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### Case Study of Teacher Perceptions of the Effectiveness of Their Current Grading Practices

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Case Study of Teacher Perceptions of the Effectiveness of Their Current Grading  
Practices

By  
Shavondra Danyelle Parker

A Dissertation Submitted to the  
Gardner-Webb University School of Education  
In Partial Fulfillment of the Requirements  
For the Degree of Doctor of Education

Gardner-Webb University  
2018

## Approval Page

This dissertation was submitted by Shavondra Danyelle Parker under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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## **Abstract**

Case Study of Teacher Perceptions of the Effectiveness of Their Current Grading Practices. Parker, Shavondra Danyelle, 2018: Dissertation, Gardner-Webb University, History of Grading/Standards-Based Grading/Effective Grading Practices/Traditional Grading/Grading Reform/Middle School/High School

Traditional grading represents typical grading practices including the traditional way grades have been calculated since the conception of grades. Before traditional grading, there was a time when mastery of content was not measured by grades at all. In recent years, educators have begun to explore other methods of grading in search of better ways to determine student mastery of content. Many educators use standards-based grading methods that focus instruction and grading around the standards students are expected to learn. Although many researchers support the use of standards-based grading, it has not replaced traditional grading methods. Grading practices should yield accurate grades and should support learning. The purpose of this study was to explore teacher grading practices and teacher perceptions of effective grading practices. The researcher wanted to uncover what grading practices teachers believe are effective and what practices they currently use. This study was conducted at a secondary school that serves grades 8-12. This study was a mixed-methods study that included qualitative and quantitative methods. The researcher conducted interviews, collected records and artifacts, and had participants complete a rubric and survey about their grading practices. The data showed that some participants used traditional grading and some participants used standards-based grading. The findings revealed that teachers use effective and ineffective grading practices. The data suggested that teachers who received professional development related to effective grading practices were more likely to implement effective grading practices. It is recommended that teachers receive training and professional development related to effective grading practices.

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## **Chapter 1: Introduction**

### **Introduction to the Study**

Traditional grading methods date back to the late 18th century. Grades originated in 1792 by William Farish, a tutor at Cambridge University in England. At that time, teachers began to be compensated based on the number of students they taught. Farish therefore created a method of teaching which would allow him to process more students in a shorter period of time and therefore increase his salary (Hartmann, 2000, pp. 190-191). Although in some instances grading can be informative to students, its original intended purpose was ultimately to increase a professor's salary. The grading method that has evolved over the years contradicts the purpose of grading according to leading researchers of the topic.

All grading and reporting should start by having a clear purpose, followed by an in-depth understanding of the various criteria that can be used. Equally important is the effort to explicitly link curriculum standards with grading and reporting systems. We are striving for consistency, validity, and fairness in grading and reporting practices. We are striving for enough detail to allow grading and reporting to serve as a road map of student progress in achieving their learning goals. (Muñoz & Guskey, 2015, p. 68)

In the late 1700s, Yale was likely the first college to rank student performance into four categories, a practice that evolved into the use of a four-point scale (a precursor of the four-point grade point average). According to Durm in 1877, Harvard began classifying students into six divisions based on merit by using a 100% scale (Vatterott, 2015, p. 8). The percent classification was later replaced by letter grades in 1897 (Vatterott, 2015, p. 8). Hundreds of years later, the influences of past grading methods



are still evident in the current practices we use to determine student achievement, but there are questions raised by some researchers as to whether our current grading methods are best practice.

Just as the history of grading provides insight into how current grading practices have come to be, so does the history of education.

From the earliest days of our country, the goal of mass literacy was driven by the need for people read the Bible and thus save one's soul. Contrary to today's practice of secular education, schools were the servant of religion, and moral education in the schools was a logical outgrowth of religion. (Vatterott, 2015, pp. 6-7)

Morality and serving God were the driving forces for the education system during that time. "Teachers worked hard to promote in students the virtues of self-restraint, industry, honesty, punctuality, and orderliness. Discipline in school was viewed as a way to model full obedience to God" (Vatterott, 2015, p. 7).

Our past has influenced our present. As a result, (today), we reward responsibility, effort, hard work, neatness, and homework completion. For this noble goal of instilling morality in students, grades have been a most convenient tool. Unfortunately, this use of grades has led to the school culture that often places more value on compliance and working than learning. (Vatterott, 2015, p. 7)

History tells us that there may have been a time where this method of grading was appropriate or had a minimal negative impact on students. We can observe that although there have been many changes in society from past to present, our grading practices have not changed to fit the needs of the students of today.

Assessments also play a role in our current grading practices. Assessments should be used formatively to provide us with information about a student's performance.

Kohn (2011) argued,

too much attention to the particulars of implementation may be distracting us from the bigger picture—or at least from the pair of remarkable conclusions that emerge from the best theory, practice and research on the subject: Collecting information doesn't require tests, and sharing that information doesn't require grades...students would be a lot better off without either of these relics from a less enlightened age. (p. 28)

Kohn (2011) went on to state that criticisms have been laid out for decades that relate to today's grading system. According to the article, those critics remind us that we have been doing something wrong for some time, and we have not made much progress towards acting to address the issue.

There is clear evidence that grading practices in the United States are broken.

O'Connor (2011) revealed that

inaccurate grades lead to poor decisions being made by and about any student whose grades are used as the basis of those decisions. When determining grades, many teachers continue the traditional practice of combining a large amount of evidence/data into a single summary symbol. This may involve literally hundreds of decisions; if even one is wrong the grade inaccurately reflects student achievement. (p. 3)

As a school administrator, it was not uncommon to encounter situations where student grades on report cards did not align with their performance on assessments, especially standardized tests. Students who knew the curriculum sometimes struggled to

demonstrate that knowledge, and their grades may have suffered because of that. Likewise, students who did not know the curriculum may have received grades that rewarded nonacademic behaviors. In neither situation did the grades reflect the true academic ability of the student. Observations of these types of situations led the researcher to want to know more about the subject of grading. Years of observing inconsistent grading that at times had detrimental effects on students has caused the researcher to need to further examine the topic of grading.

In 1912, some powerful research emerged about the lack of consistency in percentage grades. When English exams from two students were scored by 142 different teachers, the scores on one exam ranged from 64 to 98 percent and scores on the other exam ranged from 50 to 97 percent. (Vatterott, 2015, p. 8) According to Starch and Elliot (as cited in Vatterott, 2015), “the same experiment with geometry papers showed even more discrepancy, with the grades ranging from 28 to 95 percent” (pp. 8-9).

To further complicate the process of grading, behaviorism which dates back to the 17th century played a major role in how education was shaped. This was grounded in the theory that humans would repeat behavior if it resulted in positive consequences.

The widespread use of behavior modification for classroom management generalized to other school practices such as detentions for misbehavior, awards for perfect attendance, and even the use of bells. Behavior management became the dominant paradigm in schools for controlling the *behavior* of learning (or so we thought) as well as controlling classroom behavior. (Vatterott, 2015, p. 11)

The two essential questions that all educators should ask about their grades are, “How confident am I that the grades students get in my classroom/school/district

are accurate, meaningful, and consistent, and that they support learning?” and “How confident am I that the grades I assign students accurately reflect my school’s/district’s published content standards and desired learning outcomes?” (O’Connor, 2011, p. 2)

If the two questions are asked to every teacher regarding their own teaching, the benefit for students would appear to be positive. Examining these essential questions could cause teachers to truly reflect on their own practices and therefore positively impact their own performance as teachers and their ability to better align their instruction with their grading practices.

Wormlei (as stated by Miller, 2013) stated,

There are some aspects of teaching that we keep in cages in hopes they will never escape.... We don’t share our concerns with our grading approach or that of a colleague’s often, and we don’t spend time with each other determining the meaning of a C, A, or discussing what constitutes a 3.5 on a rubric.... The day is upon us, however. It’s time to talk about grades, grading, and report cards openly, if we haven’t before, questioning assumptions, embracing alternatives, and focusing on the promise of what teaching and learning can be. (p. 111)

### **The Research Problem**

Considering the decades of inconsistency in grading practices, there is much that we can we learn from teacher current practices to gage how well our current grading methods inform students, parents, and others as they relate to student knowledge of a specific curriculum. The problem this study addressed is that inconsistent and inaccurate grading has been occurring for many years since the conception of grades, and there have been no concrete solutions presented in the research to help educators know how to best

determine student proficiency in a given subject. In this study, the researcher sought to add to the body of research about the topic of grading and help close the gaps in the research about teacher perceptions of grading with a specific focus on traditional grading and standards-based grading.

In addition to the persistent problems with grading methods in general, there was also research that indicated that grading in itself had negative impacts on student learning. Research has shown that grading may not be necessary at all. According to Kohn, (2011), grades can have negative effects on learning. “Grades tend to diminish students’ interest in whatever they’re learning. Grades create a preference for the easiest possible task. Grades tend to reduce the quality of students’ thinking” (Kohn, 2011, pp. 29-30). While Kohn argued whether grades are necessary at all, other researchers support the approach of standards-based grading. O’Connor (2011) stated that there should be a shared vision at the district and school level about what grades represent: “I believe that primary purpose to be communication about achievement, with *achievement* being defined as performance measured against accepted published standards and learning outcomes” (p. 7).

Challenges and issues have persisted with grading. “At the end of the 20th century, concern about grading was heightened because of the lack of congruence between teachers’ practices and measurement theory” (Tierney, Simon, & Charlond, 2011, p. 211). Current research says that it is “believed that if teachers must assess student progress on precise goals or objectives, they will be more likely to focus their instruction on them as well” (Welsh, D’Agostino, & Kaniskan, 2013, p. 26). Other researchers have found similar shortcomings of traditional grading, stating that this type of grading has “the inability to communicate students’ proficiency on established

standards when assessment and grading is organized around assessment number or type rather than around standards” (Hooper & Cowell, 2014, p. 60). Hooper and Cowell (2014) also stated another shortcoming for traditional grading is “the inherent ambiguity in communicating student learning when averaging all student scores to determine a single final grade” (p. 60).

Student beliefs about grades have also been influenced by our current grading methods. Student beliefs have come to reflect that their effort earns them an A, regardless of whether actual high levels of learning occurred.

To students, grades have come to represent how hard they worked and how well they followed the rules. Students are quick to protest a grade that might actually reflect learning if it is incongruent with their idea of what a grade means. For one student, the complaint went like this: “I attended every class and demonstrated an exemplary amount of participation. I was under the impression that I would earn an A with the effort that I had applied.” (Vatterott, 2015, p. 17)

### **The Purpose of the Study**

Research shows that traditional grading is still present in today’s grading practices, yet standards-based grading has increasingly become a topic for discussion among educators and is growing in popularity as a method for measuring student academic proficiency.

School leaders have become increasingly aware of the tremendous variation that exists in grading practices, even among teachers of the same courses, in the same department in the same school. Consistently students’ grades often have little relation to their performance on state assessments—an issue that has education leaders and parents alike concerned. (Guskey & Jung, 2012, p. 23)

Although it is evident that traditional grading has not generated widespread success for all students in all subjects with all teachers, it is still a continued practice of many educators. The researcher intended to gain an understanding about teacher perceptions of their grading practices, both traditional and standards based. The researcher examined teacher practices in search of answers to questions about effective grading methods. Although the current research indicates the benefits of standards- or objective-based grading, this has not yet emerged as the only form of grading for educators.

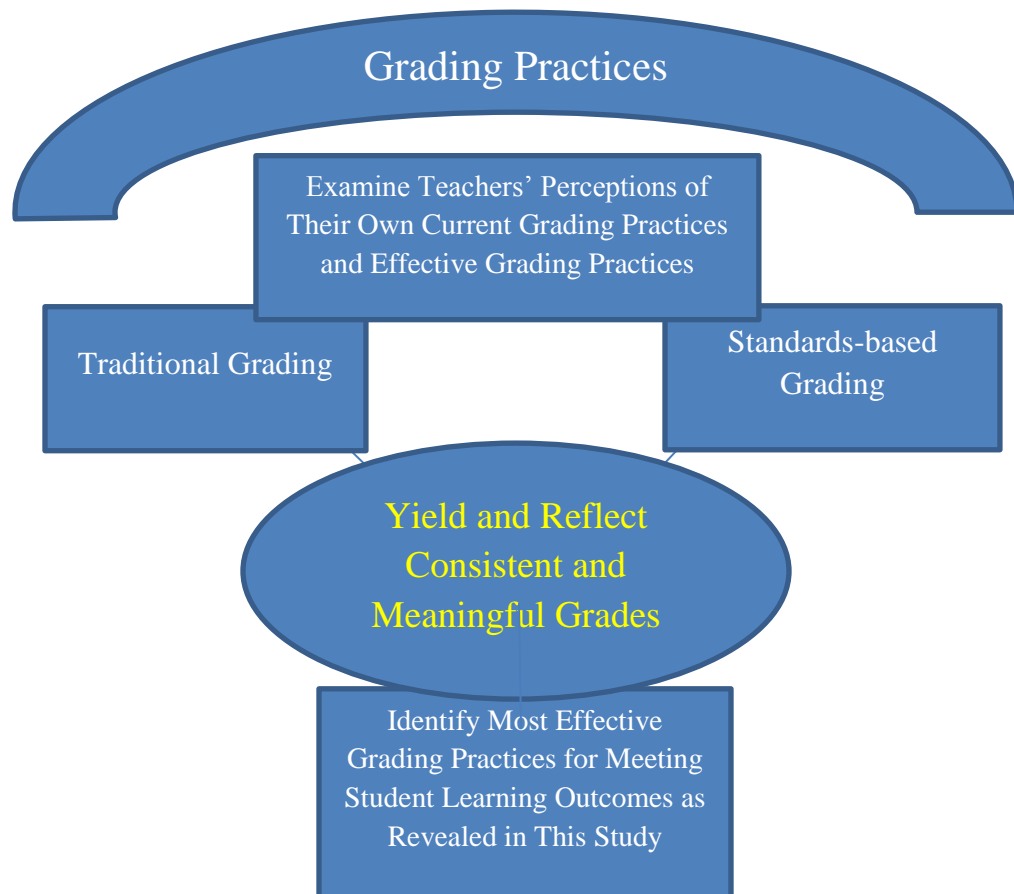
During this study, the researcher hoped to discover if teachers perceived there to be any differences in student outcomes when students are graded using different methods of grading. The researcher wanted to know what grading practices teachers perceive are effective. There is research that indicates that standards-based grading effectively assesses student academic performance; however, at the time this study was conducted, traditional grading methods were the current grading methods still used by many educators. The researcher hoped to discover if the effective grading practices identified by participants aligned with traditional methods or standards-based grading.

As expressed in O'Connor (2011), there are four categories as well as the 15 fixes that have been revealed as problems that researchers associate with traditional grading practices. Just as O'Connor explored the grading fixes that are more aligned with standards-based grading, the research shows that it is also possible that there are practices being used by teachers that are more aligned with traditional methods. Although these standards-based methods were outlined in the text, the researcher wondered how well teacher grading practices were aligned with these fixes. Therefore, the purpose of this study was to explore teacher grading practices and teacher perceptions of effective

grading practices.

### Conceptual Base

According to research, “accountability for learning demands grades that are reflective of learning” (Vatterott, 2015 p. 20). This study attempted to tackle the problems surrounding our current grading methods by examining traditional and standards-based grading through the lens of teachers by exploring teacher perceptions of their current grading practices. By conducting this study, the researcher closed the gap in the research about grading by identifying grading practices teachers determined effective.



*Figure 1.* Conceptual Framework.

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Figure 1 illustrates the conceptual framework around grading practices with



consistent and meaningful grades as the primary objective of grading. The top of this illustration is grading practices, since all elements of this study related to that main concept. In this study, the researcher first focused on teacher perceptions of their own grading practices which explains why it is the second component of the framework. The focus was on practices identified as traditional or standards based. Therefore, traditional grading and standards-based grading are next on the framework beneath teacher perceptions.

Traditional and standards-based grading are side by side on the framework because it was not determined prior to the study which methods the participants used, and they could have both potentially been used by participants in this study. Regardless of which grading method was used, traditional or standards based, it was an assumption that all teachers wanted to yield consistent and meaningful grades when assessing student proficiency. Therefore, both grading methods led to “Yield and Reflect Consistent and Meaningful Grades” in the conceptual framework. As stated earlier in this chapter, one of the essential questions for educators should be whether their grading practices are consistent and yield meaningful grades.

### **Research Questions**

Standards-based grading may or may not be the solution to grading concerns within education. O’Connor (2011) focused on the 15 fixes organized in the following manner: “fixes for distorted achievement, fixes for low-quality or poorly organized evidence, fixes for inappropriate grade calculations, and fixes to support learning” (p. 12). The following research questions were the focus of this study.

1. What are the identifiable differences in teacher perceptions of grading practices?

2. How do teacher grading practices align with standards-based grading?
3. What grading practices do teachers use to address consistency and accuracy?

### **Significance of the Study**

This study was significant because it provided educators with a better understanding of whether specific grading practices could be identified that aligned with standards-based grading; and if so aligned, did those teachers perceive that those practices were effective? Was there evidence to support teacher perceptions that the strategies were effective, and were the teachers effective? This study was intended to reveal teacher perceptions of their own teaching and student performance. These new data were used to fill the gap in knowledge about specific grading practices teachers perceive are effective. In the future, these new data can be used by teachers who have desires to reflect on their own grading practices and who may be considering implementing standards-based grading.

Although the research showed that teachers were willing to implement standards-based grading and were supporters of this method of grading, there were gaps in the research about teacher perceptions of the effectiveness of this method of grading. Despite use of standards-based grading in 21st century educational practices, traditional grading methods were still widely being used in classrooms at the time this study was conducted. This study provided additional data that teachers and other educators can use to determine best practices for grading student work.

One researcher said,

It is time to change our traditional approaches for grading and reporting in our nation's schools. The scaling-up process of the suggested approach for the grading and reporting will enhance student learning. Reporting must be valid,

reliable, fair, and useful; nothing less should be expected if we want to link grading and reporting with students' mastery of content and practice standards. Standards-based grading and reporting has much more to offer over the traditional scattershot approach. (Muñoz & Guskey, 2015, p. 68)

### **Overview of the Methodology**

Using mixed-methods research which included qualitative and quantitative methods, the researcher answered the research questions related to grading practices and standards-based grading. Secondary school teachers from one specific secondary school were selected to participate in the study based on their interest in grading practices and standards-based grading. Grades at this school ranged from sixth to twelfth grade. Ninety-three percent of the student population in this school was economically disadvantaged. There were 283 students enrolled in the school. The school exceeded expected growth based on state standards for 3 consecutive years. There were at least 10 participants, although the researcher initially intended to have 15 participants. Teachers shared their own current grading practices with the researcher, and the researcher explored how these grading practices aligned with standards-based grading.

Teacher grading practices were an important focus of this study. Data were collected using interviews, survey, rubric, artifacts, records, and observation. There was a focus on language arts, math, science, and social studies, while also including teachers from other disciplines such as career and technical education to participate if they chose to.

At the conclusion of this study, there was a deeper understanding of whether there was any correlation or alignment between teacher current grading practices and standards-based grading. The researcher used the methodology briefly described in this

chapter to answer the research questions that were identified.

### **Summary**

Research shows that educators have been concerned about intellectual growth, moral development, and the preparation of children for adulthood. Based on research, it appears that grades have been used for purposes beyond academics.

As educators, we have been concerned not only about intellectual growth, but also moral development and the preparation of children for adulthood. We've used grades for more than academics because we believe our job is more than academics—our goals have always included shaping children into better people. But our well-meaning beliefs and their unintended consequences deserve close examination. (Vatterott, 2015, p. 12)

In this study, the researcher more closely examined the grading practices of teachers to add to existing research about traditional grading, standards-based grading, and possibly whether grading is necessary at all.

Participants in this study had the opportunity to reflect on their current practices and examine their own perceptions through an interview, survey, and a self-assessing rubric. This study added to the body of research, while it allowed teachers to be reflective practitioners as it related to grading. The literature review that follows delves deeper into the history of grading and relevant research about grading methods.

### **Organization of the Dissertation**

The dissertation is organized into five chapters. The first chapter focused primarily on the introduction of the study, defining the problem, identifying the research questions, and the overview of the methodology. Chapter 2 provides a review of the literature related to grading both traditional and standards-based grading. The researcher

also restates the problem in Chapter 2. Chapter 3 explains the methodology used during the study to collect and analyze the data. This chapter provides details about the participants in the study, descriptors of the site for the study, and instruments and materials that were used for data collection. Chapter 4 presents and summarizes the data from the study. Chapter 5 allows the researcher to analyze the data, report the findings, and make connections between the findings of the study and the research. The researcher reexamines the conceptual framework and answers the research questions. Any new data found was added in Chapter 5. The researcher concluded with recommendations for further research.

### **Definition of Terms**

**Behaviorism.** Approach to psychology based on the belief that all human actions and responses can be explained in terms of reflexes conditioned by reward and punishment (carrot and stick; businessdictionary.com).

**Collaboration.** The act of working with someone to produce or create something (oxforddictionaries.com).

**Common core.** Current academic standards provided by the state used by classroom teachers to guide their instruction.

**Convergence.** The act of converging and especially moving toward union or uniformity (merriam-webster.com).

**Perceptions.** A way of regarding, understanding, or interpreting something; a mental impression (oxforddictionaries.com).

**Interdisciplinary.** Of or relating to more than one branch of knowledge (oxforddictionaries.com).

**Standards-based grading.** Alignment of the federal, state, and/or local learning

objectives/standards with the instruction and assessments used to determine and report student mastery of the objectives/standards.

**Standards-based reporting.** A system designed to inform parents about their child's progress towards achieving specific learning standards.

**Standards-based assessments.** Assessments created for the purpose of assessing pupil knowledge of standards and objectives related to a particular subject matter.

**Traditional grading.** Grading method that reflects practices that have been widely accepted for a long period of time that may or may not be associated with the standard for learning but instead reflects the task that is to be completed. Examples might be identified as “classwork” and “test.”

## Chapter 2: Literature Review

### Restatement of the Problem

“In 1912, some powerful research emerged about the lack of consistency in percentage grades” (Vatterott, 2015, p. 8). There is evidence to support that teachers are inconsistent when grading or scoring student work. “When English exams from two students were scored by 142 different teachers, the scores on one exam ranged from 64-98 percent, the scores from the other exam ranged from 50 to 97 percent” (Vatterott, 2015, p. 8). Research shows that inconsistency and inaccuracy in grading has been a continued problem for many years with no real solutions to eliminate the problem.

Although research shows that traditional grading is problematic, many educational institutions, teachers, and other educators continue to adhere to grading practices that align with traditional grading methods.

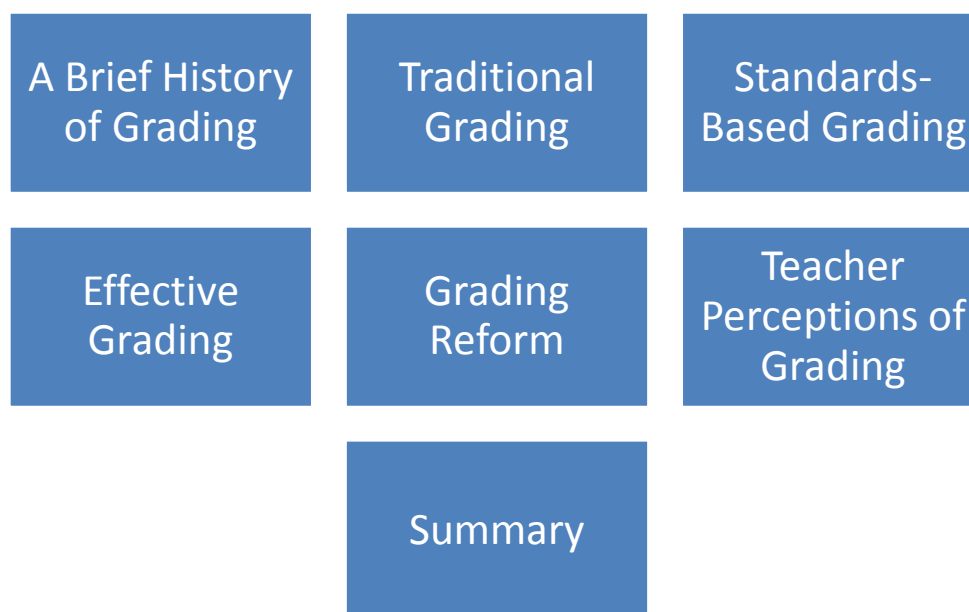
Grades should reflect students’ performance on specific learning criteria.

Establishing clearly articulated criteria for grades makes the grading process more fair and equitable. Unfortunately, different teachers often use widely varying criteria in determining students’ grades, and students often aren’t well-informed about those criteria. (Muñoz & Guskey, 2015, p. 65)

O’Connor (2011) suggested that teachers often say they are trying to be *consistent* in evaluating student work (p. 11). “Such a process in fact involves subjective judgment” (O’Connor, 2011, p. 11). O’Connor went on to explain that objectivity can only be achieved with elements such as correctness of factual information: “We need to develop approaches to help teachers both assess and grade more accurately and consistently” (p. 11). O’Connor also stated, “the problem as identified by an assistant superintendent...is that ‘every teacher sees himself or herself as an independent contractor and they

shouldn't be” (p. 11). According to O'Connor, that assistant superintendent went on to say, “what is needed are guidelines such as the 15 fixes” (p. 11).

This chapter first briefly reviews the history of grading. Next, this chapter explores two current leading grading practices, traditional and standards-based grading, by presenting the research on the two methods. Although participant grading practices are not limited to these two methods of grading, it is possible that these two grading practices were used by some or all of the participants during this study. Therefore, it is necessary for the researcher to provide background knowledge of both traditional and standards-based grading. The researcher presents literature that describes effective grading methods and research that supports the need for grade reform. The researcher presents literature that delves into teacher perceptions of effective grading practices, a critical component of this study. This chapter ends with a summary.



*Figure 2. Grading Imperatives.*

---



## **A Brief History of Grading**

There are slight discrepancies in the literature regarding the origination of grades, but there are some commonalities in the overarching impact that grading has on students and society. “The precise history of grading practices in American education is a matter of some debate, although most historians agree on a number of significant events” (Marzano, 2000, p. 11). Hartmann (2000) credited William Farish, a Cambridge University tutor, with the credit of introducing grades. Hartmann stated, “other than his single contribution to the subsequent devastation of generations of schoolchildren, is otherwise undistinguished and unknown by most people” (p. 190). Hartmann indicated that Farish used grading to process more students, subsequently increasing his salary (p. 190).

Hartmann (2000) took a critical position on the introduction of grades. According to Hartmann, “grades didn't give students deeper insights into their topics of study. Instead, grades forced children to memorize by rote only those details necessary to pass the tests, without regard to true comprehension of the subject matter” (p. 191). Hartmann claimed that before grading was used in the classroom, it was used in factories as a way of determining if the product, such as shoes, was up to grade (p. 192). Hartmann shared insight into the past by reminding readers how historical figures of the past are revered, yet they did not receive grades. Hartmann referenced individuals such as Thomas Jefferson, Ben Franklin, William Shakespeare, and Galileo, to name a few (p. 189). Hartmann stated,

but there is one thing unique about the education of all these people, which is different from that of you, me, and our children: none ever were given grades. All attended schools or had teachers who worked entirely on a pass/fail system. (p.

189).

Marzano (2000) and Vatterott (2015) credited Yale University for introducing the use of the four-point scale for providing feedback to students. “Over time, other universities began to shift from the narrative approach to more quantitative approaches” (Marzano, 2000, p. 11).

According to Marzano (2000, p. 11), in 1877, Harvard began classifying students into divisions.

Table 1

*Student Grades Classified by Division*

Division	Grade
Division 1:	90 or more on a scale of 100
Division 2:	75-90
Division 3:	60-74
Division 4:	50-59
Division 5:	40-49
Division 6	below 40

Marzano (2000) stated that in 1897, Mount Holyoke College started using letter grades (p. 11).

Table 2

*Student Grades Classified by Letter*

Letter Grade	Percentage
A: Excellent	= equivalent to percents 95-100
B: Good	= equivalent to percents 85-94
C: Fair	= equivalent to percents 76-84
D: Passed	= barely equivalent to percent 75
E: Failed	= below 75

Over the years, grading has taken many twists and turns, and landed where we are today. From sorting and ranking to numeric and letter grades, the act of grading was

introduced, quickly accepted, and has become a widespread method for assessing whether learning has occurred. According to Marzano (2000), “a 1998 study conducted by The College Board reported that out of 3,113 high schools responding to a survey, 91 percent reported using *A-F* or an equivalent numeric grading scheme” (p. 12). “Grades have become the commodity, the badge of success and smarts, the ticket to college. But what do they really mean” (Vatterott, 2015, p. 18)?

### **Traditional Grading**

Research shows that some aspects of traditional grading date back to the 1700s. It is evident in the research that grading was used for multiple reasons. As stated by O’Connor (2011), “traditionally, grades have served a number of purposes—communication, fostering student self-assessment, sorting and selecting, motivation and punishment, and teaching/program evaluation (Guskey, 1996a)” (p. 6). “Traditional grading practices often lead to ‘grade fog,’ in which the level of content mastery is distorted by such nonstandards-based criteria as practice, neatness, organization, attendance, and behavior” (Deddeh, Main, & Fulkerson, 2010, p. 54).

In traditional grading, there are various methods teachers use to arrive at the final grade used to measure student progress.

For at least a hundred years, teachers at almost every level have been using grades of some type—letter grades, percentage scores—as the overall indicator of student achievement. Students, parents, and community members also have assumed that these omnibus grades are reliable measures of student achievement. (Marzano, 2000, p. 1)

“Regardless of the method used, grading and reporting remain inherently subjective” (Scarce, 2017, p. 3). “The more detailed the reporting method and more

analytic the process, the more likely subjectivity will influence the results (Frisbie and Waltman, p. 35)” (as cited by Scarce, 2017, para. 5). In addition to subjectivity, there is research to support that traditional grading can have negative effects on its students. In 1999, Kohn (as cited by Kohn, 2011) stated, “extrinsic motivation, which includes a desire for better marks, not only differs from intrinsic motivation (a desire to learn for its own sake) but often erodes it” (p. 30). “If nourishing students’ desire to learn is a primary goal for us, then grading is problematic by its very nature” (Kohn, 2011, p. 30).

Leading researchers emphasize that grading should be meaningful and consistent. “Traditionally, teachers have collected evidence using various assessment methods and have organized their grade books by types of evidence such as tests, projects, and assignments” (O’Connor, 2011, p. 4). According to O’Connor (2011), to be meaningful, grades “must directly reflect specific learning goals” (p. 4). “Many traditional educational practices, such as rote learning and the use of grades as a reward and punishment, have interfered with, if not prevented, the development of these essential skills and dispositions in students” (Vatterott, 2015, p. 25). “To make grades more meaningful, we need to address both the purpose of grades and the format used to report them” (Muñoz & Guskey, 2015, p. 65).

The grades students receive should not be a function of whether they are in teacher X’s or teacher Y’s class. The question, “How good is good enough?” needs to be the same from classroom to classroom; that is performance standards need to be the same from teacher to teacher. (O’Connor, 2011, p. 4)

In traditional grading, inconsistency of grading and lack of meaning are further influenced by nonacademic factors. “Studies have generally found a moderate association between grades and test scores and often attribute discrepancies to

incorporation of nonacademic factors into grades (Breenan, Kim, Wenz-Gross, and Siperstein, 2001; Martinez, Stecher, and Boroko, 2009; Willingham, Pollack, and Lewis, 2002)” (as cited by Welsh et al., 2013, p. 27). One reflection of nonacademic influences is extra credit, a practice that is present in traditional grading.

Teachers may inflate grades with nonacademic extra credit assignments, base grades on improvement instead of mastery, or incorporate formative assessments into summative scores, all of which are unrelated to how much a student knows and can do at the end of a grading period (Brookhart, 1994, McMillan, 2001). (as cited by Welsh et al., 2013, p. 27)

For teachers who believe that rewards and punishments are the way to control students, grades have evolved into an elaborate system of control: Don’t bring your book—10 points off; homework a day late—50 points off; talking in class—zero for the day; tardy—lose 5 points. As grades are used to punish behaviors, they overshadow the grades students receive for learning. (Vatterott, 2015, p. 34)

Research indicates that appropriate feedback from teachers is an important part of the learning process. Interference of nonacademic elements in the grading process negatively impacts teaching, learning, and grading. “Effective feedback is specific and formative in nature” (Marzano, 2003 p. 39). Marzano (2003) recognized the importance of standardized testing but also noted that schools rely on them too much to determine whether students have learned what they should (p. 39). Marzano (2003) went on to explain that students should receive, at a minimum, quarterly feedback that measures performance related to specific skills (p. 39).

There are aspects of traditional grading that do not relate to teacher assignments and grade books but are reflective of our traditional grading system. Research shows that

there are long-standing traditions in education that school leaders understand to have negative consequences. They recognize that grading on a curve is one of those traditions. “When grades are based on students’ relative standing among classmates, rather than on what students actually achieve, it’s impossible to tell if anyone learned anything” (Guskey & Jung, 2012, p. 25). Calculating student class rank based on grade point average also has negative consequences.

According to research, selecting the valedictorian by choosing the student with the highest grade point average can also yield negative consequences. “When calculating class rank, the focus is on sorting and selecting talent, rather than developing talent” (Guskey & Jung, 2012, p. 25). According to Guskey and Jung (2012), the term valedictorian is derived “from the Latin term *vale dicere*, which means ‘to say farewell’” (p. 26). The term is not related to academic achievement. Guskey and Jung went on to state that this term and selection process was first known to be used at Harvard College in 1759 and quickly was adopted by other colleges and universities as well as high schools (p. 26). “More and more high schools today are moving away from competitive ranking systems and adopting criterion-based systems similar to those used in colleges and universities” (Guskey & Jung, 2012, p. 26).

According to research, the traditional way of sorting and ranking encourages a level of competition that does not allow for collaboration among students in pursuit of knowledge and learning. Research shows that creating new established systems for academic rigor will cause student achievement to rise. “Instead of pitting students against each, such a system unites students and teachers in efforts to master the curriculum and meet rigorous academic standards” (Guskey & Jung, 2012, p. 26).

## **Standards-Based Grading**

“In theory, standards-based grading is fairer for students’ report cards because achievement is more accurately represented in relation to learning expectations or standards” (Tierney et al., 2011, p. 211). According to McMillan (as cited in Tierney et al., 2011), standards-based grading is used to “compare student performance to established levels of proficiency in knowledge, understanding, and skills” (p. 211). Despite the apparent benefits of standards-based grading, Guskey (2009) stated, “no challenge has been ‘thornier or more vexing than grading and reporting’ in standards-based reform” (p. 2). Even though research shows that there are benefits associated with standards-based grading, grading reform presents hurdles and challenges that have perplexed educators for years.

Some researchers see standards-based grading as more of a student-centered approach. Research suggests the importance for teachers to understand student strengths and needs and act on the knowledge they have about student academic performance. For example, if a teacher assigns an essay for students to write, the assignment may need to be modified based on individual student performance throughout the writing of the essay.

While some students might need coaching on how to present and support ideas effectively, another student might have no issues with organization but need to be able to shift from exposition into narrative mode to breathe life into stilted language. Yet another student might need to let go of an essay that just isn’t working and try something new, which might interfere with his ability to finish the assignment at the same time as the rest of the class. (Miller, 2013, p. 112)

Not only does standards-based grading align teaching practice with standards, it offers students and teachers the opportunity for differentiated instruction.

For many teachers, curriculum has become a prescribed set of academic standards, instructional pacing has become a race against a clock to cover the standards, and the sole goal of teaching has been reduced to raising student test scores on a single test, the value of which has scarcely been questioned in the public forum. Teachers feel as though they are torn in opposing directions: They are admonished to attend to student differences, but they must ensure that every student becomes competent in the same subject matter and can demonstrate the competencies on an assessment that is differentiated neither in form nor in time constraints. (Tomlinson, 2000, p. 7)

Even though there is growing support of standards-based grading, there are challenges and obstacles that have emerged as well. Welsh et al. (2013) expressed that although researchers in the past have studied relationships between grades and test scores, there was no research related to the “correspondence between standards-based progress reports and standards-based assessment scores” (p. 27).

During their research, Welsh et al. (2013) uncovered that although some issues with grading related back to the grading of nonacademic factors, there were four areas of concern related to grading that did not relate to nonacademic factors. According to Polikoff, Porter, and Smithson (2011, as cited in Welsh et al., 2013),

First, large scale assessments may not adequately capture student attainment of the standards. Second, teachers may have difficulty interpreting the intent of state standards and therefore operationalize them incorrectly in their classrooms.

Third, the grading practices teachers use may jeopardize the reliability of grades and therefore weaken the link between grades and academic achievement. (p. 27)

Welsh et al. (2013) described such instances as teacher rewarded extra credit that



can inflate grades or grading of formative assessments (p. 27).

Finally, Airasian and Jones (1993), Brookhart (2003) and Cizek (2009) stated that because classroom assessments and large-scale tests are used differently, and the characteristics required for assessments to be of high quality vary, scores on classroom assessments and state tests might yield different but equally valid information. (Welsh et al., 2013, p. 27)

Welsh et al. emphasized the need for an examination of the convergence of standards-based progress reports and standards-based assessment since this information is communicated to parents and may send conflicting messages (p. 27).

There is research to support the benefits of standards-based grading, but research also shows there are various interpretations about what standards-based grading looks like and how it is implemented.

Based on countless interactions with teachers, we've concluded that the first step in sound classroom assessment practices associated with grades is to make them meaningful. The primary issue is to figure out how to weight and combine different factors into the final grade and summative comments. When guidelines provided within the standards are applied, the problems associated with hodgepodge grading methods may be eliminated. (Muñoz & Guskey, 2015, p. 67)

O'Connor (2011) outlined 15 methods for classroom teachers to use to implement a standards-based approach. The 15 fixes have been "organized into four categories-- fixes for practices that distort achievement, fixes for low-quality or poorly organized evidence, fixes for inappropriate grade calculation, and fixes to support learning" (O'Connor, 2011, p. 12).

One researcher said,

Standards-based grading takes aim both at mediocrity in the classroom and inaccurateness in the gradebook, attempting to reinvigorate education by encouraging teachers to implement more accurate methods of evaluation—methods that hold students accountable not for earning points, which often do not represent learning achievements so much as students’ ability to follow a set of rules, but for actual mastery of the subjects taught to them. (Iamarino, 2014, p. 2)

### **Effective Grading**

Research shows that it is unclear what the purpose of grading really is. According to Guskey, Marzano, Heflebower and O’Connor (as cited by Hooper & Cowell, 2014), “a grade can be used to serve myriad purposes: communicating student learning, communicating student effort, sorting and selecting students, motivating students, and punishing students” (p. 59). Muñoz and Guskey (2015) stated, “the purpose of grading is to describe how well students have achieved the learning objectives or goals established for a class or course of study” (p. 65).

Measurement experts such as Peter Airaisian (1994) explain that educators use grades primarily (1) for administrative purposes, (2) to give students feedback about their progress and achievement, (3) to provide guidance to students about future course work, (4) to provide guidance to teachers for instructional planning, and (5) to motivate students. (Marzano, 2000, p. 14)

Just as researchers have varied purposes for grading, research shows that students and parents have perceptions of grades. “To students, grades have come to represent how hard they worked and how well they followed the rules” (Vatterott, 2015, p. 17).

Vatterott (2015) went on to say, “to parents, good grades reassure them that their child is

a smart and successful student” (p. 17). Swan, Guskey, and Jung (2014) conducted a study in a midsize school district to determine parent and teacher perceptions of standards-based and traditional report cards. Parents received both the traditional report card with numeric grading and a standards-based report card that included marks for individual standards during the first two grading periods. Although parents overwhelmingly preferred the standards-based form for reporting, there were parents whose reactions provided insight to researchers. Swan et al. concluded that parents may have conflicting ideas of the purpose of grading (pp. 289-299).

Of particular interest were 13 parents who asked that the percentage grade be kept. These parents appear to have greater confidence with numerical percentages achieved from averaging scores across a wide array of achievement indicators than they do in letter grades. (Swan et al., 2014, pp. 297-298)

Consistently, research has shown that grades should have meaning and should be consistent. Grades with meaning “must communicate useful information to students and to everyone interested in or needing to know about their learning. The grades students receive should not be a function of whether they are in teacher X’s or teacher Y’s class” (O’Connor, 2011, p. 4).

One researcher said it this way: “Try this experiment in your next faculty meeting. Ask your colleagues to calculate the final grade for a student who receives the following 10 grades during a semester: *C, C, MA (Missing Assignment), D, C, B, MA, MA, B, A.*” (Reeves, 2008, p. 85). After conducting that experiment with thousands of teachers and administrators, the results seemed to support the need for consistency. “Every time—bar none—I get the same results: The final grades range from *F* to an *A* and include everything in between” (Reeves, 2008, p. 85). Reeves (2008) addressed grading

practices, such as the use of zeros for missing work, a common practice of teachers that contributes to the lack of consistent grading.

Defenders of the zero claim that students need to have consequences for flouting the teacher's authority and failing to turn in work on time. They're right, but the appropriate consequence is not a zero; it's completing the work—before, during, or after school, during study periods, at “quiet tables” at lunch, or in other settings. (Reeves, 2008, pp. 85-86)

There are “four factors that teachers commonly include in grading: academic achievement, effort, behavior, and attendance” (Marzano, 2000, p. 27). Marzano (2000) explained that teachers assigned grades for academic achievement based on whether students learned a significant amount of content or not (p. 27).

Based on research, nonacademic factors such as behavior and attendance are used when determining grades.

Teachers generally interpret behavior as the extent to which students follow classroom rules and procedures, and according to research they often include it as a factor in grades. Attendance is most commonly used to lower grades only. If a student is absent or tardy beyond a certain number of times, the grade is lowered. (Marzano, 2000, pp. 28-29)

Although these factors are not specific to standards and content, Marzano (2000) had an open stance towards these factors:

My position in this book is that academic achievement is the primary factor on which grades should be based. However, given the relatively broad acceptance of effort and the less strong but still significant support for behavior as well as attendance, I also present techniques for keeping records on these factors so that

they can be included as criteria if a teacher, school, or district so chooses. (p. 29)

Marzano's (2000) position suggested that although these factors may be considered, there might be a more appropriate way for educators to include them without skewing student grades.

One researcher suggests that there are steps that can be taken to improve grading.

First, create a sense of urgency: Identify the exact cost of inconsistent grading practices. Second, identify teacher leaders who are already improving policies.

Third, get the facts; gather evidence that will create a rationale for decision making. Fourth, reassure parents, students, and teachers that certain things will *not* change. (Reeves, 2008, p. 87)

Despite the enormous task that grade reform can be, researchers support the need for change.

The benefits of effective grading practices are not limited to a reduced failure rate---although that benefit alone is sufficient to justify change. When student failures decrease, student behavior improves, faculty morale is better, resources allocated to remedial courses and course repetitions are reduced, and resources invested in electives and advance courses increase. (Reeves, 2008, p. 87)

## **Grade Reform**

"If your grading system doesn't guide students towards excellence, it's time for something completely different" (Scriffiny, 2008, p. 70). Research tends to support standards-based grading versus traditional grading. Whether standards-based grading becomes the standard in grading, it is evident based on research that current traditional grading practices need to change. One researcher presents grade reform by posing the question of why.

Why, then, would anyone want to change grading practices, given their wide acceptance? Why would anyone write a book that deals with “transforming” grading policies? The answer is quite simple: grades are so imprecise that they are almost meaningless. This straightforward but depressing fact is usually painfully obvious when one examines the research and practice regarding grades with a critical eye. (Marzano, 2000, p. 1)

Guskey and Jung (2012) stated that effective grading reform requires four steps. “Together, the four steps are the foundation of grading policies and practices that are fair, meaningful, educationally sound, and beneficial to students” (Guskey & Jung, 2012, p. 23). Those four steps are described in depth within the subheadings in the article. Those subheadings are (a) “be clear about the purpose” (Guskey & Jung, 2012, p. 23); (b) “use multiple grades” (Guskey & Jung, 2012, p. 24); (c) “change procedures for selecting class valedictorian and eliminate class rank” (Guskey & Jung, 2012, p. 25); and (d) “give honest, accurate, and meaningful grades” (Guskey & Jung, 2012, p. 26). Hooper and Cowell (2014) stated shortcomings of traditional grading, indicating that traditional grading does not communicate student proficiency when traditional grading is not organized around standards (p. 60). “Another shortcoming is the inherent ambiguity in communicating student learning when averaging all student scores to determine a single final grade” (Hooper & Cowell, 2014, p. 60). Supporting their position, Hooper and Cowell presented the performance scores of “two student’s scores on 10 consecutive assessments” (p. 60), as shown in Table 3.

Table 3

*Student Scores for 10 Consecutive Assessments*

Student	Scores
Student 1:	0, 0, 80, 80, 80, 80, 80, 80, 80, 80      Average: 64
Student 2:	64, 64, 64, 64, 64, 64, 64, 64, 64, 64      Average: 64

“The first fundamental shortcoming with the traditional grading system made evident by the preceding example is that the student scores fail to communicate what each student really knows” (Hooper & Cowell, 2014, p. 60).

Today’s system of classroom grading is at least 100 years old and had little or no research to support its continuation. At least three inherent problems make that system highly ineffective; (1) it allows, and even encourages, individual teachers to include, at their own discretion, different nonachievement factors in the assignment of grades; (2) it allows individual teachers to differentially weight assessment; and (3) it mixes different types of knowledge and skills into single scores on assessments. (Marzano, 2000, p. 13)

Although research shows a movement towards standards-based grading, the implementation has presented some challenges. A study was conducted by Welsh et al. (2013) over a 2-year period on the implementation of standards-based progress reports in 125 third- and fifth-grade classrooms in one school district. The study was conducted to determine if standards-based grades converge with test scores. This grading reform effort revealed a moderate to weak correspondence between standards-based grading and test scores, depending on the measure used (Welsh et al., 2013, pp. 26-36).

In the discussion of this study, researchers discussed limitations of the standards-based grading tool if parents received contradictory information about their students’

performance. In this study, teachers used the terms meeting and approaching to communicate grades. During this study, “‘meeting’ or ‘approaching’ a standard are somewhat ambiguous concepts, tricky to operationalize; teacher must determine how to implement the objective and what kind of behaviors constitute different levels of proficiency” (Welsh et al., 2013, p. 35). The researchers stressed the importance that teachers “understand how to identify where students fit across all gradations of performance” (Welsh et al., 2013, p. 35).

“In addition to working towards a common understanding of each performance level, consistency is improved when the methods used to generate grades are standardized” (Welsh et al., 2013, p. 35). Also in this study, researchers found that teachers lacked consistency. Some teachers could or could not explain the process they used to determine student grades.

For standards-based grading to work as a multiple measure, teachers need training on expected grading method and on the importance of its faithful implementation. For standards-based reform to work, it is important that teachers be well versed not only in the content of state standards, but also in what it means to assign students to specific performance levels in terms of the skills that must be attained or that are yet to be mastered. (Welsh et al., 2013, pp. 35-36)

Despite the potential pitfalls with standards-based grading, research supports the implementation of standards-based grading. Researchers continue to show support and acknowledgement of this approach to grading as an effective grading practice. “A relatively new phenomenon (at least in its current form), standards-based instruction dominates the educational terrain in a time of great academic diversity in contemporary classrooms” (Tomlinson, 2000, p. 6). “Although many districts adopt standards-based



grading in *addition* to traditional grades, standards-based grading can and should *replace* traditional point-based grades” (Scriffiny, 2008, p. 70).

### **Teacher Perceptions of Grading**

“Teachers’ decisions can have long-lasting, emotional, and academic consequences for students” (Tierney et al., 2011, p. 210). There has been research presented that emphasizes the importance of relevant grading and the importance of teachers implementing appropriate grading strategies. Marzano (2000) conducted various workshops on classroom grading and posed a question to the educators who were present. He asked them to “raise their hands if they have ever received a grade that was a ‘flagrantly inaccurate representation of their achievement in a course of study’” (Marzano, 2000, p. 9). Marzano (2000) wrote that most of the thousand educators raised their hands (p. 9). He then asked them “how many believed that the grades you received in school were not an accurate representation of your academic achievement” (Marzano, 2000, p. 9). Marzano (2000) stated that sometimes as many as 50% of the audience responded in agreement (p. 9).

Marzano’s (2000) experience shows that educators overwhelmingly agree that they have received inaccurate grades. There is limited research available specific to teacher perceptions of their own grading. There has been research conducted about teacher perception as it relates to topics such as traditional grading versus standards-based grading, but there are gaps in the research specific to teacher perceptions of their own grading.

Standards-based grading has been a topic of interest in various research studies. A case study was conducted in a rural high school in Missouri for the purpose of examining teacher and student perceptions of standards-based grading to determine if

there was a difference in student achievement in one rural “Missouri school district using standards-based grading compared to student achievement of Missouri students using traditional grading practices” (Winton, 2015, p. 7). The high school where this study was conducted was selected to pilot standards-based grading. All teachers who used both standards-based grading and traditional grading were including in the sample for this study.

Winton (2015) conducted a mixed-methods design study. Winton used qualitative data collection methods to determine student and teacher attitudes towards standards-based grading. Winton used quantitative data collection to compare standardized test results of students who received traditional grading versus standards-based grading. “Triangulation was achieved through the examination of school artifacts, student and teacher perceptions, and student achievement data” (Winton, 2015, p. 41). “Internal reliability was achieved through the collection of multiple sources of data and data analysis” (Winton, 2015, p. 46).

Winton (2015) asked four research questions, and one of those questions related to high school teacher perceptions of standards-based grading. This was a mixed-methods study including qualitative and quantitative research. The school fully implemented standards-based grading in 2013-2014. The teacher interview questions asked were intended to discover teacher perceptions of potential barriers of standards-based grading as well as advantages of standards-based grading (Winton, 2015, p. 40).

There was a range of teacher responses to the interview questions. The researcher noted a specific response to one of the questions. The third interview question asked teachers, “do you use standards-based grading in each subject” (Winton, 2015, p. 59)? All teachers interviewed used standards-based grading in all subjects. One teacher

commented, “I put aside my own philosophical objections to it, and then do it, because it is Board Policy” (Winton, 2015, p. 59). Participant responses indicated that there was some professional development related to standards-based grading prior to implementation. Teachers also responded that they had input on the decision to move towards standards-based grading (Winton, 2015, p. 59).

Winton (2015) asked another interview question that is relevant to this study. Winton asked teachers, “did your instructional practices change with the implementation of standards-based grading” (p. 60)? Seven of the eight teachers interviewed said their instructional practices changed, while one teacher did not change instructional practices since it was her first year of teaching (Winton, 2015, p. 60). According to Winton, some of the respondents indicated that “the school uses more formative assessments,” “rigor increased, and one teacher reported that instructional practices were very similar to what was used prior to standards-based grading” (p. 60).

After implementation, participants were able to communicate their stance on standards-based grading and traditional grading. The following is question seven and Winton’s (2015) documentation of the participant responses.

Do you prefer standards-based grading, and why? Opinions varied greatly on grading preference. Two teachers said they preferred standards-based grading because it allowed the teachers to know where students are deficient. Three teachers did not believe there was a difference between traditional grading and standards-based grading. One teacher did not have an opinion and did not answer the question. Two teachers responded standards-based grading created an atmosphere of laziness, because students do not prepare for tests since the test retakes are allowed. One teacher preferred traditional grading and believed

standards-based grading is an artificial manipulation of student grades to meet AYP. Another response was that standards-based grading makes it easier to justify grades. (Winton, 2015, p. 60)

Winton (2015) also asked participants about “barriers of standards-based grading” (p. 60). There was an overarching theme that respondents believed that lack of understanding by parents and students of the new system was a barrier. Students and parents also complained about the lack of daily grades (Winton, 2015, pp. 60-61). The most prevalent disadvantage to standards-based grading identified by teachers was the time it takes for mastery for some students and meeting deadlines to prepare students for standardized testing (Winton, 2015, p. 60). Research Question 2 revealed 37.5% of teachers did not approve of standards-based grading (Winton, 2015, p. 93).

Taylor (2007) conducted a study on grade inflation and analyzed teacher perception within the study. The purpose of the study was to examine if grade inflation existed as evidenced by test scores and teacher perceptions. One of Taylor’s research questions related to teacher perceptions: “To what extent do teachers perceive that grade inflation exists” (p. 94). To answer this research question, Taylor conducted a survey and 10 one-on-one interviews. Participants in the study were high school teachers at one particular high school. Some of Taylor’s findings supported her claim that grades are inflated (p. 94). The inflation of grades contradicts that grades should be consistent and accurate, key characteristics of meaningful grades.

Taylor (2007) used quantitative and qualitative data during the study. Taylor analyzed test data of 160 high school seniors including cumulative GPAs, EOCT scores, and students’ highest SAT scores. Taylor centered the qualitative portion of the study around teacher perceptions “by conducting a school-wide survey of 76 classroom

teachers” and through interviews (p. 49). Purposive random sampling was used to determine the 10 teachers who would be interviewed (Taylor, 2007, p. 49). “To test the format, quality, and reliability of the survey, a pilot study was conducted” (Taylor, 2007, p. 51). According to Taylor, “when their surveys were tested for internal consistency by entering their responses into SPSS software, the Cronbach’s Alpha showed a high reliability for the questions, meaning that the questions measured what they were intended to measure” (p. 52).

According to Taylor (2007), 92% of all teachers reported that the high school’s report card accurately displays student learning (p. 94). This statement contradicts some of the participant responses that followed. “In response to the other questions addressing grading standards, teachers also suggested a level of confidence in assigned grades” (Taylor, 2007, p. 94). Many of the survey responses left implications that teachers perceived that grades were not inflated.

Thus, if students are producing better work, teachers are not lowering standards, students are earning higher grades and performing better on standardized tests, then grade inflation is not evident according to past research studies and according to the past definitions of grade inflation. (Taylor, 2007, p. 95)

Taylor’s (2007) study revealed that teachers sometimes admitted to inflating student grades for various reasons. Parents pressuring teachers generated a true to some degree response for 84.3% of the surveyed teachers, and administrators generated a true to some degree response at 75.1% (Taylor, 2007, p. 96). This type of response would support that at least in some ways, grades are inflated given the right circumstances.

Teachers responded true to some degree (76.3%) that they change students’ grades to avoid conferences with parents. Teachers also responded true to some

degree at a rate of 83% that they change grades to make their failure rates look better, and they change grades to improve their yearly evaluations (true to some degree at a rate of 78.9%). (Taylor, 2007, p. 96)

Ultimately, according to Taylor, teacher participants in this study responded that they believe inflated grades exist, with 75.85% of teachers responding that they perceive that grade inflation exists (p. 96).

Overall as it relates to grading and teacher perceptions, various studies have been conducted for different purposes, all the while uncovering similar issues and concerns. Guskey (2002) conducted a study to investigate possible differences in the perceptions of different stakeholder groups regarding grading and reporting (p. 1). Questionnaires were administered to regular education teachers in Grades 3-12 and some students and parents as well. Each participating teacher was given 30 copies of the parent and student survey to administer. The focus was “on three major grading issues: (1) perceptions of actual and ideal distribution of grades, (2) the purpose of grades, and (3) the sources of information used in determining students’ grades” (Guskey, 2002, p. 2). Guskey (2002) went on to say, “it is believed this evidence can help guide those efforts and serve as a foundation for other researchers interested in this important area of inquiry” (p. 8).

Results to Guskey’s (2002) study varied with there being similarities of results between teachers, parents, and students while differing at other times. There were differences in responses between grade levels. Guskey (2002) indicated in Table 3 related to the purpose of grades that teachers, parents, and students ranked “communicate to parents” the highest and “feedback for students” the second highest (p. 5); yet in another portion of the survey, there were differences in teacher and parent responses as they related to communication.

Generally teachers and students agreed in their ratings of different grading elements, indicating that perhaps teachers do a fairly good job of communicating to their students what evidence will be considered in determining their grades. Parents ratings indicate, however, that they are less well informed. (Guskey, 2002, p. 6)

Research shows that there is still a need for investigation and research to be conducted around the topic of grading. Guskey (2002) stated it is believed this evidence can help guide those efforts and serve as a foundation for other researchers interested in this important area of inquiry (p. 8).

### **Summary**

The literature presented in this chapter examined traditional grading, standards-based grading, effective grading, grade reform, and teacher perceptions of grades. The purpose of this study was to explore teacher grading practices and teacher perceptions of effective grading practices. The researcher answered the research questions using the methodology outlined in Chapter 3. The research questions were

1. What are the identifiable differences in teacher perceptions of grading practices?
2. How do teacher grading practices align with standards-based grading?
3. What grading practices do teachers use to address consistency and accuracy?

Research was presented that examined the history of grades. Literature presented about traditional grading and standards-based grading indicates that these are two grading methods used by educators. Much of the literature explains the ineffectiveness of traditional grading. The literature supports standards-based grading as an effective grading practice; however, research shows that traditional grading is widely used.

Literature states that there is a need for effective grading practices. The literature presented related to effective grading practices reveals the need for grade reform. Grade reform presented in this chapter focuses on the process of making the shift from traditional grading to standards-based grading or any other nontraditional grading and the continuous educational movement towards fixing grading systems that are not working.

It is evident in the research that the teacher in the classroom contributes to the overall effectiveness and/or ineffectiveness of grades. Research has been conducted around the topic of teacher perceptions and grading. Research suggests that successful implementation of an effective grading system will improve consistency and accuracy. The research presented in this chapter reveals that there are gaps in the research around the topic of grading practices and teacher perceptions. Chapter 3 delves into the methodology used in this study.



## **Chapter 3: Methodology**

### **Introduction**

There has been discussion among researchers about effective grading practices. Many researchers have shared that there is a need to explore nontraditional grading practices that focus on the standards and objectives students are expected to learn. The literature suggests that grading practices are inconsistent and inaccurate and lead to poor assessment data related to student performance.

The research design was mixed methods including both qualitative and quantitative research. The instrumentation used were two instruments found in O'Connor (2011). Participants self-assessed their own performance as it related to grading practices using the Rubric for Evaluating Grading Practices and the Survey on Marking and Grading Practices.

The researcher followed the concurrent embedded strategy to collect the data for this study. Chapter 3 is the methodology used to answer the following research questions.

1. What are the identifiable differences in teacher perceptions of grading practices?
2. How do teacher grading practices align with standards-based grading?
3. What grading practices do teachers use to address consistency and accuracy?

### **Population Participants/Sample**

Middle and high school teachers were participants in this study related to grading practices, both traditional and standards-based grading. According to O'Connor (2011), grading should be meaningful, and grades should reflect learning targets. This study intended to encourage teachers to reflect on their current grading practices to add to the

body of research about grading as well as identify effective grading practices. Teachers from various academic disciplines who taught at a secondary school that served both middle and high school students in an urban school district were asked to participate in this study based on each of their interests in reflecting on their current grading practices.

The secondary school had 38 classroom teachers in 2016. There were 283 students enrolled at the school in 2016. Ninety-three percent of the student population in this school are economically disadvantage. This school received federal Title I funding from the U.S. Department of Education. The majority of students who attended this school identified racially as African-American or Hispanic. The North Carolina Performance letter grade for the school was a letter C during the 2016-2017 school year. Letter A is the highest letter that can be earned and F is the lowest letter that can be earned. In 2016-2017, the school had a performance score of 55 and exceeded growth expectations.

At this school, in 2016-2017, 83% of the teachers are were fully certified in 2016-2017, 24% had advanced degrees, and two were National Board Certified. The teacher turnover rate was 18% compared to the district average of 22%. As it relates to school safety, the school had 3.18 criminal acts reported per 100 students compared to the district average of 2.87 and state average of 1.67.

The study was described and introduced to the classroom teachers, and all teachers were invited to participate. The preferred teacher group intended to participate in this study were teachers who teach a core subject: English language arts, math, social studies, or science. This preference was due to the substantial emphasis on core subjects as it relates to standardized testing; however, elective teachers were welcome to participate in the study. The minimum desired number of teacher participants for this

study was 15.

Teachers who participated in the study were selected using purposeful sampling method. The purposeful sampling method was homogeneous sampling. The participants selected all worked at the same secondary school, taught a similar student population, and used any form of grading practice in their classroom that they chose themselves. The researcher studied the implementation of the teacher's current grading practices and sought to answer the research questions.

Student data recorded in teacher grade books were reflected in this study, given that the 15 fixes revolve around grading practices and that included the recording of student grades. Data examined from students of the teachers who participated in this study were selected using a random sampling method. Student grades that were recorded in teacher grade books were examined during this study.

### **Research Design**

The dissertation was heavily influenced by O'Connor (2011). The method used was mixed methods involving qualitative and quantitative research. There were quantitative data collected. The discussion guide within the text included a survey and a rubric for evaluating grading practices that were used as instruments in this study. This study also included observations, examination of lesson plans and teacher grade books, and interviews.

### **Instrumentation**

The instruments used in this study were Rubric for Evaluating Grading Practices (Appendix A) and Survey on Marking and Grading Practices by Ken O'Connor (Appendix B). The Rubric for Evaluating Grading Practices is a Pearson ATI rubric and it allows teachers to self-assess their grading practices before and after participating in

the study. Survey on Marking and Grading Practices contains three parts. It measured teacher current grading practices, their opinions about grading, and their confidences related to multiple areas related to grading.

The two instruments directly related to the 15 fixes that teachers learned about and implemented during this study. The data from two instruments informed the researcher of teacher grading practices that related to the 15 fixes outlined in the text. Permission to use these instruments was granted by the publishing company Pearson Education, Inc. (Appendix C).

Appendix A is a Pearson ATI rubric written by Stiggins, Arter, Chappuis and Chappuis (as cited in O'Connor, 2011). There are seven criteria listed in the rubric:

1. Organizing the grade book.
2. Including factors in the grade.
3. Considering assessment purpose.
4. Considering most recent information.
5. Summarizing information and determining final grade.
6. Verifying assessment quality.
7. Involving students.

Using the criteria outlined in the rubric, participants rated themselves using the scale beginning, developing, and fluent. Completion of the Survey on Marking and Grading Practices occurred at the start of the study.

The Survey on Marking and Grading Practices contained three parts and was written by Ken O'Connor. It measured teacher current grading practices, their opinions about grading, and their confidences related to multiple areas related to grading.

Teachers completed the Survey on Marking and Grading Grades at the beginning and at

the end of the study. The Likert scale asked participants to respond whether they agree, somewhat agree, somewhat disagree, or disagree.

The reliability and validity of the research instruments were supported by their ability to assist the researcher in answering the research questions. Further evidence of reliability and validity was established by the Pearson Assessment Training Institute through use of the text and the instruments in trainings and professional development.

There were potential threats to the validity of the study. Although individual interviews were conducted, participants worked together in the same school and could have potentially discussed the interview before all participants were interviewed. Researcher bias could have impacted the validity of the conclusions of the study based on previously established research goals set by the researcher. Data and methodological triangulation were used to combat validity threats. As previously stated, multiple data were collected using methods such as interviews, surveys, observations, and artifacts. The diverse data collection methods generated various types of data to examine. There was a triangulation between survey and rubric responses and interviews, lesson plans, teacher grade books, artifacts, records, and observations.

## **Procedures**

The researcher completed the process required by the school district as dictated in board policy for performing research. This policy indicated that approval was to be granted by the superintendent or the director of research and evaluation. The researcher followed the concurrent embedded strategy to collect the data for this study. This was a mixed-methods research approach involving qualitative and quantitative research that occurred simultaneously.

To begin this study, the researcher briefly described the study to the faculty at a

faculty meeting and requested volunteers to participate in the study. A follow-up Google form was emailed to the faculty to allow them to agree to participate in the study or decline. The participants completed the Gardner-Webb University IRB Informed Consent Form after they agreed to participate in the study (Appendix D). Although the researcher initially hoped to have 15 participants, once 10 participants were identified, the researcher sent each participant a letter using email to welcome them to the study (Appendix E). The letter provided necessary details and information about the expectations for them as participants. The same letter was also emailed to the principal of the school to ensure the principal was aware of the expectations for teachers participating in the study. The researcher responded to any questions participants had prior to beginning the study.

The qualitative methods of this study were conducted using individual interviews and observations and by collecting unobtrusive qualitative data. These methods helped the researcher answer the research questions. The researcher conducted individual interviews to determine what grading practices teachers used to improve consistency and accuracy. The researcher believed that individual interviews, as opposed to focus group interviews, would lead to authentic interview results for the purpose of the study.

The researcher wrote interview questions that helped the researcher answer the three research questions (Appendix F). Follow-up/clarifying questions were sometimes added and asked during the interviews based on responses given by the participant at the time of the interviews. The audio for the interviews was recorded using a digital recording device. Recorded interviews were transcribed prior to data analysis. Results from the interviews were compared during data analysis. The researcher was willing to conduct follow-up interviews with participants after data analysis; however, the results

did not indicate a need to do so. The researcher used findings from the interviews to answer the research questions.

Participants completed the quantitative phase of the study by responding to the questions outlined in the instruments contained in O'Connor (2011). Using quantitative research methods, the researcher used the rubric and survey instruments to discover what teacher perceptions are of their grading practices. Participants were initially going to be asked to enter their rubric responses in a Goggle Form; however, due to unforeseen reasons, participants were asked to complete a paper copy of the rubric. The survey responses were transferred to Google Forms by the researcher. Participants completed the rubric and the survey immediately following the interview. Both instruments were collected at that time. Google Forms was used to organize the data to allow the researcher to view the data in charts and graphs during the analysis.

Teacher grade books, lesson plans, and student work were artifacts and records that provided additional insight as to whether teacher current grading practices aligned with standards-based grading. The researcher used the triangulation of these unobtrusive qualitative data and individual interviews to answer the research questions. The researcher compared these artifacts to other data to identify consistencies and inconsistencies that were present in the data. The researcher's confidence in the validity of the findings was improved by the triangulation of the data. The researcher used the report findings to answer the research questions.

The researcher performed a 30-minute observation of each participant teaching in the classroom. The researcher recorded what was observed as field notes. The researcher had limited participation during the observation. The researcher sought to discover any phenomena during the observation that would reveal consistencies or inconsistencies with

other data collected.

### **Data Collection**

To ensure participants gave authentic responses, the first form of data collection was the individual interviews. Completing the rubric and survey first might have influenced and altered participant responses. The researcher conducted the individual interviews. The interviews were performed in the classroom of the participant being interviewed or another location identified by the participant. The researcher thought the participant's classroom was the best location for the interview due to limited private space available. The audio from the interviews was recorded using a digital device. The interviews were first transcribed using an online website, and the transcription was later reviewed and edited by the researcher.

Next, the quantitative data were collected using the rubric and survey, and both were administered by the researcher. Participants completed a paper copy of the rubric and the survey immediately following the interview, and the results were organized electronically in preparation for analysis. Participants wrote their names on the rubric and survey document. The researcher later assigned each participant a fictitious name for the purpose of this study. The paper rubric and survey were collected by the researcher the same day they were completed.

The researcher collected artifacts and records from one of the 9-week grading periods for analysis. The researcher conducted the data collection of artifacts and records using a specific collection method created by the researcher. The researcher provided each participant with a data collection folder. The artifacts and records were any relevant student work, lesson plans, and grade book entries. The participants were asked to provide random samples of student work in a folder that was provided to the participants



by the researcher. To eliminate the need to seek permission from the individual students and student's parents, each participant was asked to remove any name identification from student work prior to including it in the folder. The researcher sought written permission from the participant prior to collecting any artifacts or records. The researcher used the data collected to answer the research questions. The amount of data collected was determined by what was necessary to answer the research questions.

The researcher asked that each participant provide a random lesson plan of their choice for this study. Copies of the lesson plans and grade book entries were added to participant data collection folders. To collect a second lesson plan, dates from the 9-week grading period were added to an online date generator, and a random date was selected. The researcher asked each participant to provide a lesson plan for that date. The researcher selected an alternate date using the same method if a participant was absent or if other events occurred during the school day such as a field trip that caused there to be no lesson plan available. All participants were able to provide a lesson plan for the random date that was generated. The researcher visited the school at the conclusion of the study and collected the data collection folder. Upon collection, each item in the folder was labeled by the researcher using the fictitious name assigned to the participant along with a number assigned to that artifact.

The researcher performed a classroom observation of each participant. The researcher recorded field notes during the classroom observation. The researcher recorded the date, time, subject, and grade level in the field notes. The researcher recorded in writing the activities that occurred during the observation when taking the field notes. The field notes were organized in an electronic document for analysis.

## Data Analysis

The researcher began analysis after all data were collected. The researcher performed a typological analysis to analyze the interview data. The researcher identified the typologies based on the three research questions.

Table 4

### *Typologies*

Typologies
Teacher perceptions of their grading practices
Traditional grading practices
Standards-based grading practices
Effective grading practices

The typologies used for this data analysis are represented in Table 4. The researcher read the interview data as a whole and marked entries that represented the typologies that were established. The researcher then read the marked entries and recorded the main ideas on a summary sheet. The researcher looked for patterns, relationships, and themes from within the main ideas that were recorded on the summary sheet.

To ensure the typologies were a justifiable means for data analysis for this study, the researcher reread the data in search of non-examples. These non-examples were patterns and relationships that existed in the data that did not fit into one of the typologies identified by the researcher. The results determined if the researcher needed to adjust the typologies that were identified. The typologies were not adjusted.

To analyze the quantitative data collected using the rubric and survey, the researcher used the software program Statistical Package for Social Sciences (SPSS). The researcher described and summarize the quantitative data using descriptive analysis

and created more meaning of the data that were collected. The researcher better understood how participants perceived their grading practices and what their grading practices actually were. The researcher summarized and presented these data in a chart, table, or graph to provide a visual representation of the data.

The researcher used interpretive analysis to analyze the artifacts, records, and observation data. The researcher read all data as a whole to gain an overall sense of understanding of the data. The researcher reviewed previously recorded notes and impressions about these data. After reading the data, the researcher recorded additional impressions of the data. The researcher reread the impressions seeking to discover any social phenomena that occurred. The researcher drafted a data summary from this analysis.

### **Limitations**

This study presented limitations and assumptions. The researcher initially thought teachers working together in the same building and sometimes in the same grade level might have their perceptions influenced by the opinions of other teachers also participating in the study based on their interactions with each other and their own observations of other teachers and their experiences. Another potential limitation was that there had been talk of the state standards changing from Common Core to some other form of state standards that had yet to be identified. Had the state adopted new standards during this study, the task of learning new standards could have impacted the study. Neither of these potential pitfalls and limitations were observed during this study.

The researcher did observe two limitations. The initial participant number was intended to be 15, but there were only 10 actual participants in this study. The lesser participant sample size is a limitation because a larger sample size could have altered the

results of the study. The second limitation was the announced observation. Since participants were aware of when the researcher was conducting the interview, observation results could have impacted.

In addition to limitations, there were also assumptions that existed related to this study. It was assumed that the participants in this study were teachers who earned a degree from a teacher program or entered the profession in a nontraditional format such as a lateral entry teacher. It was assumed that each participant would not be a nonlicensed substitute teacher serving in a short-term or long-term teaching assignment. It was an assumption that teachers would be truthful when participating in interviews and all other related activities concerning this study.

### **Summary**

The purpose of this study was to explore teacher grading practices and teacher perceptions of effective grading practices. The intent was to add to the body of research related to effective grading practices. This study was a mixed-methods study combining quantitative and qualitative methods. The study was conducted in a secondary school in an urban school district with participants from various subject areas. The results of this study will be used to close the gaps in the research about effective grading practices.

## **Chapter 4: Results**

### **Introduction**

The purpose of this study was to explore teacher grading practices and teacher perceptions of effective grading practices. The literature related to the topic of grading indicates that there are gaps in the research. Grading has evolved since its inception and includes traditional and standards-based grading as two principal grading methods. Based on the research, traditional and standards-based grading are both widely accepted grading practices, yet there is uncertainty about which grading practices are most effective.

The research was conducted at a Title I middle/high school in a large urban school district. This case study was intended to uncover what teachers believe are effective grading practices and reveal which grading practices these teachers are implementing during their own classroom instruction. Research shows that there is much debate on the topic of grading. The debate stems around traditional grading, standards-based grading, and even no grading at all. There is also research about the purpose of grading and grading reform. There is limited research related to the topic of teacher perceptions of grading. The researcher has focused this case study on teacher grading practices and teacher perceptions of effective grading hoping to add to the body of research related to this topic.

This chapter synthesizes and summarizes the data that were collected during this case study and provides a brief overview of the findings. The data are displayed by each research question. The research questions were

1. What are the identifiable differences in teacher perceptions of grading practices?

2. How do teacher grading practices align with standards-based grading?
3. What grading practices do teachers use to address consistency and accuracy?

As a mixed-methods study, the rubric and survey responses provided the quantitative data, and the interview provided qualitative data used in responding to the research questions. The researcher used the concurrent embedded triangulation method to collect qualitative data for this study. The interview responses represent the main source of qualitative data: The grade book, observation, lesson plans, and student work samples are artifacts and records that were embedded in the study to validate the results of the interview. The researcher searched for consistencies and inconsistencies in the data.

There were 10 participants in this study. The participants were teachers from various subject areas. Each participant was assigned a name as reflected in Table 5 for the purpose of this study. Relevant information about the participants is displayed in Table 5.

Table 5

*Years of Teaching Experience and Subjects Taught*

Participant Study Name	Years of Experience	Subjects Taught	Grade Level Taught
Jack	5	CTE	9-12
Beth	15	Math/Study Skills	6-8
Brian	2	Foreign Language	6-12
Kayla	3	Exceptional Children	6-8
Andrew	4	CTE	6-8
Cindy	5	Science	9
Peggy	6	Social Studies	9 and 10
Felicia	11	Math	10 and 12
Amber	12	Math	7-12
Don	32	CTE	6-8

## Research Question 1

**What are the identifiable differences in teacher perceptions of grading practices?** To answer Research Question 1, the researcher asked participants to complete the Rubric for Evaluating Grading Practices. This document can be found in O'Connor (2011). Participants were asked to complete a paper copy of the rubric and the survey after completing the interview with the researcher. The researcher later compiled the responses to the rubric into a Google form to present a more effective analysis of the data.

A total of 10 participants completed the rubric, and their responses are displayed in Table 6. In one instance, a participant could not fully commit to a response and therefore marked that he/she was between two criteria. This explains why some questions reflect more than 10 responses. The rubric was distributed immediately following the interview and was collected the same day.

Table 6

### *Summary of Participant Responses of Rubric for Evaluating Grading Practices*

Criterion	Beginning	Developing	Fluent
1. Organizing the grade book.	4	3	3
2. Including factors in the grade.	0	5	5
3. Considering assessment purpose.	0	6	4
4. Considering most recent information.	2	5	4
5. Summarizing information and determine final grade.	2	7	1
6. Verifying assessment quality.	0	9	2
7. Involving students.	1	3	6

Although it is not clearly stated in O'Connor (2011), the researcher interpreted that the rubric instrument used to generate the data that are reflected in Table 6 and Table 7 allowed the participants to reflect on how closely their grading practices resemble standards-based grading with "fluent" being most like standards-based grading, "beginning" being closer to traditional grading, and "developing" as moving towards standards-based grading. The actual rubric includes more details and can be found in Appendix A.

The researcher examined the participant responses to the rubric. The data show that teacher use of effective grading practices varies depending on the criterion and the individual teacher. Most participants in this study believe they are developing or fluent in most of the criteria.

The participants responded as developing or fluent for Criterion 2, including factors in the grade. The data show that five of 10 participants believe they are fluent in this criterion, while the remaining five believe they are developing. This criterion relates to basing student overall grades on achievement only. Fluent participants therefore have indicated that they do not include cheating, late work, or zeros when determining the final grade for their students. Participants who are developing indicate that the final grade includes a mixture of these factors.

As related to Criterion 5, the data show that seven of 10 participants responded that they are developing, while one participant responded that he/she is fluent. Two respondents indicated that they are beginning in this area. This criterion focused on summarizing information and determining student final grades. Respondents choosing developing for this criterion believed their grade book contained a mixture of grading symbols such as ABC grades, numeric grades, plus marks, check marks, minus symbols,



and rubric scores. There was some attempt to explain how the grading symbols are combined. If participants were fluent, however, they were able to provide a complete and sound explanation of how these marks were combined.

Criterion 5 also asked teachers to reflect on whether their final grades were based on criterion-referenced, not normed-referenced grades. Criterion-referenced grades were based on multiple choice, essay, or fill in the blank; while normed-referenced grades create grades on a bell curve by comparing student assessment performance to the performance of the entire student group. Developing in this criterion also indicated that there was an attempt to grade students with learning exceptionalities based on the learning target, although sometimes the teacher is not successful. Respondents who chose beginning were indicating that they had not yet reached the level of developing as previously described.

Criterion 6, verifying assessment quality, yielded participant results of developing and fluent. The data show that nine of the 10 participants responded developing, and there were two responses of fluent. One participant marked two answers, which explains why there were 11 responses. That participant was unable to fully commit to one answer. Developing in this criterion suggested that teachers try to base grades on accurate assessment results only but may not understand what should be included in a sound assessment. Respondents who were fluent knew the standards of quality for an assessment and could communicate those qualities.

The majority of participants also responded as developing or fluent for Criterion 7, involving students. The data show that six of 10 participants indicated that they were fluent in this area. This means that grades are not a surprise to students, because students understand the learning targets and their progress towards meeting these learning targets.

Three of the 10 participants answered that they were developing, and one participant answered that he/she was beginning.

Table 7

*Rubric for Evaluating Grading Practices by Participant*

	Organizing the grade-book	Including factors in the grade	Considering Assessment purpose	Considering most recent information	Summarizing information and determining final grade	Verifying assessment quality	Involving students	Average Grading Practice
Kayla	3	2	3	1	1	2	3	2.14
Cindy	1	2	3	2	2	2	3	2.14
Jack	2	3	2	2	2	2	3	2.28
Peggy	1	2	2	2	2	2	2	1.85
Beth	3	3	2	3	2	2	3	2.57
Andrew	1	2	2	1	1	2	1	1.42
Brian	2	3	3	2	2	2	3	2
Amber	3	3	3	2	3	2	2	2.57
Felicia	1	2	2	2	2	2	2	1.85
Don	2	3	2	3	3	3	3	2.71
Average Grading Practice	1.9	2.5	2.4	2.0	2.0	2.1	2.5	2.15

*Note.* Beginning-1, Developing-2, Fluent-3.

Table 7 reflects individual participant responses to the rubric and an average of each participant's grading practice. One participant selected two answers for two of the criteria. For the purpose of Table 7, the researcher recorded the lesser of the two. By marking "developing" and "fluent," the researcher has concluded that the participant is developing but not yet fluent; therefore, the researcher marked the participant as developing for those two criteria. Participant responses were averaged by adding the numbers that represented their responses for each criterion and dividing that number by seven, the number of criteria. Those averages are recorded in Table 8. The averages helped the researcher to establish whether each participant is beginning, developing, or fluent as it relates to their grading practices.

In order to perform quantitative analysis of the rubric and the survey, the averages of the participant responses that are reflected in Table 8 were used in the Pearson chi-square tests and are reflected in Tables 9, 10, and 11 as Average Grading Practice. The data reflected in Table 8 indicate that one participant is beginning, six are developing, and three are fluent.

Table 8

*Average Grading Practice*

	Beginning		Developing		Fluent		Total	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
Average Grading Practice	1	10.0%	6	60.0%	3	30.0%	10	100.0%

Pearson chi-square tests were conducted using the categorical data of two independent variables: average grading practice reflected in Table 8 and actual survey results reflected in Table 12. To further validate the survey and rubric results, the tests were conducted in search of any relationship between the two variables. The chi-square test data in Table 9 show that in most instances, there is no significant association between the average rubric responses and the survey responses for the section related to current grading practices; however, there is a significant difference for the survey question, “I allow new evidence to replace, not simply be added to old evidence.” The significance is smaller than the chi-square; and in this case, there is a significant association between the two independent variables. It is unknown what the relationship is, but the responses did not occur by chance.

Table 9

*Current Grading Practices by Average Grading Practice Score*

		Average Grading Practice			
		Beginning	Developing	Fluent	Total
		Count	Count	Count	Count
Include one or more of the following in grades: effort, participation, tardiness, attention, and /or adherence to class rules.	Almost Always	1	0	0	1
	Frequently	0	1	0	1
	Sometimes	0	2	2	4
	Never	0	3	1	4
	Total	1	6	3	10
I reduce points/marks on work submitted late.	Almost Always	0	0	1	1
	Frequently	0	2	0	2
	Sometimes	0	3	0	3
	Never	1	1	2	4
	Total	1	6	3	10
I give bonus points for extra credit.	Almost Always	0	0	1	1
	Frequently	1	0	0	1
	Sometimes	0	3	0	3
	Never	0	3	2	5
	Total	1	6	3	10
I reduce marks/grades for cheating.	Almost Always	0	2	1	3
	Frequently	0	1	1	2
	Sometimes	0	1	0	1
	Never	1	2	1	4
	Total	1	6	3	10
I organize information in my record/marking/grade book by source: homework, quizzes, tests, labs, etc.	Almost Always	1	4	2	7
	Frequently	0	1	0	1
	Sometimes	0	1	0	1
	Never	0	0	1	1
	Total	1	6	3	10
I include in grades zeros for missing work.	Almost Always	0	2	0	2
	Frequently	0	2	1	3
	Sometimes	1	0	2	3
	Never	0	2	0	2
	Total	1	6	3	10
I communicate feedback to students about strengths and weaknesses in their work.	Almost Always	0	3	1	4
	Frequently	1	0	1	2
	Sometimes	0	2	1	3
	Never	0	1	0	1
	Total	1	6	3	10
I provide detailed comments to students about strengths and weaknesses in their work.	Almost Always	0	2	1	3
	Frequently	0	2	1	3
	Sometimes	1	2	1	4
	Never	0	0	0	0
	Total	1	6	3	10

(cont.)

		Average Grading Practice			
		Beginning	Developing	Fluent	Total
		Count	Count	Count	Count
I include performance on homework into final grade assignments.	Almost Always	0	1	0	1
	Frequently	0	0	0	0
	Sometimes	0	1	2	3
	Never	0	4	1	5
	Total	0	6	3	9
I keep separate tracks of information from formative and summative assessments.	Almost Always	0	4	2	6
	Frequently	0	1	0	1
	Sometimes	0	1	1	2
	Never	1	0	0	1
	Total	1	6	3	10
I allow students to redo assessments without penalty if they have not done well.	Almost Always	1	4	2	7
	Frequently	0	1	1	2
	Sometimes	0	1	0	1
	Never	0	0	0	0
	Total	1	6	3	10
I allow new evidence to replace, not simply be added to old evidence.	Almost Always	1	1	1	3
	Frequently	0	2	1	3
	Sometimes	0	3	1	4
	Never	0	0	0	0
	Total	1	6	3	10
My students understand how grades will be calculated and what evidence will count.	Almost Always	0	3	2	5
	Frequently	0	2	1	3
	Sometimes	0	1	0	1
	Never	1	0	0	1
	Total	1	6	3	10

*Pearson Chi-Square Tests*

		Average Grading Practice
Include one or more of the following in grades: effort, participation, tardiness, attention, and /or adherence to class rules.	Chi-square	11.250
	Df	6
	Sig.	.081 <sup>a,b</sup>
I reduce points/marks on work submitted late.	Chi-square	7.917
	Df	6
	Sig.	.244 <sup>a,b</sup>
I give bonus points for extra credit.	Chi-square	14.000
	Df	6
	Sig.	.030 <sup>a,b,*</sup>
I reduce marks/grades for cheating.	Chi-square	2.500
	Df	6
	Sig.	.868 <sup>a,b</sup>

(cont.)

		Average Grading Practice
I organize information in my record/marking/grade book by source: homework, quizzes, tests, labs, etc.	Chi-square Df Sig.	3.810 6 .702 <sup>a,b</sup>
I include in grades zeros for missing work.	Chi-square Df Sig.	7.778 6 .255 <sup>a,b</sup>
I communicate feedback to students about strengths and weaknesses in their work.	Chi-square Df Sig.	6.250 6 .396 <sup>a,b</sup>
I provide detailed comments to students about strengths and weaknesses in their work.	Chi-square Df Sig.	1.667 4 .797 <sup>a,b</sup>
I include performance on homework into final grade assignments.	Chi-square Df Sig.	2.400 2 .301 <sup>a,b</sup>
I keep separate tracks of information from formative and summative assessments.	Chi-square Df Sig.	10.833 6 .094 <sup>a,b</sup>
I allow students to redo assessments without penalty if they have not done well.	Chi-square Df Sig.	1.310 4 .860 <sup>a,b</sup>
I allow new evidence to replace, not simply be added to old evidence.	Chi-square Df Sig.	2.917 4 .572 <sup>a,b</sup>
My students understand how grades will be calculated and what evidence will count.	Chi-square Df Sig.	10.667 6 .099 <sup>a,b</sup>

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the .05 level.

a. More than 20% of cells in this sub table have expected cell counts less than 5. Chi-square results may be invalid.

b. The minimum expected cell count in this sub table is less than one. Chi-square results may be invalid.

Table 10

*Opinions about Grading by Participant Average Grading Practice Score*

			Average Grading Practice			
			Beginning	Developing	Fluent	Total
The ONLY purpose for grades/marks should be to communicate student learning as of a point in time.	Agree	Count	0	1	2	3
	Somewhat Agree	Count	1	3	1	5
	Somewhat Disagree	Count	0	2	0	2
	Disagree	Count	0	0	0	0
	Total	Count	1	6	3	10
One should NEVER include group scores in grades for individual students.	Agree	Count	0	0	1	1
	Somewhat Agree	Count	1	3	0	4
	Somewhat Disagree	Count	0	3	1	4
	Disagree	Count	0	0	1	1
	Total	Count	1	6	3	10
There should be a limit to the number of students who receive marks/grades of A.	Agree	Count	0	0	0	0
	Somewhat Agree	Count	0	1	0	1
	Somewhat Disagree	Count	0	0	0	0
	Disagree	Count	1	5	3	9
	Total	Count	1	6	3	10
Assessments (marks/grades) should demonstrate how well students are doing relative to one another.	Agree	Count	0	0	0	0
	Somewhat Agree	Count	0	2	1	3
	Somewhat Disagree	Count	0	2	1	3
	Disagree	Count	1	2	1	4
	Total	Count	1	6	3	10
It is most accurate to base grades on the mean (average) score rather than the median (middle) or mode (most frequent) score.	Agree	Count	0	0	0	0
	Somewhat Agree	Count	0	1	2	3
	Somewhat Disagree	Count	0	4	0	4
	Disagree	Count	1	1	1	3
	Total	Count	1	6	3	10
Peer and self-assessment should be limited to formative assessment because only teachers should assign grades/marks.	Agree	Count	0	1	1	2
	Somewhat Agree	Count	0	3	1	4
	Somewhat Disagree	Count	0	0	0	0
	Disagree	Count	1	2	1	4
	Total	Count	1	6	3	10

*Pearson Chi-Square Tests*

		Average Grading Practice	
The ONLY purpose for grades/marks should be to communicate student learning as of a point in time.	Chi-square	4.000	
	Df	4	
	Sig.	.406 <sup>a,b</sup>	
One should NEVER include group scores in grades for individual students.	Chi-square	7.500	
	Df	6	
	Sig.	.277 <sup>a,b</sup>	

(cont.)

		Average Grading Practice
There should be a limit to the number of students who receive marks/grades of A.	Chi-square	.741
	Df	2
	Sig.	.690 <sup>a,b</sup>
Assessments (marks/grades) should demonstrate how well students are doing relative to one another.	Chi-square	1.667
	Df	4
	Sig.	.797 <sup>a,b</sup>
It is most accurate to base grades on the mean (average) score rather than the median (middle) or mode (most frequent) score.	Chi-square	6.667
	Df	4
	Sig.	.155 <sup>a,b</sup>
Peer and self-assessment should be limited to formative assessment because only teachers should assign grades/marks.	Chi-square	2.083
	Df	4
	Sig.	.720 <sup>a,b</sup>

Results are based on nonempty rows and columns in each innermost subtable.

a. More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b. The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

#### Pearson chi-square Table 10 reflects Opinions about Grading by Participant

Average Grading Practice Score. The results indicate that there is no significant association between participant responses to each of the survey questions related to opinions about grading and average grading practice. These data suggest that whether teachers rate their effective grading practices as beginning, developing, or fluent, this does not significantly impact their responses to the survey as it relates to their opinion about grading practices. There was no significant relationship observed between participant responses to the survey and average responses to the rubric.

The third section of the survey measures teacher confidence in their grading practices. According to the data that are a result of the Pearson chi-square test, there is a significant association between the survey responses related to teacher confidence in their grading practices and the average grading practice. These data are reflected in Table 11. The significance is smaller than the chi-square; and in this case, this indicates that there is a significant association between the two independent variables. It is unknown what the



relationship is between the variables. It is only known that it is significant.

Table 11

*Confidences by Participant Average Grading Practice Score*

			Average Grading Practice			
			Beginning	Developing	Fluent	Total
I can design or find assessments that provide an accurate picture of student learning on particular learning /objectives.	Very Confident	Count	0	4	1	5
	Somewhat Confident	Count	0	2	2	4
	A Little Confident	Count	1	0	0	1
	Total	Count	1	6	3	10
I can prepare assessment plans for units that show when formative and summative assessments will occur and how they interact.	Very Confident	Count	0	3	1	4
	Somewhat Confident	Count	0	3	2	5
	A Little Confident	Count	1	0	0	1
	Total	Count	1	6	3	10
I can assign grades that support learning.	Very Confident	Count	0	3	2	5
	Somewhat Confident	Count	0	3	1	4
	A Little Confident	Count	1	0	0	1
	Total	Count	1	6	3	10

*Pearson Chi-Square Tests*

		Average Grading Practice
I can design or find assessments that provide an accurate picture of student learning on particular learning /objectives.	Chi-square	11.000
	Df	4
	Sig.	.027 <sup>*,b,c</sup>
I can prepare assessment plans for units that show when formative and summative assessments will occur and how they interact.	Chi-square	10.250
	Df	4
	Sig.	.036 <sup>*,b,c</sup>
I can assign grades that support learning.	Chi-square	10.250
	Df	4
	Sig.	.036 <sup>*,b,c</sup>

Results are based on nonempty rows and columns in each innermost sub table.

\*. The Chi-square statistic is significant at the .05 level.

b. More than 20% of cells in this sub table have expected cell counts less than 5. Chi-square results may be invalid.

c. The minimum expected cell count in this sub table is less than one. Chi-square results may be invalid.

The researcher conducted an interview of each participant. In addition to the rubric responses, some of the responses to the interview questions help answer the first research question. The interview also addressed Research Questions 2 and 3. As a result, the summary of the interview responses is displayed later in this chapter to represent multiple research questions. Further exploration of the findings related to this research

question is discussed in Chapter 5.

## **Research Question 2**

### **How do teacher grading practices align with standards-based grading?**

Participants were asked to complete the Survey on Marking and Grading Practices immediately following the interview. Initially, participants were going to be asked to complete the survey electronically using Google Forms; however, participants were asked to agree to participate in the study using a Google Form and that required multiple reminders and thus slowed completion of the process. Therefore, the researcher decided to have participants complete the survey using a paper copy to prevent the same occurrence. The survey was distributed immediately following the interview and collected the same day.

Participants were asked to complete the Survey on Marking and Grading Practices by selecting the responses that best represented their grading practices. Table 12 displays the summary of survey responses provided by participants. Table 13 displays the actual survey responses by participants. Data displayed in Table 13 were used to conduct the mixed methods quantitative data analysis for this study. To answer Research Question 2, the researcher analyzed the summary of participant responses reflected in Table 12. The data in Table 13 were used in the chi-square tests found in Tables 9, 10, and 11 and are reflected in the response to Research Question 1. Additional data related to Research Question 2 can be found in the teacher interview responses. The interview data are provided in this chapter when Research Question 3 is answered. Specifically, Interview Question 4 provides data related to whether teacher grading practices are standards-based or traditional.

The data from the survey responses imply that teachers use a variety of grading

methods that are considered to be effective, and they use grading methods that are somewhat ineffective. Participant responses to survey questions are distributed across the Likert scale throughout the survey. This indicates that teacher use of effective grading practices varies. Some participant responses to the survey questions show that teachers have a strong understanding of a particular instructional strategy, while others show the opposite.

Table 12

*Summary of Participant Responses to Survey on Marking and Grading Practices*

Part 1 Current Grading Practices	Almost Always	Frequently	Sometimes	Never
1. Include one or more of the following in grades: effort, participation, tardiness, attention, and /or adherence to class rules.	1	1	4	4
2. I reduce points/marks on work submitted late.	1	2	3	4
3. I give bonus points for extra credit.	1	1	3	5
4. I reduce marks/grades for cheating.	3	2	1	4
5. I organize information in my record/marketing/grade book by source: homework, quizzes, tests, labs, etc.	7	1	1	1
6. I include in grades zeros for missing work.	2	3	3	2
7. I communicate feedback to students about strengths and weaknesses in their work.	4	2	3	1
8. I provide detailed comments to students about strengths and weaknesses in their work.	3	3	4	0
9. I include performance on homework into final grade assignments.	1	0	3	5
10. I keep separate tracks of information from formative and summative assessments.	6	1	2	1
11. I allow students to redo assessments without penalty if they have not done well.	7	2	1	0
12. I allow new evidence to replace, not simply be added to old evidence.	3	3	4	0
13. My students understand how grades will be calculated and what evidence will count.	5	3	1	1
Part 2 Opinions About Grading	Agree	Somewhat Agree	Somewhat Disagree	Disagree
14. The ONLY purpose for grades/marks should be to communicate student learning as of a point in time.	3	5	2	0
15. One should NEVER include group scores in grades for individual students.	1	4	4	1
16. There should be a limit to the number of students who receive marks/grades of A.	0	1	0	9
(cont.)				

Part 2 Opinions About Grading	Agree	Somewhat Agree	Somewhat Disagree	Disagree
17. Assessments (marks/grades) should demonstrate how well students are doing relative to one another.	0	3	3	4
18. It is most accurate to base grades on the mean (average) score rather than the median (middle) or mode (most frequent) score.	0	3	4	3
19. Peer and self-assessment should be limited to formative assessment because only teachers should assign grades/marks.	2	4	0	4
Part 3 Confidences		Very Confident	Somewhat Confident	A Little Confident
20. I can design or find assessments that provide an accurate picture of student learning on particular learning /objectives.		5	4	1
21. I can prepare assessment plans for units that show when formative and summative assessments will occur and how they interact.		4	5	1
22. I can assign grades that support learning.		5	4	1

Table 13

*Individual Participant Results for Survey on Marketing and Grading Practices*

Part 1 Current Grading Practices	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
Kayla	4	3	3	2	1	4	4	1	4	1	1	1	2
Cindy	2	2	4	1	1	2	1	1	3	1	3	3	1
Jack	4	4	4	4	3	4	3	2	4	1	1	2	1
Peggy	3	3	3	1	1	1	1	3	4	3	1	3	2
Beth	3	1	4	1	1	2	2	2	3	1	1	3	1
Andrew	1	4	2	4	1	3	2	3	N/A	4	1	1	4
Brian	3	2	4	4	2	2	3	2	4	2	2	2	3
Amber	4	4	4	4	4	3	3	3	4	1	1	1	2
Felicia	4	3	3	3	1	1	1	3	1	1	1	3	1
Don	3	4	1	2	1	4	1	1	4	4	2	2	1

Almost Always-1, Frequently-2, Sometimes-3, Never-4

Part 2 Opinions About Grading	Q14	Q15	Q16	Q17	Q18	Q19
Kayla	3	2	4	2	3	4
Cindy	2	2	4	3	3	2
Jack	2	2	4	4	4	1
Peggy	2	3	4	4	2	2
Beth	1	4	4	2	2	4
Andrew	2	2	4	4	4	4
Brian	1	3	2	3	3	4
Amber	1	1	4	4	4	1
Felicia	3	3	4	2	3	2
Don	2	3	4	3	2	2

Agree-1, Somewhat Agree-2, Somewhat Disagree-3, Disagree-4

Part 3 Confidences	Q20	Q21	Q22
Kayla	1	1	1
Cindy	2	2	2
Jack	1	1	1
Peggy	2	2	2
Beth	1	1	1
Andrew	3	3	3
Brian	1	2	2
Amber	2	2	2
Felicia	1	1	1
Don	2	2	1

Very Confident-1, Somewhat Confident-2, A Little Confident-3

**Research Question 3****What grading practices do teachers use to address consistency and accuracy?**

After participants agreed to be a part of the study, interviews were scheduled to occur during the participant's planning period or after school. Responses to the interview

questions are summarized in this chapter. The researcher used the typologies identified in Chapter 3 to organize the data in preparation for analysis. The majority of the interview responses relate to Research Question 3 and were used to assist the researcher in answering the third research question. Specifically, Interview Questions 5, 6, 7, 9, and 10 all provide insight regarding which grading practices teachers use that they believe improve consistency and accuracy. The interview questions also address Research Questions 1 and 2.

### **Interview Question 1**

**How many years have you been a teacher?** Responses to this question were compiled in Table 5. Five participants have between 1-5 years of teaching experience. One teacher has between 5-10 years of teaching experience. Three teachers have between 10-15 years of teaching experience. One teacher has more than 30 years of teaching experience. Teacher levels of experience reflect a diverse participant sample; however, there are no indications in the data that years of teaching experience influenced the outcomes of the study.

### **Interview Question 2**

**What subject and grade level do you currently teach?** Responses to this question were compiled in Table 5. Five participants teach a core subject area such as math, science, English, or social studies. There were three career and technical education teachers in this study. There was one foreign language teacher and one Exceptional Children's teacher. There are no implications in the data that the subject area taught influenced whether the teacher used effective grading practices. Effective grading practices were revealed throughout this study across subject areas.

### **Interview Question 3**

**What professional development have you received related to effective grading practices?** Of the 10 participants, six stated they received professional development related to grading. Five of those six participants received their training at the school where the study was conducted. The one remaining participant received similar training provided by the district while working in another position. The participants, however, only referenced one instance where they received training related to grading.

The data implied that more participants received professional development related to grading than those who did not. By triangulating the survey responses with the interview responses, the researcher searched for consistencies and inconsistencies in the data. The survey data suggested that they understand effective grading practices and they often use effective grading practices. It was evident in the data that some participants had prior knowledge of effective grading and standards-based grading. It is also implied in the data that a few of the participants had less knowledge of effective grading practices and standards-based grading, possibly due to a lack of professional development received on the topic.

### **Interview Question 4**

**Do you consider your grading practices to be standards-based or traditional? Based on your answer, what makes it standards-based or what makes it traditional? If neither is true, please explain.** Three participants said they implement traditional grading practices. Four participants indicated that they use standards-based grading practices. Three participants believe that they implement a mixture of both. The three participants who implement traditional grading practices all indicated they are interested



in learning more about standards-based grading. Peggy stated, “I’ve been trying to look at standards-based...I don’t feel like I’m there yet to be able to do that just yet.”

Of the four who indicated they implement standards-based grading, two provided explanations that included using traditional assignment names but standards-based instruction. Cindy said, “Even though I have all of my assignments into three main categories which are quite vague...you know homework, classwork, assessments...I do break those down and grade them according to the standards.” The remaining two participants who believe they implement standards-based grading described systems in their grading that include student mastery of the standard. Kayla is a teacher who co-teaches with other teachers. She described that the teachers she works with maintain “a separate grade book than what is actually their current grade...they [students] have to redo their standards assessment...each standard has a quiz and they redo it until they get a three or four for mastery.” Jack said,

Everything they’re tested on is standards based...everything in the performance profiles comes straight from the objectives and the standard. So everything they’re doing in the shop...I’m grading it ...they’re not really ever doing anything that isn’t based on the standards and objectives.

The data implied that teachers who implement standards-based grading have a clear plan for determining student mastery of the content. Those participant responses reflect that students are assessed on whether they can demonstrate mastery of the standard. The data also suggested that teachers who use traditional and mixed methods of grading might align their instruction to the standards, although the grading method does not always reflect standards-based grading. Some participant responses reflected that teachers use traditional grading yet implement instruction based on standards.

### **Interview Question 5**

**How do you determine student proficiency/mastery in your subject?** The participants provided various responses related to determining student proficiency/mastery in their subject areas. Don, a CTE teacher, uses traditional tests but mentioned using projects and other activities such as student-produced PowerPoint presentations and working with hands-on activities. Andrew who is also a CTE teacher said, “there are certain things that we want them to learn. So it’s...are they able to do it?” Andrew also said that in the past, students were assessed by the state using a multiple-choice assessment, “but the standards would be can they do this on a computer.” This created confusion for Andrew. He said, “What is mastery of the subject? Is it just answering the essential question...I’m still working on like how to determine mastery.”

Peggy determines mastery by having students write. She said it comes down to “how can they analyze something and how can they explain something?” Cindy begins by assessing what students already know. She said that she assesses where they are “to get everyone caught up or maybe I can even skip ahead a little bit and then introduce the concept we explore.” After presenting new information, Cindy said she determines mastery when students “can explain it to me with the what, how, and why, and even demonstrate with a sketch or somehow demonstrate the concept to me.” Brian, the foreign language teacher, said students “have to be able to produce it. So, can they speak Spanish or can’t they.” To assess students, Brian said, “I do have a rubric for reading and for speaking and for writing and a rubric for listening.” He indicated a score of three is considered passing or proficient.

Felicia said that student proficiency is “based off of what the standards says they should be able to do and compare those two things.” Beth indicated that students have to

score 80% or better on any and every assessment that is given to them. She said that she also uses SchoolNet assessments that have already been created based on the standard.

Amber said that she has students

take a check-in and if they perform well on it, they'll do an assessment on that standard...if they get a three or four then they move on. If they get three they can choose if they want to retest... [score of] one or two, they have to do redo on it.

When triangulating the data, the check-in that Amber mentioned during this interview is also present in her lesson plans. Kayla said students are given a quiz for each standard taught. Students must score a level three or four before they take their assessment. She said, "It's more like personalized learning so they are moving at their own pace." Kayla also said, "once you get mastery we'll move on to the next standard." Jack said that he uses data from student credentialing tests. Students take credentialing tests to earn an industry credential that is helpful when seeking employment. Jack also creates quizzes and tests and has students complete them in PowerSchool Learning. Jack's students can also retake performance tests they fail until they pass them.

The data implied that teachers understand that students should be able to demonstrate mastery of the standards within the content in order to show that they have mastered that particular subject. Students being able to produce a product or explain their answer in relationship to the standard was revealed multiple times in the data. The data also suggested that mastery of the standards might be determined using a variety of methods to assess student knowledge of the standards such as quizzes, short answer questions, or traditional tests. The data further indicated that teachers also might use a rubric as a tool to help them determine student mastery of the content.

## Interview Question 6

**What do you do when students don't learn in your class or are unable to demonstrate mastery in a subject?** Jack said that he allows students to redo/retake assessments until they are proficient. Beth said that she has a power talk with the student to boost his/her confidence. Beth also invites students for lunch tutoring one on one with the teacher, "because sometimes they may feel a little intimidated around other students who are excelling and doing well." Felicia said,

I reteach them in small groups while students who did master it work on something else that either bridges it or moves it along...then I let them go back and do corrections on what they've missed. Depending on what it is, sometimes I give them a completely different assessment that are questions on the same standard but are not the exact same questions and other times I just let them go back and show me where they went wrong.

Brian said, "First thing I would do is identify the student and then I would have a conference with the student and basically ask him/her what is going on and why are you not comprehending the lesson." After the conference, Brian will formulate a solution and also offer tutoring after school. In addition to tutoring, Brian uploads notes and videos for the class to the PowerSchool Learning page for students to be able to access that information outside of class.

Cindy said that she reteaches the content in a different way. She also says that during labs and other activities, "I'll connect it back to something that I know they know...I try to make them have connections like that." Peggy said, "I try to at least review." She also has students work in groups and has those who got it right help those who did not. Andrew said that he brings students in to work with him one on one during

lunch. During that time, he tries “to find different ways to explain it or to teach or to give different examples...then I try to understand why they’re not getting it...see if that can help me explain it differently.”

When students do not learn, Don said, “I never give up.” He also said he has conversations with other teachers to find out if they are having similar experiences with the student. He said that he will “adjust their grade accordingly if that’s the absolute best they can do.” Kayla, the Exceptional Children’s teacher, said she reinforces “what the teacher has shown.” She works with students in small groups. She completes practice problems with them. She said, “we’ll actually write out steps on what they need to do...I provide graphic organizers for my students too.” Amber said she offers a working lunch and help after school. She also said, “I like to make videos of pretty much all we talk about in class so that way a kid can go home and take [watch] a video, write notes.”

The data suggested that teachers will often re-teach and/or reassess students when they are unable to demonstrate mastery of a particular subject. The reassessment of students as it relates to a particular standard might occur multiple times until the student is able to demonstrate mastery. Participant responses also suggested that teachers do not give up on students and are willing to offer help to students during noninstructional times such as during lunch and after school. Several of the participants provided responses that involved working with students individually during lunch time or after school. Creating one-on-one time with students is a strategy for ways to make healthy connections with students as listed in Deiro (2005). This suggests that working with students one on one is a strategy that improves learning for students; therefore, the data also implied that providing one-on-one time with students helps students who struggle to master the content.

### Interview Question 7

**What current grading practices do you implement that you believe are effective? Please describe those practices.** Brian indicated that he uses standards-based grading practices. He said that since starting standards-based grading, he gives fewer grades in the grade book. Brian said that he no longer grades practice work. He said that since making this change, “after the first performance assessment, students have realized that oh, okay, maybe we need to buckle down and actually study.” He said that in the past, students could pass his course by doing well on practice work, and they may not be able to actually speak Spanish at all. Now, students have to perform well on performance assessments in order to receive a passing grade. Felicia encourages students to reflect on their own work by allowing students to do corrections on quizzes and tests. Felicia said, “I like to give kids work that goes along with what I’ve taught so that they can be successful at it.” She also said, “That gives me an accurate picture of what they can do versus what they can’t yet master.”

Beth explained that she strives to know and understand her students’ abilities. She said that she gives students the benefit of the doubt, because she knows they will pull their grade up. Jack bases his grades on how students perform on standards and objectives. Peggy said that one of her effective practices is to have a rubric. She said, “like I said earlier, I have a writing piece...If I don’t have the rubric, then...I’m being subjective.” Cindy said that she adds discussion questions to her assessments. Cindy also said,

if I place a high amount of points on that because that is explaining it back to me, you know, this is a huge area or huge concept that needs to be explained completely. And if they can do that, I know that they have it.

Andrew said that he uses a daily opening activity. He further explained, “Sometimes it’s a review of the previous class.” He also said, “I try to have an exit activity. I don’t actually have tickets that I get back. But I try to find out if they understand it when they’re walking out.” Don said that he sees “hands-on work that they’ve turned in” as being an effective practice. He said, “For instance, we make rulers. Well if I see a ruler with straight lines, extremely accurate measurements, you know that lets me know okay, this person understands.”

Kayla does not grade students in her current position but co-teaches with teachers who do grade the students and currently are using standards-based grading. She said,

The standards-based grading is effective. This is the first year in our school that anyone has ever done it. To my knowledge. So, I’m curious to see how that’s going to relate to our proficiency...with the standards-based grading, we’re spending so much time on it; we know that they’ve mastered that content.

Similarly, Amber believes that standards-based grading is the effective practice she implements. She said, “I like being able to see that standard-based grade book and say this is what you need to work on...I feel like it’s going to be effective; I’m not sure if it’s going to be.”

The data implied that teachers use a variety of grading practices they believe are effective such as hands-on activities, student reflection, and not grading practice work. The data further indicated that multiple participants said they use standards-based grading practices as an effective grading practice.

### **Interview Question 8**

**What current grading practice do you implement that you wish you could change?** Don stated that he would like to find better ways to help struggling students

who need more time. He described that he allows students to complete classwork at home for a grade. Andrew said he would like to manage projects better. He describes that in the past, students would have a project to do and he would grade it upon completion; however, he now sees the need to provide feedback along the way. He said, “I think it’s unfair from their standpoint if they’re not really seeing how they’re doing along the way.”

Brian said he would change standards-based and traditional grading. He explained his experience when studying abroad. During that time, he was enrolled in a course where their grade was determined by a final exam--that students had two times to take the exam. That was the only measure used. He said, “everything is more independent learning...there’s no handholding.” He went on to say,

If they’re jumping forward to like May and they didn’t get something that was covered back in January, I feel it shouldn’t be the teacher’s responsibility to do it at the end of the day...there needs to be more accountability, and I feel like with standards-based grading, students are not necessarily held accountable for their own education.

Felicia said she would like to change how she grades homework. She explained that she does not like to grade homework because she is not there [at the student’s home] to answer questions; but she said that students sometimes do not complete the work. She went on to say, “giving the kid a zero for not turning something in doesn’t really reflect what they can do. It reflects that they didn’t do something.” She stated concern that “you’ve got to be able to reflect that some way. But I wish that there was a way that we could do that.”

Beth would like to change how grades are calculated for quarter test grades.



Teachers are asked to enter a grade of 50 if students score below a 50. Beth would like to enter the grade students earn. Jack said, “I can be more effective on how I grade them.” He described the challenges of grading project-based learning assignments. Peggy wants to change “the traditional stuff where it’s just on points because the students focus on the number.” She described that some students strive to fix what they missed, while others do not because they are more focused on the grade than the mastery of the content.

Cindy would like to have more hands-on activities that allow students to apply what they have learned. When the researcher asked, “why do you think you do not have an opportunity to do that,” Cindy said,

Whenever a couple of students work together like in a lab or something, I see that maybe the stronger students getting everything they need and know the information that maybe another student maybe they’re not as strong as the other student...maybe they’re not getting what they deserve.

Kayla, who now co-teaches with other teachers and does not actually grade the students, said, “In the past, if a student didn’t do an assignment, I would give them a zero.” She went on to explain that she would give students a packet of missing work later in the quarter to allow them to make up any missing work. That created a lot of grading. She would like to address the missing work earlier. She said, “if I did that early on and just said, ‘here’s an alternative assignment’...gave them something on the same standard...I think that would be more effective.”

The data implied that teachers are reflective practitioners who are willing to adjust their instruction to meet the needs of their students. Each of the participants was able to provide something about their own grading practices they wish they could change. Some of the responses include eliminating traditional and standard-based grading, not grading

homework, eliminating zeros, and providing better feedback to students (including students). Research shows that some of the practices they want to change should be changed. Including zeros, limited descriptive feedback, and grading formative work are grading practices that do not reflect meaningful and accurate grades. Although the type of grading practices varied, the data implied that teachers would like to improve grading practices that will encourage more meaningful and accurate grades. The research also showed that some are making the case to eliminate grades completely, which was also reflected in a participant response to this question.

### **Interview Question 9**

**How do you promote consistent grading across teachers?** Five participants (Andrew, Peggy, Amber, Don, and Kayla) responded that they communicate with other teachers who teach like subjects about what they are teaching. This communication happens in the school setting as well as across the district. Andrew also said that when he meets with those teachers who teach like subjects as him, there are discrepancies between them as it relates to what is important, what determines student grades. Peggy described that although now she is the only person in the school who teaches her subject, she and the other teachers in the past planned common assessments and common activities together. Amber shared that she talks to the other teachers in the school who teach the same subject as her about lesson planning. She said, “I think in order to be able to effectively help teachers, I need to go through this myself and you know, maybe reflect with other teachers.” Don said that he and other middle school teachers who teach his subject stay in touch with each other especially using email. Kayla said that in years past, “every teacher in math had to have the same percentages in their grade book...grading on their test is a little different...but the percentages going into the grade book were always

the same.” In addition to communicating with teachers, Kayla mentioned using a pacing guide. “If you follow your pacing guide, everyone should kind of be somewhere...give or take a couple of weeks...in that time frame.”

Cindy said that having a benchmark keeps teachers where they should be. She described that having a pacing guide was helpful. She said, “I think pacing for everybody keeps that happening to that degree at least.”

Beth focused her responses on how she assigns points on graded assignments. Beth described that she is consistent when she grades students using the 100-point grading scale. She uses that method to determine grades for assignments. Jack responded that he assigns and grades modules the same from one module to the next. He said, “we cover sections of the module. There are quizzes at the end of those sections. There’s a test at the end of each module. So, it’s very routine in that way and consistent.” He also said, “Each module has performance aspects that they have to master in the shop so that you know it’s very consistent that way.”

Two teachers referenced following the standards. Brian said, “It would have to be based off the standards...Spanish teachers, we all teach the same (ACTFUL) American Council on the Teaching of Foreign Language.” He went on to say that teachers have a lot of autonomy, however, when using these standards. Felicia said, “if your assignments are based on the standards, then the assessment is of the standards...no matter where we are, we should be teaching the same standards.” As an example, she said, “other teachers should be able to assess them on translations even if it’s not the same assessment. The standards are the same, so they should know.”

The data implied that teachers promote consistent grading among teachers by communicating with teachers within the school, district, and sometimes state who teach

the same subject. This is suggested in five of 10 participant responses. The data also suggested that teachers follow the standards and a pacing guide to maintain consistency across teachers. Using a consistent grading method to determine student grades was also present in the data, meaning the teacher uses the same method to determine each grade such as the assignment of points to a grade or the use of module assessments.

### **Interview Question 10**

**How do you promote accurate grading?** Two teachers (Amber and Beth) focused their responses on not giving extra credit. Amber also said, “I did do grades for homework before and now, I don’t...the only thing I do is their assessments of learning.” She does, however, put a check in her grade book so she knows students completed the homework.

Andrew said he is “trying to see what we’re getting to...what they need to do...have they done it...I hope I’m better with it this year...with the standards-based.” He described an example of learning about formulas. When he explained the past, he said, “but yet on the instructions it said put it in 20-font. And if they didn’t put it in 20-point font...they would lose points...But at this point in the activity, that’s not what the standard is.” Don said that he uses a few grades together to determine a test grade. He described having students show him what they know in multiple ways such as using a PowerPoint.

Jack uses PowerSchool Learning as a tool to communicate grades to students and parents. He said, “kids being able to see where they are and the parents being able to see where they are.” He also said that everything is aligned with the standards. Cindy said that she assigns specific point values to assessment questions to promote accuracy. She said, “I would divide my test per se into different sections like the first section would be

worth 20 points of the test and you know divide it up that way...hopefully represent the difficulty level of the question.”

Two teachers referred to using rubrics to promote accurate grading. Brian said, “Grades are always going to be subjective. How I try to best approach that is the rubrics that I use to grade their practice work.” He also said, “In order to show that I’m accurately grading them, I just always refer back to the same rubric, so it doesn’t change.” Peggy said,

the using of a rubric...because if you just, you know, went through and read the students’ answers that wouldn’t work because in the morning I might be thinking one thing and then at night I might be thinking another thing.

She said a rubric keeps her looking for the same things.

Felicia provides students chances to make up missing work. She said, “like I was talking before where they have zeros...you know and it’s not that they can’t do it, or they don’t have mastery of it. It’s that they just chose not to do the work.” Felicia continued, “If you’re teaching and assessing those specific standards, then that should be an accurate reflection of what they can do.” Likewise, Kayla said that students have to “retake it and master it until they move on.” She also said that her co-teachers do not give grades for homework completion or things like bringing food for the food drive. She said, “make sure it’s all curriculum and content and standards-based.”

The data suggest that teachers use a variety of methods to promote accurate grading including, but not limited to, the use of rubrics. Three responses suggest that grades will be more accurate if they do not include nonacademic factors such as bringing food for the can food drive or extra credit. Therefore, the data imply that removing nonacademic factors from student grades promotes accurate grading. The data also

suggest that communicating grades with parents and students help promote accuracy.

The data implied that not including zeros by allowing students to complete missing work promotes accuracy.

### **Interview Question 11**

**Is there anything that I have not asked you that you wish to share with me related to your grading practices? If so, please share now.** Amber, a participant who is using standards-based grading this year, added, “this year I’m just trying a whole new thing. So, it’s very challenging for me. I feel like a first-year teacher again.” Andrew added, “Probably the biggest thing I’ve already said, I wish the state or as middle school teachers, we kind of talked.” When teachers discuss the curriculum, he wants them to determine what they are all looking for when grading particular standards and objectives.

Peggy added that she grades English Second Language students and Exceptional Children’s students differently than regular education students. She uses their reading goals to guide her grading practices for them. She said, “You know, the personalized learning or the individual learning can’t just be on the assignment but also on the way you grade them.” Brian said, “I think that it’s really important as a teacher...to really just make sure I’m doing what’s best for my kids...I’m trying to minimize the subjectivity.”

As previously stated, the data suggested teachers are reflective practitioners who seek ways to improve. These additional responses suggested that teachers want what is best for their students. The participant responses also implied that teachers are willing to adjust their instructional practices to meet student needs, and they are willing to work with other educators to address concerns about the curriculum and instruction for the subject they teach.

**Artifact and Records**

The researcher collected additional data related to whether participant current grading practices aligned with standards-based grading. The comparison of these artifacts and records can help identify consistencies and inconsistencies that may be present in the data. Specifically, the artifacts and records will be compared to the interview, rubric, and survey responses.

Participants were asked to provide a grade book sample to reflect student grades for one of their classes from the first 5-7 weeks of the first quarter of the academic school year. Participants were asked to remove the student names from the samples.

For the purpose of this study, the 15 fixes outlined in O'Connor (2011) were used by the researcher to analyze the grade book samples provided by participants and then summarized in Table 14. The 15 fixes provided in the text can be found in Appendix G.

Table 14

*Grade Book Aligns with Standards-Based Grading Based on the 15 Fixes*

Participant Name	Subject Taught	Grade book setup aligns with standards-based	Supporting evidence of why or why not grade book aligns with standards-based grading based on the researcher's analysis of the grade book artifact.
Amber	Math	YES	Grade book entries are organized by standard such as 8.EE.2 Assessment. It is unknown what 8.EE.2 is an abbreviation for but it is a math standard according to the NC Common Core Standards. No zeros present in grade book. No practice work graded. No behaviors graded.
Andrew	CTE	NO	Grade book entries are organized by assignment names. However, there are no zeros present in the grade book. No behaviors graded.
Beth	Math	NO	Grade book entries are organized by assignment names. Practice work graded. Zeros ARE present in grade book. Formative work is graded. No behaviors graded.
Brian	Foreign Language	NO	Grade book entries are organized by assignment names. Zeros ARE present in grade book. Unclear whether formative work is graded. No behaviors graded.
Cindy	Science	NO	Grade book entries are organized by assignment names. Zeros ARE present in grade book. Formative work is graded. No behaviors graded. No behaviors graded.
Don	CTE	NO	Grade book entries are organized by assignment names. Formative work is graded. However, there are no zeros are present in grade book. No behaviors graded.
Felicia	Math	NO	Grade book entries are organized by assignment names; however, there are no zeros are present in grade book. No behaviors graded. Many grades of 100 present.
Jack	CTE	NO	Formative work entries are in the grade book. Zeros present but teacher indicates that zeros will become 50. Behavior present in grade book but does not have numerical grade. Summative grading only; however, grade book does not include standards.
Kayla	Exceptional Children	N/A	N/A
Peggy	Social Studies	NO	Grade book entries are organized by assignment names. Zeros are present. No behaviors graded. Formative work entries are in the grade book. Large number of graded assignments.

Participants were asked to provide one random lesson plan. The random date was



selected using an online random date generator. The date selected by the generator was September 13, 2017. The researcher summarized the lesson plans and has included the main focus of each participant's plan in Table 15.

Table 15

*Summary of Two Lesson Plans*

Participant Name	Subject Taught	Lesson Plan 1 Participant Choice	Lesson Plan 2 Random Sample 9/13/17
Amber	Math	Includes standard and “I can” statement. Vocabulary. Includes formative “check-in.” Student activities align with standard. Math video included. Partner and individual activity included.	Includes standard and “I can” statement. Vocabulary. Includes formative “check-in.” Student activities align with standard. Teamwork included.
Andrew	CTE	School template. Includes standard, essential question, and “students will know.” Activating strategy, learning activity, and formative assessments present. Student activities align with standard. Lesson reflections.	School template. Includes standard, essential question, and “students will know.” Activating strategy, learning activity, and one formative assessment present. Student activities align with standard. Lesson reflections.
Beth	Math	School template. State standard number present. Essential question. “Students will be able to...” Vocabulary. Formative assessment.	School template. State standard written with number present. Essential question. “Students will be able to...” Vocabulary. Formative assessment.
Brian	Foreign Language	School template. Includes standard and “I can” statement. Content and grammar objective. Vocabulary. Formative assessment. Lesson activities align with standard.	School template. Includes standard and “I can” statement. Content and grammar objective. Vocabulary. Formative assessment. Lesson activities align with standard.
Felicia	Math	School template. Standard present. Essential question and “I can” statement. Formative assessment is vague.	School template. Standard present. Essential question and “I can” statement. Formative assessment is vague.
Cindy	Science	School template. Standard number present. Essential question. Students need to know, understand, and do—differentiate, describe, and plot used for this section. Vocabulary. Formative assessments.	Teacher made template. Bell ringer. Essential question. Objective/Goal and Today’s Objective. No clear state standard present. No clear formative assessment.

(cont.)

Participant Name	Subject Taught	Lesson Plan 1 Participant Choice	Lesson Plan 2 Random Sample 9/13/17
Don	CTE	Written objective but unclear whether it aligns with a state standard. Essential question. I can statement. Two activities around essential question. Vocabulary.	Written objective but unclear whether it aligns with a state standard. Objective written as “students will be able to.” Essential question. I can statement. Two activities around essential question. Vocabulary.
Jack	CTE	School template. State objective present. Students need to know, understand, and do. Vocabulary. Formative assessment is vague.	School template. State objective present. Students need to know, understand, and do. Vocabulary. Formative assessment is vague.
Kayla	Exceptional Children	N/A	N/A
Peggy	Social Studies	School template. Standard and essential question present. Students need to know, understand, and do. Vocabulary. Formative assessments. Lesson reflections.	Unit Lesson template. Objective and essential question. Explore, model, demonstrate. Guided practice. Words and phrases present in objective/essential question are bold font when written in other parts of lesson. No clear formative assessment. Summative assessment present.

Participants were asked to provide two graded student assignments of their choice. The researcher analyzed and summarized the data from graded student assignments and included the data from the analysis in Table 16. Participants were asked to remove student names from the samples. The researcher closely examined each graded assignment in search of any phenomena. The researcher identified and recorded potential phenomena in Table 16. The comparison of the data with these artifacts and records are discussed in the findings in the next chapter.

Table 16

*Summary of Two Student Activities*

Participant Name	Subject Taught	Student Grade Work 1 Participant Choice	Student Grade Work 2 Participant Choice
Amber	Math	Assignment is an assessment. Title includes standard. Points added but no feedback present. Number grade at top of assignment that represents proficiency level 2 and percentage grade 75.	Assignment is an assessment. Title includes standard. Points deducted but no feedback present. Check marks beside correct answers. Number grade at top of assignment that represents proficiency level 4 and percentage grade 92.
Andrew	CTE	Check marks present for correct responses. Circles present for incorrect responses. Minimal written feedback provided. Percent grade at top of assignment.	Check marks present for correct responses. Circles present for incorrect responses. Specific written feedback provided. Percent grade at top of assignment and number correct of number of questions.
Beth	Math	Assignment is a Check for Understanding Handout from Discovery Education. Check marks present. Percentage grade at top of page.	Check for Understanding Handout from Discovery Education. Check marks present. Percentage grade at top of page.
Brian	Foreign Language	Listening activity with rubric. Score at top of assignment is 5. Students translate Spanish to English. No other marks or feedback from teacher present on assignment.	Listening activity with rubric. Score at top of assignment is 4. Students translate Spanish to English. No other marks or feedback from teacher present on assignment.
Cindy	Science	Tectonic plates assignment. Percentage grade at top with deducted points. Some feedback written at top and throughout assignment. Check marks and deductions throughout assignment. Questions on back required students to explain.	Numeric grade at top. Some feedback written at top and throughout. Student drawn graph. Conclusion written in student's own words. No clear assignment title. Handwritten assignment.
Don	CTE	Recall level questions related to content. Check marks present. Percentage grade at top of paper. Minimal feedback provided at top of paper.	Fill in the blank activity related to content. Check marks present. Percentage grade at top of paper. Minimal feedback provided at top of paper.
Felicia	Math	Check marks and "x" throughout assignment. Percentage grade at top of paper. Circles for missing responses. No written feedback.	Check marks and "x," and circles throughout assignments. Percentage grade at top of paper. No written feedback.

(cont.)

Participant Name	Subject Taught	Student Grade Work 1 Participant Choice	Student Grade Work 2 Participant Choice
Jack	CTE	Objective on top left corner of assignment. Missed questions marked with "x." Correct answers circled by teacher. Percentage grade on paper. Assignment aligns with content.	Written response questions. Correct answers written in by teacher. Missed questions marked. Percentage grade on paper. Assignment aligns with content.
Kayla	Exceptional Children	Trans Math Report. Provides explanation to parent. Level 1 Math. Percentage grades on "homework lessons." Chart of Trans Math Progress Assessment including Goal.	Trans Math Report. Provides explanation to parent. Level 1 Math. Percentage grades on "homework lessons." Chart of Trans Math Progress Assessment including Goal.
Peggy	Social Studies	Written response questions. Check marks present. Circles present to add emphasis of words in questions. Written feedback provided. Percentage grade at top of paper. No marks to identify points deducted.	Unit essential questions on first page for students to answer. Packet of assignments. Check marks present. Circles present to add emphasis of words in questions. Written feedback provided. Percentage grade at top of paper. No marks to identify points deducted. KWL strategy.

At the conclusion of the interview, each participant was asked to select a date for the researcher to return to perform a 30-minute observation. The researcher performed the 30-minute observation and recorded field notes during the observation. The researcher scripted the field notes based on what was observed in the classroom environment during the 30-minute observation. The field notes have been summarized in Table 17. The data findings are discussed in the next chapter as the researcher seeks to reveal consistencies or inconsistencies with other data collected.

Table 17

*Summary of Observation Field Notes*

Participant Study Name	Subject Taught	Time and Date	Field Notes Summary
Amber	Math	9/28/17 9:20 am	On board. 7.NS. 2 Check in. Provided students with “Binder Guidelines”-Tabs must be in this order: Homework, In Progress Work, Completed Work, Assessments. Teacher collected check-ins. Crates in classroom contained Math resources for grades 7 and 8 and Student Progress in Work. Lots of oral questions asked by the teacher. Not every student responded to the questions. Some students were called by name to respond. No essential question or objective on the board. Not sure of the learning target for the lesson.
Andrew	CTE	9/28/17 9:55 am	Six students in class. Vocabulary on the wall for every class. Self-paced activity. On the board, teacher has opening activity that is a journaling activity. Posted-EQ-What are the home row keys and which hands and fingers rest on these? Unit EQs are on the bulletin board for each subject taught. One EQ did not seem to be based on standards. 1) What is the Edutyping website address and what is the license ID, my sign-on ID and password. Music played while students worked. Teacher monitored students throughout the observation and spoke to students individually.
Beth	Math	9/26/17 10:07 am	Teacher asked for conversation level zero. She gave them a handout about Multiplication Coordinate Plane. Teacher told student to do all of the quadrants. Lesson 11: Develop Rules for Multiplying Signed Numbers. Some students seemed to struggle with the assignment. No teacher feedback observed for first handout. Using a projector system, the EQ is scrolling on the board -How can you make a table equivalent ratios? Word wall posted. Students use laptops for next assignment. Next assignment... “click the naked math tab and begin the quick online assessment.” Students are grouped by colors like Gold Team. Possibly grouped by ability. Assessments by team.
Brian	Foreign Language	9/28/17 8:44 am	Used PowerSchool Learning site to communicate with students. Announcements, schedules, syllabus, etc. are in PowerSchool Learning. Students used laptops to complete the assignment for the lesson that day. Raz Kids reading assessments in PowerSchool Learning. Teacher provided instructions about the assignment. He referenced listening and reading components and both activities will receive a grade.

(cont.)

Participant Study Name	Subject Taught	Time and Date	Field Notes Summary
Cindy	Science	9/27/17 10:05 am	Teacher begins by discussing lithosphere vocabulary. Students copying vocabulary while teacher gives instructions for the activity. Students work in stations. No EQ on board. Sample lab at one station: Weathering Lesson 1. No multiple choice. Fill in blank. Lesson is a continuation from day before. No time limit before rotating to the next station. This is a 4-day lesson. This is new information. No teacher instruction observed on this day.
Don	CTE	9/29/17 1:00 pm	On board: EQ: How can I show evidence of knowledge with a PowerPoint? Agenda also posted on the board. Students work on PowerPoint. Teacher circulates and works with each student individually and provides feedback about the PowerPoint presentation that they are creating. No rubric. Positive praise provided verbally. Teacher asked students to provide input about what they thought their grade should be. Minecraft Coding when they finish (unrelated to EQ).
Felicia	Math	9/29/17 9:20 am	Math 2 class. Students are finishing a test. Once everyone is finished, they begin working on projects. On the board-I can statements. I can show dilations on a coordinate plan. I can show translations on a coordinate plane. Unit 1 Transformation Test. The test aligned with the project-Transformation Summative Activity. Group activity. Both test and project include quadrants and translations. Teacher modeled for one student. She circulated the room and worked with groups as needed. Students returned to the room with a test in their hand and they are with the exceptional children's teacher. They rejoin the class and began working on the project. The teacher goes to assist each student who has rejoined the class. The exceptional children's teacher began circulating the room and provided assistance to students in the classroom.
Jack	CTE	9/27/17 9:10 am	EQ: Why is it important to know how to measure correctly in the construction trades? Students are working in pairs on textbook questions before going into the lab. Teacher circulates and answers questions as needed. As they complete the textbook assignment, students who were finished began measuring items in the classroom for the measuring lab. Sample items measured: door, table, whiteboard, etc. Teacher continued to assist as needed. Teacher stopped to tell the whole group how to mark 3 feet 7/8 inches and why it's important to reduce the number to inches. Questions teacher asked: How do you find square footage? Do you know how to find area? The teacher said this helps you determine how much material to get.

(cont.)

Participant Study Name	Subject Taught	Time and Date	Field Notes Summary
Kayla	Exceptional Children	9/29/17 12:30 pm	Class observed was a Literacy Block used to teach literacy and math. Teacher conducted fluency checks of the 3 students present. Used <a href="http://interventioncentral.org">interventioncentral.org</a> to conduct fluency checks. Two students worked on VMath Live while teacher performed fluency check of the remaining student. Progress was recorded in the student's folder. The process for fluency checks is adopted by the exceptional children's department within the school district.
Peggy	Social Studies	9/29/17 10:00 am	Lesson included opening activity. Recall level questions. Saudi Arabia: What change is happening? Why? What are critics of the change saying? U.S. Tax Code: What is tax reform? What has the Trump administration said about their plan? What could this new plan do? Next-video related to women given driving privileges in another country. Paused video. Asked recall level questions. When did the ban take place? What else were they just allowed to do?

## Summary

Teacher actual grading practices and teacher perceptions of their own grading practices may or may not align. This chapter revealed the data that the researcher collected for the purpose of answering the three research questions posed in this study. The researcher has synthesized and summarized the data that were collected. The data in this chapter were presented by research question. The data were collected using a self-assessment rubric, a survey, and an individual interview. In addition, the researcher performed an observation and collected a grade book sample, two student-graded work samples, and two lesson plans as artifacts and records in search of consistencies and inconsistencies within the data. The artifacts and records were summarized in this chapter.

In Chapter 5, the researcher analyzes the data and discusses what the data indicate. The researcher seeks to determine the theoretical meaning of the data by making connections to the conceptual framework that is displayed in the first chapter.



Additional research that supports the theoretical connections is also included in Chapter

5. Recommendations related to the theory and further research are revealed in Chapter 5.

## Chapter 5: Conclusions and Recommendations

### Introduction

Discussion about grades has occurred for many years and has evolved into a multifaceted research topic in education. Researchers have discussed aspects of grading pertaining to its conception, its existence, its effectiveness, and even its necessity. The introduction of grades in some cases has caused us to be a society filled with individuals who are motivated by grades instead of by learning. Kohn (2011) said, “*grading for learning is, to paraphrase a 1960s-era slogan, rather like bombing for peace. Rating and raking students (and their efforts to figure things out) are inherently counterproductive*” (p. 31); yet as a society, we continue down this path of grading, and based on the research, it appears in some cases to be for no other reason than force of habit.

The research has shown that grades have been determined for students using a variety of methods. According to research, two of the most widely used grading methods are traditional and standards-based grading. The purpose of this study was to explore teacher grading practices and teacher perceptions of effective grading practices. The researcher sought to learn more about the grading practices participants were actually using whether traditional, standards based, or other. Grades should reflect the actual learning that the student has obtained no matter how they are determined.

Although our grading system may be ingrained in us through past experiences, many educators have combined parts of grading against standards into their current pedagogy and may not realize it. Before we make major changes to our grade book, what small changes can be made to have an impact on student learning? How many educators are following these ideas and don’t even realize it? (Shippy, Washer, & Perrin, 2013, p. 14)

By conducting this case study, the researcher hoped to find out more about what grading practices teachers actually use when assessing their students. The researcher also hoped to discover what grading practices teachers perceive to be effective and if they are using those practices. The findings of this case study are summarized in this chapter.

## **Findings**

**Research Question 1. What are the identifiable differences in teacher perceptions of grading practices?** The instrument used to answer this research question is the Rubric for Evaluating Grading Practices (O'Connor, 2011). The participants self-assessed their grading practices against the criterion within the rubric and rated their practices as beginning, developing, or fluent. The fluent column contained practices that most resembled research-based effective grading practices.

Overall, the results of this rubric represent that the majority of participants responded as developing or higher as it relates to most criteria. Responses to Criterion 7, “involving students,” reflected the highest fluent results with 60% of participants indicating that they are fluent in this area. Although the majority of participants responded that they are developing or fluent in this area, analysis of the sample graded work that was collected and was included in the artifacts and records suggested that written feedback provided to students was minimal and was not descriptive feedback. The researcher was unsure whether students were involved at other stages of the grading process such as when developing the syllabus or whether verbal descriptive feedback was provided to students; however, during the observation, the researcher recorded evidence that indicated that grades were not a surprise and/or students were involved in their own grading. Specifically, Don and Amber’s observations supported this notion. This is reflected in the field notes in Table 17. The data collected from the interview, survey,

and rubric suggested that teachers use effective grading practices even though some participants indicated during the interview that they received little or no professional development related to grading.

The second highest fluent results were in the criterion related to “including factors in the grade,” with 50% of participants responding fluent. The remaining participants selected developing. Factors included cheating, late work, and zeros. As indicated in the literature review, non-standard-based criterion such as these distort the level of achievement reflected in the grade.

More than 60% of participants selected developing and fluent for every criterion within the rubric with a small percentage of respondents choosing beginning for four of the seven criteria. The findings suggested that teachers understand that nonacademic factors should not be included in student final grades. Some participants may not be fluent in this area, but the data suggested they are working towards being fluent. The findings also implied that teachers believed students should be involved in their own learning and teachers should communicate with them about their performance. Some participants were not fluent in this area, but the data suggested that most are working towards being fluent.

The findings suggested that although teachers use and have some understanding of effective grading practices, they may perceive their grading practices do not completely reflect effective grading and/or standards-based grading. The data suggested that areas of weakness are organizing the grade book, considering assessment purpose, summarizing information, determining the final grade, and verifying assessment quality.

The study did not reveal any evidence of professional development offerings related to some of the criteria within the rubric. For example, the criterion “summarizing

information and determining final grade” includes “criterion referenced final grades” in the fluent column. There was no evidence that participants received professional development about that criterion. There were no fluent responses by participants. There was no mention of “criterion referenced final grades” during the interview. Further research would need to be conducted for the researcher to conclude whether a lack of professional development in this area impacted the lack of fluent results. Using the data from the interview, survey, and rubric, the researcher concluded that teachers perceive that they use effective grading practices some or most of time.

After averaging each participant’s rubric responses, it was determined one participant was beginning, six of the participants were considered to be developing, and three were fluent. The chi-square data that were generated using that data implied that for most criteria related to current grading practices and opinions about grading, there was no significant association between the survey responses and the rubric responses; however, there was a significant association between the survey responses and the rubric responses as it relates to the survey section about confidences. Although it was unknown what the association was, the researcher could speculate that the relationship might be related to years of teaching experience or professional development received about the topic. The data showed that there were differences between the participants such as years of experience, subject taught, years teaching at that school, and professional development. Any number of these reasons could have been the reason the results of the survey and rubric were associated.

**Research Question 2: How do teacher grading practices align with standards-based grading?** Part 1 of the Survey on Marking and Grading Practices directly related to teacher current grading practices. Although responses to survey parts

two “opinions about grading” and three “confidences” may suggest what the teacher believes, responses to the first part of the survey that relates to current grading practices best answered Research Question 2. According to O’Connor (2011), “effective grades need to meet four overarching criteria for, or keys to success: they must be accurate, meaningful, and consistent, and must support learning” (p. 3). O’Connor integrated these criteria into the 15 fixes mentioned throughout this study. Before O’Connor delved into the 15 fixes, he set the tone for his book with statements focused on content standards. O’Connor said, “The key to reaching this goal is to evaluate every student’s achievement using similar criteria, consistently applied at all levels” (p. 2). The 15 fixes, the rubric and the survey he created support his belief that standards-based grading will repair broken grading systems.

Based on responses to the survey, the researcher concluded that most of the participants demonstrated some behaviors that aligned with standards-based grading. Research suggests that the 15 fixes associated with the survey are effective practices. The survey responses show that participant practices somewhat aligned with standards-based grading; although at times, the participants used practices that were more traditional. As it relates to grade book setup, 70% of the participants responded that their grade book was set up by homework, quizzes, tests, and labs. This type of grade book setup better aligns with traditional grading practices. Seven of 10 participants stated that they allow students to redo assignments without penalty which more aligns with standards-based grading.

More participants stated that they separate formative information about their students from summative information. Six of 10 participants said they almost always do that. As it relates to providing feedback to students about their strengths and weaknesses,

“frequently” and “almost always” were selected by 60% of the respondents. Although participants responded that they provide feedback about student strengths and weaknesses, the graded work samples collected as artifacts suggested that the feedback was vague. The student work samples also showed that the grades were sometimes limited to students receiving marks indicating the level of proficiency based on a teacher-generated rubric or students received marks for the percentage grade earned. Descriptive feedback was not typically observed in the artifacts that were collected.

Question 1 of Part 1 asks if teachers include nonacademic behaviors such as effort, participation, and tardiness in their grades. Four of 10 teachers said they sometimes include these behaviors in their grades. One participant responded that they almost always include these factors, and one participant said they frequently include these factors. Four teachers said they never include these behaviors; therefore, six of 10 participants said they include nonacademic behaviors in their grades. Research shows that including nonacademic behaviors in grades is not an effective grading practice.

Not including zeros in grading is a part of O’Connor’s (2011) 15 fixes; and 50% of participants responded that they almost always or frequently include zeros for missing work, while 50% responded that they sometimes or never included zeros for missing work. O’Connor also stated that students should be included in the grading process. Fifty percent of participants indicated that students almost always understand how grades will be calculated and what evidence will be used to determine student performance, and 30% responded that students frequently understand how grades are calculated.

The review of the data led the researcher to conclude that participants use a mixture of standards-based grading practices and traditional practices. When reviewing the interview responses, six participants said they had not received professional

development related to standards-based grading. After examining the interview responses, the artifacts, and the records, the researcher concluded that teachers who did receive training related to effective grading practices were more likely to implement grading practices that aligned with standards-based grading.

When asked Question 4 during the interview about whether they implement traditional or standards-based grading, three participants said they implement traditional grading, four said they implement standards-based grading, and three said they implement a mixture. This question also related to Research Question 1. Based on their responses to this question, teachers perceived that they used traditional grading, standards-based grading, and a mixture of both. The responses to the survey appeared to vary and reflected similar responses as the responses to Interview Question 4, “Do you consider your grading practices to be standards-based or traditional? Based on your answer, what makes it standards-based or what makes it traditional? If neither is true, please explain.”

The findings suggest that although seven participants stated they use standards-based grading or a mixture of standards-based grading and traditional grading, only one participant actually recorded grades in his/her PowerSchool grade book that reflected standards-based grading. The data indicate that most participants used effective grading practices, and they were able to demonstrate knowledge of effective grading practices by using traditional grading, standards-based grading, and a mixture of both grading methods.

The data also revealed that participants implemented instructional strategies that were not research-based or proven to be effective. This suggests that teachers sometimes implement ineffective instructional strategies that are not research-based. The data tell us



that there are opportunities for growth as it relates to understanding and consistently implementing effective grading practices and specifically standards-based grading. As previously stated, very few participants have received professional development relative to effective grading practices. The study revealed that similar to previous research about grading, implementation of effective grading practices is somewhat inconsistent.

**Research Question 3: What grading practices do teachers use to address consistency and accuracy?** Implementation of the 15 fixes supports learning and helps teachers improve consistency and accuracy. According to O'Connor (2011),

Inaccurate grades most commonly result from teachers determining them by blending achievement with behaviors (effort, participation adherence to class rules, etc.) (Fix 1), poor-quality assessment (Fix 10), and inappropriate use of the mean (average) in combining data (Fix 11). For grades to be “fixed,” each of these practices (and others, discussed in Fixes 4, 5, 8, 9, and 12) need to be eliminated. (p. 4)

The review of the literature revealed that researchers say nonacademic grades create inaccurate and inconsistent grades. Responses to interview questions indicated that participants typically base their instruction on standards, use rubrics when assessing students, and strive to eliminate zeros. There were no interview responses that led the researcher to believe that participants grade behaviors and nonacademic performances; however, responses to Part 1 of the survey reveal that some participants assign grades based on practices that distort achievement such as effort and participation, and they also give extra credit and reduce marks for late work. Sixty percent of participants indicated that they sometimes, frequently, or always reduce marks for cheating. These practices are addressed in O'Connor's (2011) 15 fixes.

There were various participant responses to interview questions that continued to appear in the data. Five participants said they promote consistency by communicating with other teachers who teach the same subject as they do. Participants stated they follow a pacing guide and use standards to promote consistency. Participants indicated they use rubrics. They also indicated they give students opportunities to complete missing work and retake assessments until they master the standard.

Fix 7 addresses making grades meaningful. Research revealed throughout this study shows that grades should be meaningful. To address the need for grades to be consistent, Fixes 2, 3, and 5 relate to grades needing to support learning; while Fixes 13, 14, and 15 relate to assessments. Participant practices have been revealed in their responses to the interview questions. The researcher was able to determine what grading practices teachers implement to improve consistency and accuracy. Although some of the interview questions relate directly to the 15 fixes, some questions relate to other effective grading practices that have been revealed in the research related to grading.

When participants responded to Interview Question 5 related to determining mastery and proficiency, their answers included using formative assessments and having students write or explain their answers, and many participants referenced students understanding the standards. When responding to Interview Question 6 related to what to do when students do not master the content, many responded they would reteach the content. Responses ranged from re-teaching one on one or in small groups to working to determine what is preventing the student from learning and understanding. Participant responses about how they determine mastery did not reflect any of the practices that distort achievement.

When participants were asked what grading practices they implement that they

wish they could change, several responses revealed they would like to eliminate practices that are ineffective. One participant wanted to provide more feedback to students as they completed major projects. Two participants said they would like to change how they grade homework. Both of those participants had specific concerns related to missing homework that could result in a zero.

As it relates to overall classroom instruction, the data indicate that participants incorporate effective teaching strategies and grading practices that promote consistency and accuracy. The lesson plan artifacts that were collected show that most participants use a lesson plan template that promotes effective teaching. The lesson plans collected included an essential question, standard, formative assessment, and vocabulary. The researcher's analysis of the lesson plans showed that the participants could create an effective lesson plan. The lesson plan template developed by the school included components that encouraged the use of effective teaching strategies. The lesson plan components included essential question, standard, formative assessment, and vocabulary.

Participant responses to the interview, survey, and rubric led the researcher to conclude that the participants reflect on their teaching practices and they can communicate effective ways to grade and assess students; however, data collected led the researcher to conclude that some participant grading practices were not consistent and did not always reflect student abilities as they related to academic performance standards. Participant responses to the rubric and survey that related to grading behaviors and nonacademic performances most influenced this conclusion. The researcher concluded that additional professional development related to effective grading practices could reduce occurrences of ineffective grading practices based on the data that suggest that the participants who received professional development training related to the topic of

grading better implement effective grading practices.

### **Conceptual Base Indications**

The conceptual framework illustration in Figure 1 in Chapter 1 showed that the primary objective of grading practices is that grades should be consistent and meaningful. The data suggest that because some participants include zeros and nonacademic behaviors in their grading, grading practices do not always promote consistency; yet several participants also provide opportunities for students to redo assessments. The majority of participants do not include homework in the final grade, and the majority of the participants allow new evidence to replace old evidence. When responding to the survey question related to the purpose for grades, eight participants agreed or somewhat agreed that grades should communicate student learning. This response along with other data suggest that participants believe that grades should be meaningful.

Using the survey, rubric, interview questions, artifacts, and records, the researcher examined teacher perceptions of their own current grading practices and effective grading practices. The data, as well as the analysis of the data that were collected, were previously explained within this chapter and Chapter 4. The data revealed that some participants implement traditional grading practices, while others implement standards-based grading practices. Some participants also implement a mixture of both traditional and standards-based practices. Survey responses along with artifacts revealed that nine participant grade books were set up to reflect traditional methods such as quizzes, tests, and assignments, with one participant setting up his/her grade book to reflect standards-based methods.

The data revealed that the participants grading practices are subjective to the individual. While there was some phenomenon present in the data, this case study

showed that teachers grading practices vary and reflect both effective practices and ineffective practices. The data suggest that, as stated in the literature, grading reform is necessary. There is inconsistency among teachers. Participants used various grading methods. Some teachers still had questions about best practices and identified grading practices they wanted to change. As previously stated, some nonacademic factors were included in student grades, yet the data suggest that participants were also working towards making grades meaningful; and the majority of participants based their grades on what students learned as it related to the standards.

The data suggest that educators are moving in the right direction, but there is still work to be done. Research shows that when effective teaching strategies such as those indicated in the 15 fixes are implemented with fidelity, grades should be more consistent and meaningful; however, additional research would need to be conducted to determine if grades are actually more consistent and meaningful.

Within the conceptual framework, the final component is identifying the most effective grading practices for meeting student learning outcomes as revealed in this study. This study revealed a multitude of effective grading strategies. The data suggest that several of the strategies participants used are effective. Strategies such as retesting, use of standards-based grading, not providing extra credit, and not grading homework are all strategies that some participants in this study used; however, it was unclear which specific strategies implemented by participants are most effective relative to student outcomes. Additional research would need to be conducted to determine which grading practices are actually most effective for meeting student learning outcomes.

**Limitations**

This study was conducted as a case study. Initially, the researcher hoped to identify 15 participants for the study. The study was conducted at a small school with a small faculty and therefore limited the number of potential participants. As a result, there were only 10 participants in this study. Had there been a larger sample of teachers, the results of this study may have been different; therefore, the low number of participants is a limitation in this study.

The researcher conducted an announced observation during this study. The participants selected the time and date for the observation within a time frame that was provided. It was a limitation that the participant was able to prepare for the observation with full knowledge that the study was related to effective grading. This could have impacted the teacher grading practices during the observation.

**Recommendations for Practice**

Effective grading professional development would be a key first step towards implementing more effective grading practices. This study revealed that only a few teachers actually received training related to grading, yet the data revealed that some effective grading practices and some standards-based grading practices were being implemented. To yield more consistent implementation of effective grading practices, teachers should know and understand what grading practices are considered to be effective. Opportunities to receive professional development about grading should increase teacher knowledge of effective grading practices.

It is also recommended that teachers approach grading in an intentional and deliberate way. This study revealed that teacher grading practices varied tremendously and included traditional, standards-based, effective, ineffective, and a mixture of all of

the above. A close examination of existing grading practices followed by implementation of effective grading practices that are grounded in research-based strategies should yield consistent and meaningful grades.

Some participants in this study said they implement standards-based grading, but only one participant's grade book reflected standards-based grading practices. Grade books reflected assigned work. Although the assigned work may have been based on the standards, using standards-based grading as the process for determining proficiency in the standard and recording that information in the grade book was not evident in most participant grade books. Based on the research, teachers who decide to implement standards-based grading should strongly consider adjusting their grade book setup to reflect standards-based grading practices. This will assist the teacher in communicating information to students and parents about student levels of mastery of a particular standard.

### **Recommendations for Future Research**

This study focused on teacher grading practices and teacher perceptions of effective grading practices. Although the research revealed that grades should be consistent and meaningful, there is still much to be learned about what specific grading practices yield the most consistent and meaningful grades. To determine this, further research of actual teacher grading practices and the student learning outcomes that result from those grading practices might get us closer to understanding which specific grading practices are most effective.

The 15 fixes discussed throughout this study identify multiple fixes for poor and ineffective grading practices. Further research of these fixes followed by a narrower focus on a few identified fixes or effective grading practices could provide concrete

evidence about teacher perceptions of specific effective grading practices. Identifying the most effective grading practices can eliminate the trial and error implementation that is often observed in education year after year as educators seek to determine what will produce the highest level of student learning outcomes.

The conceptual framework of this study included student learning outcomes. The researcher wrote interview questions to answer the research questions within the study. After conducting the interview and gathering additional data, the researcher believed that there may have been some questions that could have been asked that might have provided insight about the most effective practices for meeting student outcomes as stated in the conceptual framework. Question 7 was, “What current grading practices do you implement that you believe are effective? Please describe those practices.” Instead, the researcher could have asked, “Based on student learning outcomes, what current research-based grading practices do you implement that you believe are most effective? Please describe those practices.” This question might have provided results that better reflected the conceptual framework. Future research could be conducted to address this issue.

Results from this study caused the researcher to wonder if some of the criteria within the Rubric for Evaluating Grading Practices represent more complex practices that might not be educational practices that most teachers are exposed to without professional development. If teachers lack understanding of complex criteria, this might impact rubric results. Using research to determine whether teachers know and understand the elements included in the fluent criterion might further reveal how professional development impacts teacher implementation of effective grading practices. Also, it would be beneficial to uncover in future research what professional development, if any, was



received related to the criterion that participants marked fluent when responding to the rubric.

As stated in the limitations, there was a small participant group for this case study. In the future, it might be beneficial to study a larger group of participants. Future researchers may want to have more participants complete the rubric and the survey while still interviewing a smaller participant sample.

### **Summary**

The purpose of this study was to explore teacher grading practices and teacher perceptions of effective grading practices. The researcher reviewed the history of grading and identified a research problem focused on inconsistent and inaccurate grades. Research shows that grades were typically determined using traditional and standards-based methods. To add to the body of research relative to the topic of establishing meaningful, effective practices, the researcher wondered what teachers' grading practices are and what are their perceptions of effective grading practices.

The researcher identified three research questions aligned with the purpose of the study. The researcher was able to answer the research questions by conducting a mixed methods case study at an urban school that serves middle and high school students. The data collected show that teachers use both traditional practices and standards-based grading practices. The finding suggests that teachers use both effective and ineffective grading practices. At times, research suggested that teachers know and understand effective practices but may not use those practices in their classrooms. Instead, teachers may be working towards improving their grading practices. Data also imply that teachers who receive professional development related to effective grading might be more likely to consistently implement effective grading practices.

It was not revealed in the findings whether or not grading is necessary. Research showed that some researchers believe that grading was not needed at all. The findings of this case study contribute to the body of research around the topic of grading; and although much has been answered, there is still much to be learned on the topic of grading.

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## Appendix A

## Rubric for Evaluating Grading Practices

**Rubric for Evaluating Grading Practices**

<b>Criterion</b>	<b>Beginning</b>	<b>Developing</b>	<b>Fluent</b>
<b>1. Organizing the gradebook</b>	The evidence of learning (e.g., a gradebook) is entirely organized by sources of information (e.g., tests, quizzes, homework, labs, etc.).	The evidence of learning (e.g., a gradebook) is organized by sources of information mixed with specific content standards.	The evidence of learning (e.g., a gradebook) is completely organized by student learning outcomes (e.g., content standards, benchmarks, grade level indicators, curriculum expectations, etc.).
<b>2. Including factors in the grade</b>	<p>Overall summary grades are based on a mix of achievement and nonachievement factors (e.g., timeliness of work, attitude, effort, cheating). Non-achievement factors have a major impact on grades.</p> <p>Extra credit points are given for extra work completed; without connection to extra learning.</p> <p>Cheating, late work, and missing work result in a zero (or a radically lower score) in the gradebook. There is no opportunity to make up such work, except in a few cases.</p> <p>Borderline grade cases are handled by considering non-achievement factors.</p>	<p>Overall summary grades are based on a mix of achievement and nonachievement factors, but achievement counts a lot more.</p> <p>Some extra credit points are given for extra work completed; some extra credit work is used to provide extra evidence of student learning.</p> <p>Cheating, late work, and missing work result in a zero (or lower score) in the gradebook. But, there is an opportunity to make up work and replace the zero or raise the lower score.</p> <p>Borderline cases are handled by considering a combination of nonachievement factors and collecting additional evidence of student learning.</p>	<p>Overall summary grades are based on achievement only.</p> <p>Extra credit work is evaluated for quality and is only used to provide extra evidence of learning. Credit is not awarded merely for completion of work.</p> <p>Cheating, late work, and missing work is recorded as "incomplete" or "not enough information" rather than as zero. There is an opportunity to replace an "incomplete" with a score without penalty.</p> <p>Borderline grade cases are handled by collecting additional evidence of student achievement, not by counting nonachievement factors.</p>
<b>3. Considering assessment purpose</b>	Everything each student does is given a score and every score goes into the final grade. There is no distinction between "scores" on practice work (formative assessment or many types of homework) and scores on work to demonstrate level of achievement (summative assessment).	Some distinctions are made between formative (practice such as homework) and summative assessment, but practice work still constitutes a significant part of the grade.	Student work is assessed frequently (formative assessment) and graded occasionally (summative assessment). "Scores" on formative assessments and other practice work (e.g., homework) are used descriptively to inform teachers and students of what has been learned and the next steps in learning. Grades are based only on summative assessments.

### Rubric for Evaluating Grading Practices (*continued*)

Criterion	Beginning	Developing	Fluent
<b>4. Considering most recent information</b>	All assessment data is cumulative and used in calculating a final summative grade. No consideration is given to identifying or using the most current information.	More current evidence is given consideration at times, but does not entirely replace out-of-date evidence.	Most recent evidence completely replaces out-of-date evidence when it is reasonable to do so. For example, how well students write at the end of the grading period is more important than how well they write at the beginning, and later evidence of improved content understanding is more important than early evidence.
<b>5. Summarizing information and determining final grade</b>	<p>The gradebook has a mixture of ABC, percentages, + ✓ -, and/or rubric scores, etc., with no explanation of how they are to be combined into a final summary grade.</p> <p>Rubric scores are converted to percentages when averaged with other scores; or, there is no provision for combining rubric and percentage scores.</p> <p>Final summary grades are based on a curve—a student's place in the rank order of student achievement.</p> <p>Final grades for special needs students are not based on learning targets as specified in the IEP.</p> <p>Final summary grades are based on calculation of mean (average) only.</p>	<p>The gradebook may or may not have a mixture of symbols, but there is some attempt, even if incomplete, to explain how to combine them.</p> <p>Rubric scores are not directly converted to percentages; some type of decision rule is used, the final grade many times does not best depict level of student achievement.</p> <p>Final grades are criterion referenced, not norm referenced. They are based on preset standards such as A = 90–100% and B = 80–89%. But, there is no indication of the necessity to ensure shared meaning of symbols—i.e., there is no definition of each standard.</p> <p>There is an attempt to base final grades for special needs students on learning targets in the IEP, but the attempt is not always successful; or, it is not clear to all parties that modified learning targets are used to assign a grade.</p> <p>The teacher understands various measures of central tendency, but may not always choose the best one to accurately describe student achievement.</p>	<p>The gradebook may or may not have a mix of symbol types, but there is a sound explanation of how to combine them.</p> <p>Rubric scores are converted to a final grade using a decision rule that results in an accurate depiction of the level of student attainment of the learning targets.</p> <p>Final grades are criterion referenced, not norm referenced. They are based on preset standards with clear descriptions of what each symbol means. These descriptions go beyond A = 90–100% and B = 80–89%; they describe what A, B, etc. performance looks like.</p> <p>Final grades for special needs students are criterion referenced, and indicate level of attainment of the learning goals as specified in the IEP. The targets on which grades are based are clear to all parties.</p> <p>The teacher understands various measures of central tendency (average, median, mode) and understands when each is the most appropriate one to use to accurately describe student achievement.</p>

### Rubric for Evaluating Grading Practices (*continued*)

Criterion	Beginning	Developing	Fluent
<b>6. Verifying assessment quality</b>	<p>There is little evidence of consideration of the accuracy/quality of the individual assessments on which grades are based.</p> <p>Quality standards for classroom assessment are not considered and the teacher has trouble articulating standards for quality.</p> <p>Assessments are rarely modified for special needs students when such modifications would provide much more accurate information about student learning.</p>	<p>The teacher tries to base grades on accurate assessment results only, but may not consciously understand all the features of a sound assessment.</p> <p>Some standards of quality are adhered to in judging the accuracy of the assessment results on which grades are based. The teacher can articulate some of these standards; or, uses standards for quality assessment intuitively, but has trouble articulating why an assessment is sound.</p> <p>Assessments are modified for special needs students, but the procedures used may not result in accurate information and/or match provisions in the IEP.</p>	<p>Grades are based only on accurate assessment results. Questionable results are not included.</p> <p>The teacher can articulate standards of quality, and can show evidence of consideration of these standards in classroom assessments:</p> <ul style="list-style-type: none"> <li>■ clear and appropriate learning targets</li> <li>■ clear and appropriate users and uses</li> <li>■ choosing the best assessment method</li> <li>■ writing clear, unambiguous questions</li> <li>■ good sampling</li> <li>■ avoiding potential sources of bias and mismeasurement)</li> </ul> <p>Assessments are modified for special needs students in ways that match instructional modifications described in IEPs. Such modifications result in generating accurate information on student achievement.</p>
<b>7. Involving students</b>	<p>Grades are a surprise to students because (1) students don't understand the basis on which they are determined, (2) students have not been involved in their own assessment (learning targets are not clear to them, and/or they do not self-assess and track progress toward the targets); or (3) teacher feedback is only evaluative (a judgment of level of quality) and includes no descriptive component.</p>	<p>Grades are somewhat of a surprise to students because student-involvement practices and descriptive feedback are too limited to give them insights into the nature of the learning targets being pursued and their own performance.</p>	<p>Grades are not a surprise to students because (a) students understand the basis for the grades received, (2) students have been involved in their own assessment (they understand the learning targets they are to hit, self-assess in relation to the targets, track their own progress toward the targets, and/or talk about their progress), and/or (3) teacher communication to students is frequent, descriptive, and focuses on what they have learned as well as the next steps in learning. Descriptive feedback is related directly to specific and clear learning targets.</p>

Source: From *Classroom Assessment for Student Learning: Doing It Right—Using It Well* (pp. 328–330) by R. J. Stiggins, J. A. Arter, J. Chappuis, and S. Chappuis, 2004, Portland, OR: Assessment Training Institute. Copyright © 2010, 2006, 2004 by Pearson. Reprinted by permission of Pearson.

## Appendix B

## Survey on Marking and Grading Practices

## Survey on Marking and Grading Practices

### Instructions

There are three parts to the survey. The first part asks about your current grading practices. The second part asks your opinions about grading. The third part asks about your confidence in various areas. Taking this survey at the beginning and the end of study on grading can be a useful way to track and digest changes in your thinking and practices.

### Definitions

**Marking** is the process of providing an evaluative judgment on a single piece of work. In the United States this is called grading individual pieces of work.

**Grading** is the process of summarizing marks over a period of time for external reporting.

### Part 1 Current Grading Practices

	Almost Always	Frequently	Sometimes	Never
1. I include one or more of the following in grades: effort, participation, tardiness, attendance, and/or adherence to class rules.				
2. I reduce points/marks on work submitted late.				
3. I give bonus points for extra credit.				
4. I reduce marks/grades for cheating.				
5. I organize information in my record/markings/gradebook by source: homework, quizzes, tests, labs, etc.				
6. I include in grades zeros for missing work.				
7. I communicate feedback on assessments by providing a single letter grade)				
8. I provide detailed comments to students about strengths and weaknesses in their work.				



9. I include performance on homework into final grades.				
10. I keep separate track of information from formative and summative assessments.				
11. I allow students to redo assessments without penalty if they have not done well. (NBPTS study)				
12. I allow new evidence to replace, not simply be added to old evidence.				
13. My students understand how grades will be calculated and what evidence will count.				

## Part 2 Opinions About Grading

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
14. The ONLY purpose for grades/marks should be to communicate student learning as of a point in time.				
15. One should NEVER include group scores in grades for individual students.				
15. There should be a limit to the number of students who receive marks/grades of A.				
17. Assessments and marks/grades should demonstrate how well students are doing relative to one another.				
18. It is most accurate to base grades on the mean (average) score rather than the median (middle) or mode (most frequent) score.				
19. Peer and self-assessment should be limited to formative assessment because only teachers should assign grades/marks.				

## Part 3 Confidences

	Very Confident	Somewhat Confident	A Little Confident
20. I can design or find assessments that provide an accurate picture of student learning on particular learning targets/objectives.			
21. I can prepare assessment plans for units that show when formative and summative assessments will occur and how they interact.			
22. I can assign grades that support learning.			

## Appendix C

## Permission from Pearson



**Legal/Permissions**  
200 Old Tappan Road  
Old Tappan, NJ 07675  
Fax: 201-767-5956  
Phone: 201-236-3263

May 28, 2015

PE Ref # 190541

Danyelle Parker  
Gardner- Webb University  
110 South Main St.  
P.O. Box 997  
Boiling Springs, NC 28017

Dear Danyelle Parker:

You have our permission to include content from our text, ***REPAIR KIT FOR GRADING, A: FIFTEEN FIXES FOR BROKEN GRADES WITH DVD, 2nd Ed. by O'CONNOR, KEN***, in your dissertation "Impact of Standard grading on Teachers' Grading Practices" at Gardner Webb University.

Content to be included is:  
Discussion Guide in back of the book

Permission is granted to print copies for yourself, the instructor and school committee. You also have our permission for Gardener Webb University to electronically store a copy on-line in their database.

Please credit our material as follows:  
***O'CONNOR, KEN, REPAIR KIT FOR GRADING, A: FIFTEEN FIXES FOR BROKEN GRADES WITH DVD, 2nd Edition, © 2011. Reproduced in print and electronically by permission of Pearson Education, Inc., Upper Saddle River, NJ***

Sincerely,

Mary Ann Vass, Permissions Specialist

## Appendix D

Gardner-Webb University IRB  
Informed Consent Form**Title of Study**

Case Study of Teacher Perceptions of the Effectiveness of their Current Grading Practices

**Researcher** Shavondra Danyelle Parker. I am a [REDACTED] County Schools Employee. I am a former secondary principal, but I currently work in the Career and Technical Education department as a Program Manager.

**Purpose**

The purpose of the research study is to explore teacher grading practices and teacher perceptions of effective grading practices

**Procedure****What you will do in the study:**

**Interview:** Participants will be expected to respond to one-on-one interview questions that will be conducted by the researcher. Interviews will be conducted at the school where the participants work. The interview will be recorded using an audio recording device. Participants can stop the interview at any time.

**Rubric and Survey:** Participants will also complete the following: Appendix A-Rubric for Evaluating Grading Practices and Appendix B -Survey on Marking and Grading Practices by Ken O'Connor. Participants can skip any questions that cause discomfort.

**Observation and Artifacts:** Participants will provide two copies of lesson plans, one of their choice and one that will be randomly selected. One announced 30-minute observation will be conducted of each participant. The participant will indicate an observation time that best fits the participant's schedule. The participant will provide a copy of their grade book for one grading quarter and will provide a few student work artifacts.

Names of participants will not be included in any part of the study. Results to the research study will be shared with all participants at the conclusion of the study. Audio recordings will be deleted/destroyed upon transcription.

**Time Required**

It is anticipated that the study will require about 72 hours of your time. This time estimate includes the interview, completion of rubric and survey, observation, and collection of artifacts.

**Voluntary Participation**

Participation in this study is voluntary. You have the right to withdraw from the research study at any time without penalty. You also have the right to refuse to answer any question(s) for any reason without penalty. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identified state.

**Confidentiality**

Each participant will be assigned a “nickname” to identify them throughout this study. The participant will be referenced by the “nickname” when the researcher writes the remaining chapters of the dissertation. The identity of the participant by “nickname” will only be known by the researcher. The researcher will conduct individual interviews to determine what grading practices teachers use to improving consistency and accuracy. Each participant will complete the rubric and survey after the interview has been conducted. The data will be organized electronically once it has been collected to allow the researcher to view the data in charts and graphs during the analysis. The teachers’ grade books, lesson plans, and student work are artifacts and records that will provide additional insight as to whether teachers’ current grading practices align with standards-based grading. The researcher will communicate using email and site visits to collect artifacts. The researcher will perform a 30-minute observation of each participant teaching in the classroom. The researcher will record what is observed as field notes. During data collection throughout this study, data as well as all documents containing participant information will be stored in a locked file cabinet in the researcher’s home. The document that identifies which teacher is associated with each letter will also be stored in the locked file cabinet. Data and the teacher alphabetic list identifying them for the study will be shred at the conclusion of the study at the appropriate time. Electronic data will be deleted.

**Benefits**

There are no direct benefits associated with participation in this study. Indirectly, the study may help participants understand teachers’ grading practices and teachers’ perceptions of effective grading practices. Participants will may exhibit teacher leadership and reflective practices by participating in the study. The researcher hopes to learn more about the implementation of traditional and standards-based grading. The

Institutional Review Board at Gardner-Webb University has determined that participation in this study poses minimal risk to participants.

### **Payment**

You will receive no payment for participating in the study. At the end of the study, participants will receive a copy of the text, *A Repair Kit for Grading 15 Fixes for Broken Grades* written by Ken O'Connor.

### **Right to Withdraw From the Study**

You have the right to withdraw from the study at any time without penalty. If you choose to withdraw from the study, your audio recording will be deleted/destroyed.

### **How to Withdraw From the Study**

- If you want to withdraw from the study, tell the researcher “I wish to withdraw from the study”. If during an interview, you wish to stop the interview, tell the researcher, “I wish to stop the interview and leave the room.” There is no penalty for withdrawing.
- If you would like to withdraw after your materials have been submitted, please contact the researcher Danyelle Parker at [REDACTED].

### **If you have questions about the study, contact the following individuals.**

Researcher's Name: Danyelle Parker  
 Educational Leadership Department  
 Gardner-Webb University  
 Boiling Springs, NC 28017  
 Researcher Telephone Number: [REDACTED]  
 Researcher Email Address: danypark04@gmail.com

Faculty Advisor Name: Phillip Rapp  
 Educational Leadership Department  
 Gardner-Webb University  
 Boiling Springs, NC 28017  
 Faculty Advisor Telephone Number: [REDACTED]  
 Faculty Advisor Email Address: prrapp@live.com

**If the research design of the study necessitates that its full scope is not explained prior to participation, it will be explained to you after completion of the study. If you have concerns about your rights or how you are being treated, or if you have questions, want more information, or have suggestions, please contact the IRB Institutional Administrator listed below.**

Dr. Jeffrey S. Rogers  
 IRB Institutional Administrator  
 Gardner-Webb University

Boiling Springs, NC 28017  
 704-406-4724  
[jrogers3@gardner-webb.edu](mailto:jrogers3@gardner-webb.edu)

**Voluntary Consent by Participant**

I have read the information in this consent form and fully understand the contents of this document. I have had a chance to ask any questions concerning this study and they have been answered for me.

\_\_\_\_\_ I agree to participate in the confidential rubric and survey.

\_\_\_\_\_ I do not agree to participate in the confidential rubric and survey.

\_\_\_\_\_ I agree to participate in the interview session(s). I understand that this interview will be recorded using audio recording for purposes of accuracy. The audio recording will be transcribed and destroyed.

\_\_\_\_\_ I do not agree to participate in the interview session(s).

\_\_\_\_\_ I agree to participate in a 30-minute classroom observation.

\_\_\_\_\_ I do not agree to participate in the 30-minute classroom observation.

\_\_\_\_\_ I agree to collect the artifacts as described in this agreement.

\_\_\_\_\_ I do not agree to collect the artifacts as described in this agreement.

\_\_\_\_\_

Date:

\_\_\_\_\_  
 Participant Printed Name

\_\_\_\_\_

Date:

\_\_\_\_\_  
 Participant Signature

You will receive a copy of this form for your records.

## Appendix E

## Welcome Letter to Participants

April 17, 2017

Greetings Study Participant,

Thank you for agreeing to participate in this study! The purpose of this study is to explore teachers' grading practices and teachers' perceptions of effective grading practices. Your participation in this study will assist me in adding to the body of research around the topic of grading.

I'm excited to learn more about your grading practices using interviews, rubric/survey collection, observations, and artifact collection. Grading is a topic that I am passionate about and I'm grateful for your participation as I strive to learn more about the topic.

Also, attached to this email you will find an "Informed Consent Form" that will detail information that you need to know before the study begins. You will have an opportunity to consent or decline to participate in this study. Please review the form in detail and contact me if you need clarification about any part of this study.

Again, welcome aboard and I look forward to working with you!

With regards,

S. Danyelle Parker  
Researcher

## Appendix F

## Interview Questions

1. How many years have you been a teacher?
2. What subject and grade level do you currently teach?
3. What professional development have you received related to effective grading practices?
4. Do you consider your grading practices to be standards-based or traditional? Based on your answer, what makes it standards-based or what makes it traditional? If neither is true, please explain.
5. How do you determine student proficiency/mastery in your subject?
6. What do you do when students don't learn in your class or are unable to demonstrate mastery in a subject?
7. What current grading practices do you implement that you believe are effective? Please describe those practices?
8. What current grading practices do you implement that you wish you could change?
9. How do you promote consistent grading across teachers?  
(Explanation/clarification of question to be read to participant: If a student is enrolled in your class and transfers to another class or school and is enrolled in another teacher's classroom learning the same subject, how do you promote that your grading is consistent other teachers who teach the same subject?)
10. How do you promote accurate grading? (Explanation/clarification of question to be read to participant: Accurate grading means that the grade the student receives in your class reflects his or her content knowledge related to the subject.)
11. Is there anything that I have not asked that you wish to share with me related to your grading practices? If so, please share now.



## Appendix G

## The 15 Fixes

**Figure 1.1** The 15 Fixes

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**Fixes for Practices That Distort Achievement**

1. Don't include student behaviors (effort, participation, adherence to class rules, etc.) in grades; include only achievement.
2. Don't reduce marks on "work" submitted late; provide support for the learner.
3. Don't give points for extra credit or use bonus points; seek only evidence that more work has resulted in a higher level of achievement.
4. Don't punish academic dishonesty with reduced grades; apply other consequences and reassess to determine actual level of achievement.
5. Don't consider attendance in grade determination; report absences separately.
6. Don't include group scores in grades; use only individual achievement evidence.

**Fixes for Low-Quality or Poorly Organized Evidence**

7. Don't organize information in grading records by assessment methods or simply summarize into a single grade; organize and report evidence by standards/learning goals.
8. Don't assign grades using inappropriate or unclear performance standards; provide clear descriptions of achievement expectations.
9. Don't assign grades based on student's achievement compared to other students; compare each student's performance to preset standards.
10. Don't rely on evidence gathered using assessments that fail to meet standards of quality; rely only on quality assessments.

**Fixes for Inappropriate Grade Calculation**

11. Don't rely only on the mean; consider other measures of central tendency and use professional judgment.
12. Don't include zeros in grade determination when evidence is missing or as punishment; use alternatives, such as reassessing to determine real achievement, or use "I" for Incomplete or Insufficient Evidence.

**Fixes to Support Learning**

13. Don't use information from formative assessments and practice to determine grades; use only summative evidence.
14. Don't summarize evidence accumulated over time when learning is developmental and will grow with time and repeated opportunities; in those instances, emphasize more recent achievement.
15. Don't leave students out of the grading process. Involve students; they can—and should—play key roles in assessment and grading that promote achievement.