Stake (2006) notes, "the first objective of case study is to understand the case" (p. 2). Once the case or cases were defined in this case study research, it was important for the researcher to "bound the case," which is distinguishing those who are part of the case from those who are not part of the case (Yin, 2018). This study was bounded to the experiences of five upper elementary school teachers who went through a grade reform within one elementary school in a mid-sized

school district in the South. The case study participants' experiences were also bound to the grade reform implementation's specific time frame. Study participants were initially trained at the beginning of the 2016-2017 school year, with full implementation of the new grading practice completed during the 2018-2019 school year. Yin (2018) indicates that bounding the case by participant and time can help the researcher "determine the scope of the data collection and, in particular, how you will distinguish data about the participant of your case study from data external to the case" (p. 31). Bounding the case also helps to strengthen the link established between the individual cases and the research question and sub-question (Yin, 2018).

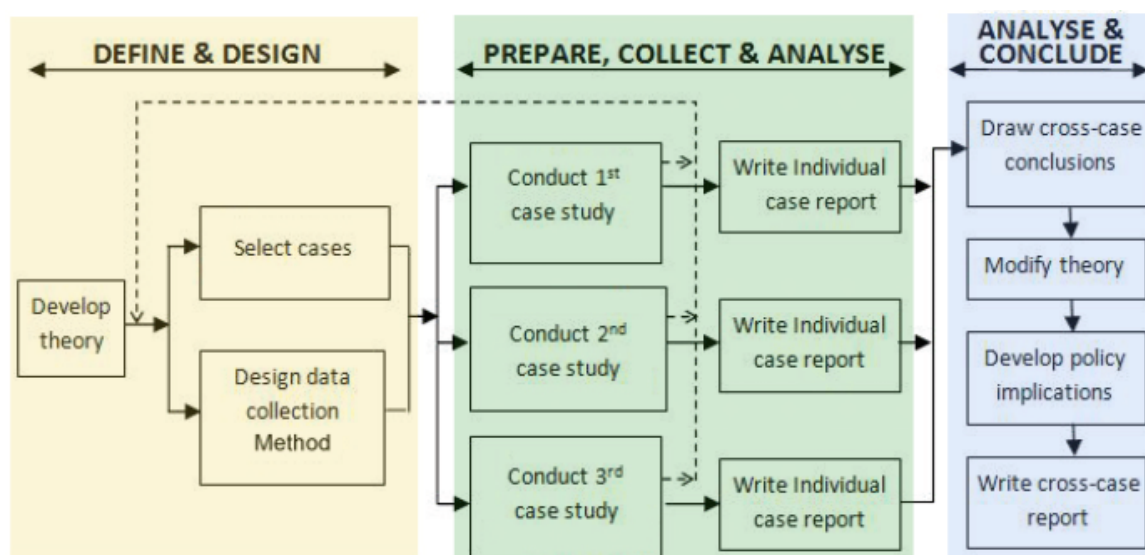
The replication approach was utilized in this multiple case study and is seen through Yin's (2018) Multiple Case Study Procedure (see Figure 1). The first step in this procedure was to define the theoretical framework, which is Bandura's Social Cognitive Theory, followed by the selection of cases and design of the data collection method (Yin, 2018). As noted, five cases were used in this multiple case study to examine and understand the experiences of upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices. These experiences were captured through semi-structured one-on-one interviews.

The next step in the Multiple Case Study Procedure was to prepare, collect, and analyze the data (Yin, 2018). Once data was collected through the interviews, as seen in Figure 1, each of the five cases became its own case study with its own findings and conclusions noted in the individual case report (Yin, 2018). The individual conclusion from the first participant's case was then the basis for replication in the other four cases (Yin, 2018). When analyzing the individual case reports, the researcher was able to discuss any contrasting results (Yin, 2018).

The researcher concluded the study by developing implications based on results and writing a final case report (Yin, 2018).

Figure 1

Yin's Multiple Case Study Procedure



Note: From “What Are the Potential Multiple Case Study Designs (Types 3 and 4)?,” by R. K. Yin, 2018, *Case Study Research and Applications: Design and Methods*, p. 58. Copyright 2018 by Sage.

Participant Selection

Stake (2006) notes that a multiple case study's benefits can typically be seen in the number of cases selected. He indicates that benefits are minimal if four or fewer cases are chosen; however, ten or more cases can become too overwhelming for the reader to understand. This study's five participants included upper elementary school teachers from Shermer Elementary School located in a mid-sized suburban school district situated outside a large Southern city. Pseudonyms for the study site and five participants were given to provide anonymity and maintain confidentiality. This particular school district, which includes 42

schools at the time of the study, was chosen based on its convenience and accessibility to the researcher as well as its transition from traditional grading practices to standards-based grading practices in the upper elementary grades. The school district mandated the implementation of standards-based grading starting with the third grade during the 2016-2017 school year with the plan that the schools could implement the grade reform over three years by adding a grade level each year.

Shermer Elementary School houses grades kindergarten through fifth grade and had approximately 860 students at the time of the study. A breakdown of student demographic is as follows: 60 percent white, 18 percent African American, 11 percent Hispanic, and five percent Asian. This particular site was chosen based on convenience and the researcher was once a school administrator at the study site with access to the study participants. Since the elementary schools in this particular school district implemented standards-based grading in grades kindergarten through fifth grade, any of the 21 elementary schools could have produced participants; however, since the researcher had an established relationship with the school building administration and the teachers at the chosen study site, she felt this relationship would help gain access. At the time of the study, Shermer Elementary School, the study site, had 56 classroom teachers throughout all grade levels, with six teachers per grade level in the upper grades of three, four, and five.

In keeping with the constructivist paradigm, the researcher chose purposive sampling to select the five participants with the goal of selecting “information-rich cases” (Mertens, 2015, p. 331). Due to the researcher’s position as a school administrator in the school district at the time of the study and being a former administrator at this school, the potential study participants needed to understand that this study and its elements, to include a one-on-one interview, were

not evaluative. In order to participate in this study, participants must have taught an upper elementary grade when the grade reform initially took place, which was in the fall of 2016, and continue to have taught at the study site through the final stage of SBG implementation, which was the 2018-2019 school year. Teachers were allowed to participate in the study if they experienced the entire three-year grade reform implementation at the study site but were teaching at another elementary school in the district using standards-based grading at the time of the interviews. The study participants must have used traditional grading practices prior to the grade reform and received the school-based training on the implementation of standards-based grading practices.

In order to determine the five eligible participants, a recruitment survey was sent to all certified teachers at Shermer Elementary School, the study site. A statement that included the purpose of the study and the criteria for study participation accompanied the recruitment survey. Participation in this study was voluntary; however, participants must have met the study criteria to participate. If the researcher was unable to identify at least five teachers at the study site, snowball sampling was to be used to identify study participants who were at the study site during the entire grade reform but were teaching at another elementary school in the district using standards-based grading at the time of data collection. Since five study participants were identified at Shermer Elementary School, snowball sampling was not needed to identify additional study participants. Once the study participants were selected, the researcher contacted eligible teachers through their preferred form of contact, as noted on the recruitment survey. Data regarding grade level, demographics, years of teaching, and exposure to grading instruction at the pre-service teacher level of the study participants was collected through both the recruitment survey and the one-on-one interviews and shared in chapter 4.

Instrumentation

There were two instruments for data collection in this multiple case study. The first data collection instrument was an electronic *Google* form for the recruitment survey to introduce the study's purpose, share participant criteria, and gather contact information for those interested in participating. The survey included questions about what grade the teacher taught at the time of data collection and what grade they taught at the initial implementation of standards-based grading in the 2016-2017 school year. Also included in the recruitment survey were questions to determine if the teacher taught at this specific site in the upper grades from the beginning of the grade reform implementation. The recruitment survey concluded with a question focusing on the teacher's interest in participating and a section for potential participants to include contact information. The recruitment survey is included in Appendix A.

The second data collection instrument was a semi-structured one-on-one interview. The interview protocol was designed around five main topics: (a) teacher preparation program and cooperating teacher relationship, (b) beginning teacher and mentor relationship, (c) traditional grading practices, (d) transition to new grading practice, (e) and training and implementation of new grading practice. The semi-structured one-on-one interview utilized an interview protocol of 20 questions adapted from two qualitative studies on teachers' grading practices (Cizek et al., 1995; Simon et al., 2010). Additional questions were developed through a review of the literature and the above topics to provide answers to the research question and sub-question. The one-on-one interview protocol is included in Appendix B.

Data Collection

The researcher completed the Institutional Review Board (IRB) process to start initial data collection and obtained permission from the Assistant Superintendent of Curriculum and

Instruction, Director of Accountability, and principal of the study site to conduct research within the district using district personnel. Once the school district and IRB approval were received, the researcher sent the recruitment survey to all certified teachers at Shermer Elementary School, the study site, to introduce the study's purpose, share participant qualifications, and gather interest in participation. The recruitment survey, sent as a *Google* form, was used as the initial contact with potential study participants and allowed for data collection from a larger group (Mertens, 2015). This initial simple descriptive survey also allowed the researcher to gather demographic information for the selected five cases (Mertens, 2015). Through the recruitment survey, potential participants provided their preferred contact information to schedule a time to conduct the one-on-one interview.

Common forms of data collection in qualitative research include observation, interview, and document review, and Yin (2018) believes the interview is "one of the most important sources of case study evidence" (p. 118). The researcher used an interview protocol in the multiple case study and included questions to get to know the five chosen teachers and establish trust (Creswell & Poth, 2018). The questions asked by the researcher were relevant to investigating and finding conclusions to the research question and sub-question for this study. Through the 20-question interview protocol, the researcher aimed to develop rich descriptions of the participants' experiences in their respective teacher preparation programs, their experiences with grading as a student teacher working with a cooperating teacher, their experiences with grading as a beginning teacher (BT) working with a mentor, and their experiences transitioning from traditional grading to standards-based grading as a classroom teacher working with their colleagues and school building administration. Through the one-on-one interview questions, the

researcher sought to determine how school building leadership supported the grading practice change process through professional development and building teacher self-efficacy.

An app called *Just Press Record* was used to record individual interviews. The technology allowed the researcher to download both a digital text file and a sound file. The sound file was uploaded into an online program called *Temi*, which quickly transcribed and formatted the uploaded interview data into a text file. Since the final transcribed interview file was not verbatim to the actual interview, the researcher listened to each interview file again to properly format and correct any grammatical mistakes in the transcribed data. Any identifying information was scrubbed from the data sets, and each participant was identified using a coded pseudonym on the initial digital transcription files. Once data was transcribed, the data analysis process began.

Two of the five study participants were identified through a pilot study on the same topic conducted in the fall of 2019. Face-to-face interviews with the pilot study participants took place at the study site on separate occasions after completion of the school day. The researcher used *Just Press Record* to record the two in-person interviews. However, due to the COVID-19 pandemic, social distancing restrictions, and school closures in early 2020, the researcher conducted one-on-one interviews for the additional three study participants through *Microsoft Teams*, a virtual meeting platform. While the three individual semi-structured interviews were recorded through the virtual meeting platform, the researcher followed the same steps as the face-to-face interviews conducted during the pilot study and used *Just Press Record* to record the interviews and *Temi* to transcribe the interview data.

Data Analysis

In order to identify underlying themes present in the five interviews, the researcher used a constant comparison method of analysis (Leech & Onwuegbuzie, 2007). While many researchers use this method to identify the commonalities across the multiple cases, Stake (2006) emphasizes using this method to identify the differences between the multiple cases. The benefit of doing cross-case analysis in this study is that the differences in experiences can come together to develop more inclusive and differentiated professional development for an educational change such as grade reform. Since the researcher conducted this study to understand the five teachers' experiences, both the similar and different aspects in each case were analyzed to further understand how each case was situated contextually (Stake, 2006).

Once properly transcribed and formatted, the researcher read all five data sets in their entirety without annotating but simply reading for initial meaning and understanding. Next, the researcher read through the transcribed interviews a second time to chunk the data into "smaller meaningful parts" (Leech & Onwuegbuzie, 2007, p. 565) and hand annotated by assigning a descriptive code to each chunk of data making sure to appropriately code similar chunks. This data analysis used codes established from the pilot study. Examples of the codes used include teacher prep-courses, teacher prep-relevant experience, teacher prep-cooperating teacher. The codes were abbreviated for ease in annotating. A list of the codes and their abbreviations is included in chapter 4.

For ease in the analysis process, the researcher created a *Microsoft Excel* spreadsheet to document the codes and subsequent data analysis. The researcher pulled direct quotes from the data sets along with their codes, and then sorted the data chunks by codes. The sorted data was assigned a category by the researcher. The six categories include: prepare to grade, going beyond

averages, communication, changing practices, teacher efficacy, and teacher investment. A list of the categories and their abbreviations is included in chapter 4.

The next step in the analysis process consisted of grouping the categories to establish broader themes. Following Saldaña's (2016) description of theme, in order to pull meaning from each unit of data, the researcher created thematic sentences from the data chunks. More specific themes were developed by analyzing each of the five case reports, as noted in chapter 4. The thematic sentences were then sorted and chunked into broader themes. A list of the thematic sentences and broader theme chunks is included in chapter 4. A copy of the master database, including data chunks, codes, categories, thematic sentences, and broader themes, is located in Appendix C.

Strategies for Quality

Shenton (2004) notes four main areas in which qualitative researchers can ensure quality: credibility, transferability, dependability, and confirmability. There are many strategies within each area to guide a researcher to a quality study. In terms of credibility, the researcher sought to ensure the study and its findings were relevant to the studied environment (Shenton, 2004). For example, the topic of grading practices is relevant to the current discussion of grade reform across all levels of instruction, from elementary to higher education. To ensure this credibility to establish the study's trustworthiness, the researcher stated that her role as a school administrator in the study site's school district is separate from her role as a researcher. The researcher also aimed to make the study participants feel comfortable enough to disclose their true feelings about the transition from traditional grading to standards-based grading. A subjectivity statement, which grounds the researcher's own experiences as a classroom teacher and beliefs about equitable grading practices, was included in chapter 1 and is briefly addressed later in this

section. Once data was collected and transcribed, follow-up questioning was utilized (Shenton, 2004) to allow participants to verify their statements' accuracy.

While qualitative research findings cannot be described as generalizable like quantitative research findings, there is still an element of external validity that has to be achieved with qualitative research. To ensure the findings of this research could be transferable, or able to be applied to different situations, the researcher wrote rich descriptions of the participants' experiences transitioning from traditional grading practices to standards-based grading practices (Merriam & Tisdell, 2016). Due to the purposive sampling method of using participants from one elementary school in one district, maximum variation in the sampling was not possible (Merriam & Tisdell, 2006).

In order to ensure dependability, or the ability for the study to be replicated with similar results (Shenton, 2004), the researcher reported the research methods, including the research design and data analysis strategies, in detail in this chapter. This not only allows the study design to be used in future research, but it also adds to the study's credibility because readers can see that the researcher followed correct qualitative research procedures (Shenton, 2004). These steps took place during the study design and implementation as well as the data gathering, analysis, and reflection stages (Shenton, 2004).

As noted in the subjectivity statement in chapter 1, the researcher's experience with grades and grading practices changed drastically when she transitioned from the role of classroom teacher at the high school level to the role of school administrator at the elementary school level. This new perspective also affected her role as a parent in supporting her child in his academic performance and the grades that symbolized his assumed achievement levels. The researcher's feelings on grading and grading practices could potentially affect the confirmability,

which is seeking objectivity (Shenton, 2004), of this study. In order to eliminate bias in this study, Husserl's concept of bracketing was used so that the researcher's experiences in grading did not project into the responses of the study participants (Creswell & Poth, 2018).

Risks, Benefits, and Ethical Considerations

The risks to the study participants in this multiple case study were minimal. The researcher obtained Institutional Review Board (IRB) approval through the university before data collection. In the IRB, the researcher explained the steps in keeping study participants' information confidential. The researcher also obtained permission from the district Assistant Superintendent of Curriculum and Instruction, the Director of Accountability, and the study site's principal. Stipulations to the use of district personnel are ensuring the ethical treatment of their personal information, including their shared experiences within the school environment, and ensuring participants that their participation is voluntary and not evaluative. Each study participant signed an Informed Consent form to indicate their permission to be included in the study results and is listed as Appendix D. As explained in the IRB, the researcher created a coding system to de-identify interview data collected. This data was stored on password-protected devices to protect the confidentiality of the study participants further.

A benefit to study participants' involvement in this study is knowing they are contributing to the development of sustainable educational change. A teacher's grading practices can make or break a student. The occurrence of bias grading and differential grading has been noted in the literature as a problem in secondary schools, both middle and high school (Malouff, 2008; Rauschenberg, 2014; Zoeckler, 2007). However, this discrepancy in grading practices could have a greater effect on high school students who are vying for top ranking status to gain scholarships and financial aid to highly competitive colleges. Teachers within a school building,

departments, and even specific content areas (e.g., English IV) have varying criteria for what is an A and what is a B, as well as what is included in that A or B (Rauschenberg, 2014).

This study is an important step in determining how to solve the inequities in grading across the secondary level. While standards-based grading (SBG) has been used at the elementary level for over a decade, conversations to implement SBG at the secondary level have started. This study's findings could inform the development of grading criteria and course materials to help pre-service and in-service teachers develop the necessary skills to grade equitably. Findings could also help inform school and district level professional development to support the sustained implementation of SBG at the secondary level.

Summary

The researcher included a detailed description of the research methodology in Chapter 3. This qualitative multiple case study consisted of a recruitment survey and semi-structured individual interviews of five teachers who experienced a grade reform. Due to the COVID-19 pandemic and school closures at the time of three of the five interviews, the researcher utilized a virtual meeting platform to conduct one-on-one interviews for the three study participants. The other two study participants were part of a previous pilot study, and their interviews were conducted in a face-to-face setting at the study site. The researcher selected the case study research design because it is grounded in the idea of understanding a participant's experiences of a phenomenon or event (Yin, 2006). The researcher analyzed data using a constant comparison method where annotation and coding helped to find broader themes in the individual cases and across all interviews.

The researcher will reveal the final analysis and discussion of the research study findings in chapter 4 and chapter 5.

Chapter 4: Data Analysis

Introduction

As noted in the previous chapter, the researcher's goal was to capture and understand the experiences of five upper elementary school teachers as they transitioned from traditional grading practices to standards-based grading practices. Using a multiple case study, the researcher focused on one main research question and one sub-question: What was the experience of five upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices? What are the teachers' perceptions of the effectiveness of the professional development provided to teachers in building their self-efficacy toward the required use of standards-based grading?

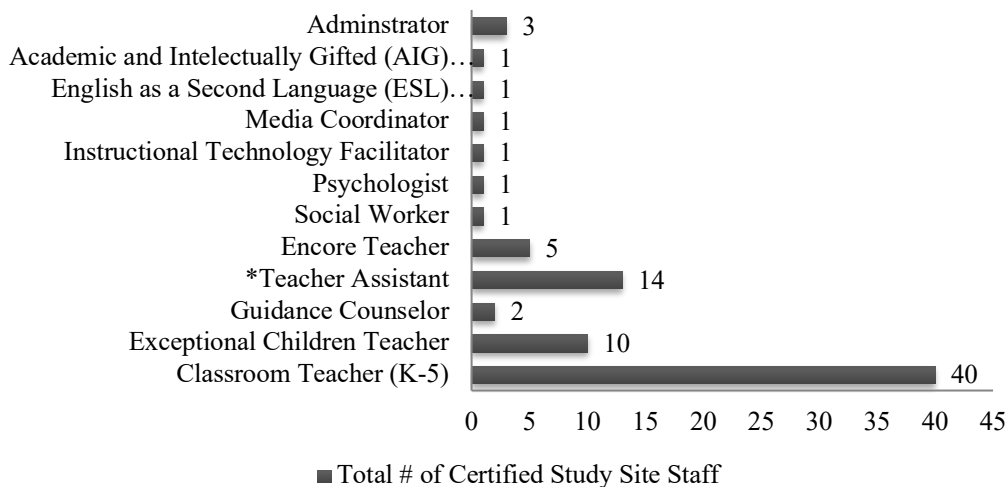
In this chapter, the researcher provides the recruitment survey findings, the description of the codes and categories established through data annotation and analysis, and the five individual case study reports. Information gathered through the initial survey is presented as a description of the certified staff of the study site, Shermer Elementary. The researcher used pseudonyms for the study site and the five study participants to provide anonymity and maintain confidentiality. Once the researcher completed the five semi-structured one-on-one interviews, the interviews were transcribed and read once for initial understanding without annotations. The researcher read through the interviews a second time and hand annotated each interview using codes established from the pilot study. Chunks of data were pulled from the interviews and entered into a *Microsoft Excel* digital database along with their appropriate codes. The data was then sorted into broader categories. Next, the researcher created thematic sentences that captured the meaning of the specific chunk of coded data (Saldaña, 2016). Using the thematic sentences, the data chunks were grouped into larger, broader themes. The five individual case reports include

participant background, a narrative of their experience as they transitioned to standards-based grading from traditional grading, and an overall summary of each case study's findings. As per the Multiple Case Study Procedure (Yin, 2018), each of the five individual case reports produced individual results, which were used as a basis for comparison in the remaining four case reports. The implications and final case report (Yin 2018) are discussed in Chapter 5.

Recruitment Survey Results

The recruitment survey was sent to the 79 certified staff members of the chosen study site in the spring of 2020. The certified staff of Shermer Elementary School consisted of 40 kindergarten through fifth-grade teachers. While they are not certified staff members, 14 teacher assistants received the recruitment survey, as they were part of the study site's certified email group; however, not all of the teacher assistants at the study site held a certified teaching license at the time of data collection, nor were they considered as participants as they did not participate in the initial standards-based grading training. Figure 2 shows the total number of the study site's certified staff at the time of data collection.

Figure 2



Note. The total number of certified staff at the study site, May 2020.

Twenty-nine certified staff filled out the recruitment survey, with a 37 percent response rate. One of the recruitment survey responses included a participant from the pilot study completed in the fall of 2019. To participate in the study, a response of “yes” must have been marked for five of the seven required survey questions.

The recruitment survey, sent as a *Google* form, consisted of seven required questions and two optional questions. Tables 5 provides a breakdown of the recruitment survey frequencies per required question.

Table 5

Frequencies of the Recruitment Survey Questions

Question	Frequency	
	Yes	No
1. Did you teach 3 rd , 4 th , or 5 th grade at Shermer Elementary School during the 2016-2017 school year?	9	20
2. Did you participate in the Standards-Based Grading training provided by the school in August of 2016?	15	14
3. Did you teach 3 rd , 4 th , or 5 th grade at Shermer Elementary School through the entire three-year Standards-Based Grading implementation (2016-2019)?	8	21
4. Did you use traditional grading (use of letter grade and percentages) prior to the Standards-Based Grading implementation in your grade level?	8	21
5. Are you interested in participating in a one-on-one interview as a study participant?	9	20

The school district mandated the move from traditional grading to standards-based grading beginning with third grade in the 2016-2017 school year; therefore, it is possible that teachers responding “yes” to Question 2 on the recruitment survey received the training at a

different school in the district and then moved to Shermer Elementary School, the study site, at some point during the three-year implementation.

The recruitment survey included two optional questions to gather more data beyond the required criteria questions. Of the 29 survey respondents, 23 completed Optional Question 1 while 20 completed Optional Question 2. Table 6 provides a breakdown of the frequencies of the two optional recruitment survey questions.

Table 6

Frequencies of the Optional Questions on the Recruitment Survey

Question		Frequency
6. How many years have you been teaching? (n=24)	0-3 years	2
	4-7 years	6
	8-10 years	3
	11+ years	12
7. Did you receive instruction on grading in your pre-service teacher preparation program? (n=20)	Yes	7
	No	13

Participants

Of the 29 total recruitment survey respondents, four respondents met the required criteria and agreed to participate in the study. One of the four recruitment survey respondents included one of the two pilot study participants. These four study participants answered “yes” to Question 1 through Question 5 on the recruitment survey. The fifth study participant included the other of the two pilot study participants. As seen in Table 7 below, pseudonyms were given to the five study participants to provide anonymity and maintain confidentiality. In both the pilot study and current study, all participants signed the Informed Consent forms as approved by the University

of North Carolina at Charlotte IRB process, which is listed as Appendix D. Table 7 provides descriptive data on the five study participants.

Table 7

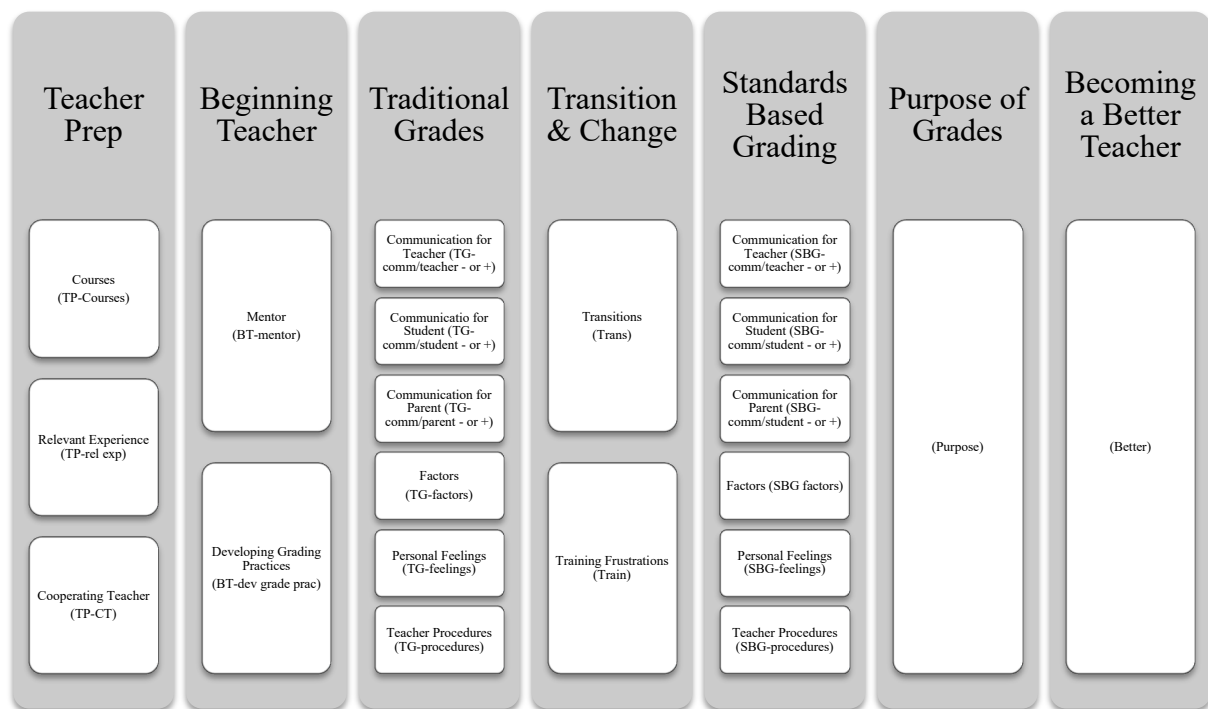
Descriptive Data on Study Participants

	Total Years Teaching	Total Years Using Traditional Grading	Grade Taught at Standards-Based Grading Implementation	Course on Grading in Pre-Service Teacher Preparation Program
Katie	17	15	5 th	No
Linda	19	17	5 th	No
Rachael	6	2	3 rd	No
Vickie	19	16	4 th	No
Jessica	16	4	3 rd	No

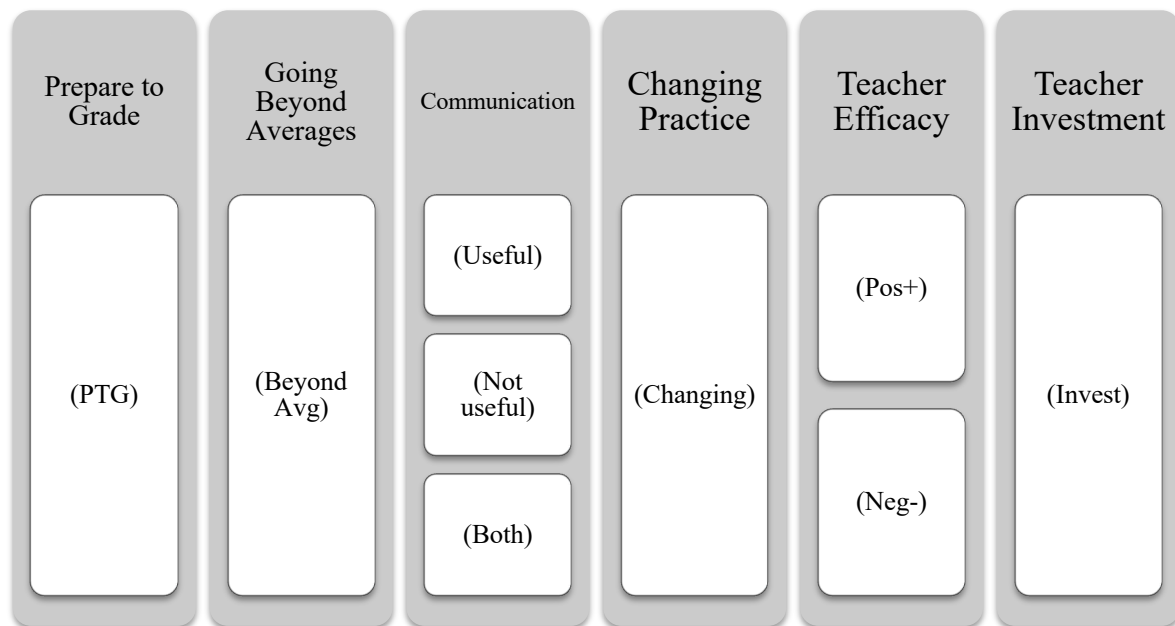
Codes and Categories

As noted in Chapter 3, once the interviews were transcribed correctly and formatted, the researcher read all interviews in their entirety without annotating. The researcher then annotated each interview by hand by chunking into “smaller meaningful parts” (Leech & Onwuegbuzie, 2007, p. 565) and assigning descriptive codes established from the pilot study. The researcher created a *Microsoft Excel* spreadsheet to document the codes and subsequent data analysis for ease in disaggregating the data. Figure 3 provides a list of the codes used during the data analysis phase. Included in parentheses is the abbreviated code used during annotation.

The researcher grouped coded data chunks to find broader categories and wrote thematic sentences that captured the chunked data’s meaning. Figure 4 provides a list of the categories developed from analysis and grouping of the codes used in data analysis.

Figure 3

Note. Codes and their abbreviations.

Figure 4

Note. Categories and their abbreviations.

Upon completion of coding and categorization, the researcher analyzed the data for themes. As they are similar to codes and categories, “‘themes bring meaning and identity to a recurrent [patterned] experience and its variant manifestations’ (DeSantis & Ugarriza, 2000)...a theme captures and unifies the nature or basis of the experience into a meaningful whole” (Saldaña, 2016, p. 199). Following Saldaña’s (2016) description of theme, the researcher then created sentences from the data chunks to pull meaning from each unit of data. A total of 49 thematic sentences were developed from the analysis of the five case studies. Examples of the thematic sentences include:

- SBG provided communication that was both useful and not useful for parents.
- Teacher believes the purpose of grades is to communicate mastery of the standards.
- Teacher did not have a useful experience with cooperating teacher during teacher preparation program.
- Teacher feels confident using standards-based grading.
- Teacher has both positive and negative feelings toward standards-based grading.
- Traditional grades provided communication that was not useful for teachers.
- The idea of transition to standards-based grading was negative to the teacher.

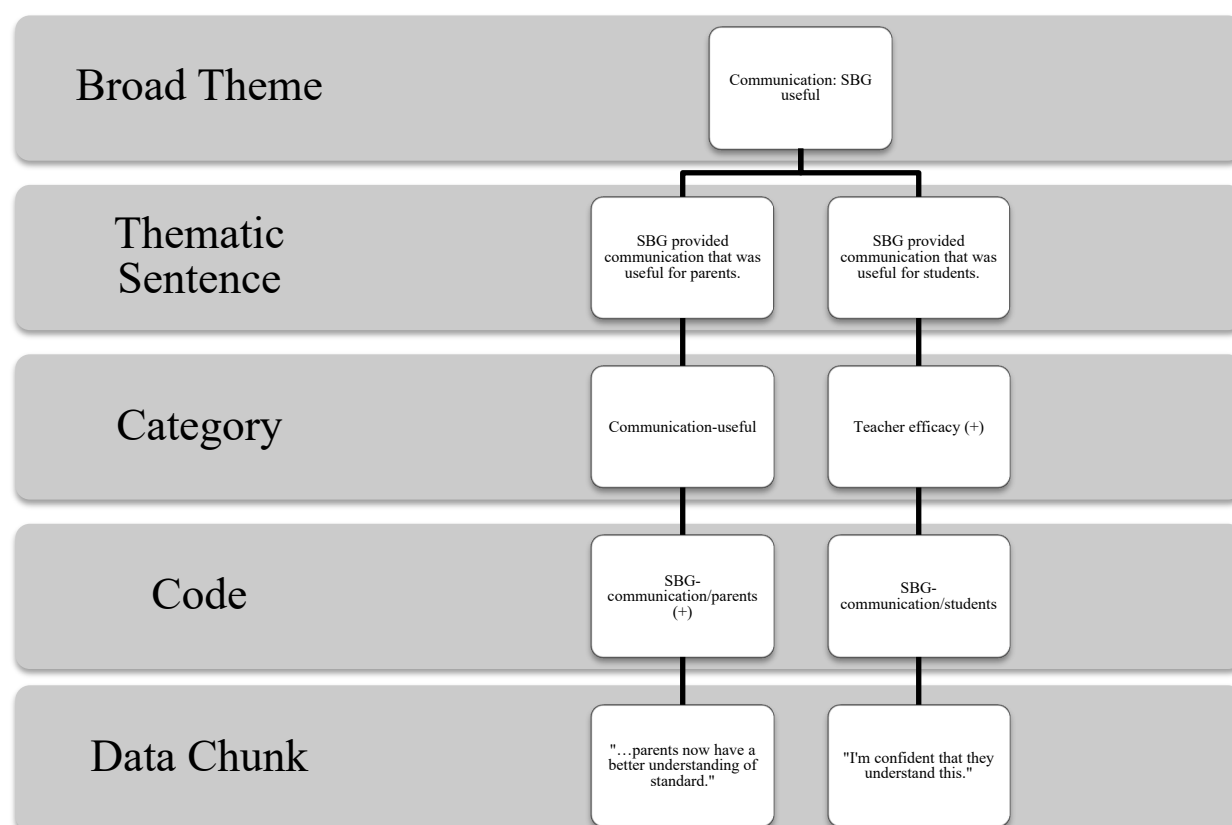
The researcher combined the thematic sentences into 24 thematic chunks. The thematic chunks were color-coded to show if a response fell into the useful category (green), not useful category (red), or referenced both useful and not useful (orange). Table 8 shows the thematic chunks, the total number and percentage of study participants who fall into this theme based on their responses, along with the total number of quotes in the entire body of the case study that fall into these themes.

Table 8*Thematic Chunks*

Thematic Chunks	# Participants	% Participants	# Total Quotes
Communication: SBG not useful	5	100	17
Communication: SBG useful	5	100	20
Communication: SBG useful/not useful	2	40	2
Communication: TG not useful	5	100	13
Communication: TG useful	5	100	19
Communication: TG useful/not useful	4	80	8
Efficacy: SBG confident	4	80	5
Efficacy: SBG: positive change in teaching practice	5	100	18
Feelings: negative SBG	2	40	7
Feelings: positive SBG	4	80	12
Feelings: positive TG	1	20	2
Feelings: positive/negative SBG	3	60	5
Feelings: positive/negative TG & SBG	1	20	1
Idea of transition: negative	3	60	3
Idea of transition: positive	3	60	4
Other: Going beyond final grade	5	100	14
Other: Purpose of Grades	4	80	4
Support: BT years useful	2	40	4
Support: Mentor not useful	4	80	7
Support: Mentor useful	1	20	2
Support: Teacher prep not useful	5	100	17
Support: Teacher prep useful	5	100	6
Training: SBG training not useful	4	80	18
Training: SBG training useful	3	60	8

A complete table of chunked data, codes, categories, and themes is included in Appendix C. Figure 5 shows a portion of the analysis process by providing representative quotes for the codes and categories within the thematic chunks and larger themes.

Figure 5



Note. A representation of the analysis process starting with data moving up to the creation of broad themes.

Case Report 1: Katie

As part of a pilot study, the semi-structured face-to-face interview with Katie was conducted in the fall of 2019. The 25-minute interview took place in her classroom at Shermer Elementary School, the study site, after the school day.

At the time of the interview, Katie had been teaching for 17 years, all of which were in the upper elementary grades. She taught fifth grade for the last eight years at the time of the

interview. For six of those eight years, Katie taught math at the study site in a departmentalized approach where she was part of a team of teachers. One teacher taught English Language Arts, one taught science, and she taught math. Katie used traditional grading practices for 15 years before implementing standards-based grading in her grade level during the 2018-2019 school year, the final year of the SBG implementation at Shermer Elementary School.

Katie shared that much of her pre-service teacher preparation program consisted of subject-specific related courses such as math, language arts, technology, and science. She did not remember taking any courses geared explicitly to grading and creating assessments. “I remember we had to create units for different content depending on what the class was, but I don’t remember specific instruction on how to create the assessments,” she stated. When asked about her pre-service teacher preparation program’s most relevant experience, Katie stated that being out in the schools to gain clinical credit hours was the most beneficial to her transition into in-service teaching. She did not recall much from her student teaching experience other than it was “a very scripted experience.” This scripted experience included her cooperating teacher’s grading practices. Katie recalled that students received a weekly spelling list, they were tested at the end of the week on the list of words, and all grades went into the grade book.

Katie noted that grading was not a focus during her beginning teaching years with her mentor as well. “I feel like it wasn’t ever the focus of instruction...wasn’t the focus of my being mentored as a first-year teacher,” she stated. However, when asked about how her grading practices developed during her beginning teaching years, she remembered “making a shift towards organizing [student] data and grouping the kids based on what they need” using *Microsoft Excel* spreadsheets.

As the interview moved into questions related explicitly to traditional grading practices and standards-based grading practices, the researcher saw patterns starting to emerge from Katie's responses. She stated she believed the purpose of grades is "to communicate a student's level of performance on the standard." It is here that the researcher developed the theme of *grades as communication*. When asked what traditional grades told the teacher, Katie said, "it's an average." She further explained her response by stating, "if you have multiple assessments on a standard, it's going to average them together...if it was an isolated quiz on a standard, it was very useful because it was one standard." She circled back to how she grouped students based on their performance on assessments stating that if it was a multiple standard assessment, she still had to break it down into separate standards or concepts; otherwise, the traditional grade in the form of a percentage was not useful to her because it was just an average of how the students did on the summative assessment. "An end of unit summative assessment with traditional grades is less useful to me than standards," Katie said. When the traditional grade is an average of a whole body of work, she stated that traditional grades could leave out a great deal of information. "Did the kid not do one assignment? Did they do really well on three and not do well on one?" she pondered.

When it comes to traditional grades as communication for students and parents, Katie stated that students see the percentages of traditional grading as "I'm good at it" or "I'm not good at it." Parents are similar in how they see traditional grades as communication. She described parents as being comfortable with traditional grading because they are familiar with this grading practice. "They see the As and Bs, and their kid's doing okay," she said. "They see not As, you know, and their kid's failing."

When asked about transitioning to a new grading practice, Katie stated she was open to the change and felt like she was willing to try the new grading practice because she thought the idea behind standards-based grading was good. “I was trying to be very open-minded about it,” she added. Katie was asked what the four levels of standards-based grading tell the teacher. She started by answering she felt SBG communicated a student’s level of mastery on a standard, but Katie went further by explaining the questioning she poses to herself when assessing student work: “Do they have it, and are they showing it?” She said she liked to use the word “consistent” during this questioning by asking herself: “Are they consistently showing me they can do this skill?” Working through the levels of SBG, she described level one and level two as students consistently mastering a skill some of the time. Students at these levels need more support. As students move up the levels into level three and level four, that support decreases while the consistency increases. Katie also noted that she is less likely to wait longer to assess students with standards-based grading. “I feel like I can assess sooner with maybe less practice on a skill because it’s okay to put a two on a paper, but I didn’t want to give a kid a C right off the bat,” she said. Even though she felt SBG involved more data collection and paperwork, she said it was worth it because the result is not an average. “I can give a kid two questions on Tuesday and give two or three questions on Friday, but I wouldn’t want to put a percentage on either one of those,” she said. She further explained that with traditional grading this practice can have detrimental effects on the student’s average. “Now I don’t have a problem giving just three or four questions at a time as opposed to 10.”

However, Katie explained that standards-based grading was not useful communication for students and parents on student achievement. “Students see that level...ones, twos, and threes,” she said. “I’m trying to really promote them seeing a two and not being frustrated.” She

makes a point to tell students who receive twos that they are “moving in the right direction” and to keep working for the next level. She also has the students do some self-reflecting by looking at what they might be missing and need to learn to be consistent with the standard.

Katie noted that parents are frustrated by standards-based grades as well. Since students move to traditional grades in middle school, “I see a lot of parents concerned about the next level,” she said. She stated that she receives many questions about what a specific level will look like moving into middle school. “Parents are still very unsure,” she said. “I try to communicate the same thing to parents that I do with the kids.”

While Katie stated that standards-based grading gives her the information she needs in terms of student achievement, she still has difficulty knowing what to put on a student’s report card. She explained how she struggled when students showed inconsistency in their skills on a specific standard. Katie noted that it is easy when a student can show their knowledge in a variety of ways; however, she questioned what to do with the student who may receive higher levels of progression and then drop down into lower levels for the same skill. When asked if support is provided in these situations, she stated that she sometimes gets different answers and feels that everyone might be unsure. Through these descriptions of frustration, the researcher developed the theme of *frustration with the transition to standards-based grading*.

The standards-based grading implementation started with third grade at Shermer Elementary School, the study site, in the fall of 2016. The plan was to add a grade level each year, with fifth grade implementing the new grading practice in the fall of 2018. However, all third-grade through fifth-grade teachers were required to attend the initial training in the fall of 2016. “I remember a few trainings over the course of the time period,” Katie said. She further explained her experience in the initial year of the implementation by stating, “I remember...I’m

like ‘I’m not doing this.’ When you’re not doing something, you kind of halfway listen...halfway tune it out.” She did recall a training session conducted on a workday at the start of their implementation year to prep them; however, she stated she felt her grade level was overlooked, and there was no follow-up training once the new grading practice was implemented in her grade level. “We should have known what we were doing a little bit more than maybe what we did because we weren’t at the beginning of [the implementation],” she noted.

At the time of the interview, Katie had been using standards-based grading for a full year and claimed to be a “big fan of it for day-to-day teaching.” She stated that she could look at any student and tell the student exactly where they are on a specific standard. However, her frustration seems to come at the end of each grading period with report cards. “Communicating it to parents at the end of a quarter is difficult,” she said. “I feel like there’s still some subjectivity into what I’m communicating.” When asked if she felt she had enough evidence of student progress to back up the apparent subjectivity, Katie stated she felt she had enough, but she did not know if every teacher could say they had enough evidence. “I don’t know that there is an expectation of what we’re supposed to have,” she said. “I just kind of feel like maybe some follow-up training would be nice.” In the end, Katie could see the positives in both traditional and standards-based grading practices. “Report cards were much easier [with] traditional grading,” she stated, “but day-to-day, I like standards-based.” She repeated that communication with parents and writing report cards with standards-based grading could be difficult, but the ability to teach small groups based on the data from standards-based grading practices is much better than using traditional grading.

Overall, Katie was in favor of standards-based grading practices over traditional grading practices. While she could not recall any specific coursework dedicated to grading practices

during her undergraduate teacher preparation program, she could recall how she used spreadsheets to group students as she developed her grading practices during her beginning teacher years. The 17-year veteran upper elementary teacher felt grades, in general, are used as communication to all stakeholders—teachers, students, parents, and even administration—on how well a student is performing with the content; however, Katie felt traditional grades only told those stakeholders if a student “got it” or “did not get it.” As noted above, she did find completing report cards using traditional grading practices to be easier than using SBG, but she felt the four levels of standards-based grading told her enough about a student to determine what additional supports the student might need to progress to the next level. Based on her responses, her frustrations with standards-based grading and the new grading practice lie in the lack of understanding with parents and the lack of sustained training for teachers at each grade level during the three-year SBG implementation at Shermer Elementary School.

Case Report 2: Linda

Linda was the second of two participants of the pilot study conducted in the fall of 2019. The 27-minute semi-structured face-to-face interview was conducted on a weekday after school in the teacher’s classroom at Shermer Elementary School in the fall of 2019. This was Linda’s 19th year of teaching in the upper-grade levels, having only taught third grade, fourth grade, and fifth grade. At the time of the interview, she taught fifth-grade English Language Arts (ELA) as a part of a three-member departmentalized team; however, before her experience as an ELA teacher for the last six years, she taught all subjects in a self-contained model of teaching. Linda used traditional grading practices for 17 years prior to the final stage of implementing standards-based grading in her grade level in 2018-2019.

Linda completed a pre-service teacher preparation program during her undergraduate years. She recalled taking foundational courses in both reading and math along with some courses in history and science, but most of her teacher preparation courses focused on content areas and analyzing textbooks. Linda did not have instruction on grading or analyzing assessments during her teacher preparation program, and she stated that her student teaching semester included a cooperating teacher that was “extremely strict, especially for third grade.” The cooperating teacher did not allow students to correct work and threw away papers with no names. Once she became an in-service teacher, Linda stated she did not have much help in grading from her mentor since her mentor was teaching kindergarten and Linda was teaching third grade. While the school was not using standards-based grading, the primary grades were still focused more on the progression of skills than assigning percentages and letter grades. Linda, who taught in the upper levels during her BT years, used letter grades and percentages common to traditional grading practices. However, she did state that she had support from her colleagues and the assistant principal when it came to developing her grading practices. “We did allow for corrections if it was below a 70 for half credit and until a kid got it done,” she said. “You’d say ‘well this is due on a certain day,’ but you would give extensions automatically.” Linda also noted that teachers at the school were not allowed to record anything less than a 60 in the grade book even if the student did not attempt the assignment. “That was a hot topic,” she exclaimed.

Linda thought about her own experience as a young student when developing her grading practices as a beginning teacher. “I definitely was thinking about myself because I was the student who had to study, study, study, and I ended up with the F or D,” she said. Linda further explained that she tried to put herself in her students’ place to see what they would feel. While

she did not want to base grades on feelings, she did want her students to feel successful. “If they didn’t show proficiency, I needed to get to the point where they could, she stated.” Linda looked deeper into the final averages students received on their classwork. She would reteach and pull small groups to make corrections together. “I did quite a bit of ‘you choose the format you wanted,’” she stated. She would make assessments in various modes such as multiple choice and short answer and allow the student to choose the format they felt they would be most successful; however, it was still graded using traditional grading practices with a seven or 10-point scale.

The theme of *grades as communication* continued throughout Linda’s responses, but her responses became more in-depth about the usefulness of that communication to each stakeholder: the teacher, the student, and the parent. Again, due to her own experience as a student, Linda believed the purpose of a grade is to show mastery, or what a student knows; however, she felt “there’s so much more to a person than that number or that level.” She stated that some students, like herself, need that “extra piece” to get into college” or to show others that she was “better than what my grade showed.”

Linda noted that she used to think traditional grades told her a lot about a student, and she still felt that a percentage can communicate accuracy. However, she does not feel that traditional grades with their percentages show a deeper level of understanding. She does feel the students find more value in traditional grades, as do their parents, because they are used to that grading practice. “When we switched to standards-based grading, it was like the kids didn’t understand or couldn’t visualize where they were on a scale, and with the hundreds, you could think of a number line,” she explained. “If you were a hundred, that was good. A 50 was not good. It was easier to visualize.” She noted that both the students and parents struggle with visualizing where the levels are in standards-based grading. “Even though we say, ‘you’re progressing’ and ‘you

reached mastery,' I don't think [the students] are developmentally ready for that." Linda noted that the group of students she had in her class that school year never had traditional grading. "These kids have had standards-based grading since kindergarten, and we're still teaching the parents about the levels even if they've been in the county forever, so it's not as meaningful to them."

Linda and the other fifth-grade English Language Arts teacher tried to integrate more standards-based grading practices into their planning and teaching a year before the official implementation in 2018. The students in fifth grade during the 2017-2018 school year had SBG up until fifth grade, so the two teachers felt it was necessary to at least merge traditional grades with standards-based grading since the students were already familiar with standards-based grading since kindergarten. Linda did not mind the transition from traditional grading to standards-based grading. She was open to the transition due to the depth she felt standards-based grading would provide and that it is "not just a number." She further explained that she was open to the implementation because she felt SBG focused on a student's understanding and that it is progressive.

After a year into the implementation, Linda felt that she knew when students were ready for enrichment better than she knew with traditional grading. She noted that she could now see how the students were doing over time in each standard. Linda commented that there is more to consider with standards-based grading, whether it be more data or more paperwork. She said the need to create multiple modes of assessments is part of the process with standards-based grading, and it can add to the workload; however, she noted there is more to consider. "It takes a little more prep," she said, "but I think it's meaningful because you have to think about your assignments more. It's gotten us closer to best practice." Along the lines of using best practices,

Linda noted that she and her colleagues have started to better understand the standards. “I’m seeing there were standards that my colleague and I were way off of understanding because we didn’t use the unpacking, and it was right there. It was telling us what it meant.”

The theme of *grades as communication* continued with Linda’s responses to student and parent understanding of standards-based grading. “I haven’t gotten a response from [students] on their understanding,” she said. “I want them to see that if you’ve been level one, a [level] three might not be realistic” when creating goals for their unit goal sheets. She added that she wants students to see that the progression through the standards is over time and that they need to keep realistic goals in mind. Linda felt there is a lack of understanding with the parents as well. She would like parents to see that, with using SBG, there is a progression over time. Linda feels that this would lessen parents’ anxieties when they see a lower level of progression and feel that, even at a quarter mark, this lower level is a final indication of the student’s knowledge of that standard.

Linda brought up the idea of traditional grades providing a useful look at a student’s accuracy as well. She did not feel SBG provided this type of communication to students. “I’ll still put [a percentage] on their paper,” she stated, “but I also put the level with it, and that way I can kind of see they were almost level three.” The idea of accuracy also came up when asked what SBG does not tell students. “The students don’t see what mastery means,” Linda said. “Whereas before they would. They didn’t know it, but they kind of considered 85 and higher mastery. They felt like they had done a good job, but they don’t see that with [standards-based grading].”

The theme of *frustration with the standards-based grading transition* was apparent in Linda’s responses. While she and her English Language Arts PLC colleague tried to integrate

standards-based grading practices before the full grade level implementation in 2018-2019, she still felt nervous going into the official implementation in 2018 because “we had heard so many different things in between the training and that time [of implementation].” Linda noted some of the misunderstandings were in how teachers came up with the final level on a standard. These ranged from taking the average of the levels noted for each standard to taking the most recent level noted for a standard. “We want to do this right,” she recalled thinking at the time, “but we don’t really know.” Her grade level received a brief training during a workday before the 2018 school year and their implementation of SBG. “It still came down to ‘use your best judgment,’” Linda said, “which we struggled with.” She stated that she and her colleagues would have preferred district or school building leadership simply telling them what to do rather than use their best judgment. “Tell me to take the average. The main. Tell me to take the most recent,” she exclaimed. The directive of taking the most recent evidence of a standard to determine the level was problematic for the grade level. Linda explained that if a student did not perform well in the most recent assessment format, this might not be an accurate depiction of the student’s mastery of the standard. She continued to explain that the grade level told the administrator who provided the refresher training that they wanted to take the median, and the administrator told them that if that was “a truer picture of the kid, then do that.” The frustration, she noted, was that they did not receive consistent messages on how to reach a final level in standards-based grading. “They said, ‘just have work samples to prove what you put there,’ and I was okay with that,” she concluded. Other than the brief refresher before her grade level implementation, Linda reported no official follow-up training. However, she noted that if she told the administration that they had an issue, they would receive help. Most of the support she received came from colleagues as they worked through specific situations.

At the time of the interview, Linda was not as happy with standards-based grading as she wanted to be. “I think because I don’t see it making an impact or being as meaningful with the kids,” she explained, “but I think it’s still what’s right for the kids.” She noted that she likes that standards-based grading lies on a spectrum, and it is not just a number. “It’s more proficiency-based,” she said. While she can see the positives in the use of SBG, she stated that if she could go through the transition again, she would suggest more training. She mentioned that using work samples with rubrics and group scoring followed by a discussion on how the student work was scored would be beneficial. Linda added that SBG training should be provided during new teacher orientation or a topic during a monthly mentor/mentee meeting at the school level.

While she felt traditional grades, at one point, told her a great deal about her students, Linda now feels standards-based grading is a better practice for showing her where her students need additional support, even though it puts more work on the teacher. She feels that students and parents still struggle with understanding the levels of SBG, and many parents worry how those levels will transfer to the secondary level.

The 19-year veteran did not have training dedicated to grading at the pre-service teacher level or even much support during her beginning teacher years, relying on her colleagues and administration’s practices for support in developing her grading practices. Based on her shared personal experiences as a struggling student, Linda seemed to enter teaching with a broader view of assessing student progress—going beyond percentages alone. These experiences likely factored into her openness to the SBG implementation as she felt standards-based grading would provide stakeholders information on a student’s progress that was “not just a number.”

It was evident that Linda was frustrated with the lack of sustained training for teachers throughout the SBG implementation at the study site. She came away from the initial training,

which occurred two years before the fifth-grade implementation of SBG in the fall of 2018, feeling that there were still too many unanswered questions and conflicting information about how to score student work using standards-based grading. While this was an apparent frustration, Linda followed up by stating, if asked, the study site's administration would provide any training the teachers felt they needed; however, in the end, she still felt that the move to SBG was in the best interest of students.

Case Report 3: Rachael

Due to COVID-19, the 26-minute face-to-face interview with Rachael was conducted through a virtual platform in the spring of 2020. At the time of the interview, she was completing her sixth year of teaching, all of which took place in third grade. The first three years of her six years of teaching took place at Shermer Elementary School, the study site, in a departmentalized model where she taught math while her partner teacher taught English Language Arts. According to Rachael, Shermer Elementary School moved back to a self-contained teaching model of teaching approximately three years before the time of this study, where the teachers in the grade level taught all subject areas to their specific classroom of students.

By analyzing Rachael's interview data, the researcher developed a theme of *lack of preparation at the pre-service level*. Rachael took courses in reading and math methods along with courses on creating units in her pre-service teacher preparation program; however, she did not receive specific instruction on grading. "I remember being shocked when I got into the real world," she said regarding her first year as an in-service teacher. "This is very different than I was expecting it to be." Rachael also noted that she had a useful experience with her cooperating teacher during her student teaching semester and her mentor during her first three years as a beginning teacher (BT). "I had a fantastic student teaching experience," she said. "I feel like that

makes a huge difference and whether people last in the profession or not.” Rachael credited her positive student teaching experience to the fact that she was able to “connect with her [cooperating teacher] on a personal level and a professional level.” She added that her cooperating teacher treated her as if she was an equal and with respect, not just a student teacher. While Rachael was able to describe her student teaching experience as beneficial to moving into her in-service years, she could not speak on any specific guidance on grading she received from her cooperating teacher during her student teaching semester.

The researcher developed a theme of *support from colleagues as useful or not useful* through the analysis of Rachael’s interview data. Rachael spoke about a positive experience with her mentor during her BT years concerning grading student work. As an interim substitute teacher for her mentor, who was out on maternity leave, Rachael stated she was exposed to her mentor’s grading practices before she had her classroom. She explained how her mentor was still handling the grading of student work while out on maternity leave; however, Rachael was responsible for recording the grades in the grade book as the interim teacher. “I got exposure,” she said. “It was kind of like baby steps.” Rachael further explained that her mentor helped her out a great deal during her first official year of teaching and noted that she even used the same grade book method as her mentor. “We did the traditional grading...the percentages,” she said. “I remember the Easy-Grader. I would pull it out and look at the scores. I remember [grading] being a lot of work, but since I had that exposure to it, it wasn’t that bad.” Adding to the theme of *support from colleagues as useful or not useful*, Rachael stated that she “definitely learned from [her] teammates” with regard to developing her grading practices.

The theme of *grades as communication* runs through Rachael’s case study report. When asked about the purpose of grades, she stated that the purpose of grades “in elementary school is

to provide feedback to parents and students.” She further added that the purpose of grades is mainly for parent feedback, explaining that, as the teacher, she already has an idea of what her students know and do not know without having an official grade on a report card. Concerning traditional grades, Rachael stated they show the teacher how much effort students are putting into their work. She added that she felt traditional grades punished students in terms of behaviors such as not turning in assignments or not doing their best on an assignment. Rachael also believed that students and parents gleaned more from traditional grades and the percentages than the teacher did. “I think they would take pride in a certain score more so than, like, a one, two, or three,” she said. “I do think that it may have had a greater impact on the student than standards-based,” she added. She stated that traditional grades were more “black or white” in terms of telling parents how their child was doing in a subject area. Rachael felt “students and parents can learn the importance of effort and the importance of completing assignments when using traditional grades” and added that this type of grading practice could help prepare students for secondary grade levels. She also noted that this was one area that parents showed the most concern when they transitioned from traditional grading to standards-based grading. “Parents complained to me about how we were not preparing students for traditional grading [in later grade levels],” she said concerning Shermer Elementary School’s transition to SBG.

Rachael stated that she felt traditional grading was not useful in communicating student progress on specific standards to all stakeholders—teacher, students, and parents. “Parents now have a better understanding of standards,” she said. Rachael reflected that when she used traditional grading, students and parents did not know what a standard was; however, now that she uses SBG, she can give specific information on a standard, and she feels the parents have a better understanding of the level of their student’s progress.

At the time of the transition to standards-based grading in 2016-2017, Rachael had only been using traditional grading practices for approximately two years; however, she was not looking forward to the change in grading practices. “I was not wanting to do it at all,” she stated, further noting that her shock at the transition was because she was simply used to traditional grading, as it was all she knew at the time. However, she did mention that third grade was considered a transition year from the primary grades, and her grade level felt that moving to SBG was not going to be a good move for the students, claiming that the students would not take grades seriously with SBG and it would not help prepare them for the state assessments that began with third grade. “So, I remember all of us that had been doing traditional grading were not ... open to it,” she said. “Obviously, we didn’t have a choice, but not wanting to do it.”

As a third-grade teacher, Rachael was in the initial implementation of standards-based grading in the fall of 2016; therefore, at the time of the interview, she had been using SBG for approximately four years and stated that using standards-based grading practices provided more information about student progress on specific standards. “The teacher knows more specifically what skills that student needs to work on,” said Rachael. “You know specifically what standards students need additional help with,” she added. Rachael felt that with the implementation of goal setting and exposure to the standards, SBG gives the students “a purpose for what [they are] doing in class.” At the beginning of the 2019-2020 school year, she had her students set goals based on district-level benchmark assessments. “We list out all the standards, and students actually put their scores for each standard,” she explained. “It’s crazy to see... three weeks later, you know, we’ll be talking about a lesson on context clues, and they’ll be... ‘Oh, that was my goal! I’m working on that standard.’” She further explained that the students had been engaged

in more in-depth class discussions due to their understanding of the standards. “They just have a purpose behind what they’re doing,” she said.

According to Rachael, parents’ involvement with their students’ education determines if a parent will have a useful experience with standards-based grading. “It is a bit more broad, like a [level] one, [level] two, or [level] three,” she said concerning SBG and parent understanding compared to the letter grades of traditional grading. “But again, I also think it helps them have that knowledge of the standards, too, and I think it depends on the parent,” she said with regard to parent involvement. This involvement can affect a parent’s depth of understanding of SBG. “Unfortunately, the parents that are very involved have a good understanding of what their students need, and then the parents that aren’t involved... [they have] no idea how their student is doing because it’s not a percentage,” she noted. Rachael further noted that she felt standards-based grading gives all stakeholders a thorough explanation of what students are doing in class and even helps them move on to the next grade level since the communication provided is clear on each standard’s progression.

Rachael stated she attended one professional development session for the implementation to standards-based grading and standards-based report cards; however, she added that her grade level PLC worked through the process to see what they should anticipate with the new implementation. “It wasn’t like ‘Oh, yeah, this is what you’re doing,’” she said concerning how the school administration introduced the new grading practice. She explained how her grade level discussed assessments and what would constitute a level one, level two, or level three. “I think that it was probably easier for me to... catch because I’ve only been doing traditional grading for two years,” Rachael stated. While she did not state specific frustrations, she noted many changes in how teachers recorded grades with each year of the SBG implementation.

"Like, one year we were entering into PowerSchool, and then the next year they were going to have to be, like, handwritten, and then somebody would print them for us," she explained.

Even without follow-up training throughout the three-year implementation, Rachael stated that she felt "very confident" using standards-based grading now that she has been using it for three years and would not go back to traditional grading. "I am pro-standards-based grading," she said. "Two years ago, I probably would have answered that differently, but I think after doing it for a couple of years, I think that there are a lot of benefits that you did not get with traditional grading." She reiterated that she felt a large part of the benefit of using SBG is that students and parents come to understand the standards better. "I think that with traditional grading, they probably didn't even know what a standard was."

Thematic patterns became more consistent with the researcher's analysis of Rachael's interview data. In keeping with the theme of *lack of preparation at the pre-service level*, Rachael could not recall any specific undergraduate course work on grading, nor could she recall receiving specific guidance from her CT or her mentor on grading student work. However, she recalled having a supportive cooperating teacher during her student teaching semester and a mentor who guided her through her first three years as a BT, which aligns with the theme of *support from colleagues as useful or not useful*.

Rachael was not open to the move from traditional grading practices to standards-based grading practices when it was introduced at the beginning of the 2016-2017 school year. At the time, her grade level felt that traditional grades were better suited for use in third grade as it was the first year of standardized testing, and the students would take letter grades more seriously. After three years of SBG implementation, Rachael felt that the four levels of standards-based

grading were more useful in communicating student progress than the letter grades and percentages of traditional grading, aligning to the theme of *grades as communication*.

Rachael did not come across as frustrated by the training provided by the study site's administration; however, she noted that she may have picked up on SBG better than her colleagues since she had only been using traditional grades for two years before the SBG implementation, still being considered a BT at the time of implementation.

Case Report 4: Vickie

Due to the COVID-19 school closures, Vickie's 28-minute face-to-face interview was conducted through a virtual platform in late spring of 2020. The 19-year veteran teacher taught fifth grade at the time of the interview; however, she taught fourth grade during the three-year implementation of standards-based grading at Shermer Elementary School, the study site. Vickie stated that she had only taught upper elementary grades, focusing on math in a departmentalized teaching model throughout her teaching career.

During her pre-service teacher preparation program, Vickie recalled taking alternate assessment and content area classes, along with courses on collaborating and designing units; however, she could not recall taking a course related to grading student work. Vickie stated that the course on alternate assessments was the most relevant concerning her transition from pre-service teacher to in-service teacher, and she noted one of the take-a-ways from the course was that a teacher did not necessarily have to collect or grade every assignment they gave to students. "Depending on which phase, let's say, of their learning with a certain or specific standard," she explained, "that would kind of dictate how you would check the work that they were doing." Vickie further stated she thought about this idea often when she was planning assessments for her students. "Like, you're not going to give them 20 questions in the very beginning of the

standard and go through all 20, you know, with a fine-tooth comb because you're in the beginning...they're going to make mistakes," she said. "Sometimes, you put a smiley face on it and hand it back."

Vickie's student teaching experience added to the established theme of *lack of preparation at the pre-service level* in grading. She recalled how her cooperating teacher would give students a worksheet or task on Fridays, and that was the percentage grade recorded in the grade book each week. She did note, however, that the teacher took "informal" grades throughout the week. Vickie could not recall gleaning any knowledge about grading during her BT years because she and her mentor teacher taught different subject areas and grade levels. "I don't think we ever shared any grading practices," she stated. As she developed her grading practices, Vickie said she "wanted to stay on top of it," so she checked every piece of student work and created checklists for every assignment; however, these practices started to decrease throughout the years. When asked how she graded student work using traditional grading practices, she said it was a "cross between accuracy and giving percentage score versus the check for participation." She stated that she did not like to use rubrics to score student work, even though she thinks it is good practice. "I think sometimes when you have that scale, and then if you have so many different pieces to it, it just becomes almost a messy headache," she said. "And then do it for 30 kids or more. It's just...it's tough." While she claimed using rubrics was useful for students to gauge where they were currently at in their learning and where they were going, she claimed they were "daunting."

Vickie noted the purpose of grading was to act as a form of communication to provide "formal feedback for students and families." She also added that grades were communication for her, as the teacher, to determine where the students are in their learning and where they need to

progress. When discussing what traditional grades communicate to a teacher, she felt it depended on how the student's work related to the scale. "Like I've always said, it's the average," she began. "Above average is exemplary...I envisioned that scale to mean different levels. I'd like to think that a lot of people do that. So, you gauge a student's abilities and success based on that scale from the percentages they get." In a follow-up question, Vickie clarified her response by stating a student's "overall success and ability is often reflected in their grades." She further stated that if a student can demonstrate success of mastering the standard, they will receive a better grade. An A would reflect the student's ability to go beyond the standard, while a B is above average all the way through to an F, which is well below average. She concluded her clarification in the follow-up question by stating that traditional grades and the percentages attached to them may not reflect a student's true success as they may only understand part of the learning, and "a partial understanding wouldn't be reflected in traditional grading practices."

Adding to the theme of *grades as communication* for students, Vickie felt that, depending on the grade, traditional grades "can make or break their whole psyche." Because of this, she noted that she discussed using the A-F scale with her students as part of the beginning of the year procedures. "Here's average. You want to do more? You want to be better? Go for it," she would tell her students. Vickie explained how she would tell them to figure out what they needed to do to be at the average mark while noting that they would need to work harder to get back to their goal if they drop below the average. She also noted that she felt there are many interpretations of grades, and she felt it was necessary to tell students what her interpretation of the grading scale was at the beginning of the year. "This is what it's going to mean while you're with me," she would tell her students. "I think, for them, it's just a number, and it doesn't mean much. Some kids are predispositioned [*sic*], I guess, to accept whatever grades they got, and then some know

or expect higher.” Like the students, Vickie stated that parents glean any useful information from traditional grades depended on their understanding of the scale as well. “I think it needs to be communicated clearly in the beginning of a term,” she said. “But I think, also, from years of exposure, you know, F is failing, and A is good, and there’s no in-between, I think, for a lot of parents.”

Vickie stated that she felt traditional grades might not tell the teacher how much effort students put into their work. “You’ve got that average as your percentage,” she said, “and you’re never going to show the different pieces of standards they really are good at when you have the cumulative average. I mean, you could see an increase in percentages and hope that there’s growth” Further explaining her view on effort and traditional grades, Vickie stated that when homework and participation are added in, the percentage could show a lack of effort. “The effort could outshine their actual assessment performance or vice versa. It could be hidden in both rooms,” she added.

When discussing what standards-based grading communicated to the teacher, Vickie stated it pointed to the “levels of success” instead of behaviors such as participation. “It eliminates the participation,” she said. However, she did state that “efforts” were “built into it,” meaning that when teachers use standards-based grading, high achieving students could still receive high scores with little effort when they “naturally” get the concepts.

Vickie’s case told the story of standards-based grading providing useful information regarding student progress to the teacher, and her responses added to the pattern of SBG not being useful to parents and students in communicating achievement and progress. “I don’t think they get it yet,” she stated when asked what standards-based grades told a student. “They get the scale, and they equate it to their formal testing and wonder why there’s not a three. [They] don’t

fully understand the two.” She noted this was the same with parents. Vickie further noted that using standards-based grading was not useful in informing the teacher how much effort a student put into learning a new concept. “You have a kid that works so, so hard, and they’re still getting a [level] one,” she explained. “The next year, his teacher’s going to look at it as a [level] one. You don’t know that they tried all year to get it, though.”

Vickie also stated she felt frustrated that some people, whether they be parents or other educators, hold strong opinions on standards-based grading. She added that these opinions could come from something they heard, maybe in professional development training, and they “latched onto it, and aren’t changing from it.” She recalled a teacher telling her friend that students could not receive level threes in the first quarter of instruction. Vickie disagreed with this thinking because she felt there were too many variables to the student’s learning. One variable, she stated, could be that the teacher simply had not assessed students on a standard yet and would not know if a student was at grade level on that specific skill. She also noted that students could have enough knowledge at the beginning of the quarter to master a skill; therefore, it was possible to receive a level three or even a level four in that specific standard. “I think those [interpretations] really do hurt in the long run in reporting with accuracy,” she concluded.

“You tell me to do it, I’ll do it,” was Vickie’s response to administration when teachers at Shermer Elementary School were told about the transition from traditional grading practices to standards-based grading practices. As a fourth-grade teacher at the time of the initial implementation during the 2016-2017 school year, Vickie participated in the training provided by the administration; however, she would not implement the use of standards-based grading for another year after the initial training. “I was not very excited,” she stated regarding her feelings about the transition to SBG, adding that the reason for her feelings was due to the grading

practice being new. “And with the new, you have to be able to not only understand it yourself,” she said, “but then you have to convey that to the stakeholders.”

Vickie recalled that the teachers received training on the use of standards-based grading at the onset of the first year of implementation in 2016-2017; however, they did not receive any follow-up training throughout the three-year implementation, even though two grade levels, fourth grade and fifth grade, would not use the new practice that first year. “Our PLCs had conversations about it as well, just to reinforce it,” she said. Vickie noted her team relied on each other to determine specific scoring of student work using SBG. Vickie stated that she felt school building administration would provide additional training if teachers requested it. “We’re always given the option to reach out if we think we need it,” she added.

At the time of the interview in the spring of 2020, Vickie had used SBG for two years and stated she felt confident using the new grading practice to assess student achievement. Vickie also noted that she preferred using SBG over traditional grading even though she stated it took longer and “it’s more thought-provoking.” However, she stated that along with being easier, one of the benefits of using traditional grading practices was that it made her a more reflective teacher. “When you reflect on every student and whatever percentage they have, and you’re like, ‘Hmmm, are they really a 93?’” she said. “Maybe I gave too many homework grades, or maybe my percentages aren’t correct versus standards-based...it’s more informative if used correctly.” Because she had to break down every standard and use this information to set up differentiated groups, Vickie felt this was a benefit of SBG as she had better knowledge of where her students were in mastering the standards. “It’s not a blanket percentage that just says, ‘they’re good or not,’” she added.

Vickie shared her hesitation at the implementation of standards-based grading in 2016, and she attributed her hesitation to simply not knowing enough about the new grading system to feel comfortable with the change. However, after three years using SBG, she felt confident using the grading practice and preferred it to traditional grading practices.

The themes of *lack of preparation at the pre-service level*, *grades as communication*, and *support from colleagues as useful or not useful* were consistent within Vickie's responses. She could not recall any specific course work on grading during her teacher preparation program, nor could she recall specific support on grading student work from her cooperating teacher or mentor; however, she did note that her professional learning community (PLC) worked together in the beginning stages of the implementation to become better acquainted with the variety of levels within standards-based grading and what those levels may look like in student work. Now that she had been using it for three years, Vickie was also able to describe the benefits of standards-based grading; however, she also discussed the positives of using traditional grading practices, especially for students and parents. In the end, Vickie felt the benefits of SBG outweighed those of traditional grading.

Case Report 5: Jessica

Due to COVID-19 restrictions, Jessica's one-on-one interview was conducted using a virtual platform in late spring of 2020 and lasted approximately 20 minutes. The 16-year veteran teacher taught third grade at Shermer Elementary School, the study site, at the time of the interview; however, she taught fourth grade at the time of the initial standards-based grading implementation. Jessica received teacher preparation training before beginning her in-service teaching through a master's level program rather than at the undergraduate level. She recalled taking various teaching methods courses, including reading and math, along with psychology

courses. Jessica noted that the teaching methods courses were the most relevant and useful to her every-day job because they taught her “how to fit the ideas into practice.” She could not recall taking a formal course on grading during her teacher preparation program, adding to the theme of *lack of preparation at the pre-service level*.

Jessica completed her student teaching in second grade and fifth grade and explained that, at the time, teachers used letter grades in both of those grade levels. She continued to use traditional grading in her beginning years of teaching. When asked how she developed her grading practices, Jessica stated that she “always kind of rounded up to give them the benefit of the doubt;” however, other than that, she used “basic percentage” grading. When determining grades for student work using traditional grades, she said she considered if the student “did all of their work or completed all the assignments.” Jessica could not recall any support or lack of support from her cooperating teacher or mentor.

Jessica stated she believed the purpose of grades was to show how well a student was doing with a specific skill or concept. Adding to the theme of *grades as communication*, she also said that she believed traditional grades told the teacher a student’s motivation level; however, Jessica added that she does not believe traditional grading told the teacher or student how much the student retained the information they were taught. “I think that the student feels it’s a method of how well they’re doing with the concept, you know,” she said, adding that it also shows the student “how much work they’re completing, or working toward.” She believed traditional grades told the parents much of the same information; however, she added that percentages and letter grades could also tell the parent “how much effort [students are] putting into their work.” Along with not being a good indicator of how much a student retained from a lesson, Jessica

stated she did not think traditional grades told the teacher, student, or parent information about the rigor of an assignment or the student's ability to apply the learned concept.

Before moving to standards-based grading at Shermer Elementary School in 2016, Jessica had approximately four years of experience using SBG while teaching in a different state prior to moving to the study site. Even with this experience, she noted that she was not “a huge fan” of switching from traditional grades to standards-based grades. “At first, it was a little overwhelming,” she stated. However, in her third year into the implementation, she felt that standards-based grades told the teacher how well a student mastered a concept. Jessica felt that students still struggled to understand the four levels of SBG. “I think that if they see a [level] three, they're happy,” she said. “They understand the concept, and they're doing what they're supposed to be doing,” she added. However, Jessica felt students were confused by level ones and level twos, stating, “it means they're not doing as well as they should be doing.” While SBG, in general, might be confusing to the students and parents, she said parents moved into reading those lower levels as a sign that their student needs support with a concept or is not mastering a skill. “I think over the years, they're starting to get more comfortable with it,” she said. “I know, at first, it was difficult on them to understand the difference [between traditional grades and standards-based grades].” Jessica added that parents have a “grade concept” in their head, and it was hard for them to correlate that concept with standards-based grades.

Jessica mentioned how standards-based grades could not tell the teacher, student, or parent information about work completion or turning in assignments. In a follow-up question, she stated that with the implementation of standards-based grading, she started to use notes in student agendas, emails, phone calls, and comments on the report card to communicate these behaviors to parents. She previously noted that she would use work completion as a factor when

assigning traditional grades; however, these behaviors are not factors used in determining grades with SBG. Jessica noted that she factored in growth on a standard and consistency when assigning a level one, level two, level three, or level four to a student.

When discussing the training provided by school level administration before the SBG implementation in 2016, Jessica noted there was no follow-up training on the new grading implementation. “We did a training all together,” she stated, “and we worked through some exemplars and some ideas of what it looks like.” Jessica stated that she felt confident using standards-based grading with the training provided and noted that her confidence developed over time, giving off a high perceived self-efficacy with her use of SBG. She noted that it became easier to compare different students and how consistently they were applying the standard in order to recognize what a level three, or grade level proficient, would look like on a report card. Jessica also stated that she felt the students were becoming more confident in their knowledge of standards and understanding the difference in the four levels.

Noting her comfort level at the time of the interview, Jessica stated that she would stick with standards-based grading if she were given an option to go back to traditional grading practices. “If it was my choice, I’d probably just stay with the standards for third grade,” she stated. She attributed this decision with her comfort level of using standards-based grading even though she stated SBG could be “a lot on the teachers.” “At first, I really had a hard time because it made me feel like they didn’t understand whether they were getting an A or B or a C,” she stated. Jessica felt her students would not try so hard because they would not understand how the teacher was grading their learning progress. She noted that SBG was not “inhibiting them from doing their best,” and with more exposure to the new grading practice, her students gave as much effort to their learning as they did when traditional grading was used. “And I’ve worked around

making sure they are doing their work as opposed to just giving them a lower grade for not doing it,” she added. Jessica concluded by stating she believed there are pros and cons to standards-based grading, noting that the practice being implemented correctly makes a difference.

Jessica had experience using standards-based grading before the SBG implementation at Shermer Elementary School in 2016. However, even with her four years of SBG experience, Jessica was hesitant to make the change to the new grading practice. She attributed her hesitation to feeling overwhelmed by the change.

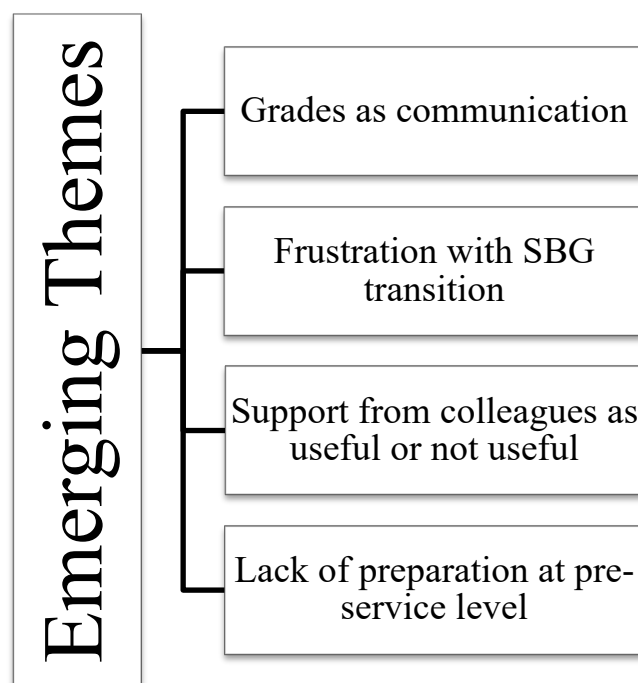
Adding to the overall theme of *grades as communication*, Jessica noted that parents and students still struggled with understanding the four levels of SBG. However, she felt their understanding of the new grading practice increased with each year in use. Even with its benefits, Jessica does not believe SBG provides information on important learning concepts such as work completion. She even mentioned how she transitioned from giving grades for non-compliance behavior to implementing new practices such as agendas to communicate when students may need parent support in these areas.

Overall, Jessica felt confident in her use of standards-based grading and preferred to continue using this grading practice, even if she had the choice to go back to traditional grading practices. She even noted her confidence was due in part to the training provided by the study site’s administration. However, she felt SBG put more work on the teacher, especially when it came to filling out report cards. Jessica felt that fidelity in the implementation of SBG makes a difference when thinking about the benefits of this new grading practice over traditional grading practices.

Summary

In chapter 4, the researcher included a discussion of the results of the recruitment survey sent to all certified staff at the study site as well as descriptive data on the five study participants. The data analysis steps included how the interviews were annotated, coded, and eventually broken up into broad themes. Through each case study's written narrative, the researcher developed four key themes: grades as communication, frustration with standards-based (SBG) transition, support from colleagues as useful or not useful, and lack of preparation at the pre-service level. Figure 6 lists the four key themes present after analyzing the five case reports.

Figure 6



Note. The four key themes established from analysis of the four case reports.

The theme of *grades as communication* was seen in all five case reports. All study participants described the purpose of grades as communication of a student's progress or mastery of a standard. While all participants could see benefits in both traditional grading and standards-

based grading, all five participants stated that using standards-based grading provided more in-depth information on what concepts students needed additional support. However, all five participants also noted that they continued to see parents and students struggle with understanding the four levels of standards-based grading and how it equated to student progress.

All five participants noted some *frustration with the standards-based transition*, which was the second theme developed through analysis of the case reports. Linda and Katie, the two pilot study participants, were clear on their frustration at the lack of on-going training during the three-year implementation. This could be due to the fact that they were teaching fifth grade at the time of the implementation and did not begin using SBG for two full school years after the initial training in the fall of 2016. All study participants noted a lack of follow-up training; however, Linda, Rachael, and Vickie mentioned they would receive additional training from the study site's administration if they requested it. Rachael noted some frustration among staff at Shermer Elementary School because the reporting method changed each year of the implementation. While most of the frustrations focused on the lack of training provided, Rachael, Vickie, and Jessica voiced frustration at the idea of transitioning from traditional grading to standards-based grading, while Katie and Linda, both in the same grade level, stated they were open to the grade reform.

The third theme developed through analysis of the case reports was *support from colleagues as useful or not useful*. All study participants mentioned their colleagues, whether it be a cooperating teacher, a mentor, or the PLC members, as people who supported them or did not support them in developing their grading practices, including the transition to SBG. Rachael was the only study participant to provide a positive experience with her cooperating teacher and mentor; however, she still could not recall any support given by her CT or mentor specific to

grading. Linda, Rachael, Vickie, and Jessica mentioned working with their colleagues and PLC during the standards-based grading implementation as useful.

Lack of preparation at the pre-service level was the fourth theme developed from the five case reports. While one study participant, Vickie, discussed a course on assessments as beneficial to her teaching practices, none of the participants took a course specifically focused on grading during their pre-service teacher preparation program. As mentioned above, none of the study participants noted specific support on grading from cooperating teachers or mentors. If a participant described an experience or memory related to grading with their cooperating teacher or mentor and grading, it was described as a negative experience.

While the four themes made up most of the case study analysis findings, the researcher discovered that all five participants noted a positive change in their teaching practices due to the transition to standards-based grading from traditional grading. Katie explained that with the implementation of standards-based grading, she felt that she could assess the students sooner than when she used traditional grading practices. “I can give a kid two questions on Tuesday and give two or three questions on Friday,” she said, “but I wouldn’t put a percentage on either of those, so now I don’t have a problem giving just three or four questions at a time as opposed to 10.” Linda said she felt the use of SBG was meaningful because she had to put more thought into her assignments. She noted that it made her think about the standard and whether she assessed the student’s progress on the standard or something different. Linda also explained that using SBG forced her PLC to unpack and discuss the meaning of each standard. Vickie and Rachael explained how they discussed the standards with the students and used goal-setting strategies with them. Rachael explained how she believed having these “kid-friendly” discussions about standards with goal setting attached gave the students purpose behind the activities and tasks

they completed in class. Vickie noted that the use of SBG made her reflect on her grading practices. “Maybe I gave too many homework grades,” she said. “[SBG is] more informative, if used correctly,” she added.

In Chapter 5, the researcher will present an interpretation of the five case studies to answer both the main research question and the sub-research question. Implications and limitations of this research study are included. To conclude the chapter, the researcher will provide recommendations for further research based on findings from this study.

Chapter 5: Discussion

Introduction

Rick Wormeli (2006) notes there are several reasons why teachers do not like to make changes in their teaching practices. These reasons may include “complacency, cynicism, ignorance, fear, distrust, unclear outcomes, perceived increase in workload,” or possibly because the teachers are in “survival mode” and cannot take on one more item on their already full plate (Wormeli, 2006, p. 181). Implementing reforms in grading practices could be one of those changes that incite teachers’ strong feelings, especially fear. With the development of curriculum documents and pacing guides along with standardized tests, teachers may already feel as if they are losing control of factors that determine how they are evaluated. With this apparent loss of control, teachers may feel as if they only have control over determining student achievement in their course content (Olsen & Buchanan, 2019). It is as if grading has become the last bastion of control for teachers, and making a change to grading practices can bring about strong reactions in teachers.

The purpose of this qualitative multiple case study was to capture and understand the experiences of five upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices. The researcher selected all five study participants from a mid-sized suburban elementary school in the South based on convenience and if they met the predetermined criteria for participation. The researcher used an electronic recruitment survey sent to all certified staff at Shermer Elementary School, the study site to select the study participants. The researcher intended the recruitment survey to be a tool to gather interest for participation in the study as well as determine if potential participants met the criteria for inclusion in the study. Once the researcher determined the five participants, she conducted the

semi-structured face-to-face interviews using an interview protocol designed around five main topics: (a) teacher preparation program and cooperating teacher relationship, (b) beginning teacher and mentor relationship, (c) traditional grading practices, (d) transition to new grading practice, (e) and training and implementation of new grading practice. Two of the five study participants were part of a pilot study conducted in the fall of 2019. Due to COVID-19 and school closures, interviews for the additional three study participants took place in late spring of 2020 using a virtual meeting platform.

Once the interviews were conducted, the researcher used *Temi*, an online program, to transcribe the recorded interviews. The researcher listened to and read through each interview multiple times and annotated each interview using a coding system established during the pilot study. Once the initial coding was complete, the researcher created a digital case study database to locate specific data during the analysis phase (Merriam & Tisdell, 2016). The quoted chunks of data were then coded based on the annotations and grouped into categories. Once sorted, the researcher wrote thematic sentence statements. The researcher sorted the thematic statements and determined four key themes common in the five case studies by analyzing the final five case reports. The four key themes were grades as communication, frustrations with SBG transition, support from colleagues as useful or not useful, and lack of preparation at the pre-service level. Through a constant comparison method of analysis of the five in-depth descriptive case reports, the researcher answered the main research question and sub-research question: What was the experience of five upper elementary school teachers who transitioned from traditional grading practices to standards-based grading practices? What are the teachers' perceptions of the effectiveness of the professional development provided to teachers in building their self-efficacy toward the required use of standards-based grading?

The researcher conducted the study to ultimately contribute to the body of knowledge regarding the development of effective implementation practices to promote sustained change and increase teacher self-efficacy. In this concluding chapter, the researcher will provide an interpretation of findings and discuss implications and limitations. The chapter concludes with recommendations for further study.

Interpretation of the Findings

Grades as Communication

Since their inception in the late 1700s at Yale University, grades have communicated student achievement to numerous stakeholders (Durm, 1993; Schneider & Hutt, 2014). Three out of the five study participants mentioned some form of communication regarding mastery of standards or content when asked about the purpose of grades. Katie, a fifth-grade teacher and participant in the pilot study, stated the purpose of grades was to “communicate a student’s level of performance on the standard,” while Vickie, a fourth-grade teacher, and Rachael, a third-grade teacher, both stated the purpose of grades was to provide feedback for students and parents. These results are consistent with multiple studies on factors teachers consider when assigning grades (Guskey, 2009; Guskey & Link, 2018; Randall & Engelhard, 2009; Randall & Engelhard, 2010). Studies by Bonner and Chen (2009) and Guskey (2009) found that elementary teachers tended to view grades as communication of achievement with students and parents, while secondary teachers tended to use grading as a classroom management function. Additional studies show that elementary teachers tend to emphasize formative assessments and other forms of practice over tests, projects, and homework like their secondary colleagues (Guskey & Link, 2018). Findings from these studies could attribute to the fact that the five teachers of this study came away from the grade reform with a perceived high self-efficacy based on their confidence

in using the new practice and that the purpose of grades at the elementary level is more about achievement and less about motivation or ranking of students, as seen at the secondary level.

All five participants noted examples of how their use of standards-based grading (SBG) could be seen as a useful form of communication. Vickie and Jessica explained how the information from the use of SBG could be useful to school building administration, while Katie, Rachael, and Jessica explained how it could be useful to students and parents. Rachael explained how she presented the standards to her students, and they developed mastery goals for each standard collaboratively, which she felt gave the students purpose and ownership in their knowledge. All five participants shared examples of how SBG provided useful communication to them on student mastery of the standards. “I can see they are ready for enrichment...or how they are doing overtime,” said Linda. Rachael and Vickie explained how their use of SBG allowed them to pinpoint a student’s level of success on specific skills or standards. Vickie added that her use of SBG was useful communication on student progress because it eliminated participation from the overall grade. These findings are consistent with the literature on the benefits of standards-based grading (Knight & Cooper, 2019; Marzano, 2000; Marzano & Heflebower, 2011; Munoz & Guskey, 2015; O’Connor, 2017; Peters & Buckmiller, 2014; Townsley, 2018; Vatterott, 2015; Wormeli, 2018).

“I don’t love it on report cards...report cards are hard,” stated Katie concerning the downsides to standards-based grading and its usefulness. Since SBG emphasizes formative feedback, it requires teachers to spend more time on report cards or creating rubrics (Peters & Buckmiller, 2014; Swan et al., 2014). Traditional grading is centered around a percentage, which then becomes a letter grade based on a seven-point or ten-point scale. Traditional grading is “preoccupied with numbers, rather than communication” (Iamarino, 2014). With SBG, teachers

have to step out of their comfort zones and communicate directly and specifically with students on their progress of a standard (Iamarino, 2014). This feedback can be difficult for parents to understand when they are accustomed to seeing As, Bs, Cs, or even Fs on their child's schoolwork. "Communicating [student achievement] to parents at the end of the quarter is difficult," said Katie.

All five participants stated few parents knew the standards; therefore, the parents were unsure of the levels of progression noted on the report card. "We're still teaching the parents about the levels," said Linda. Katie, Linda, Vickie, and Jessica indicated that standards-based grading was not as useful for parents as it was for the teachers simply because parents are familiar with traditional grading practices. Studies on SBG indicate this finding to be true for elementary through secondary levels (Franklin et al., 2016; Peters & Buckmiller, 2014). One study on standards-based grading found that parents of college-bound students tend to contest the use of SBG as they feel post-secondary institutions are assessing students based on grade point average, which also denotes class rank (Peters & Buckmiller, 2014). Katie stated that parents of her fifth graders were already concerned about the next phase of their child's schooling beyond elementary school and "just don't grab hold of [SBG] and understand it." Based on his experience with a standards-based grading transition at the secondary level, Matt Townsley (2018) addressed several parent misconceptions that are consistent with this study's findings. He noted parents felt the use of SBG would hinder the college application process; however, he concluded his article by noting that students continue to be admitted into college five years into the SBG implementation at the secondary level. Townsley (2018) added that through the continued use of SBG, parents knew specific levels of their student's progress and where the student may need to improve.

Consistent with the literature on traditional grading practices, Vickie, Rachael, and Jessica noted they did not find the use of traditional grades to be an effective use of communication due to the non-achievement behaviors such as participation and homework completion included in the final percentage or letter grade (Allen, 2005; Brookhart, 1994; Cox, 2011; Ladas, 1974; McMillan, 2001; McMillan et al., 2002; Randall & Engelhard, 2009; Randall & Engelhard, 2010; Rugg, 1918; Sadler, 2010). “You could have kids that have participation grades, and they’re all As,” said Vicki. “I don’t think that tells the teacher much.” Rachael and Jessica both noted that traditional grades could be ineffective when a student does not complete assignments as the low grade or zero can be deemed as punishment to the student, or the zero on a missed assignment is not indicative of what the student knows about the course content.

Study participants’ negative perceptions of traditional grades and their effectiveness in reflecting mastery also align with the literature on averaging final grades (Guskey, 2015, Marzano, 2000; Wormeli, 2018; Vatterott, 2015). Three of the five participants stated the use of a final average was not a useful reflection of student success. Vickie and Katie both explained the final average used in traditional grading did not show understanding on sub-standards of an overall standard, while Linda pointed out averages simply did not indicate a student’s depth of understanding.

The majority of literature and research on grading practices are on the inaccuracies of traditional grading (i.e., zeros and averaging); therefore, it was surprising to find all five study participants commented on how traditional grading practices could provide some form of useful communication. Rachael stated that traditional grades could help teach the importance of effort and completing assignments as it may help prepare elementary students for the secondary level. The literature on grading presents the importance of teaching responsibility through classroom

elements such as deadlines on classwork or homework; however, it is clear that these behaviors should be separate from achievement scores (Guskey, 2011; Guskey, 2015; Guskey, 2020; Wormeli, 2018). Linda noted that she liked to use traditional grades to see “a number of proportions,” and she continued to put both the percentage and SBG level on student papers in order to see where the student was in relation to the next highest or lowest level. Additionally, Rachael and Linda noted they felt traditional grades may have more of an impact on students over SBG; however, this could be attributed to the fact that parents seem to find more value in traditional grades as percentages and letter grades are what they are used to seeing on report cards. “It’s what they are used to,” said Katie. “It is what they know.”

Frustrations with SBG Transition

The pilot study showed that Katie and Linda, both fifth-grade teachers at the time of study, were excited about the move from traditional grading practices to standards-based grading; however, not all of the study participants in the larger study were excited about the transition to SBG. Feelings about the move to SBG for the other three participants ranged from shock to overwhelmed. In her sixth year of teaching at the time of the interview, Rachael stated she did not want to change practices at all while the two participants from the pilot study who had 17 and 19 years of experience, respectively, were open to the change. This finding contradicts a study by Hany et al. (2016) that found teachers with five years or fewer of experience were more open to trying new practices while more veteran teachers were hesitant to change their grading practices. Some of the literature states that for change to be effective, it should not be mandated (Fullan, 1994; O’Connor et al., 2018). When asked about her thoughts on the transition to SBG, Vickie stated, “You tell me to do it, I’ll do it.” This comment could suggest that teachers did not have a say in the transition from traditional grading to SBG. The

literature on effective grade reform notes teacher involvement as a factor in the new practice's sustainability (Cooper et al., 2016; Feldman, 2019b).

The standards-based grading implementation at Shermer Elementary School, the study site, began at the onset of the 2016-2017 school year with a one-time training session conducted by the two assistant principals. Teachers from third grade through fifth grade were present; however, only third-grade teachers were required to implement the new grading practice that school year. While the administration and the teachers knew about the change in grading practices, parents did not receive communication before the implementation in 2016-2017. In their study on teacher perceptions of SBG, Hany et al. (2016) noted that all stakeholders should understand the new grading practice and see the value in the change from traditional grading. Literature on professional development also notes that "high quality" training is essential when making change (Guskey, 1986). Much of the literature on effective professional development also notes that the training should be directly tied to the work being done by the teachers at that time (Guskey & Yoon, 2009; Ingvarson et al., 2005; Labone & Long, 2016; Wayne et al., 2008). The fact that Katie and Linda, the two fifth-grade teachers, were not actively engaged in using SBG at the time could be cause for their frustration with how the implementation was rolled out to teachers.

Participants in the pilot study voiced their concerns over the lack of follow-up training they received and the fact that school-building leadership at Shermer Elementary School did not require SBG implementation for another two years for fifth-grade teachers. In a study on high school principal perceptions of standards-based implementation, Townsley et al. (2019) found that grade reform "requires a strategic plan and may not be an expedited process" (p. 289). Principals who participated in the study noted that adequate time and a "foundation of practices

and mindset” were needed for successful implementation (p. 289). Consistent with the findings of this study, previous research on SBG implementation discussed the need for sustained training to help teachers feel comfortable assigning SBG levels to students that are reflective of the student’s mastery (Townsend et al., 2019; Welsh & D’Agostino, 2013). Katie and Linda noted how they struggled with determining the level to put on a student’s report card. While the two fifth-grade teachers voiced frustrations and feelings of being overlooked due to the lack of follow-up training, Rachael, Vickie, and Jessica did not feel the frustration at the same level. Katie and Linda’s frustration could be attributed to the fact that they received the one-time training two full years before implementing SBG without any follow-up training offered in between. “We should have known what we were doing a little bit more than maybe what we did,” stated Katie.

While frustration in some form was a common theme among the study participants concerning the grade reform, all five study participants seemed to have accepted and appreciated some aspects of standards-based grading. “I wasn’t a huge fan,” said Jessica, “but I do think I see the pros of it now. I think there’s pros and cons if it’s implemented correctly.” All five participants stated they would continue using standards-based grading if they had a choice. This finding is consistent to study results where teachers, who have transitioned from traditional grading to SBG, stated the new practice was more difficult or took more time; however, they would not go back to using traditional grading practices (Olsen & Buchanan, 2019; Peters & Buckmiller, 2014). Linda commented that she had mixed feelings about continuing to use standards-based grading. “I’m not as pleased with it as I wanted to be,” she said. “I think because I don’t see it making an impact or being as meaningful with the kids, but it’s still what’s right for the kids.” Linda’s feelings are consistent with Guskey’s “Model of the Process of Teacher

Change" (1986, p. 7). This process puts staff development at the forefront, followed by a change in teacher practices, then a change in learning outcomes, concluding with a change in teachers' beliefs and attitudes. With this model, Guskey (1986) believes that significant change in teacher attitudes and beliefs only occurs after the teacher sees changes in the student learning outcomes. Based on her comment, it is likely that Linda did not seem wholly invested in SBG because she had yet to see evidence of the increases in student learning using the new grading practice. In turn, since she did not see an impact on her students through the use of SBG, Linda could be questioning the success of the change, which could result in low perceived self-efficacy toward the use of SBG (Bandura, 1977; Bandura, 1997; Sahin & Yildirim, 2016).

Support From Colleagues as Useful or Not Useful

Along with the content of professional development being relevant to teachers' daily tasks, one of the elements of effective change through professional development is collaboration (Labone & Long, 2016; Wayne et al., 2008). All five study participants discussed how support from colleagues, whether it was teachers in their PLC, an administrator, a mentor during their BT years, or their cooperating teacher during student teaching, was useful or not useful for their transition to standards-based grading from traditional grading practices.

Through his Social Cognitive Theory (SCT), Albert Bandura posits that the cause of human behavior is "bidirectional" where behavior, environment, and personal factors equally influence the others (Bandura, 1999, p. 23). This model helps explain how teachers may develop or change their grading practices by working alongside their colleagues. Bandura calls this extension of SCT "collective agency" (Bandura, 2000, p. 75). He further suggests that unless individuals feel they cannot change a practice on their own, they will have little motivation to act

on that change; therefore, Bandura notes the importance of collective efficacy and how it builds a group's commitment to change as well as their overall performance (Bandura, 2000).

Three of the five study participants mentioned their colleagues' support through the work in PLCs as useful to their transition from traditional grading practices to standards-based grading. Linda discussed how she and her fifth-grade English Language Arts PLC colleague began working with SBG before the implementation to better understand the standards and levels associated with SBG. Rachael noted how she and her third-grade teammate would consult with each other when assigning a level to student work, while Vickie stated her PLC worked through student samples at the beginning of the SBG implementation to help with their understanding of assigning levels. These findings are consistent with studies citing how collaborative work could positively affect teacher efficacy when facing changes in long-held practices such as grading (Ingvarson et al., 2005; Labone & Long, 2016; Munoz & Guskey, 2016). Katie was the only study participant who did not discuss working directly with her colleagues in PLC during the SBG implementation, and she was the most outspoken participant when it came to sharing her frustrations with the implementation. In a case study on implementing a system-based professional learning model, Labone and Long (2016) found positive outcomes with the implementation when teachers worked collaboratively in two of the three cases studied. The case study that did not feature collaboration did not have positive results on the sustainability of the professional learning implementation. Labone and Long (2016) noted this result could have been due to the lack of "collegiality around the new learning" (p. 71). Not only could the lack of collaboration affect Katie's willingness to change, but her frustrations with the implementation could have also stemmed from apparent obstacles that she continued to dwell on two years into the implementation, such as the lack of training she received and the uncertainty of how to

determine and record student achievement using SBG. Combined, these seem to have negatively affected Katie's sense of self-efficacy in some areas of using standards-based grading (Bandura, 1997).

All five teachers participating in the case study experienced working with a mentor during their beginning teaching years; however, only one participant described that experience as useful in terms of grading. Katie, Linda, Vickie, and Jessica did not recall grading ever being a focus of instruction during their first years of teaching. Rachael, however, recalled a useful experience working with her mentor when it came to grading due to the fact that she worked as a long-term substitute while her mentor was on maternity leave. "I was able to get a little bit of exposure before it was my own classroom," she stated. Rachael explained how her mentor continued to assign grades to student work while on maternity leave, but Rachael would enter the grades or record them in the grade book. "It was kind of like baby steps," she recalled.

According to Social Cognitive Theory, Bandura (1999) explains that in order to develop capacity in a skill, individuals must take multiple sources of information gathered from the environment around them, to include hands-on experiences and observations, and incorporate these sources into "cognitive models" that act as guides for what to do in certain situations (p. 26). In this multiple case study, all five participants spent time observing either their cooperating teacher or mentor's grading practices; however, only Rachael noted any type of discussion on grading during her BT years. Whether these observations were useful or not useful, the teachers built their knowledge on grading through this observation and eventual "monitored enactment" (Bandura, 1999, p. 26). Bandura further explains that the feedback provided by the mentor after the BT's "enactment" of grading should provide the new teacher with "information for detecting and correcting mismatches between conception and action" (1999, p. 26). If there is no

“enactment” or feedback provided, the BT is not able to build her knowledge of the practice; therefore, she may revert to SCT’s idea of “learning from response outcomes,” which could result in flawed or inequitable grading practices or a perceived low self-efficacy in terms of assigning grades to student work (Bandura, 1999, p. 25). Even though she noted her strong opposition to the SBG implementation, Rachael’s positive experience with her mentor concerning grading could explain her high perceived self-efficacy using standards-based grading.

Lack of Preparation at the Pre-Service Level

According to the research on the topic, one of the underlying problems in grading is due to a lack of measurement and grading instruction at the pre-service teacher level along with continued support or training at the in-service level (Barnes, 1985; Battistone et al., 2019; Chen & Bonner, 2017; Cizek et al., 1995). As a result of this lack of grading instruction at the pre-service and BT levels, many teachers fall back on grading practices they experienced or observed as students, student teachers, or beginning teachers working with their mentor (Allen, 2005; Chen & Bonner, 2017). However, it would seem this observed behavior does not transition into proficient action. Bandura’s (1999) explanation of thought into action, as associated with the Social Cognitive Theory, aligns with the work teachers do during their pre-service instruction and BT years. He states that:

Cognitive guidance is especially influential in the early and intermediate phases of skill development. Knowledge structures specify how appropriate subskills must be selected, integrated and sequenced to suit particular purposes. With continued practice, skills become fully integrated and are executed with ease (p. 26).

When asked about their teacher preparation program, all five study participants were able to recall specific courses on reading and math methods and noted that being in schools for

required clinicals was the most relevant experience during their pre-service preparation program; however, none of the participants could recall specific instruction on grading in any of their courses. This is consistent with previous studies on teacher training in grading and assessment (Battistone et al., 2019; Olsen & Buchanan, 2019; Wise et al., 1991). Linda commented that she learned what not to do concerning grading from her cooperating teacher during her student teaching year. She recalled her cooperating teacher throwing away student papers without names and not allowing corrections.

Additional elements of the transition to adept action are the “self-efficacy to master the requisite competencies” and the “social networks that tie people to one another” (Bandura, 1999, p. 26). Essentially, when pre-service and beginning teachers are acquiring new skills through observation, they continue to need the foundational skills and collaborative work to seat the skill and achieve a high perceived self-efficacy (Bandura, 1999). When teacher candidates are not receiving targeted instruction on grading or feedback from their cooperating teacher or mentor, there is a chance that the individual will not experience the transition from observation to skilled action (Bandura, 1999). In a study on the pre-service teachers’ perceptions of ethical student evaluation, Bergman (2018) suggested that when specific discussions of grading practices occur between student and instructor, pre-service teachers begin to change their ideas of ethical student evaluation. When there is a lack of discussion on grading practices, especially criteria for assigning specific grades, pre-service and beginning teachers tend to follow their cooperating teacher or mentor, which could potentially exacerbate inequitable grading practices (Barnes, 1985). Additionally, it is suggested that when discussion or feedback is absent on the quality of their practices, teachers tend to include their own beliefs and values when assigning grades rather than focusing on the student’s mastery of the content (Wise et al., 1991). This study’s findings

are consistent with the research on this as four out of the five participants of this study could not recall their cooperating teacher or mentor providing specific discussion or feedback on their developing grading practices.

Limitations

For this multiple case study, the researcher focused on only one of the 20 elementary schools in a mid-sized suburban school district in the South. Within the study site, chosen based on convenience, the researcher chose study participants who taught upper elementary when the grade reform initially took place and continued to teach at the study site through the final stage of the SBG implementation. The participants were required to have experience using traditional grading methods and received the school-based training at the study site before the standards-based grading implementation. Due to these limiting factors, the results of this multiple case study may not be transferable across other schools in the district, state, or nation.

Education was forced to pivot in March of 2020 due to the COVID-19 pandemic and school closures. Students as young as kindergarten were introduced to virtual learning, and the topic of equity in education became even more critical, especially in grading. Grading experts such as Matt Townsley and Thomas Guskey took to social media as a platform to discuss the multiple inequities present in grading during a pandemic. In a podcast posted on Twitter through *Eduview 360* (Austin, 2020), Guskey discussed how assessment and grading were affected by the pandemic. He noted there is a “time and place” for accountability grades; however, he suggested that educators focus more on formative assessment to guide student learning during the pandemic. Guskey also stated that he believed the number of failing grades during the pandemic was not due to lack of achievement; it was due to the inequities in access, resources, and adult support (Austin, 2020).

While the teachers participating in this study did not specifically mention the COVID-19 pandemic or virtual learning affecting their grading practices, nor were they asked specific questions about the effects of the COVID-19 pandemic on their grading practices, it is important to note that three out of the five teachers were interviewed in May of 2020, which was approximately two months into school closures due to COVID-19. The five teachers of the study likely saw decreases in engagement and issues related to social-emotional learning due to the pandemic; however, since all of the study participants used standards-based grading prior to and during the pandemic, they likely would not have strong feelings toward decreases in overall grades due to the pandemic like secondary teachers may have provided if asked the question.

Implications

While the results of this multiple case study of the experiences of five upper elementary teachers who transitioned from traditional grading practices to standards-based grading may not be applicable to all teachers experiencing a grade reform, the researcher found four key themes common across grading literature in this study. One of those themes supported by the literature and research is the lack of preparation teachers receive at the pre-service level regarding grading and assessment (Barnes, 1985; Battistone et al., 2019; Chen & Bonner, 2017; Cizek et al., 1995). When teacher candidates did receive instruction on grading, studies found they rarely put theory into practice once at the in-service level (Allen, 2005; Brookhart, 1993; Brookhart, 1994; Brookhart, 2015; Cox, 2011; Link, 2018; McMillan, 2001; McMillan et al., 2002; Randall & Engelhard, 2010; Sadler, 2010; Tierney et al., 2011). As a result of little to no grading practices, teachers tend to develop their own grading practices or fall back to grading practices they recall as a student (Allen, 2005; Battistone et al., 2019; Chen & Bonner, 2017; Tierney et al., 2011).

A possible reason for the gap in theory and practice when it comes to grading is that teacher candidates have little practical experience at the pre-service level with grading. If they took a course on grading, it typically involved the theory of grading, and there was no practical application of the practice during their pre-service experience. A study by Battistone et al. (2019) noted that when teacher candidates do have instruction on grading and assessment, it is varied among programs. These differences tend to blur common understandings of grading pedagogy and terminology when teacher candidates become beginning teachers and work with colleagues. This can be troublesome when school districts or building-level leadership mandate common grading practices among PLCs or departments. The study also noted that most of the learning on grading practices is experiential, where student teachers and BTs learn from their cooperating teacher or mentor (Battistone et al., 2019). This too can be troublesome, as teachers tend to develop individual grading practices based on their own beliefs and values rather than on research-based, effective practices (Allen, 2005; Battistone et al., 2019; Brookhart, 1994; Brookhart, 2015; Randall & Engelhard, 2009; Rugg, 1918).

The development of common grading criteria and course materials by teacher preparation programs for pre-service teacher candidates could be a solution to the issues of inequities in grading practices found across all levels, especially the secondary level. Further, the collaboration between teacher preparation programs and school districts to implement a common grading criteria and continued use of practical course material in the form of on-going professional development could help the sustainability of equitable grading practices. While Bonner and Chen (2009) found that teacher candidates changed their perceptions on grading when participating in grading training, they suggested that ongoing professional development involving the actual practice of the skill should occur to maintain this change.

A teacher's self-efficacy in a newly implemented practice could be tied to professional development quality. While all of the study participants stated there was no follow-up training to the initial training session with the study site's standards-based grading implementation, two of the participants were outspoken in their frustration to the lack of training available. Katie and Linda, both fifth-grade teachers at the time of the study, stated they should have received additional training since they did not implement the new grading practices until two years after the initial training. "We need help because we had heard so many different things in-between training and [implementation]," said Linda. Katie even admitted to not paying much attention in the initial training because she knew it would not apply to her for another two years. These comments, along with the established research on SBG implementation, suggest that proper training through professional development could increase the sustainability of the change and, potentially, a teacher's self-efficacy in the use of the new practice (Proulx et al. 2012; Townsley et al., 2019; Townsley & Wear, 2020). These studies also indicated that successful grade reform took up to three years, if not longer, and allowed teachers to have a voice in the reform. Studies further indicated that implementation begins at the PLC level, where teachers can collaborate, experiment, and support each other in their new learning (Townsley et al., 2019; Townsley & Wear, 2020).

In addition to the robust course work on grading established at the pre-service teacher level, to include specific criteria included in grading, universities and colleges should work with school districts to create on-going professional development at the in-service level to continue equitable grading practices. When introducing and eventually implementing a new practice as entrenched as grading, university, district, and school-building leadership should think about the content and structure of the training they provide to pre-service and in-service teachers.

Collaboration in the form of practice along with segmented implementation in the form of pilot studies could be beneficial in the sustainability of the change and the teachers' self-efficacy when putting their training into practice (Bandura, 2000; Proulx et al., 2012; Townsley et al., 2019; Townsley & Wear, 2020).

Multiple studies suggest that the principal plays a direct role in the success of changing practices in their school building (Fullan, 1985; Olsen & Buchanan, 2019; Zimmerman, 2011). The principal of Shermer Elementary School, the study site, was not directly involved with the SBG training at the onset of the implementation, and it was the school district that decided to transition from traditional grading practices to standards-based grading. However, it is still important to note that the principal's direct involvement could determine successful change in schools. Zimmerman (2011) noted that it is important for principals to be involved in change by creating a "supportive environment" to alleviate teacher stress, which can impede change of practices, especially one as established as traditional grading (p. 111). It is also important for the principal to promote collaborative practices as well as clear and consistent policy concerning the new practices being implemented (Fullan, 1985). Even if there is collaboration among the teachers during a grade reform, if they feel that the principal is not supportive of the change, there is a chance the grade reform could fail (Olsen & Buchanan, 2019).

An additional and unexpected implication to this multiple case study was the effects of the COVID-19 pandemic on grading practices. Townsley (2020) presented three grading principles that educators should consider during pandemic learning: traditional letter grades should be based on prioritized standards; there should be a focus on achievement of the standards rather than completion of homework, and teachers should emphasize "what students have learned over when they have learned it" (p. 10). These principles are consistent with established

research on standards-based grading (Knight & Cooper, 2019; Guskey & Bailey, 2010; Marzano, 2000; Marzano & Heflebower, 2011; Munoz & Guskey, 2015; Peters & Buckmiller, 2014; Vatterott, 2015). Townsley (2020) also notes that one of the implications of the pandemic and grading could be how schools now plan for a grade reform implementation post-COVID-19 to address issues they may have seen during the pandemic. The two elements he notes, implementation timeline and parent resistance to grade reform, are consistent with findings from this study.

Recommendations for Further Research

For this qualitative multiple case study, the researcher focused on the experiences of five upper elementary teachers who transitioned from traditional grading practices to standards-based grading. Interviews were conducted after the transition to the new grading practice; therefore, it could be beneficial to the body of research on grading to capture the experiences from the onset of the implementation. It could be especially beneficial to capture teacher perceptions of the grade reform and new grading practices concerning self-efficacy at the initial implementation phase. The perceived self-efficacy of the five study participants was captured post initial implementation, and the participants had a minimum of one year implementing and a maximum of almost four years implementing the new practice. All five teachers involved in the study noted a high level of confidence using standards-based grading. However, this high perceived self-efficacy could be due to the fact that they had a minimum of one full year to practice the new grading practice. The researcher found that Katie and Linda, the two teachers with the least amount of time using SBG, had a lower perceived self-efficacy compared to those who were further into the implementation. Analysis of the two teachers' perceptions of the new grading practice coupled with their perceptions of the training they received overtime could support the

development of instructional training programs at both the pre-service and in-service level; therefore, it would be beneficial to the development of future trainings to capture teachers' initial perceptions of a new practice being implemented and follow it through to final implementation.

In order to better capture the participants' perceptions on the quality of the professional development provided at the initial implementation phase, the researcher could use a Likert-type scale to rate the quality of the training provided along with focus groups to capture common experiences of the grade reform across the district (Mertens, 2015). Additionally, opening up the study to all teachers in the district who received the initial standards-based grading and reporting training at the onset of the 2016-2017 school year could increase the transferability of the study results, thus providing the district with important information on the quality of the training they provided which could, in turn, increase the sustainability of the change being implemented.

One of the barriers to standards-based grading seems to be parents' reactions and their misconceptions about the grading practice (Franklin et al., 2016; Peters & Buckmiller, 2014; Swan et al., 2014; Townsley, 2018). Participants of this study shared stories of parent concerns when it came to their children moving into the secondary level, which continues to use traditional grading practices. Katie noted she had difficult conversations with parents regarding the use of standards-based grading. "Parents are still very unsure," she stated. While the literature suggests that schools involve parents and the community in the initial implementation of SBG (Cox, 2011; Reeves et al., 2017; Townsley, 2018), the body of literature could benefit from research on parent perceptions of standards-based grading several years into the implementation.

Findings from this research on parent perceptions of standards-based grading could also help develop implementation plans and training material. Katie and Linda were only one full

year into implementing SBG, yet they were in the final stages of the implementation and continued to struggle with communicating SBG to parents. It could be beneficial to teachers to receive research-based resources that address parent concerns at the initial implementation phase. These resources could include a typical progression of parent thinking over the span of the implementation gleaned from studies on changing parent perceptions through a grade reform.

Linda stated that while she knew using SBG was best for students, she was not completely invested in the new grading practice because she did not see an impact on student understanding with its use. This introduces another potential topic for future research: student perception of the use of standards-based grading. As SBG is introduced at the secondary level, students who have had experience with traditional grading and experience a transition to SBG could provide insight on their increased or decreased understanding of the standards and if they feel SBG affected their achievement.

Conclusion

Questions arose regarding equitable grading practices in the early 1900s, and a call was made to overhaul the grading system in public schools (Rugg, 1918). The literature on grading from the 1970s and 1980s brought to light how traditional grading systems sort students into what some might call predestined futures (Candady & Hotchkiss, 1989; Kirschenbaum et al., 1971). As the years passed, the body of knowledge on traditional grading practices increased. The research noted final assignment and course grades in the form of percentages and letter grades included more than a student's level of mastery of a skill. The grades included behaviors such as participation, attendance, and even attitude (Brookhart, 1993; Brookhart, 1994; Cox, 2011; Cross & Frary, 1999; Feldman, 1019; Guskey, 2011; Marzano, 2000; McMillian, 2001; McMillan, Myran, & Workman, 2002). Standards-based grading came to light with the No Child

Left Behind legislation in the early 2000s (Hamilton et al., 2008; Vatterott, 2015). This grading practice took off at the primary level; however, some upper elementary and secondary level teachers continue to hold tight to traditional grading practices.

The researcher did not intend for this study to designate one grading practice as superior over the other. Each method of grading has its pros and cons. In fact, one of the cons of SBG is that it emphasizes achievement over behaviors such as participation and completion of homework. At first light, this would seem to be best practice, and it is suggested as best practice by the findings of this study; however, one of the primary goals of educators is to not only teach the content but to teach students how to be productive, responsible citizens. How can educators accomplish this when standards-based grading practices do not allow them to assign a grade on late work, a lesson in responsibility?

Findings of this study and other studies on SBG suggest that there are ways to move the emphasis off assigning consequences for late work, as seen in traditional grading practices, to promote the need to gather evidence for learning, as seen in standards-based grading (Knight & Cooper, 2019; William, 2020). Even though traditional grades are well established, they could send messages to students that affect their motivation and have social consequences (William, 2020). Each of the five participants of this case study noted positive changes to their overall teaching practices using standards-based grading. From teaching the standards in “kid-friendly” language to setting goals based on their mastery of standards to working with PLC colleagues to unpack the standards for better understanding and lesson preparation, teachers of this study felt the implementation of SBG moved them closer to best practices. While some participants felt traditional grading was easier to record on report cards, all five teachers in this study noted that

they would not go back to using traditional grading practices if they had a choice between that or SBG.

The researcher developed four key themes through analysis of the five case study reports: grades as communication, frustrations with SBG transition, support from colleagues as useful or not useful, and lack of preparation at the pre-service level. These key themes are important to the ongoing standards-based implementations across all grade levels, especially at the secondary level. The results of this multiple case study brought to light some of the issues already addressed in previous studies on grading, and they could help develop effective training materials that address potential teacher frustrations at the onset of the implementation to alleviate stress and increase teacher investment. Additionally, the development of effective, sustained training could increase teacher self-efficacy, which could help with implementation success. To initiate a successful grade reform implementation, district and school-building leadership should create collaborative environments that allow for practice before implementation as well as safe spaces for feedback from colleagues. Furthermore, pre-service teacher preparation programs in conjunction with school districts should develop common criteria for grading that are incorporated in robust courses at the pre-service level with specific instruction on grading and assessment. These combined elements could then allow teachers to use grading as an equitable and accurate form of communication to all stakeholders.

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APPENDIX A: RECRUITMENT SURVEY

Standards-Based Grading Survey

My name is Meghan Frazier, Assistant Principal at Mt. Pleasant High School and a doctoral student in the Educational Leadership department at the University of North Carolina at Charlotte. In my role as a doctoral student, I am inviting you to participate in a research study about upper elementary teachers who have recently transitioned from using traditional grading practices to standards-based grading practices. The current research study is not connected to my role or function with Cabarrus County Schools as an administrator.

What do you need to do?

By answering the brief set of questions below, I will determine if you are eligible to participate in the study. Participation is voluntary; however, if you would like to participate in the study, please provide your contact information at the conclusion of the survey.

* Required

1. Did you teach 3rd, 4th, or 5th grade at Pitts School Road Elementary School during the 2016-2017 school year? *

Mark only one oval.

- ☐ Yes
☐ No

2. Did you participate in the SBG training provided by the school in August of 2016? *

Mark only one oval.

- ☐ Yes
☐ No

3. Have you continued to teach 3rd, 4th, or 5th grade at Pitts School Road Elementary School since 2016? *

Mark only one oval.

- ☐ Yes
☐ No

4. Did you use traditional grading (use of letter grades and percentages) prior to the SBG implementation in your grade level? *

Mark only one oval.

- ☐ Yes
☐ No

5. Are you interested in participating in a one-on-one interview as a study participant? (confidential and lasting no longer than 45 minutes) *

Mark only one oval.

- ☐ Yes
☐ No

6. If you are interested, please provide your name below:

7. If you are interested, please provide an email or phone number so that I may contact you to set up a brief interview.

Thank you for your time! I look forward to hearing from you.



APPENDIX B: INTERVIEW PROTOCOL

Warm up	
How long have you been teaching? How long have you taught this specific content area?	
What led you to teaching?	
Teacher preparation program and cooperating teacher relationship:	
Tell me about your teacher preparation program. <ul style="list-style-type: none"> What type of courses did you take in this program? What was the most relevant and useful information you took from your teacher prep program into your actual teaching? 	
Did you have any courses on grading? If so, what do you remember about the content and instruction.	
Do you remember some of your Cooperating Teacher's grading practices and/or procedures? If so, can you tell me about them?	
Beginning teacher/mentor relationship:	
Do you remember some of your mentor's grading practices and/or procedures? If so, can you tell me about them?	
How do you think you developed your own grading practices when you were a BT1 through BT3?	
Traditional grading practices:	
What do you believe to be the purpose of grades?	
When teachers use traditional grading practices, what do you think it tells the teacher? The student? The parent/guardian? The school's administration?	
Is there anything traditional grading does not tell the teacher? The student? The parent/guardian? The school's administration?	
When you used traditional grading, what factors did you consider when assigning and/or adjusting grades on assignments, tests, etc.?	

Transition to a new grading practice:	
How many years did you use traditional grading?	
What were your thoughts when you were told you would be transitioning into standards-based grading practices?	
When teachers use SBG practices, what do you think it tells the teacher? The student? The parent/guardian? The school's administration?	
Is there anything SBG does not tell the teacher? The student? The parent/guardian? The school's administration?	
Now that you use SBG, what factors do you consider when assigning and/or adjusting grades on assignments, tests, etc.?	
Training and implementation of new grading practice:	
How did your district and/or school building administration implement the transition from traditional grading to SBG? <ul style="list-style-type: none"> How did they train you for the implementation to SBG? What type of follow-up training has been given during the implementation to SBG? 	
What are your current thoughts on the use of SBG?	
If you could go back to using traditional grading, would you? Explain.	
Would you like to add any additional thoughts on your experience transitioning from traditional grading to SBG?	

Coded participant information:	
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APPENDIX C: SAMPLE OF MASTER DATABASE

Participant	Chunks/Quotes	Codes	Category	Themes	# Quotes	Theme Chunks	# Participants	Participant
03	...it's a bit more broad, like a one, two, or three...I also think it helps them have that knowledge of the standards too...the parents that are very involved have a good understanding of what their students needs to better in...the parents that aren't involved [have] no idea how their student is doing because it is not a percentage	SBG-communication/parents	Communication-both	SBG provided communication that was both useful and not useful for parents.	1	Communication: SBG use (both useful)	2	03
05	I think that if they see a three, they're happy that they understand the concept and they're doing what they're supposed to be doing...the two and the ones, I think, are a little confusing to them sometimes just as far as what that means for them...I think it means they're not doing as well as they should be doing	SBG-communication/students	Communication-both	SBG provided communication that was both useful and not useful to the student.	1			05
03	Not really. I mean, I don't...I'm trying to see how it helps administration...when you compare it to our state benchmarks...it's hard to compare	SBG-communication/administration	Communication-not useful	SBG provided communication that was not useful for administration.	1			03
04	they're [parents] in the same boat with the kids	SBG-communication/parents	Communication-not useful	SBG provided communication that was not useful for parents.				04
02	We're still teaching the parents about the levels even if they've been in the county forever, so it's not as meaningful to them.	SBG-communication/parents	Communication-not useful	SBG provided communication that was not useful for parents.				02
02	I'd like for parents to see that it's a progression over time to prevent them from panic...	SBG-communication/parents	Communication-not useful	SBG provided communication that was not useful for parents.				02
01	...parents are still very unsure...I try to communicate the same thing to parents that I do with the kids...some of them just don't grab hold of it and understand...they're still concerned about the next phase.	SBG-communication/parent	Communication-not useful	SBG provided communication that was not useful for parents.				01
05	I don't [think parents understand what the numbers mean]. I think now over the years they're starting to get more comfortable with it...at first it was very difficult on them to understand the difference...they have the grade concept in their head, so it was hard for them to correlate it back and forth	SBG-communication/parents	Communication-not useful	SBG provided communication that was not useful for parents.				05
01	...I've had to have conversations that had been difficult.	SBG-communication/parents	Communication-not useful	SBG provided communication that was not useful for parents.				01
02	...even though we say 'you're progressing' and 'you reach mastery'...I don't know that they are developmentally ready for that.	SBG-communication/students	Communication-not useful	SBG provided communication that was not useful for students.	6	Communication: SBG not useful	5	02
02	...they're expecting to see threes now and were upset that they were seeing some ones and twos...that means that I'm pulling them extra in small groups to move us...three's mean you've already mastered it and I need to enrich and that's okay...they don't see it as the end of the year.	SBG-communication/students	Communication-not useful	SBG provided communication that was not useful for students.				02
02	I haven't gotten a response from them on their understanding, like a clear understanding...	SBG-communication/students	Communication-not useful	SBG provided communication that was not useful for students.				02
02	The students don't see what mastery means...but they kind of considered 85 and higher mastery...they felt like they had done a good job, but they don't see that with the standards.	SBG-communication/students (-)	Communication-not useful	SBG provided communication that was not useful for students.				02
04	I don't think they get it yet...they equate it to their formal testing and wonder why there's not a three...don't fully understand the two	SBG-communication/students	Communication-not useful	SBG provided communication that was not useful for students.				04
01	...I'm really trying to promote seeing a two and not being frustrated...you're getting there and moving in the right direction...keep working towards the three.	SBG-communication/student (-)	Communication-not useful	SBG provided communication that was not useful for students.	6			01
04	You can't tell effort...you have a kid that works so, so hard and they're still getting a one...the next year, his teacher's going to look at it as a one...the expectation could be 'Oh well, this kid, you know, just isn't going to get it'...you don't know that they tried all year to get it though...they were not progressing and then they're so far off grade level maybe that's all you could do	SBG-communication/teacher (-)	Communication-not useful	SBG provided communication that was not useful for the teacher.				04
01	I see a lot of parents concerned about the next level [grade level]...I still have a lot of questions about what is that going to look like next year (6 th grade)	SBG-communication/parents	Communication-not useful	SBG provided communication that was not useful for the teacher.				01
01	Communicating it to parents at the end of the quarter is difficult.	SBG-communication/parents	Communication-not useful	SBG provided communication that was not useful for the teacher.				01
05	...it doesn't tell them how much work they're completing in class or whether they're turning in all their assignments	SBG-communication/teacher (-)	Communication-not useful	SBG provided communication that was not useful for the teacher.	4			05
05	...they tell them [administration] kind of the ability level of the kids in the room	SBG-communication/administration	Communication-useful	SBG provided communication that was useful for administration.		Communication: SBG useful	5	05
04	...just performance...overall performance on different standards...engagement, participation and even teacher direction or how a teacher relates with their kids even	SBG-communication/administration	Communication-useful	SBG provided communication that was useful for administration.				04
04	If students collectively performance above, on, or below level, administration may be able to determine the effectiveness of a teacher...measured in the teacher's ability to relate to students and inspire or engage them in learning	SBG-communication/administration	Communication-useful	SBG provided communication that was useful for administration.				04
04	It may even reflect the teacher's understanding of the standards...or the delivery of instruction and the rigor they embed in the instruction	SBG-communication/administration	Communication-useful	SBG provided communication that was useful for administration.	4			04
05	That they need some help with the concept and not mastering the idea [parents]	SBG-communication/parents	Communication-useful	SBG provided communication that was useful for parents.				05
03	...parents now have a better understanding of standards...they probably didn't have, you know, any idea what standards were...	SBG-communication/parents (+)	Communication-useful	SBG provided communication that was useful for parents.				03
03	Now I can tell a parent 'Oh, your student needs help with RL.3.2' and they, you know, kind of understand what that means.	SBG-communication/parents (+)	Communication-useful	SBG provided communication that was useful for parents.	3			03
05	How well the student has gotten the concept...mastered it	SBG-communication/students	Communication-useful	SBG provided communication that was useful for students.				05
01	...there's a little bit more of openness with students to work towards the next level...more like steps and working their way up.	SBG-communication/student (+)	Communication-useful	SBG provided communication that was useful for students.				01
03	...if you implement with good goal setting and expose them to those standards, then it gives them a purpose for what we're doing in class...they take pride in that	SBG-communication/students	Communication-useful	SBG provided communication that was useful for students.				03
03	I don't think so, no. I think that it gives a pretty good explanation of what they're doing...it also helps moving on to the next grade level. Even I know exactly where each student, you know, is	SBG-communication/parents (+)	Communication-useful	SBG provided communication that was useful for students.				03
03	I'm confident that they understand this.	SBG-communication/students	Teacher efficacy (positive)	SBG provided communication that was useful for students.	5			03
02	...even though sometimes they're a pain to make the rubrics, it's not just you got 9 out of 10, it's you explain this and you went further with it.	SBG-personal feelings	Communication-useful	SBG provided communication that was useful for teachers, students, and parents.	1			02
02	I can see they are ready for enrichment more or...how they are doing over time...not just one isolated	SBG-communication/teacher	Communication-useful	SBG provided communication that was useful for the teacher.				02
01	...their level of mastery, where they're at...do they have it, are they showing consistency [in that skill]	SBG-communication/teacher	Communication-useful	SBG provided communication that was useful for the teacher.				01
01	They need a lot of support at that level...that's what that tells me...we need a little support and we don't always get it...and then we're consistently getting it one our own...	SBG-communication/teacher	Communication-useful	SBG provided communication that was useful for the teacher.				01
01	I don't think it doesn't tell me anything...I think I get what I need	SBG-communication/teacher	Communication-useful	SBG provided communication that was useful for the teacher.				01
03	I know when my kids know and don't know, you know, without having to create an official grade on something...	SBG-communication/teacher	Communication-useful	SBG provided communication that was useful for the teacher.				03
03	...the teacher knows specifically what skill that student needs to work on...little bit more specific...you know specifically what standards students need additional help with	SBG-communication/teacher	Communication-useful	SBG provided communication that was useful for the teacher.				03
04	...levels of success...it pinpoints that as opposed to, like, participation...it eliminates participation...if a kid naturally gets it and they're going to get those higher scores with no effort, maybe	SBG-communication/teacher	Communication-useful	SBG provided communication that was useful for the teacher.	7	Purpose of Grades	4	04
05	...to see how well that they're doing with the concepts	Purpose of grades	Going beyond averages	Teacher believes the purpose of grades is to communicate how well students are doing with concepts.				05
01	...purpose of them to communicate performance and mastery...to communicate a student's level of performance on the standard...	Purpose of grades	Going beyond averages	Teacher believes the purpose of grades is to communicate mastery of the standards.				01
04	...formal feedback for students and families	Purpose of grades	Going beyond averages	Teacher believes the purpose of grades is to provide feedback to parents and students.				04
03	I think the purpose of grades in elementary is to provide feedback to parents and students...	Purpose of grades	Going beyond averages	Teacher believes the purpose of grades is to provide feedback to parents and students.	4			03

APPENDIX D: INFORMED CONSENT FORM



Consent to be Part of a Research Study

Title of the Project: Upper Elementary Teachers Transition from Traditional Grading to Standards-based Grading
Principal Investigator: Meghan A. Frazier, UNCC Doctoral Student
Faculty Advisor: Dr. R. Shore, UNCC Professor

You are invited to participate in a research study. Participation in this research study is voluntary. The information provided is to help you decide whether or not to participate. If you have any questions, please ask.

Important Information You Need to Know

- The purpose of this study is to capture the experiences of upper elementary teachers who recently transitioned from using traditional grading practices to standards-based grading practices.
- You will be asked to participate in a one-on-one in-person individual interview.
- If you choose to participate it will require a maximum of three (3) hours of your time.
- Risks or discomforts from this research include the discomfort of revealing your feelings about the required transition from traditional grading to standards-based grading.
- Benefits may include the knowledge that you are adding to the overall literature on grading practices and grade reform.
- You may choose not to participate at any time during the study.

Please read this form and ask any questions you may have before you decide whether to participate in this research study.

Why are we doing this study?

This study intends to understand the lived experience of upper elementary teachers who transitioned from traditional grading practices to standards-based grading practices. The study's goal is to highlight the experience of these teachers going through a grade reform process. Grading practices have been a topic of research since the current education format began over a century ago. As the research continues to show negative effects of traditional grading practices, standards-based grading has made a move up the grade levels. What has been the norm at the primary grades for at least a decade is now moving closer to the secondary level. Using Social Cognitive Theory as a framework, this study will look at how upper level elementary teachers experienced the initial training and subsequent professional development in their transition to standards-based grading.

The research question for this study will be: What was the experience of upper elementary teachers who transitioned from traditional grading practices to standards-based grading practices?

Why are you being asked to be in this research study.

You are being asked to be in this study because you teach upper elementary grades (3rd grade through 5th grade) and recently transitioned from traditional grading to standards-based grading.

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What will happen if I take part in this study?

If you choose to participate in this study, you will be asked to answer questions about grading with regard to your years as a student in a teacher preparation, your year as a student teacher working with a cooperating teacher, your years as a BT working with a mentor, your years as a classroom teacher using traditional grading practices, and your recent transition to standards-based grading practices. This one-on-one interview will take place at a place of your choice, which could include your school site or another convenient location.

Your time commitment will be a maximum of three (3) hours. This includes the potential first in-person meeting to answer any specific questions (30-45 minutes), the actual interview (45 minutes to 1 hour), and a potential follow-up meeting (30-45 minutes).

What benefits might I experience?

You may not benefit directly from being in this study. However, others might benefit because your experiences as shared in this study are adding to the overall literature of grading and grade reform.

What risks might I experience?

You may experience information risk by way of a breach of confidentiality. To minimize this risk, I will use pseudonyms for subject names, school name, and district name.

How will my information be protected?

All data collection and digital files will be on password protected files and devices. Coding will be used in interview data, which will eliminate the use of actual subject names on interview files (eg. SS#1, SS #2 to mean Study Subject #1, Study Subject #2). Sharing of digital files that include data or study subject information will be done over university sponsored/owned email and sharing programs. Study data will only be shared between PI and faculty advisor. All digital files will be deleted within six (6) months of study completion.

We plan to publish the results of this study. To protect your privacy, we will not include any information that could identify you. We will protect the confidentiality of the research data by using pseudonyms in the written study and coding for subject names within the interview data.

Other people may need to see the information we collect about you. Including people who work for UNC Charlotte, and other agencies as required by law or allowed by federal regulations.

How will my information be used after the study is over?

After this study is complete, study data may be needed as part of publishing our results. The data we share will NOT include information that could identify you. The information we share with these other investigators will not contain information that could directly identify you; however, there still may be a chance that someone could figure out that the information is about you. In order to protect your identity, pseudonyms will be used in the written portion of the study for subject name's, the school name, and the district name. The only demographic information that potentially will be included in the final study write up is the number of years a study subject taught using traditional grading practices. Other data, such as gender, will be grouped to prevent any deductive disclosure of identity.

Data in the form of the final written study may be deposited in a public repository such as ProQuest, which is a database that houses theses and dissertations. Typically, access to these sites are restricted to students associated with an educational institution.

What are my rights if I take part in this study?

It is up to you to decide to be in this research study. Participating in this study is voluntary. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer.

If you chose to withdraw from the study, any data collected will be destroyed and not used in the final study.

Participant's participation may be terminated by the PI without the consent of the participant.

Who can answer my questions about this study and my rights as a participant?

For questions about this research, you may contact Meghan Frazier at mfrazier@uncc.edu or 704-701-2509 and Dr. Rebecca Shore at rshore6@uncc.edu or 704-687-8867 ext. 4.

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the Office of Research Compliance at 704-687-1871 or uncc-irb@uncc.edu.

Consent to Participate

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will receive a copy of this document for your records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I understand what the study is about and my questions so far have been answered. I agree to take part in this study.

Name (PRINT)

Signature

Date

Name and Signature of person obtaining consent Date

Consent to be audio recorded

To assist with accurate recording of participant responses, interviews may be audio recorded [*explain if names will not be used during recording*].

Participants have the right to refuse to allow such recording without penalty. Please select one of the following options:

_____ I consent to the use of audio recording.

_____ I do not consent to the use of audio recording.

Signature

Date