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Educational Stakeholders' Perceptions during Grading
Reform in One Middle School

by

Christy M. Patrick

October 2015

A Dissertation submitted to the Education Faculty of Lindenwood University in

partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

Educational Stakeholders' Perceptions during Grading

Reform in One Middle School

by

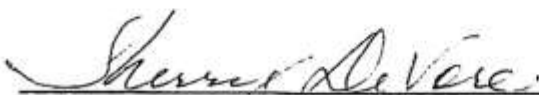
Christy M. Patrick

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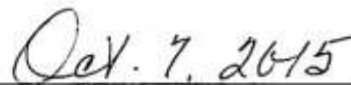
of the requirements for the degree of

Doctor of Education

Lindenwood University, School of Education



Dr. Sherry DeVore, Dissertation Chair



Date



Dr. Vicki Schmitt, Committee Member



Date



Dr. Doug Hayter, Committee Member



Date

Declaration of Originality

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

Full Legal Name: Christy M. Patrick

Signature: Christy Patrick Date: 10/7/15

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Abstract

The purpose of this study was to analyze the factors influencing middle school grading reform. The study involved all stakeholders in one middle school community.

Participants were surveyed to determine which standards-based grading practices were most welcomed among middle school students, parents, teachers, and administrators.

Additionally, students' perceived motivation levels when evaluated using standards-based grading practices were quantified and the necessary support needs of middle school teachers were identified as they attempted school-wide grading reform. Many are calling for school leaders to evaluate unreliable traditional grading methods and reform grading to a standards-based approach (Guskey, Swan, & Jung, 2011; Wormeli, 2013). For this reason, the survey items used in the study were based on the positive and negative outcomes of standards-based grading found in current research. The sample groups for the study included 137 middle school students, 148 parents, 25 teachers, and three administrators. Descriptive statistics were used to analyze the results of Likert-style survey items and open-ended questions. Findings indicated the most accepted grading changes among all stakeholders included allowing students multiple attempts to show the learning of a concept and providing for awareness and understanding of learning objectives. The teacher survey results revealed necessary support needs when attempting grading reform include the following: making grading decisions together as a faculty, communicating grading changes with parents, and allowing for time to implement grading changes correctly.

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Chapter One: Introduction

Student grade reports are an integral component in educating and guiding learners (Campbell, 2012). As stated by Jung and Guskey (2011), “Despite the many changes in education over the past century, grading and reporting practices have essentially remained the same” (p. 32). While student grades are assumed to reflect what students have learned, many inconsistencies are occurring leading to inequities for today’s learners (Campbell, 2012). School administrators and teachers should analyze and implement more effective grading practices to best reflect student achievement and to aid learners in obtaining the highest levels of growth possible (Guskey, Swan, & Jung, 2011; Wormeli, 2013).

This chapter includes the background and purpose of a study concentrating on factors influencing grading reform efforts at the middle school level. The conceptual framework is established along with the research questions that guided the study. Finally, terms are identified and defined and limitations of the study are addressed.

Background of the Study

Following the release of *A Nation at Risk* in 1983 (National Commission on Excellence in Education), President Ronald Reagan’s administration and all Americans were faced with the distressing news that the learning rate of America’s youth was falling rapidly behind the youth of other countries. In further effort to improve education for America, President George H. Bush called a National Education Summit and released national goals for education in 1990 (Public Broadcasting Service [PBS], 2002). President Bill Clinton continued the push for quality education with the Goals 2000: Educate America Act (PBS, 2002). Finally, the George W. Bush administration

mobilized the No Child Left Behind initiative, guaranteeing every student would master the content needed to reach proficiency on state-mandated tests by the year 2014 (No Child Left Behind Act, 2002).

Through these initiatives and mandates, the United States government declared education a top priority (Graham, 2013). Educational and political leaders set forth to correct educational weaknesses (Graham, 2013). This work started with the goal of improving student achievement on high-stakes state-mandated tests and led to setting high standards with specific plans to help each student achieve mastery (Graham, 2013). Graham (2013) declared this renewed focus on student learning eventually developed into the standards-based movement in America. As the movement advanced, leaders realized professional development concerning standards-based teaching, learning, and grading was needed and research on best practices went into developing and aligning student learning and assessment (Cox, 2011).

In 2001, Marzano wrote *Classroom Instruction that Works*, which was a research guide many educational leaders investigated as the government determined no child would be left behind in learning (Wormeli, 2013). In an effort to help each student perform at grade level, educators began carefully examining what they taught, how they taught it, and the feedback given to students (Wormeli, 2013). Through Marzano's (2001) work and the research of others, many schools started giving formative tests and encouraging students to test and retest until concepts were mastered (Brookhart, 2011; Frey & Fisher, 2011; Wormeli, 2013). This practice, called assessment for learning or formative assessment, was a big change in the education world, especially in secondary schools (Cox, 2011).

In the very same book where Marzano (2001) called for assessment for learning, he also provided research validating the need for standards-based grading practices. He argued standards-based grading provides more direction for student learning, and standards-based grade reports give more meaning to students and parents (Marzano, 2001; Marzano & Heflebower, 2011). Additionally, Wormeli (2013) has been studying and calling for standards-based grading practices since 2006 when he published, *Fair Isn't Always Equal: Assessing and Grading in the Differentiated Classroom*. Wormeli (2013) declared the only “ethical thing to do” is eliminate traditional grades and begin “grading students in whatever manner will maximize their learning at every turn” (The Subjectivity of Grades section, para. 4).

Guskey and Jung (2012) also advocated for grade reform for the following reasons:

School leaders have become increasingly aware of the tremendous variation that exists in their grading practices, even among teachers of the same courses in the same department in the same school. Consequently, students’ grades often have little relation to their performance on state assessments—an issue that had education leaders and parents alike concerned. Such inconsistencies lead many to perceive grading as a distinctly idiosyncratic process that is highly subjective and often unfair to students. (p. 23)

Furthermore, Guskey and Jung (2012) explained the burden on educators and administrators as they attempt to implement standards-based grading. Educators realize standards-based teaching and learning should lead to grading practices that are “meaningful and fair;” unfortunately, the absence of experience and information often

leads to “a lack of direction” and seldom produces “significant improvement in the accuracy or relevance of the grades students receive” (Guskey & Jung, 2012, p. 23).

Conceptual Framework

The conceptual framework for the study was based on the premise all students can learn and acquire critical thinking skills (Bloom, 1968; Guskey, 2001). Although several researchers have influenced the concepts related to the standards-based movement, Benjamin Bloom was one of the first to use the term *formative assessment* in his writings in 1968 (Guskey, 2001). Bloom’s idea of formative assessment was influenced by the writings of Scriven, who coined the terms *formative* and *summative evaluation* in 1967 (Dunn & Mulvenon, 2009).

Bloom was an educational psychologist who contributed the theory of mastery learning model to schools in the United States in the late 1960s and 1970s (Guskey, 2001). He encouraged all schools to classify educational objectives and ensure students master content (Bloom, 1968). This school of thought assumes all students can learn if they are given appropriate and repeated opportunities (Bloom, 1968).

Bloom was motivated by the work of John B. Carroll in the article, “A Model for School Learning” (Bloom, 1968). Carroll’s research on aptitude proclaimed educators were misunderstanding the meaning of student ability (as cited in Guskey, 2001). Carroll found aptitude determines learning rate and not the difference between a “good learner” and a “poor learner” (as cited in Guskey, 2001, p. 6). Guskey (2001) reported Bloom’s process in perfecting the concept of mastery learning:

Impressed by the optimism of Carroll’s work, Bloom extended Carroll’s theoretical premises, developing his own theory and model of school learning. He

recognized that while students vary widely in their learning rates, virtually all learn well when provided with the necessary time and appropriate learning conditions. If teachers could provide these more appropriate conditions, Bloom believed that nearly all students could reach a high level of achievement and, hence, differences in their levels of achievement would vanish. (p. 8)

Bloom's mastery learning model was adopted in many schools, and decades of research established this method as an effective way to increase student achievement (Guskey, 2001).

In addition to the works of Carroll, Bloom was also interested in Scriven's ideas of evaluation (Dunn & Mulvenon, 2009). Scriven described formative evaluation as gathering information to determine the effectiveness of school curriculum and guiding school leaders in making choices in improving curriculum and learning (Dunn & Mulvenon, 2009). Bloom used the term in 1968, calling it formative assessment, and called for educators to use formative assessment as a tool to assess and guide the learning process for students (Dunn & Mulvenon, 2009).

Based on Guskey's (2001) research, Bloom's work may have inspired standards-based grading, although his ideas first surfaced in schools throughout the world with the thought of allowing each student his or her needed rate of time to master a concept. Following Bloom's writings on formative assessment, the concept has become widely used in schools (Guskey, 2001). Countless books and articles have been written on how to effectively use formative assessments, and research has shown this method to aid student learning (Guskey, 2001).

Guskey (2001) agreed with Bloom all students can learn when receiving appropriate types of instruction and unending opportunities. Guskey (2001) proclaimed grade reports at the end of a semester or unit do “little more than show for whom the initial instruction was or was not appropriate” (p. 10). Mastery learning has encouraged educators to define a set of standards to be mastered and to use formative assessment to drive learning until complete mastery is accomplished for each student (Guskey, 2001).

Standards-based reform, based on mastery learning, only became known and started gaining influence in 1983 when President Reagan and the federal government declared educational goals in *A Nation at Risk* (Graham, 2013). This report cited many concerns for America’s students including the risk of becoming intellectually inferior to students in other world power countries (National Commission on Excellence in Education, 1983). By the year 2000, the standards-based reform movement was in use by 15 states including Missouri (Graham, 2013).

Massell and Perrault (2014) defined the standards-based movement as an educational method of instruction, assessment, grading, and academic reporting. In this method of instruction, students must show mastery and adeptness in dealing with crucial learning standards as they advance through their educational careers (Massell & Perrault, 2014). Frey and Fisher (2011) found the process of teaching students at their current levels, providing feedback after the practice of each standard, and using feedback to move students forward made sense to many educators. Thus, standards-based reform led many public schools to begin using the research-based practice formative assessment (Guskey & Jung, 2012).

The concepts of mastery learning and formative assessment have repeatedly shown to aid students in gaining higher levels of achievement (Guskey, 2001). This success has led educators to consider new grading methods that also aid learning (Rosales, 2013). Massell and Perrault (2014) asserted placing a strong focus on making sure students learn and achieve expected learning goals should guide how educators report achievement. The concept of allowing students multiple attempts to master standards led researchers Shippy, Washer, and Perrin (2013) to question, “Because standards are used to guide curriculum, why not assess just on mastery of standards?” (p. 15). In conclusion, teaching with the end in mind leads to grading simply based on the mastery of standards (Shippy et al., 2013).

Statement of the Problem

Standards-based grading is a recent phenomenon in education; some schools have adopted this practice, but many have not (Beatty, 2013). Elementary schools seem to encourage this grading change, while secondary schools seem more resistant (Rundquist, 2011; Townsley, 2013). The current nationwide goal to help every student achieve proficiency on state assessments has encouraged administrators and educators to truly evaluate what is taught, how it is taught, and how students are assessed (Cox, 2011). Standards-based teaching and formative assessments have been positive changes for students, as educators have started to focus more on students mastering concepts instead of earning grades (Savickiene, 2011). As schools change the focus to learning, it is now time to reform the way student progress is reported (Rosales, 2013).

In addition to a renewed focus on learning over grading, there are also many frustrations with traditional grades documented in research (Beatty, 2013). For example,

parents and students may be satisfied with a letter grade of a *B*, but have no idea if the student actually learned all of the material (Spencer, 2012). Also, grades are often dependent on the personality traits and grading style of one's teacher (Shippy et al., 2013). Traditional grading is generally an average of a student's overall points based on practice and assessment, and the data can be completely skewed if a student receives a zero score for failing to complete an assignment (Urich, 2012).

Ultimately, grade reports should reflect what students have learned and not how well students can accommodate teachers (Jung & Guskey, 2011). Although researchers have reported standards-based grading to be best for students for over a decade, many educators and school leaders have decided to continue with traditional grading practices (Shippy et al., 2013). Teacher, student, and parent comfort with grading practices is important if the stakeholders are going to use grading practices to extend learning and set goals (Mabie, 2014); accordingly, this current study involved analysis of the feelings of these stakeholders and why some educators, students, and parents may be hesitant to implement such grading reform. Furthermore, an investigation was conducted to determine if grading practices increase perceived motivation levels for students.

Purpose of the Study

The purpose of this study was to elicit the perspectives of students, parents, teachers, and administrators during the implementation of grading reform in one middle school. The results of recent studies involving standards-based grading were analyzed. Researchers of standards-based grading have reported students are more motivated to master concepts than to earn letter grades (Beatty, 2013). The aim of this research was to determine the truth of this declaration through survey items designed to measure

students' perceived motivation levels. Many authors have revealed the strengths and weaknesses of standards-based grading (Guskey et al., 2011; Marzano & Heflebower, 2011; Reeves, 2011); however, only a small number of studies have included a large-scale student response to standards-based grading and learning compared to a more traditional grading model (Townesley, 2013). By focusing on the feedback of students during the implementation of standards-based learning and grading, this information will aid educators in guiding future grading reform at the middle school level.

The standards-based movement is improving teaching and learning in schools; however, grading reform lags behind the rest of the movement in importance and implementation (Cox, 2011; Guskey & Jung, 2012). Cox (2011) reported additional studies citing a lethargic trajectory for grading reform post-elementary school; thus, this current project was focused on the thoughts of middle school teachers as they discuss and adopt standards-based grading practices at the middle school level. Beatty (2013) revealed transitioning student and parent thinking concerning learning and grading is just as important as changing how grades are reported. In view of this research, a portion of the work focused on parent and student perspectives of standards-based grading.

Research questions. The following research questions guided the study:

1. What are middle school students' perceptions of their motivation to learn when standards-based grading practices are implemented?
2. What are the current perceptions of students, parents, teachers, and administrators concerning standards-based grading at the middle school level?
3. What factors do middle school teachers report as necessary supports when attempting to reform grading practices school wide?

Significance

Few studies exist giving insight on student views concerning standards-based grading at the secondary level (Cox, 2011; Townsley, 2013). This research provides awareness to educators attempting grading reform, extending beyond the elementary level. In addition, the primary investigator aimed to determine if standards-based grading actually improves student motivation in middle school.

It is widely reported standards-based grading is an effective way of showing what students know (Brookhart, 2011; Wormeli, 2013); however, data need to be collected to determine if students feel more motivated and if parents and students appreciate this reporting method. Because secondary schools have few examples of successful implementation of standards-based grading (Cox, 2011; Townsley, 2013), this study was undertaken to gain insight from middle school students, parents, teachers, and administrators as grading practices changed from traditional to a standards-based approach.

Townsley (2013) reported secondary schools are hesitant to adopt standards-based grading; therefore, this project involved investigation of teacher views on current grading practices and grading reform. Teacher buy-in to grading reform is a crucial step in making successful grading and learning changes for students (Tierney, Simon, & Charland, 2011). Thus, data were collected concerning teachers' views and needs as grading reform began, providing discernment for school administrators and teacher leaders guiding grading discussions and adaptations in schools.

Definitions of Key Terms

For the purposes of this study, the following terms are defined:

Formative assessment. Formative assessment is a process using regular diagnostic testing to assist student learning (Brookhart, 2013). This frequent testing is a research-based method used by teachers to evaluate student learning levels and guide teaching strategies (Brookhart, 2013).

Google forms. Google forms is a free online site for the building of forms allowing the creating, distribution, and storing of surveys (Google, 2013). For the purposes of this study, Google forms was used to record survey results that were only accessible by the primary investigator.

Grading reform. Within this study, grading reform was defined as the pursuit of improving the reporting of student learning based on sound research (Jung & Guskey, 2011).

Learning objectives. For the purposes of this study, learning objectives were defined as statements explaining what students should know and perform during or following a learning experience (Jung & Guskey, 2011).

Middle school. A middle school refers to a school building usually including grades five to eight or six to eight (Merriam-Webster, 2014). For the purposes of this study, middle school included grades seven and eight.

Professional learning community (PLC). A professional learning community (PLC) is defined as an ongoing process where educators continually focus on the learning of each student in a school district (Humada-Ludeke, 2013). District goals and learning

reforms often begin and continually grow through PLC teams in schools (Humada-Ludeke, 2013).

Standards-based grading. Standards-based grading communicates how students are performing on a set of clearly defined learning objectives (Jung & Guskey, 2011). This grading method relies on student performance of specific skills, rather than averaged assignment scores, to compile a report of student learning (Jung & Guskey, 2011).

Traditional grading. Within this study, traditional grading was defined as an A to F grading scale where student scores on various assignments and tests are averaged to determine the letter grade (Townsend, 2013).

Limitations and Assumptions

The following limitations were identified in this study:

Population. This study was limited to one public middle school in southwest Missouri. The middle school was selected for the case study because administrators were in the process of expanding standards-based grading practices from the elementary level into the middle school of seventh- and eighth-grade students.

Treatment. Most students in the participating middle school had received standards-based grading in elementary school and traditional grading during middle school; however, the school did have over 50 transfer students during the year of the study. These transfer students may or may not have been enrolled in standards-based English classes in the participating middle school. This was a limitation in that these 50 students may or may not have been exposed to both types of grading prior to the survey.

Sample demographics. Another limitation was the school's population. The student body of 723 students was predominately White (83%) with a Hispanic subgroup

of 9% (Missouri Department of Elementary and Secondary Education [MODESE], 2014). Furthermore, the free and reduced price meal qualifying rate in the selected school was over 50% (MODESE, 2014). These factors may limit the study from generalizing to other middle schools with more varied populations.

Instrument. The study included a survey written by the primary investigator. The survey questions were based on current research and field tested; however, an original survey constitutes a limitation. In addition, a proctor was used to present the survey, so the primary investigator was not available to answer questions concerning understanding of survey questions.

Primary investigator. Finally, because the primary investigator was a teacher in the case study school, some coercion could possibly have skewed the results. To avoid coercion, a third party was used to collect data when appropriate.

Summary

Current research indicates a call for grading reform from elementary school through the university level (Caruth & Caruth, 2013). In order to improve student learning, school administrators and all educators should evaluate and improve grading practices (Brookhart, 2011). Instead of making hasty changes to a certain grading strategy or program, school leaders must look at the long-term effects of these changes and whether they are truly best for students (Marzano & Heflebower, 2011). Grading reform finds the most success in schools where students, parents, and teachers give input and the grading process is evaluated and updated regularly (Townesley, 2013).

The goal of this study was to investigate one middle school in its attempt to resolve issues with traditional grading practices. The administrators of the school started

the conversations about grading during PLC meetings and provided current research for teachers to explore on best grading practices. Survey questions were used to collect perceptions of students, parents, teachers, and administrators as grading reform began at the school site. The survey data provided insight for answering the stated research questions.

The following chapter outlines the current research covering the foundations, fundamentals, and implementation strategies of standards-based learning. Concerns with traditional grading are overviewed, and several studies concerning the results of standards-based grading practices are investigated. The research provides an understanding of the need for current and appropriate grading reform.

Chapter Two: Review of Literature

Student feedback is an important link in student learning. For over a century, this feedback has been in the form of letter grades (Townsend, 2013). These traditional grade reports are commonly calculated by averaging all the scores of one student and assigning a letter based on the percentage (Beatty, 2013). Current researchers are challenging traditional letter grades, as letter grades do very little to guide and assist the learning process (Beatty, 2013; Guskey & Jung, 2012). At this time, “the field of education is moving rapidly toward a standards-based approach to grading” (Guskey & Jung, 2012, p. 23).

The information presented in the review of the literature is based on the work of other researchers, experienced educators, and experts in the field of education. The research was analyzed and synthesized to provide an in-depth overview of current grading reform, specifically focusing on standards-based grading practices. This chapter includes research on the need for grading reform, the historical perspective behind the standards-based teaching movement, positive aspects of standards-based grading, criticisms of standards-based grading, and favorable implementation techniques used in schools during grading reform.

The information included in the literature review is current, relevant, and establishes a need for the study. Key components of the research were used to develop three surveys discussed in Chapter Three. Survey questions were based on the positive and negative aspects of standards-based grading outlined in research (Beatty, 2013; Brookhart, 2011; Frey & Fisher, 2011; Jung & Guskey, 2011; Marzano & Heflebower,

2011; Massell & Perrault, 2014; Rundquist, 2011; Shippy et al., 2013; Spencer, 2012; Urich, 2012; Wormeli, 2012, 2013).

The Need for Grading Reform

Traditional grades are familiar and anticipated by parents, students, and educators. It is assumed a student who earns an *A* letter grade met all the expectations of the class, while a student who earns an *F* letter grade failed to meet expectations (Wormeli, 2013). Wormeli (2013) argued with this assumption as did Knaack, Kreuz, and Zawlocki (2012), claiming traditional grades cannot be trusted because they include environmental factors and student comparisons making them inconsistent and ineffective in helping students grow. The main problem with these averaged-points grades is historically the grades have not shown what students actually know and what skills they can use (Guskey et al., 2011).

Although averaging grades is a century-old tradition (Jung & Guskey, 2011), it is a questionable practice that distorts student achievement results (Erickson, 2011). Erickson (2011) contended, “Factors unrelated to student achievement of standards – such as behavioral infractions, unexcused absences, cheating, late or missing work” can cause grades to be skewed lower than what the student has actually mastered (p. 67). Campbell (2012) revealed 93% of teachers incorporate credit work into final grade averages. This means students receive a 100% score on these assignments regardless of mastery of the content (Campbell, 2012). In addition, over 25% of educators admitted to including behavior, attendance, and attitude in end-of-course grade computations (Campbell, 2012).

Student grades should be consistent across content, schools, and teachers (Rauschenberg, 2014); however, Campbell (2012) reported, “Teachers vary considerably in their grading practice and in their consideration of non-achievement factors when determining grades” (p. 30). Guskey et al. (2011) found, “Even in schools where established policies offer guidelines for grading, significant variation remains in individual teachers’ grading practices” (p. 53). Furthermore, teachers’ grades among race, gender, and social class are not consistent (Rauschenburg, 2014). Rauschenburg (2014) found low-income students receive lower grades than they actually earn, while female, limited-English proficient students receive significantly higher grades than they earn.

Urich (2012) provided another example of grading inequity among three teachers teaching the same math class. Teacher One makes homework scores worth 50% of the total score, while Teacher Two only takes grades on tests, and Teacher Three makes attendance worth 25% of the final grade (Urich, 2012). Additionally, Teacher One adds a 30% deduction to all late homework, and teacher three assigns a zero grade to late assignments (Urich, 2012). The possibilities for grade variations are endless (Urich, 2012). Marzano and Heflebower (2011) summarized traditional grades are familiar but take into account numerous different standards, skills, and non-learning factors, pushing them all together for one overall score. Students, teachers, and parents have no idea which skills the students have mastered and which ones need more practice (Marzano & Heflebower, 2011).

With so many non-learning factors included in grade reports, grade inflation has become a problem in education (Caruth & Caruth, 2013). Erickson (2011) found, “It’s

common place for teachers to award extra points for bringing in tissue boxes, completing extra credit assignments, returning permission slips, contributing canned food to the food drive, and so on” (p. 66). Grading systems allowing these practices are not an accurate reflection of what students have learned (Erickson, 2011). Caruth and Caruth (2013) reported the following results:

The average grade-point average at private colleges rose from 3.09 in 1991 to 3.30 in 2006 or an approximate increase of 7%. At public colleges and universities, the average grade-point average rose from 2.85 in 1991 to 3.01 in 2006 or an approximate increase of 6%. (p. 103)

Caruth and Caruth (2013) contended grades all over the country are rising without evidence of knowledge increasing for students. Erickson (2011) advised educators to analyze grading and reporting problems so better methods can be realized and grade inflation can be minimized.

Another major drawback in traditional learning and grading systems is time limits (Erickson, 2011). Students are introduced to a learning topic for a predisposed amount of time, and at the end of this time period the students are moved on to the next topic of learning regardless of the level of mastery (Beatty, 2013). Erickson (2011) claimed, “The philosophy teach, test, and move on should be replaced with teach, test, and now what?” (p. 66). Ultimately, educators must decide should students earn lower grades simply for taking more time to master concepts (Townesley, 2013)?

Determining if grades motivate student learning is a long-term controversy in education (Pulfrey, Darnon, & Butera, 2013). Guskey (2011) asserted high-achieving students may be motivated to avoid low grades, but there is no research supporting “the

idea that low grades prompt students to try harder” (para. 17). Guskey (2011) asserted grades actually decrease intrinsic motivation, as students motivated by grades begin to focus on being more successful than their classmates instead of on learning. Pulfrey et al. (2013) outlined similar results using an experiment concerning grades in a middle school classroom. Their study revealed students in the non-graded experimental group obtained “equivalent levels of achievement, higher levels of perceived task autonomy” and “higher levels of continuing motivation for the task” than students in the graded control group (Pulfrey et al., 2013, p. 51).

Some researchers have called for a possible need to stop using grades altogether. Kohn (2011) described one study conducted among medical school students in 2010 eliminating grades and adopting a pass/fail system. The study showed significant advantages with no noted disadvantages (as cited in Kohn, 2011). In addition, Kohn (2011) claimed grades are closely linked to elevated cheating occurrences and fear of failure in school.

During the 1980s and 1990s, studies were conducted comparing students encouraged to focus on grades to those who were not (as cited in Kohn, 2011). Kohn (2011) proclaimed these studies pointed to three conclusions concerning grades:

1. Grades have a tendency to reduce student interest in what they are learning.
2. Grades encourage students to take the simplest learning path possible.
3. Grades reduce student thinking as students memorize information to pass a test.

Kohn (2011) noted a struggle to find recent research on the effects of grading, theorizing the push for grading reform and standards-based grading has become the most important research focus.

Traditional grades are inaccurate, limit learning time, fail to guide the learning process, and may reduce student interest in learning (Campbell, 2012; Pulfrey et al., 2013; Reeves, 2011). In conclusion, Savickiene (2011) declared the way schools assess, report, and analyze student learning determines the quality of an education. Educators can no longer ignore the failure of inaccurate reporting in using traditional grading practices (Campbell, 2012). Leaders in education must act on what they know and “engage teachers, parents, communities, and policymakers in a rational discussion about grading” (Reeves, 2011, p. 76).

Conceptual Framework/Historical Perspective

Standards-based grading. Standards-based grading has been part of the standards-based reform movement which began with the intention of improving education for all learners (Wormeli, 2006). Several presidential and national decisions led educators on a quest to improve the education system at large (Graham, 2013). The effort to make quality changes in curriculum, teaching, and grading methods eventually led to the standards-based teaching movement throughout the country (Graham, 2013).

In 1983, *A Nation at Risk* declared test scores in the United States were on a rapid decline, American schools were content to be mediocre, and 20% of high school seniors were unable to write a simple persuasive essay (National Commission on Excellence in Education, 1983). In 1989, President George H. Bush placed education in the national spotlight when he convened the National Education Summit (PBS, 2002). This summit brought the nation’s governors together to develop national goals for education (Vinovskis, 1999). The goals, released in 1990, included students leaving fourth, eighth, and twelfth grades with a set level of competency in core learning subjects (Vinovskis,

1999). Additionally, President George H. Bush's presidency was the beginning of a national push for support of state and local goals and standards for schools (PBS, 2002).

When Bill Clinton was the governor of Arkansas, he worked with President Bush in drafting the National Education Goals (PBS, 2002). When Clinton became President, he continued with Bush's agenda and drafted an educational proposal titled Goals 2000 (PBS, 2002). In 1994, the Goals 2000: Educate America Act was signed as a bill (Goals 2000: Educate America Act). This bill created the National Education Standards and Improvement Council with the idea of this council approving or rejecting state standards (Goals 2000: Educate America Act, 1994). Immediately, opposition was expressed against increasing federal control over the education system, and no members were ever selected for this council (PBS, 2002).

In 2001, President George W. Bush continued in pressing the need for standards-based reform with the No Child Left Behind Act (NCLB Act, 2002; PBS, 2002). This act was an effort to increase the federal government's role in education while honoring state control over standards (PBS, 2002). The law also enforced accountability measures on schools mandating more standardized testing, the analyzing of student growth based on scores, and corrective actions for schools producing low scores (NCLB Act, 2002).

From the years 1983-2002, America's public schools gained tremendous attention from the media, and correcting educational weaknesses became part of the national agenda (Graham, 2013; PBS, 2002). School officials were charged with improving student learning, and much of the focus began with improving student scores on high-stakes achievement tests (Graham, 2013). In the years to follow, the standards-based reform movement evolved toward "developing rigorous standards and aligning

instruction, assessment and professional development to those standards” (Llosa, 2011, p. 368).

Much of the standards-based movement paid particular attention to a researched practice referred to as assessment for learning, sometimes called formative assessment (Llosa, 2011). Formative assessment is a process of teaching students at their current levels, providing feedback after the practice of each standard, and using feedback to move students forward (Frey & Fisher, 2011). Bloom (1968) encouraged educators to classify learning objectives and ensure students master content with multiple and unlimited attempts.

Formative assessment led to the idea of making sure students master each standard instead of competing for an *A* grade (Wormeli, 2006). During his research on formative assessment and standards-based grading, Spencer (2012) reported on one teacher’s frustrations with students earning an *A* in his high school physics class and yet only possessing the skills to solve simple physics problems. This teacher, Frank Noschese, felt his students’ grades were not an accurate measure of the amount of learning taking place, so he moved to a new method of teaching that included formative assessment (Spencer, 2012).

In this journey, Noschese quizzed his students to see if they had complete mastery of each standard (Spencer, 2012). If the students did not own the standard, they would quiz a second time after feedback and more practice (Spencer, 2012). Students were even encouraged to try the concepts third and fourth times for complete mastery and higher grades (Spencer, 2012). Noschese’s teaching style eventually led to standards-based grading and reporting in his classroom (Spencer, 2012).

Guskey (2001), Schmoker, and Marzano (1999) described a viewpoint similar to Spencer's (2012) and reported the standards-based movement inspired educators to be judicious in selecting and mastering the most important learning goals. In 1999, Schmoker and Marzano revealed several success stories of schools using standards-based teaching properly to guide instruction. Glendale High School in Phoenix, Arizona, raised student achievement in most every class (Schmoker & Marzano, 1999). Another school in Arizona increased the number of students able to read at grade level or higher by 15%, and a third example included a school in Frederick County, Maryland, raising achievement scores from the middle levels to the highest level possible (Schmoker & Marzano, 1999). Schmoker and Marzano (1999) affirmed the promises of the standards-based movement over 15 years ago. As the movement continued, standards-based report cards became the necessary next step in providing all stakeholders a clearer representation of student proficiency of standards and to aid students, parents, and educators in concentrating on the performance objectives (Hardegree, 2012).

The history of standards-based reform has certainly played a part in shaping the current state of education (Guskey, 2001; Hardegree, 2012; Schmoker & Marzano, 1999; Spencer, 2012). Hardegree (2012) expressed most schools have identified and set the most important learning goals firmly in place, and standards-based instruction is commonplace for teachers all over the country. Now is the time for schools to decide how to best design their assessment, grading, and reporting practices to equip students to master these standards (Hardegree, 2012).

Traditional grades. Historically, grades have been the primary form of feedback for students and parents (Jung & Guskey, 2011; Spencer, 2012). Grades are used as

decision-making tools for school awards, club memberships, college acceptance, and jobs (Rosales, 2013). Ultimately, the grades students earn contribute to small and large life decisions, yet “grades have long been identified by those in the measurement community as prime examples of unreliable measurement” (Guskey et al., 2011, p. 53). Educational stakeholders are complacent and often comfortable with this practice; however, research reveals serious issues with traditional letter grades (Guskey et al., 2011; Wormeli, 2006).

Wormeli (2006) spent years researching assessment and grading practices. He reported when he first meets with a group of teachers, the teachers declare the sole purpose of grades to be student feedback (Wormeli, 2006). Wormeli (2006) challenged teachers to think of all the possible reasons for grading. After more thought, the teachers generally list six reasons for grading: documenting student and teacher progress, providing feedback to students and their families, making instructional decisions, motivating students, punishing students, and sorting students (Wormeli, 2006).

Wormeli (2006) declared when teachers use a traditional averaging-of-points grading system, they begin with the goal of documenting learning progress and guiding learning but end up adding many other factors into the equation. In an effort to improve student learning and provide accurate learning reports, Wormeli (2013) and numerous other authors continue to call for grading reform (Beatty, 2013; Kalnin, 2014; Meilke, 2015; Pekel, 2013; Shippy et al., 2013). As Shippy et al. (2013) stated, an educator’s number one endeavor is to help students grow and learn, and grading practices should be developed and deeply rooted around this goal.

Craig (2011) advocated for standards-based grading, because traditional grading practices, such as taking grades on homework, are actually a representation of work ethic instead of learning. Craig (2011) described these practices reward and motivate the highest-achieving students but make school difficult or nearly impossible for students with less support at home (Craig, 2011). Traditional grades are often based on work ethic and the ability of students to conform to the teaching methods of the teacher (Craig 2011). Students from poverty situations, second language learners, and those with learning disabilities are punished when they struggle to complete work on time and receive late grades or zeros (Craig, 2011).

Additionally Craig (2011) reported many teachers view failing grades as a punishment given to students for a lack of effort to learn. Teachers may think reporting a failing grade will motivate students to improve their learning on the subject matter; however, there are no studies to support this belief (Craig, 2011). Craig (2011) concluded, “Traditional report cards do not build a student’s belief in his or her own ability to learn content; do not create a sense of self-efficacy; and will result in decreased motivation to continue striving to learn” (p. 44).

Examples of the misuse of grades are found throughout literature (Brookhart, 2011). Brookhart (2011) asserted traditional grading practices have become a way to sort students into two groups, learners and non-learners. Additionally, she claimed traditional grading does not support learning; it may even deter learning (Brookhart, 2011). Her research called for “learning focused grading” (Brookhart, 2011, p. 10). Brookhart (2011), along with many other researchers, called for a movement to standards-based grading (Campbell, 2012; Guskey, 2001; Townsley, 2013).

In lieu of current research, many educators are abandoning traditional grades, and standards-based grading has become more prominent in schools across the United States (Beatty, 2013). In some schools, parent, teacher, and student feedback is positive, while in others there have been negative reviews (Beatty, 2013). Researchers repeatedly convey standards-based grading is better for students; however, proper implementation is crucial for successful results (Guskey & Jung, 2012). As Brookhart (2011) noted in her article, “Starting the Conversation About Grading,” there will be many issues to deal with and many moments spent sidetracked with “artifacts” consisting of small “technical details” (p. 11). She advised to have many conversations with all staff involved and to keep coming back to the main issue, “What meaning do we want our grades to convey?” (Brookhart, 2011, p. 11).

Positive Aspects of Standards-based Grading

Schools are considering standards-based grading and reporting, because this method seems to be a way to “provide teachers, parents, and students a clearer picture of student mastery of standards and keep teaching and learning focused on the performance goals” (Hardegree, 2012, p. 1). Standards-based grade reports are better for students, because these reports do not rely on factors like attendance or behavior but on the demonstration of understanding in relation to standards (Kalnin, 2014). When teachers know which standards have been mastered and which ones require additional practice, classroom instruction can be slightly or significantly altered to achieve the desired results (Shippy et al., 2013).

Wormeli (2013) proclaimed standards-based grading is one way to keep teachers from grading behaviors or effort and instead places the attention on grading to guide

future instructional decisions. He illustrated this point with the story of a student refusing to do homework and yet scoring an *A* on every single test in math class (Wormeli, 2013). The student only received credit for half the points averaged at the end of the term, and the teacher reported an *F* on the report card which kept the student from moving on to the next math class (Wormeli, 2013). According to Wormeli (2013), this situation is happening in schools and is a huge disservice to the student when he or she has mastered all or most of the concepts.

Pekel (2013) also reported the importance of using grading methods to guide learning while also promoting standards-based grading methods as more accurate than traditional grading practices. Pekel's (2013) study, involving middle school students, found a greater correlation of student grades with state standardized test scores when standards-based grading methods were used. The student participants also reported having a clearer understanding of what they knew and where they needed to study more in a particular subject area (Pekel, 2013).

Standards-based grading is not just about changing the way student progress is reported but a process through which schools can also "reduce failure and improve learning" (Cox, 2011, p. 68). The overall goal of a standards-based program is for each student to master every objective at his or her own rate (Marzano & Heflebower, 2011; Spencer, 2012; Wormeli, 2012). Marzano and Heflebower (2011) found this to be one of the most important and beneficial reasons for standards-based grading and reporting. They also cited research from Covington, proposing that this method is intrinsically motivating to students, as people are naturally uplifted when they accomplish a new skill after trying several times (as cited in Marzano & Heflebower, 2011).

Covington advocated for making grades based clearly on what students can do and giving students the most opportunities for achieving growth (Marzano & Heflebower, 2011). Rundquist voiced similar positive outcomes during his study in 2011. He explained standards-based grading as trying to “find a way to give a final grade that takes into account retention and is flexible to deal with students who take that extra time to learn something” (Rundquist, 2011, p. 69).

Mielke (2015) also advocated for additional learning opportunities for students. Mielke (2015) interviewed a group of at-risk tenth graders asking them to talk about what kills their motivation when it comes to learning at school. The biggest factor discussed among Mielke’s (2015) at-risk students included not having opportunities to re-learn, revise, and improve their work. Mielke (2015) summarized the student responses:

Surprisingly, students weren’t griping for those final-week extra-credit chances to inflate grades. They wanted chances to revise tests, essays, and assignments throughout a class. They wanted chances to turn things in late—even with penalties. In short, they simply wanted a chance. (para. 7)

Mielke (2015) noted teachers must consider how they can provide opportunities for students to revise work. These second chances help students to feel in control of their own futures (Mielke, 2015).

The students in Mielke’s (2015) study not only wanted extra chances to show their learning, but they also wanted additional chances to understand content. Several students had similar thoughts concerning losing motivation when they did not understand the lesson (Mielke, 2015). One participant commented, “I hate when I ask teachers to explain something again and they say, ‘Weren’t you paying attention?’ They assume I

was being lazy but I really was trying. It just didn't make sense" (Mielke, 2015, para. 13). Another student voiced, "I can't stand when I say something doesn't make sense and the teacher explains it exactly the same way they did the first time. After they keep doing that, I don't even bother asking" (Mielke, 2015, para. 14). Mielke (2015) agreed with the current research standards-based grading practices provide additional opportunities to help students overcome failure and master learning objectives.

Another positive factor of standards-based grading includes students having academic choice. Land's (2011) study found 80% of the high school participants were motivated to complete work when given choices on their assignments and how they show their learning. On the open-ended survey results asking students why choice is motivating, students noted using creativity was motivating, and several wrote they were more likely to finish work that is interesting to them (Land, 2011).

Land (2011) also found written feedback on assignments to be a positive aspect of standards-based grading practices. Many of the students surveyed responded they use teacher comments to improve their future performance (Land, 2011). Students also felt like they had a better understanding of their achievement, as well as a sense of accountability in not letting the teacher down, when comments were used on assignments (Land, 2011).

Erickson (2011) reported more student achievement and improved student focus when he worked alongside his teachers to pilot a standards-based grading program in his high school. Erickson's (2011) teachers were directly involved in the implementation process, and after the first year reported feeling accomplishment in their students' grades reflecting academic achievement. Over four years, Erickson's (2011) students made

many academic advancements, substantially raising scores on the ACT, advanced placement exams, and Minnesota Comprehensive Reading tests. Most importantly, Erickson (2011) stated, “Our relentless focus on grading and assessment practices has helped create a culture of learning all around” (p. 70).

Kalnin shared similar results in her 2014 article, “Proficiency Based Grading: Can We Practice What We Preach?” Kalnin (2014) used standards-based grading and assessment practices in two of her college-level education courses. Over two years of study, she found standards-based practices directed student efforts straight to learning, and students began to value the opportunity of second chances to master concepts that were initially confusing to them (Kalnin, 2014). On the end-of-course evaluation, one student wrote:

When I saw the list of assessment concepts at the beginning of the course, I thought there was no way I could ever learn all of that. But after each check-up, I saw my progress and it gave me confidence. I did learn all of the concepts. I’m proud of myself. (Kalnin, 2014, p. 28)

Based on the results of Kalnin’s (2014) study, students mastered more concepts using standards-based grading methods than students in previous classes using traditional grading methods.

Brookhart (2011) also recognized the value of standards-based grading in helping students learn. Standards-based education promotes quality and regular feedback to students (Rapp, 2012). Brookhart found most learners want to know where they stand and what exactly they can do to improve (as cited in Rapp, 2012). She said, “Once they feel they understand what to do and why, most students develop a feeling that they have

control over their own learning” (as cited in Rapp, 2012, para. 6). Learners evaluated against standards get to see advancement through each individual concept; Marzano and Heflebower (2011) claimed this is motivating and encouraging and a clear road map for learning.

Hanover Research (2011) reported another positive outcome of standards-based grading is it demands quality work. In traditional grading, if students turn in substandard work they receive failing grades, and the class moves forward (Hanover Research, 2011). In standards-based grading, students submit poor work, and they just have to revise it until they show mastery (Hanover Research, 2011).

Additionally, Erickson (2011) asserted grades should be based on standards rather than attendance, behavior, or extra credit. Instead of turning the grading process into a game, educators using standards-based grading direct the focus to reaching the standards, so students learn the importance of quality work (Erickson, 2011). Knaack et al. (2012) agreed, stating, “These approaches to education make students rethink school culture and create a rich learning environment” (p. 44).

Standards-based grading was introduced to help education stakeholders understand learning progress; however, this grading system has also changed the way many students think about learning (Townesley, 2013). Townesley (2013), a director of instruction and technology for Solon Community Schools, piloted standards-based grading in his classroom and then helped his school implement the program district-wide. After the first year of implementation, students in Solon Community High School were surveyed and asked to rate the statement, “Overall, I have an understanding of where I am in my learning and the areas in which I need to continue to learn” (Townesley,

2013, p. 71). Seventy-five percent of these high school students agreed or strongly agreed with the statement (Townesley, 2013). Teachers from the school also reported more students were looking for ways to improve their learning; “instead of asking how to improve their grades students were asking for help in understanding the content” (Townesley, 2013, p. 70).

Additional researchers pointed to changes in student perceptions concerning learning and school when standards-based reporting was adopted (Cox, 2011). Cox (2011) conducted a study in a high school during the first year of grading reform. Random teachers were followed and interviewed concerning their thoughts on standards-based grading (Cox, 2011). Most of the teachers mentioned their school must “keep hope alive” for students (Cox, 2011, p. 69). These teachers realized motivating students with low grades was not working (Cox, 2011). A standards-based approach allowed students to retake tests and focus on mastery of standards instead of giving up on a failing grade (Cox, 2011).

Craig (2011) also found failing grades to hinder the learning process for many students. Her study with 103 at-risk elementary students found the elimination of failing grades to have a positive impact on learning growth (Craig, 2011). When this grading method was used, Craig (2011) reported math scores increased, specifically with students qualifying as low income or receiving special education services.

Armacost and Pet-Armacost (2003) investigated the impact of standards-based or mastery-based grading in a college research class. Students were allowed to participate in a standards-based approach or to choose traditional grading practices (Armacost & Pet-Armacost, 2003). Over two years, Armacost and Pet-Armacost (2003) found the students

choosing the standards-based grading approach earned higher grades than those in the traditional plan. After the study was conducted, participating students were surveyed (Armacost & Pet-Armacost, 2003). In year one, 75% of the students strongly agreed they learned better, and in year two, 67% strongly agreed (Armacost & Pet-Armacost, 2003). In a similar study, Beatty (2013) experimented with a standards-based grading approach at the college level and reported 62% of his students checked, “I really like it,” after the first semester (p. 8). The responses of many of Beatty’s (2013) students coincide with those previously mentioned in that they were glad to be able to target specific learning weaknesses and improve.

In Knaack et al.’s 2012 study, parents and students were surveyed after a one-semester trial of standards-based grading practices in three classrooms. Overall, parent participants reported teachers could better explain why each student earned his or her grade with standards-based grading strategies in place (Knaack et al., 2012). Parents also agreed they were more aware of their students’ strengths and weaknesses than with traditional grading practices (Knaack et al., 2012). Student participants felt their grades were more fair with the new grading method, and students also agreed to a better understanding of their learning levels (Knaack et al., 2012). The three teachers in Knaack et al.’s (2012) study applied standards-based grading methods for the research project and based on the results of the parent and student surveys decided to continue with the practice.

Criticism of Standards-based Grading

Standards-based grading has a large literature following, and most of the research and results are positive (Guskey & Jung, 2012; Wormeli, 2012). However, there are a

few contentions when it comes to implementing this program in today's schools (Hanover Research, 2011; Kalnin; 2014, Knaack et al., 2012; Townsley, 2013). One concern is that extrinsic rewards like grades do make some students more motivated to perform the tasks presented by teachers (Hanover Research, 2011). For example, students are more likely to actively engage in a class activity if they know participation points will be awarded (Hanover Research, 2011).

Rundquist (2011) voiced concerns as he implemented standards-based grading in a classical mechanics course at the university level. He recounted one large pitfall was the extra time involved (Rundquist, 2011). Students were not used to this form of teaching, assessing, or grading, and getting students to buy-in was difficult (Rundquist, 2011). Rundquist (2011) spent a great amount of time convincing students this new method was of great value to the learning process. An additional struggle Rundquist (2011) encountered was the amount of time assessing and reassessing students was more than substantial. In the study, the class consisted of only nine students, but in a regular-sized class this amount of work could become overwhelming to the teacher (Rundquist, 2011).

Kalnin (2014) also noted the extra amount of time and effort involved when she chose to change to standards-based grading methods requiring her college-level students to retest on un-mastered concepts until they demonstrated proficiency. Kalnin (2014) reported, "My own assessment knowledge was stretched as I struggled to write new—and yet equivalent—items that indicated level of cognitive complexity to re-assess concepts" (p. 28). In an effort to keep track of student progress and assessment options, Kalnin

(2014) took the time to create spreadsheets and used mail merge to generate individual reports for students.

Another concern of standards-based grading is the practice of omitting homework and formative test scores from grades (Land, 2011). Land (2011) found this practice to be a negative factor for high school English students. Land's (2011) school reduced homework grades and formative tests to 10% of students' final grades. In this study, 16 out of 18 students felt less motivated to complete work (Land, 2011). Almost every participant specified, "doesn't count" as his or her reason for loss of desire to complete homework and formative assessments (Land, 2011, p. 61). Only two of the 16 high school participants were able to make the connection between the importance of practice and higher summative results (Land, 2011). One student said, "I don't feel very motivated to complete homework assignments because it doesn't make my grade deviate that much. I think a lot of kids including myself think if it doesn't affect your grade that much why do it?" (Land, 2011, p. 61).

Student concerns about standard-based grading were collected by survey in Beatty's (2013) study. Thirty-one college-level physics students were exposed to standards-based grading for one semester (Beatty, 2013). Of the 31 students, Beatty (2013) reported 23 students declared "a bit of difficulty" or more in completing coursework that was not included for part of the final grade (p. 10). Additionally, student survey results included the following concerns: the need for more clearly explained standards, feedback was not constant or consistent, and scales using 1-4 were as difficult to interpret as letter grades (Beatty, 2013).

Similar student and parent concerns were noted in Reeves's (2011) study.

In some schools using standards-based grading, parents complained the number of learning objectives printed on the grade report were too many, and the language used in the objectives was difficult for them and their children to understand (Reeves, 2011). Furthermore, there seem to be some inconsistencies in rating on standards-based reports (Reeves, 2011). The number system of 1, 2, 3, 4 and the rating systems similar to beginning, proficient, and advanced can become as ambiguous as traditional letter grades (Reeves, 2011).

Prompted by the current arguments concerning traditional versus standards-based grading, Abdul and Jisha (2014) stated several studies show letter grades actually reduce error in the assessment of students. Grades help teachers admit there is no precise way of summarizing the actual learning taking place in an individual at a specific moment in time (Abdul & Jisha, 2014). Abdul and Jisha (2014) tested grading reliability between two groups of teachers using two different grading methods. Group one used a rubric and marking system, using numbers, to grade English assessments (Abdul & Jisha, 2014). Group two used a scoring guide and converted those scores into grades on the same English assessments (Abdul & Jisha, 2014). The study took place over a two-week period with repeated grading sessions (Abdul & Jisha, 2014).

In the end, Abdul and Jisha (2014) found many inconsistencies between both grading methods in reliability of both inter-examiner and intra-examiner results. Additionally, the teacher participants confessed frustrations in their inability to precisely assess learning while scoring student work (Abdul & Jisha, 2014). These results persuaded Abdul and Jisha (2014) to summarize the focus should not be on letter grades,

numbers, or pass/fail but on how consistent and focused educators are in grading students with whichever method is used.

Craig (2011) conducted a study to determine if standards-based grading methods improved state achievement test scores for at-risk students in elementary math classes. This study revealed the standards-based grading methods had little impact on improving the math performance of the 103 students involved in the study (Craig, 2011). Craig (2011) believed these results may have been due in part to lack of understanding of standards-based reporting methods among teachers, parents, and students. Craig (2011) inferred the lack of understanding was posed by the burden of having to interpret progress and mastery on too many performance indicators.

Teacher resistance to grading reform is a large criticism associated with standards-based grading (Cox, 2011; Townsley, 2013). Some educators, especially at the secondary level, find grading reform to be overwhelming and do not trust standard-based practices to hold the learner accountable as assured by current research (Tierney et al., 2011). In the following section, factors pertaining to teacher resistance to standards-based grading are examined.

Teacher Resistance

In 2010, O'Connor found around 90% of schools continued to use traditional grading practices at the secondary level, and this percentage was only reluctantly decreasing. A 2011 Hanover Research brief reported all states now have standards, but few middle schools and high schools are standards-based for grading and reporting. The literature reveals a substantial reluctance to change traditional grading practices post-elementary school (Rundquist, 2011; Townsley, 2013; Urich, 2012).

Although most educators would agree the standards-based movement has been beneficial in building consistency through learning objectives and common assessments, grading practices continue to “remain largely the domain of individual teachers, particularly at the secondary level” (Cox, 2011, p. 67). Teachers realize grading practices have a long-term impact on students’ lives, and teachers want “grades to accurately reflect students’ achievement” (Tierney et al., 2011, p. 210).

DeLarkin (2013) reported obtaining teacher buy-in is possible and leads to successful grading changes for students. If teachers are resistant to or do not believe in the grading changes, the effectiveness of a standards-based grading program depreciates quickly (DeLarkin, 2013). This logic makes it clear educators’ interpretations of standards-based grading practices are an important key in changing how student learning is reported (Campbell, 2012; Shippy et al., 2013).

Knaack et al. (2012) reported on common teacher reservations concerning standards-based grading practices:

Many teachers have reservations about standards-based grading. Problems have occurred across the United States and in school districts due to fuzzy or varying definitions of standards and variance of what is meant by “standard.” In some cases, there are too many standards so that teachers, students, and parents get overloaded. In many cases, a standardized state test is the means with which districts test for proficiency. (p. 41)

Knaack et al. (2012) contended teachers want to make decisions that are best for their students, but with state-mandated standards and tests, the task is often overwhelming.

In a 2011 Tierney et al. study, educators in a Canadian secondary school were followed as they used standard-based grading methods. The study participants were asked to share their opinions as they reported student achievement through a completely standards-based program (Tierney et al., 2011). The interview results varied a great deal. While most teachers agreed traditional grading practices need transformation, there were many concerns as the participants embraced standards-based grading (Tierney et al., 2011). One teacher voiced this concern:

I guess with this policy you have to accept all submissions regardless of how late they are. If I don't pay my taxes on time, there's a consequence. You know there's a penalty to a lot of things. I think if we continue to move toward a system where consequences don't really seem to appear anywhere, then how do you educate good versus not so good decisions? And that's part of our job right? (Tierney et al., 2011, p. 218)

Another teacher reported this on the end-of-study survey:

Current system—Failure is not an option. Should be—You get what you earn. We need to prepare students for the real world, not baby them. We are doing students a grave injustice by not preparing them for life. (Tierney et al., 2011, p. 218)

Other study participants continued these thoughts. Overall, the teachers felt accepting late work without cost and allowing students to redo tests due to lack of effort went against their professional duty (Tierney et al., 2011).

Townsley (2013) wrote of similar reports as he implemented standards-based grading throughout his school district. Some teachers feared enabling students to re-test

would encourage less study time for the first test attempt (Townasley, 2013). Participants expressed feelings of apprehension, because they felt responsible for aiding students in learning content as well as character traits such as being punctual, conscientious, and hard-working (Townasley, 2013). Additionally, Townasley (2013) noted discerning the true meaning of learning objectives was difficult for teachers, students, and parents. His district had to make many revisions over the two-year transition period (Townasley, 2013).

Another teacher concern of standards-based grading is the neglect of important practice and homework if these items are not included in final grades (Land, 2011; Teirney et al., 2011, Townasley, 2013). Teachers in Land's (2011) study reported less homework completion after standards-based grading was implemented in their high school. Educators in this school decided to survey students and found more narrative feedback and student choice in assignments were motivational to students completing work; however, the teachers in this study voiced concern as to finding the time to carry out these motivational factors (Land, 2011).

Favorable Implementation Techniques

The standards-based movement and its grading practices are becoming more common across the country (Guskey & Jung, 2012; Kalnin, 2014). Many parents, teachers, and students are agreeing letter grades and class averages are arbitrary; however, public opinions in schools already using standards-based grading vary greatly (Reeves, 2011). It is true many schools have jumped into standards-based grading without really focusing on best practices for how to implement this strategy (Guskey & Jung, 2012). Guskey and Jung (2012) reported the implementation process must focus on the primary "function of grades as communication tools" (p. 23). Reeves (2011)

reiterated the primary purpose of changing learning reports is to give all stakeholders a clearer picture of student learning.

Brookhart (2011) noted the importance of beginning grading reform in the correct way:

As they attempt to make this shift, many schools go off track or get swamped by side issues. They waste energy having hard discussions about details of grading practice that, by themselves, cannot accomplish real reform. Merely tweaking the details of a grading system can result in a system that makes even less sense than the one it is intended to replace. Any school that is interested in reforming grading needs to talk about it in ways that challenge colleagues on the right questions. (p. 10)

Other authors agreed with Brookhart (2011) the first step in a positive standards-based grading implementation is getting staff members to come together in agreement on the fundamental purpose of grades (Campbell, 2012; Guskey et al., 2011).

DeLarkin (2013) found other important implementation factors when he conducted a study to obtain teachers' perceived value of standards-based grading practices during grading reform in a Los Angeles high school. The school started the reform process by incorporating an online system to aide teachers and students in tracking standards and storing evidence of student growth (DeLarkin, 2013).

Additionally, administrators and teachers worked together to create scoring guides and mastery levels and to provide the needed professional development (DeLarkin, 2013).

After one year with the new grading policy, teachers were surveyed and reported buy-in to their standards-based program because their administration had been successful in

providing quality professional development and allowing many opportunities for teachers to provide feedback (DeLarkin, 2013).

DeLarkin's (2013) study also used the online grading system to follow the grading practices of the teachers in the case study high school to determine if they were actually using the new grading policy in their classrooms. Overall, the analysis of the data revealed the teachers were using all of the grading practices described in the school's standards-based grading policy on a regular basis (DeLarkin, 2013). The results concluded teacher buy-in partnered with quality professional development led to these results (DeLarkin, 2013). DeLarkin (2013) noted the importance of these two factors in implementing grading reform, reminding administrators if teachers choose not to truly implement grading changes the effectiveness of standards-based grading will be minimized.

Adrian (2012) also advocated for teacher needs as an important first step in school-wide grading reform. Adrian (2012) surveyed teachers to garner concerns and needs before standards-based grading changes were mandated in their elementary school. The participants reported three main needs in feeling comfortable with making grading changes during the next school year (Adrian, 2012). Teachers wanted an online gradebook that would aid them in tracking each standard, professional development in how to use the online grade book and how to determine student proficiency, and to make sure students and parents were educated on standards-based grading changes (Adrian, 2012). Adrian (2012) encouraged principals and administrators to provide as much support as possible to teachers to ensure quality and lasting grading reform for students.

Brookhart (2011) similarly realized the priority of teacher buy-in, but also emphasized getting sidetracked by anything but the fundamental purpose of grades will resort in a “superficial” or even “harmful” change (p. 11). According to Brookhart (2011), the most common examples of breakdown during grading reform included the following:

Some districts begin grading reform discussions with whether to assign zeros for missed work. This discussion is an artifact of the percentage-based grading scale. . . . Other districts abolish certain grades, for example adopting a “no D” policy. This results in a truncated, but still conventional grading scale. (p. 11)

Overall, Brookhart (2011) asserted “safe and honest” discussion with all educators must take place first (p. 11). Next, teacher leaders and administrators must advocate support for a professional agreement to experiment with new ideas (Brookhart, 2011). These experiments should be followed to see how the ideas affect teacher and student beliefs concerning learning and grade reports (Brookhart, 2011).

Edgar, Johnson, Graham, and Bruce (2014) agreed students’ viewpoints on grading practices are also important considerations during grading reform. While most teachers think of grading or feedback as a way to measure mastery and motivate learners, students see grading and feedback very differently. Students may consider mastery and motivation, but Edgar et al. (2014) found students also view grading as “the key” to school admissions, scholarships, future jobs, and self-confidence (p. 184). Edgar et al. (2014) found both student and staff perceptions should be contemplated when implementing grading changes.

Abdul and Jisha (2014) claimed the focus should not be on letter grades, or numbers, or pass/fail but on how consistent and focused educators are in rating students' learning based on standards. Developing better grading practices requires teachers be allowed to experiment with different procedures, work as a team to promote grading consistency, and employ descriptive rubrics to make grading more informative, valid, reliable, and focused on guiding student learning (Abdul & Jisha, 2014). Teaching teams need time to create plans to make grading more systematic, objective, and scientific (Abdul & Jisha, 2014). Finally, Abdul and Jisha (2014) noted educators need time to make appropriate evaluations, and this should be considered and "given adequate weightage in calculating the workload of teachers" (p. 298).

Wormeli (2012) echoed the argument for discussion, planning, and support and added making assessment and grading changes must be closely tied with professional learning communities. Professional learning communities are the place where educators tackle all of the questions and issues that will continually arise as schools strive to make grade reports truly reflective of student learning (Wormeli, 2012). Wormeli (2012) provided a list of essential questions for improving student learning and guiding grading reform:

1. What do we want our students to learn?
2. How will we know when they have learned it?
3. How will we respond when some students don't learn?
4. How will we enrich and extend learning for students who have demonstrated proficiency? (Wormeli, 2012, p. 4)

Wormeli (2012) declared real and meaningful change happens when essential questions, standards-based grading practices, and professional learning communities flow together.

Several authors emphasized the necessity of professional development and professional learning communities in implementing quality grading reform (Abdul & Jisha, 2014; DeLarkin, 2013; Wormeli, 2012). Professional development is essential in correcting broken grading practices (Abdul & Jisha, 2014). Teacher training and collaboration are the most effective methods for influencing teacher attitudes and making real and lasting grading changes (Brookhart, 2011). Collaborative and well-guided training sessions encouraging meaningful conversations concerning student learning, accurate assessment methods, and equitable and valid grading practices will produce grading reforms that are best for students and teachers (Brookhart, 2011).

School principals should also be involved in planning and attending professional development, as this helps to establish a purposeful community where real change takes place (Abdul & Jisha, 2014). The administrator's role in this involves encouraging students and teachers to appreciate best practices for grading, assessment, and learning, as well as advocating for the needs of all stakeholders during grading reform (Land, 2011). While using professional development and collaboration to guide grading reform, educators must remember each staff member is involved when making positive difference in the lives of students, and this includes using all tools available such as curriculum, instructional practices, and grading methods (Wormeli, 2012).

Wiles (2013) conducted a study to determine the effectiveness of professional development and collaboration during grading reform in a middle school environment. All teachers in the case study middle school were required to participate in the

professional development sessions and collaborative professional learning community discussions prior to the start of school-wide grading reform (Wiles, 2013). Teachers were given a pre-survey before the professional development sessions started and a post-survey following the last collaborative sessions (Wiles, 2013). The pre-surveys revealed the teacher participants were already understanding of the need for several standards-based grading practices (Wiles, 2013). Before the start of training the teacher participants agreed to the need for grades to reflect the achievement of learning standards, the importance of regular and quality feedback on student growth, and the problem with adding factors, such as behavior, into subject-area grades (Wiles, 2013).

After the training and collaborative professional learning community sessions, Wiles (2013) discovered a positive shift toward standards-based grading practices on the post-survey results. More teachers were in favor of formative and summative assessments than at the time of the pre-survey (Wiles, 2013). Teachers were less in favor of allowing zero grades on missing work, and most importantly, Wiles (2013) found teachers were more agreeable to a school-wide grading and assessment policy.

On a similar note, Land (2011) advocated for surveying teachers and students after grading practices have been in place for a while. Land's (2011) school discovered fewer students finishing homework after standards-based grading practices were introduced. After surveying students, Land (2011) discovered the learners in their school wanted more feedback, more choice in how they showed learning, and for practice work to count in their final grades. Land (2011) declared this was important insight in continuing quality grading reform.

Brookhart (2011) stated the most important implementation step is remembering that there will be difficulties. Once educators are in agreement on the fundamental purpose of grades, productive conversations on scales, reporting styles, and parental briefing can begin (Brookhart, 2011). By determining core beliefs concerning the meaning of grades, schools open themselves to creating true reform while dealing with the secondary issues (Brookhart, 2011). Many schools find reforming grading is a process, and difficulties and setbacks are part of this important change (Brookhart, 2011).

Finally, Kalnin (2014) shared similar implementation guidelines but added a crucial final step. Once teachers and leaders have come together on the meaning of grade reports, it is important to define specified levels of performance for proficiency on standards (Kalnin, 2014). All stakeholders must be aware of the standards and the proficiency levels (Kalnin, 2014). Once these items have been established, teachers can plan backwards to create a relationship among assessment, standards, and instruction (Kalnin, 2014).

Summary

According to current research, traditional grading practices are not adequate in reporting student mastery (Townesley, 2013; Wormeli, 2013). Various studies have conveyed standards-based grading is an effective way of guiding and reporting student learning (Beatty, 2013; Guskey & Jung, 2012; Kalnin, 2014; Mabie, 2014; Townesley, 2013). As standards-based grading is becoming more accepted in K-12 schools, educational leaders must decide how to best respond to this movement (Kalnin, 2014).

Many factors influence the implementation of grading reform in schools (Beatty, 2013). Successful grading changes can be accomplished when special attention is given

to the meaning and function of grade reports (Beatty, 2013; Townsley, 2013).

Educational communities of students, parents, and teachers need information, support, and voice in developing a standards-based grading program (Brookhart, 2011; Wormeli, 2012). Implementation is the best time to make sure grades are guiding learning and are consistent for all students (Abdul & Jisha, 2014). Finally, all stakeholders must expect difficulties and continual revision in the process of creating grading practices that are best for students (Brookhart, 2011; Townsley, 2013).

Chapter Two included a review of literature outlining current grading practices and grading reform taking place in schools. In addition, the history of grades and governmental influence on the standards-based movement were described. The following chapter presents the research methodology that was employed to identify factors influencing grading reform at the middle school level. Additionally, Chapter Three contains a detailed overview of the research design, population and sample, instrumentation, data collection, and data analysis.

Chapter Three: Methodology

Standards-based grading practices are an improved way to report student learning (Townsend, 2013). Due to the many documented problems with traditional letter grades and a renewed focus on learning over grades, school leaders are encouraged to implement quality grading reform (Beatty, 2013). Grading reform is an ongoing process and not simply the adoption of a program (Reeves, 2011). Implementing quality grading changes involves stakeholders working as a team to develop and change grading practices to best accommodate student needs (Guskey & Jung, 2012).

In this chapter, the research design and methodology of the study are described. The problem, purpose, and research questions are reviewed. Population and sample, instrumentation, data collection, and data analysis are expounded to give a comprehensive overview of the research methodology.

Problem and Purpose Overview

The purpose of this study was to investigate the factors and perceptions influencing grading reform at the middle school level. The research relied on descriptive quantitative data using survey questions. Three surveys were distributed to educational stakeholders to elicit the perspectives of students, parents, teachers, and administrators during an attempt to reform grading in one middle school.

Descriptive statistics were used following Likert-style surveys of students, parents, teachers, and administrators involved in the grading reform processes. Quantitative methods were also used to garner opinions on open-ended survey questions concerning the meaning of grade reports, the appropriateness of standards-based grading

practices for middle school students, and the types of supports teachers need to make quality grading changes.

Research questions. The following research questions guided this study:

1. What are middle school students' perceptions of their motivation to learn when standards-based grading practices are implemented?
2. What are the current perceptions of students, parents, teachers, and administrators concerning standards-based grading at the middle school level?
3. What factors do middle school teachers report as necessary supports when attempting to reform grading practices school wide?

Research Design

The research design for this study was quantitative and set in a case report format. According to Hancock and Algozzine (2011), case report research is essential when deliberately analyzing a recent phenomenon or program within its most natural environment possible. Allowing the student population to experience the treatment of standards-based grading in elementary school and traditional grading during middle school provided a natural environment for investigating opinions pertaining to grading reform. This format is valuable in guiding grading reform as it is taking place, which provides real-time evidence within a "real-life context" (Yin, 2014, p. 2).

A cross-sectional survey research design was used in the hopes of gaining an overall view from as many persons as possible in the middle school community (Creswell, 2015). Students, parents, teachers, and administrators were surveyed to "collect quantitative, numbered data using questionnaires" and to "statistically analyze the data to describe trends about responses to questions and to test research questions"

(Creswell, 2015, p. 388). A survey research design method was chosen with the purpose of collecting data from “the entire population of people to describe the attitudes, opinions, behaviors, or characteristics of the population” (Creswell, 2015, p. 388). The survey questions were based on current research and written in an effort to elicit genuine reactions from students, parents, and educators concerning standards-based grading.

Three different surveys were distributed to four consensus sample groups in the participating school district: students, parents, teachers, and administrators. Participants in each consensus sample were asked to consent and complete a grading survey. First, parents were contacted via email by the school principal, and the parent survey and consent forms were sent home with all students. The parent sample included the parents of all students in the participating school district.

Next, the student grading survey was distributed electronically to all students whose parents provided consent. The survey took place during class, and proctors provided clear and concise instructions. The proctors were available to ensure students were able to use the web-based link and understand survey questions.

An additional survey was administered to gain insight on grading beliefs from the teachers’ and administrators’ perspectives. The educator grading survey and introduction letter were placed in the mailboxes of all teachers and administrators in the case study school. Information concerning the survey was also sent to all teachers and administrators via email by the primary investigator. The survey allowed for collection of data concerning teacher beliefs and feelings pertaining to grading reform and grading methods.

The data were examined to find emerging themes concerning standards-based grading and the implementation of grading reform. A portion of the educator grading survey included open-ended questions. The constant comparative method was used on the open-ended questions to convert words into values that unveil emerging trends and themes (Creswell, 2015). The identities of the students, parents, teachers, and administrators were not included on any of the surveys.

Population and Sample

The population of this study included educational stakeholders in one southwest Missouri middle school. This school was selected because administrators were in the process of expanding standards-based grading from the elementary level into the middle school of seventh- and eighth-grade students. All teachers in the school were trained to use standards-based teaching methods and formative assessments in the classroom. At the time of the study, these teaching and assessment methods had been in place for three years. The participating school district provided standards-based teaching and reporting in kindergarten through sixth grades in previous years. Although the middle school was standards-driven, student progress had always been reported on traditional report cards with *A* to *F* grade ratings.

The participating school had a student body of 723 learners. The student population was predominately White (83%) with a Hispanic subgroup of 9% (MODESE, 2014). The free and reduced price meal qualifying rate in the selected school was over 50% (MODESE, 2014).

The teacher population included 41 certified teachers in the participating middle school. The administrator population included the school's acting principal and two

assistants serving alongside the principal. The amount of teaching experience among the middle school staff varied from three years to 30 years of experience.

For the 2014-2015 school year, the participating school decided to take a strong look at grading reform research. The English department in this school volunteered to pilot standards-based reporting. The English teachers attended conferences and workshops concerning grading reform during the summer of 2014 and visited personalized learning schools in Wisconsin during the 2013-2014 school year. In addition, the teachers embarked on a partnership with one of the Wisconsin schools using standards-based practices for support during the grading transition. Due to convenience and time restraints, the school administrators decided to keep the English standards-based report card similar to what the students were accustomed to in elementary school. The participating school staff hoped to research and learn during this year and develop their own grade cards for the 2015-2016 school year.

The goal of this study was to elicit as many responses as possible from all of the stakeholders in this middle school community. A consensus sample technique was used in an effort to include all members within the chosen subgroups of the population (Sullivan, 2012). The student population included all learners enrolled in the participating school. All students were asked to participate in the study with 137 students returning parent consent and taking the survey. The parents of the students enrolled were asked to participate as well, with 148 returning the survey, thereby comprising the parent sample. The participating school contained a population of 41 certified educators and three administrators. The total populations of the teachers and administrators were

invited to participate in the study. All administrators completed the survey, and 25 teachers chose to participate to become the teacher sample.

Instrumentation

The instrumentation for this study included three surveys (see Appendices A, B, and C): an online student survey, a paper survey distributed to parents, and a paper survey distributed to teachers and administrators. The survey questions were developed using the successful outcomes and criticisms of standards-based grading found in current research and outlined in Chapter Two. The quantitative questions used a five-point Likert rating scale. Participants were asked to rate their levels of agreement or disagreement concerning specific aspects of grading. Additionally, open-ended survey questions were used to elicit the individual perceptions and needs of educators while working to implement grade reform.

The survey questions were field-tested by four educators who were also parents. The participants in the field-test were not included in the middle school community of the participating school. Revisions to survey questions were made based on the feedback from the field-test group. The student survey was also shared with the administrators and key teachers in the participating school. Additional suggestions were made by this group, and the surveys were revised again.

Data Collection

After approval by the Institutional Review Board (see Appendix D) and approval from the participating school district (see Appendix E), the recruitment process began with an email posted to parents of students in the participating middle school. This communication informed parents and students of the purpose of the study and explained

the role of students in collecting data. Additionally, the email invited parents to participate by taking the parent grading survey. Families were notified of parent and student consent processes, voluntary participation, and the assurance of privacy of identity. The student population then received a letter to take home to their parents (see Appendix F). Like the earlier email, this letter stated the purpose of the study, explained voluntary participation, and ensured privacy of identities of both parents and students. The letter included the parent grading survey and the parent consent form (see Appendix G) to be returned to the school within two weeks' time.

Following the collection of consent forms and parent grading surveys, students were surveyed (at school) concerning levels of self-reflection, motivation, and preference between the two types of classroom settings. In addition, the recruitment letter (see Appendix H), informed consent form (see Appendix I), and educator surveys were placed in teacher and administrator school mailboxes and collected in a secure drop box on the school site.

Student survey responses were stored in a spreadsheet using the electronic survey method in Google forms. Returned parent and educator surveys were also entered into Google forms and stored identically. Paper surveys were stored in a locked filing cabinet in the primary investigator's classroom. Because the primary investigator was a teacher in the middle school where the surveys were distributed, care was taken to avoid coercion. For this reason, proctors were used to administer the student surveys, and the educator surveys were collected in an anonymous drop box in the school office.

Data Analysis

This study was conducted to investigate the complex environment of grading reform when the implementation is a process and not simply the adoption of a new grading program. Surveys were used to collect quantitative data. Likert-style survey items allowed the primary investigator to determine which components of standards-based grading were considered positive among the population. Descriptive statistics were used to organize, summarize, and describe how stakeholders viewed this phenomenon (Bluman, 2014). According to Hoy (2010), Likert scale surveys aid in determining the human opinion concerning the success or failure of a treatment.

Likert scale items are considered in the ordinal level of measurement, classifying data “into categories that can be ranked; however, precise differences between the ranks do not exist” (Bluman, 2014, p. 8). Considering the ordinal classification of the Likert scale, mean scores and standard deviations are not used to analyze the data (Hoy, 2010). A percentage distribution of the Likert numerical values was used to determine the mode and percentage of participants agreeing or disagreeing with each positive or negative aspect of standards-based grading (Bluman, 2014).

Using these methods on each survey question allowed “meaning to emerge from the data” (Kisely & Kendall, 2011, p. 364). Following computation, the percentage and the mode for each survey question were entered into a table format. The components of standards-based grading were clearly ranked from most positive to most negative among the cluster groups consisting of students, parents, teachers, and administrators.

Additional data for this study were collected from three open-ended questions on the surveys distributed to teachers and administrators. These types of survey items were coded to convert words into values that allow trends to appear from the data (Creswell, 2015). According to Winters, Cudney, and Sullivan (2010), coding is essential in this type of data collection for the following reason:

A systematic procedure for managing and analyzing the data gathered is required in order to make sense of what can be an overwhelming volume of data that need to be condensed and organized in some way so the riches that dwell within it can be teased out and examined for themes, links, and relationships. (p. 1415)

Thus, the answers were scrutinized to determine if patterns emerged in this collection of data. These open-ended questions were crucial in allowing educators to summarize their needs and feelings concerning the grading reform process and allowed for trends to be identified concerning why teachers may be nervous to implement standards-based grading post-elementary school (Yin, 2014).

Ethical Considerations

All survey responses were anonymous, and no participants were harmed during the survey process. The student grading survey was similar to the parent and educator surveys but was written to be user-friendly for 12- and 13-year-old students. All participants were made aware of their rights to discontinue participation at any time. This study was approved by the Lindenwood Institutional Review Board, and all ethical protocols were in place to protect the participants in the study.

Summary

The factors and perceptions influencing grading reform during the implementation process of standards-based grading in one middle school were investigated as part of this study. Survey items were used to collect data with an attempt to sample all educational stakeholders. The data were organized and detailed to aid and inform school leaders in incorporating successful grading revisions at this level. The surveys included a Likert scale and asked participants to rate their levels of agreement with positive and negative aspects of standards-based grading. In addition, open-ended survey questions were asked to allow participants to describe their personal perceptions concerning grading and additional information. Frequency and mode of survey responses were analyzed to allow trends and themes to emerge.

This chapter outlined the methodology of the study. The research design, population and sample, instrumentation, data collection, and data analysis were given in-depth overview. In Chapter Four, the survey results are analyzed, synthesized, and presented in table format.

Chapter Four: Analysis of Data

The purpose of this study was to identify educational stakeholders' perspectives concerning grading reform at the middle school level. Three survey instruments were used to garner the opinions of students, parents, teachers, and administrators concerning grading practices in one middle school community. The surveys were developed to decipher which grading practices the participants found most beneficial for middle school students and which support factors middle school teachers deemed necessary during grading reform.

The grading practices included in the surveys were based on the positive and negative aspects of standards-based grading outlined in recent research. The data collected in this research should help to determine which grading practices are welcomed and which grading practices are feared by educational stakeholders during grading reform for this age group of students. For districts considering standards-based grading, the data should aid school administrators in guiding and encouraging grading reform at the middle school level.

Quantitative methodology was used to determine the mode and percentage of which grading practices the participants found most beneficial to middle school students. Surveys were distributed to all parents, students, teachers, and administrators in the participating middle school. The surveys consisted of Likert-style items that required participants to select one of the following in regard to implementing specific grading practices into their middle school: strongly agree, disagree, neutral, disagree, or strongly disagree.

Quantitative methodology was also utilized to reveal the specific support components most requested by educators when transitioning to a standards-based grading and reporting method. Open-ended questions were used in this portion of the study. Teachers and administrators were asked to describe what a grade report should convey to students and parents, as well as to list the most important factors in guiding educators to reform grading practices school-wide.

The grading practices chosen for the Likert-style items included standard-based grading methods outlined in previous research and were categorized as positive or negative outcomes of standards-based grading (Beatty, 2013; Brookhart, 2011; Frey & Fisher, 2011; Jung & Guskey, 2011; Marzano & Heflebower, 2011; Massell & Perrault, 2014; Rundquist, 2011; Shippy et al., 2013; Spencer, 2012; Urich, 2012; Wormeli, 2012, 2013). Three open-ended items were included at the end of the survey sent to teachers and administrators. The open-ended items allowed educators to provide input on grading reform beyond the limits of Likert survey items.

Student Survey Results

All 723 students in the middle school population were offered the opportunity to respond to the Student Grading Survey. Of the 723 students who received the electronic email and paper letter format introducing the survey, 137 students returned parent consent letters and completed the survey. The student grading survey yielded a participation rate of 18.94% of the student population.

A compilation of the percentages of responses and the mode for specific survey items are presented in Table 1. The mode of the 11 survey items revealed students

strongly agreed with four factors as, “This factor really motivates me to learn.” The factors included the following:

- I feel motivated to complete assignments when I am given choices as to how I show my learning;
- I feel more motivated to learn when I understand the expected learning objectives at the beginning of a unit;
- I feel motivated to learn when I can work at my own pace; and
- I prefer the letter grades on my report card instead of mastering and checking off each standard.

Table 1

Percentages for Grading Factors and Students' Perceived Motivation to Learn

Survey Item	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	Mode
1	38.5%	46.7%	5.9%	5.9%	3%	Agree
2	22.9%	40.5%	23.7%	8.4%	4.6%	Agree
3	42.7%	33.6%	15.3%	7.6%	0.8%	Strongly Agree
4	13.8%	30.8%	23.1%	20%	12.3%	Agree
5	38.5%	33.8%	17.7%	9.2%	0.8%	Strongly Agree
6	38%	45%	14%	2.3%	0.8%	Agree
7	51.1%	33.6%	6.1%	7.6%	1.5%	Strongly Agree
8	7.7%	15.4%	19.2%	30.8%	26.9%	Disagree
9	18.6%	17.8%	25.6%	27.9%	10.1%	Disagree
10	17.8%	34.9%	25.6%	12.4%	9.3%	Agree
11	43.1%	22.3%	21.5%	7.7%	5.4%	Strongly Agree

Note. Survey sample comprised of 137 student participants. Items rated as *Strongly Agree* were defined as, “This factor really motivates me to learn.” Items rated *Not Sure* were defined as, “I’m not sure if this factor motivates me to learn.” Items rated *Strongly Disagree* were defined as, “This factor is the opposite of motivating when it comes to my learning.”

Parent Survey Results

All parents of the participating middle school were offered the opportunity to participate in the Parent Grading Survey with information concerning the study sent out by email and by letter. Of the parents of the 723 students enrolled, 148 parents returned

the paper survey to school for a participation rate of 20.47%. Items on the parent survey were Likert-style and divided into two parts based on recent research. In the first portion of the survey, positive components of standards-based grading were described.

Participants were asked to what degree they believed each component should be included in their student's middle school learning experience.

Within Table 2, a summary the percentage of responses and the mode for specific survey items designated as positive factors of standards-based grading are presented.

Overall, parents agreed the positive components of standards-based grading should be incorporated in their child's middle school. Only one survey item was not agreed upon for implementation, survey item 5 (Practice work is not included in end-of-unit grade reports). Of the 148 parent participants, 34.7% agreed or strongly agreed practice work should not be included in final grades, while 65.3% of parents were neutral or disagreed with this grading method.

Table 2

Percentage Data for Parent Support of Positive Standards-based Grading Factors

Survey Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mode
1	32%	53.1%	8.2%	5.4%	1.4%	Agree
2	20.5%	30.8%	22.6%	21.2%	4.8%	Agree
3	24.5%	34%	20.4%	17.7%	3.4%	Agree
4	28.8%	47.9.7%	11.6%	8.9%	2.7%	Agree
5	6.8%	27.9%	35.4%	27.2%	2.7%	Neutral
6	24%	36.3%	22.6%	13%	4.1%	Agree
7	41.1%	40.4%	6.8%	8.9%	2.7%	Strongly Agree
8	29.7%	43.4%	12.4%	13.1%	1.4%	Agree
9	28.3%	46.9%	16.6%	5.5%	2.8%	Agree

Note. Survey sample comprised of 148 parent participants. Items rated as *Strongly Agree* were defined as, “I think this practice should be used in our school.” Items rated *Neutral* were defined as, “I am indifferent as to whether or not this practice should be used in our school.” Items rated *Strongly Disagree* were defined as, “I do not think this practice should be used in our school.”

Contained in the second portion of the parent survey were statements about concerns of standards-based grading reported in recent research (Beatty, 2013; Campbell, 2012; Cox, 2011; Hanover Research, 2011; Reeves, 2011; Rundquist, 2011; Tierney et al., 2011). Participants were asked to what degree they believed each concern should be considered as their school attempted to make grading changes. Within Table 3, a summary of percentage of responses and the mode for specific survey items designated as concerns of standards-based grading are presented.

Overall, parents agreed the following two statements should be considered as concerns when administering standards-based grading changes with middle school students:

- If some work is used only for feedback and not for grades, students may neglect important practice; and,
- Teachers have too many students and not enough time to make detailed feedback commonplace on student work.

Only two survey items yielded a mode of disagree. On survey item 11, parents disagreed allowing students test retakes would encourage them to study less for the first test. A mode of disagree was also reported on survey item 14 with 32.4% of parents disagreeing to a fear of struggling to understand standards-based report cards; however, 35.5% of parent participants chose strongly agree or agree on this item.

Table 3

Percentage Data for Parent Concerns of Standards-based Grading Factors

Survey Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mode
10	11.27%	51.7%	16.6%	15.9%	4.1%	Agree
11	11.7%	34.5%	11%	37.2%	5.5%	Disagree
12	7.5%	38.4%	26.7%	25.3%	2.1%	Agree
13	13%	49.3%	21.9%	12.3%	3.4%	Agree
14	9%	24.8%	24.1%	32.4%	9.7%	Disagree

Note. Survey sample comprised of 148 parent participants. Items rated as Strongly Agree were defined as “I believe this is a concern that should be considered when changing to a standards-based grading program.” Items rated Neutral were defined as “I am indifferent as to whether or not this practice should be considered when changing to a standards-based grading program.” Items rated Strongly Disagree were defined as “I do not think this should be considered a concern as our school makes grading changes.”

Teacher Survey Results

The total number of certified educators who were offered the opportunity to participate in the study included all 41 full-time certified staff members at the participating middle school. Information concerning the survey was sent by email and through letters placed in school mailboxes. Twenty-five teachers completed and returned the survey, yielding a participation rate of 60.97%.

The first 12 items on the Educator Grading Survey were identical to the parent survey and in a Likert-style format. Like the parent survey, the items on the educator survey were divided into two parts based on recent research. The first portion of the

survey described positive components of standards-based grading. Participants were asked to what degree they believed each component should be included in their middle school. Within Table 4, a summary of percentage of responses and mode for specific Likert survey items designated as positive factors of standards-based grading are presented.

Overall, the teachers agreed the positive components of standards-based grading should be incorporated in their middle school. The results were very similar to the parent survey data in that only one survey item was not agreed upon for implementation, which was survey item 5. This item stated practice work should not be included in final grade reports. Of the 25 teacher participants, 32% agreed or strongly agreed practice work should not be included in final grades, while 68% of teachers were neutral or disagreed with this grading method.

Table 4

Percentage Data for Teacher Support of Positive Standards-based Grading Factors

Survey Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mode
1	28%	64%	4%	0%	4%	Agree
2	25%	41%	12.5%	12.5%	8.3%	Agree
3	12%	68%	8%	12%	0%	Agree
4	28%	52%	8%	8%	4%	Agree
5	4%	28%	16%	32%	20%	Disagree
6	12%	52%	16%	20%	0%	Agree
7	45.8%	37.5%	0%	16.7%	0%	Strongly Agree
8	25%	29.2%	16.7%	20.8%	8.3%	Agree
9	20%	36%	20%	24%	0%	Agree

Note. Survey sample comprised of 25 educator participants. Items rated as Strongly Agree were defined as “I think this practice should be used in our school.” Items rated Neutral were defined as “I am indifferent as to whether or not this practice should be used in our school.” Items rated Strongly Disagree were defined as “I do not think this practice should be used in our school.”

The second portion of the educator survey described concerns of standards-based grading stated by recent research. Participants were asked to what degree they believe each concern should be considered as their school attempted to make grading changes.

Within Table 5, a summary of percentage of responses and the mode for specific Likert-style survey items designated as concerns of standards-based grading are presented.

Overall, teachers tended to agree leaders should take into account the stated concerns of standards-based grading practices. Survey items 10, 11, and 12 were grading concerns receiving a mode of agree (I believe this is a concern that should be considered when changing to a standards-based grading program). The only concern conceding a mode of disagree was survey item number 9 (Adequate feedback on assignments can be communicated with a letter grade).

Table 5

Percentage Data for Teacher Concerns of Standards-based Grading Factors

Survey Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mode
10	20.8%	62.5%	12.5%	0%	4.2%	Agree
11	16.7%	58.3%	8.3%	12.55	4.2%	Agree
12	4.2%	16.7%	8.3%	62.5%	8.3%	Disagree
13	29.2%	33.3%	20.8%	8.3%	8.3%	Agree

Note. Survey sample comprised of 25 educator participants. Items rated as Strongly Agree were defined as “I believe this is a concern that should be considered when changing to a standards-based grading program.” Items rated Neutral were defined as “I am indifferent as to whether or not this practice should be considered when changing to a standards-based grading program.” Items rated Strongly Disagree were defined as “I do not think this should be considered a concern as our school makes grading changes.”

Administrator Survey Results

A total of three middle school administrators completed the Educator Grading Survey. All of the administrators working in the participating middle school were offered the opportunity to participate in the study. Information concerning the survey was sent by email and through letters placed in school mailboxes and yielded a participation rate of 100%.

Teachers and administrators were given the same survey, but the data were calculated separately for each population. Within Table 6, a summary of percentage of responses and the mode for specific survey items designated as positive factors of standards-based grading are presented. Overall, the administrators agreed the positive components of standards-based grading should be incorporated in their middle school. Again, survey item 5, concerning practice work being omitted from end-of-term grade reports, was the only item to not receive a mode of strongly agree or agree.

Table 6

Percentage Data for Administrator Support of Positive Standards-based Grading Factors

Survey Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mode
1	66.7%	33.3%	0%	0%	0%	Strongly Agree
2	33.3%	66.7%	0%	0%	0%	Agree
3	66.7%	33.3%	0%	0%	0%	Strongly Agree
4	66.7%	33.3%	0%	0%	0%	Strongly Agree
5	0%	33.3%	66.7%	0%	0%	Neutral
6	66.7%	0%	33.3%	0%	0%	Strongly Agree
7	66.7%	33.3%	0%	0%	0%	Strongly Agree
8	66.7%	33.3%	0%	0%	0%	Strongly Agree
9	33.3%	66.7%	0%	0%	0%	Agree

Note. Survey sample comprised three administrator participants. Items rated as Strongly Agree were defined as “I think this practice should be used in our school.” Items rated Neutral were defined as “I am indifferent as to whether or not this practice should be used in our school.” Items rated Strongly Disagree were defined as “I do not think this practice should be used in our school.”

The second portion of the educator survey asked the administrators to what degree they believe each concern of standards-based grading should be considered as their school attempted to make grading changes. Within Table 7, a summary of percentage of responses and the mode for specific survey items designated as concerns of standards-based grading are presented.

The administrator responses on standards-based grading concerns were more varied than any of the other survey groups. Administrators rated item 10 (Important practice work may be neglected if it is only for feedback) with a mode of agree. However, on the remaining survey items, dealing with grading concerns, the three administrators were evenly split in their ratings. These items included allowing students to retake tests, providing letter grades as feedback on assignments, and the lack of time for teachers to make detailed feedback commonplace on student work.

Table 7

Percentage Data for Administrator Concerns of Standards-based Grading Factors

Survey Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mode
10	0%	66.7%	33.3%	0%	0%	Agree
11	0%	33.3%	33.3%	33.3%	0%	Agree Neutral Disagree
12	0%	0%	33.3%	33.3%	33.3%	Neutral Disagree Strongly Disagree
13	0%	33.3%	33.3%	33.3%	0%	Agree Neutral Strongly Disagree

Note. Survey sample comprised of three administrator participants. Items rated as Strongly Agree were defined as “I believe this is a concern that should be considered when changing to a standards-based grading program.” Items rated Neutral were defined as “I am indifferent as to whether or not this practice should be considered when changing to a standards-based grading program.” Items rated Strongly Disagree were defined as “I do not think this should be considered a concern as our school makes grading changes.”

For the purpose of this study, the middle school community of the participating school was separated into four different populations: students, parents, teachers, and administrators. The student population received a survey concerning grading methods and the ability of these methods to affect their perceived motivation levels. Of the 11 survey items describing grading practices, students rated three items as motivational (this factor motivates me to learn) in over 80% of the responses.

The most motivational grading method among students was allowing multiple tries to show learning with 85.2% of students agreeing or strongly agreeing that this

motivated them to learn. The second and third highest rated items included the option for students to work at their own pace and understanding the expected learning objectives at the beginning of a unit with agreement rates (strongly agree or agree) of 84.7% and 83%, respectively. Another highly ranked item (76.3% strongly agree or agree) included the following: I feel motivated to complete assignments when I am given choices as to how I show my learning instead of the teacher expecting all students to complete the same assignment or test.

The data also revealed 63.4% of students agreed or strongly agreed they feel more motivated when the teacher gives written or spoken suggestions instead of grades; yet, 72.3% of the students responded they feel motivated by receiving grades, and 65.4% of students responded strongly agree or agree to the following statement: I prefer the letter grades on my report card instead of mastering and checking off each standard. When asked if they feel motivated to work outside of school to aid learning even when it is not for a grade, 44.6% of students strongly agreed or agreed, while 32.2% disagreed or strongly disagreed, and 23.1% of students marked not sure.

The parent, teacher, and administrator surveys were the same for the first portion of the study. These survey items provided a clear picture as to which factors each subgroup found favorable for middle school students. Among the nine survey items categorized as positive aspects of standards-based grading, the most agreed-upon grading factor was the same for parents, teachers, and administrators. Allowing students multiple attempts to show the learning of a concept was marked strongly agree or agree (I think this practice should be used in our school)

by 85.1% of parents, 92% of teachers, and 100% of the administrators surveyed. All three groups agreed again in rating the second most agreed-upon grading factor (Students, parents, and teachers should be aware of exact learning objectives). This item was marked strongly agree or agree by 81.5% of parents, 83.3% of teachers, and 100% of the administrators.

Survey item 3 (Late work is accepted if students are making an effort to learn) ranked high with teachers (80% strongly agree or agree) and administrators (100% strongly agree or agree), while parents rated this item lower (58.5% strongly agree or agree). Only 56% of teachers rated agree or strongly agree for item 9 (Report cards should include learning objectives and clear results as to whether or not the students has mastered each standard); yet, 75.2% of parents and 100% percent of administrators strongly agreed or agreed to the need for this grading method. Only 51.3% of parents agreed or strongly agreed to students receiving written or oral feedback instead of grades, as compared to teachers who agreed in 66% of the responses, and administrators who agreed in 100% of the responses.

Of the nine positive outcomes of standards-based grading, two items were scored fairly low by all three survey groups. Item 5, stating that practice work should not be included in end of unit grade reports, only received a strongly agreed or agreed rate of 34.7% with parents, 32% with teachers, and 33% with administrators. Item 6 had higher ratings than item 5, but was still among the lower scores from all three groups. Item 6 was, “Because the goal is to check off standards mastered standards, students are not competing against one another.” This factor was strongly agreed to or agreed to by 60.3% of parents, 64% of teachers, and 66.7% of administrators. Additionally, items 5

and 6 were the only items to not receive a 100% agree or strongly agree rating by the administrators.

Concerns of standards-based grading were presented in the second portion of the parent, teacher, and administrator surveys. These items were noted by research as negative feedback some administrators and educators had experienced while transitioning to standards-based grading programs. Survey participants were asked to rate to what degree they felt each concern should be contemplated as their school changed grading practices.

Survey item 10 (If some school work is used only for feedback and not for grades, students may neglect important practice) was found to be of high concern among all three survey groups. Parents, teachers, and administrators agreed or strongly agreed to this item in 63.4%, 83.3%, and 66.7% of the responses, respectively. Item 11 explained test retakes and the possibility this practice may encourage students to study less for the first test. Seventy-five percent of teachers found this to be a concern, while only 46.2% of parents and 33.3% of administrators strongly agreed or agreed.

Most participants did not agree adequate feedback on assignments can be communicated with a letter grade. Only 45.9% of parents, 20.9% of teachers, and no administrators agreed or strongly agreed to this item. Item 13 dealt with teachers not having enough time to make detailed feedback commonplace for all students. Of all the responses, 62.3 % of parents, 62.5% of teachers, and 33% of administrators agreed or strongly agreed.

Parent Survey Comments

There were no open-ended survey items included on the parent survey; however, several parents wrote additional comments next to survey items, and one parent even returned a letter attached to the survey. It was evident parents' emotions ran high in regard to grading methods.

Survey item 2 (Students are given feedback using scoring guides and written or oral feedback instead of grades) received three parent comments advocating for written and oral feedback in addition to grades. Survey item 3 (Late work is accepted if students are making an effort to learn) received three comments as well. Parent Participant 97 wrote, "This will encourage kids to not care if things are turned in on time."

Parent Participant 62 wanted teachers to make sure the students were really trying and not being "lazy." Participant 32 felt a percentage of the actual score should be subtracted for late work. Item 4 (Students are given choices as to how they demonstrate learning of objectives) received contradicting comments. Parent Participant 22 strongly agreed to this statement noting, "We all learn differently." Conversely, Participant 97 wrote, "They are going to figure out the easiest way to do something."

A few parents wrote comments on Item 5, requesting practice work be included in final grades. One parent wrote, "Practice work is an important part of the learning process. I believe it should be used to a lesser degree in the evaluation process, but only as an indicator of understanding prior to mastery." Item 6 (Because the goal is to check off mastered standards, students are not competing against one another) received comments as well. Participant 62 disagreed and wrote, "A certain amount of competition

is good and can be motivating.” Participant 97 also disagreed with this survey item and added, “They aren’t competing with letter grades either.”

Parent Participant 22 strongly agreed with item 8 (Students are not penalized for taking longer to master a concept) and added, “But class is not held up by one or two.” Participant 32 agreed with this statement and added, “Only if effort to learn is shown, not simply due to laziness.” Item 10 was a concern dealing with not taking grades on homework and students neglecting important practice. Two parents noted the culture is very important in helping students want to practice. These parents disagreed this would be a concern as their school changed grading practices.

At the end of the survey, several parents wrote comments. Parent Participant 97 discussed the current English class and standards-based grading: “Our daughter’s English class is set up this way. Her teacher does not know her personally. If anything, it has discouraged her in learning and writing skills.” Another response said, “Letter grades are arbitrary values assigned to work. There becomes a deep flaw when special needs students are assigned the same letter grade as regular education students. They are evaluated on different standards.” Participant 102 wrote about the confusion of standards-based grade cards and the need for grade point averages for college. Finally, Participant 12 wrote this on the end of the survey: “I don’t think grades should be taken out completely, but it would be nice to see more feedback as to how the child is struggling or achieving instead of just a letter grade.”

Open-Ended Survey Results

The final three survey items were open-ended questions to teachers and administrators. Open-ended questions were used to solicit additional information

allowing the participants to voice their thoughts unconstrained by any perspectives of the primary investigator or prior research results (Creswell, 2015). Teachers and administrators were asked to convey the meaning of a grade report, discuss the appropriateness of standards-based grading for middle school students, and list support factors necessary in school-wide grading reform.

Open-ended item 14. What would be the most important factors in helping you feel comfortable while implementing grading changes in your school?

Participants listed 10 different needs with several of these factors listed by five or more participants. These most-needed factors included the following: making grading decisions together as a faculty and faculty buy-in; parent communication of grading changes and parent buy-in; and time to implement grading changes correctly. Teachers also requested professional development and training and a solid recording system including scoring guides, levels of mastery, and report cards in place. Teacher Participant 20 noted, “The change should be gradual with a lot of input from the teachers. The objectives should be clear with multiple ways to assess.” An administrator described his vision of the process as providing ownership and adapting “year to year as teachers, learners, and parents give feedback.”

Other needs were also listed on item 14. Several teacher respondents included administrative support as a top need during grading reform. Teacher Participant 18 mentioned needing administrative involvement during implementation and in the classroom to ensure ongoing success. Another need voiced was grading consistency in mastery levels, vocabulary, and parent communication among all departments.

Data showing the effectiveness of standards-based grading in improving achievement levels for middle school students were requested by some teachers. Other respondents suggested teacher leaders should begin implementing with success and then lead the way for others. Additionally, a few teachers noted the need for creating more time in the day for students to revisit concepts and the need for smaller class sizes with this type of grading method. Participant 6 mentioned, “The number of students would have to be smaller for me to be comfortable in being able to accurately grade them all.” Teacher Respondent 22 conveyed the same feeling asking for smaller class sizes of no more than 25 students per class period. Participant 20 added, “The objectives must be such that they can be reasonably covered and assessed in a school year.”

Open-ended item 15. If you feel that standards-based grading is not appropriate at the middle school level, please list your top reasons.

Of the 28 teacher and administrator surveys, nine participants responded to this item. The responses were varied with only a few overall themes emerging. Teacher Respondent 25 stated, “I feel grading is pretty subjective no matter which system you use.” Another participant feared teachers would continue to have varying levels of expectations (similar to problems with traditional grades), so the feedback would not be valid. A similar response was noted, “If standards-based grading is based on a numerical value, I don’t see how that will be any different than A-F.”

The main concern, noted by four of the nine teachers responding to this item, mentioned preparing students for high school and college within a standards-based grading program. Several teachers stated educators should be preparing students for how to maintain a strong high school and/or college grade point average. Another wrote,

“[We] have many dual credit classes that need grades in order to translate smoothly to high school.” Other teachers echoed this thought of needing a grade for high school credit classes offered to middle school students. One teacher recommended combining overall letter grades and concepts mastered. Additional factors noted by one or two respondents included parents understanding the measuring scale, students neglecting work when it is not for a grade, and the extra time involved with this grading method.

Open-ended item 16. What do you feel a grade report should convey to students and parents?

This question revealed teachers and administrators have many expectations as to what grade reports should communicate. Of the 28 surveys returned, many different opinions emerged concerning the purpose of grade reports. One response stated, “Parents and students should know if a student is learning and understanding content. But, in there somewhere, we should be able to reflect degrees of responsibility.” Teacher Participant 11 wrote, “Grade reports should convey what a student knows and what he or she needs to continue to practice. Concepts may carry over from grade level to grade level. It’s a continuous progress report.” An administrator noted grade reports should convey “what the student has learned, character, and work ethic.”

Participant 6 requested two different types of grades: “An academic grade to show what a student knows,” and “Another grade to reflect their character, organization, effort, and other life skills that are just as, if not more, important than an academic grade.” Teacher Participant 11 asked for the attachment of an artifact file to report cards as way to show what the students can produce. One teacher questioned, “Not sure, at this point. What is necessary?” Others summed it up simply that grade reports should convey

“mastery of objectives,” “how well the student can meet the expectation,” and “if they [students] are meeting their true potential.”

Overall, the teachers and administrators noted several aspects they felt should be conveyed through grade reports. These emerging factors are listed in order of their prominence in the responses: mastery of objectives, effort or work ethic, responsibility, knowledge or current learning level, behavior of the student, artifacts showing what the student can produce, strategies for improvement, and letter grades. Mastery of objectives was by far the most consistent theme with 11 respondents mentioning this in their descriptions of a grade report.

Summary

Within this chapter, quantitative data were analyzed to examine the effectiveness of standards-based grading practices to motivate learning, as determined by perceptions of middle school students. Additional data were evaluated to determine best grading practices as perceived by middle school parents, teachers, and administrators. Likert-style surveys were used to obtain this information from educational stakeholders in one Missouri middle school as they attempted to begin grading reform school-wide. The synthesizing of the four stakeholder survey groups revealed the most desired grading practice, allowing students multiple attempts to show the learning of a concept, was the same for students, parents, teachers, and administrators.

To gain a better understanding of what supports educators need during grading reform, open-ended survey items were used on the teacher and administrator surveys. The open-ended items yielded information concerning the meaning of grade reports, the appropriateness of standards-based grading for middle school students, and support

factors necessary in school-wide grading reform. Personal needs and perceptions toward grading reform were collected and ranked through these open-ended items.

In Chapter Five, the quantitative findings of the study are further discussed. Conclusions are drawn, based upon the data collected, to answer the three research questions guiding the study. Implications for grading practices that could motivate and guide middle school students are outlined. Finally, recommendations for future research in the area of grading reform are presented.

Chapter Five: Findings, Conclusions, and Recommendations

The purpose of this study was to identify and investigate the most important factors guiding grading reform as schools adapt to standards-based grading methods. According to Hardegree (2012), the standards-based teaching movement has improved learning for students nationwide, and the necessary next step is providing all stakeholders with a clearer picture of student proficiency in mastering performance objectives. In 2012, Guskey and Jung declared, “The field of education is moving rapidly toward a standards-based approach to grading” (p. 23). As report cards and grading methods change, this investigator aimed to collect and analyze data to aid school administrators in guiding and encouraging grading reform at the middle school level.

The data collected in this study focused on all stakeholders involved in grading at the middle school level. Students, parents, teachers, and administrators completed surveys in order to collect many perceptions concerning grading practices. The surveys were distributed to all stakeholders during the beginning stages of grading reform in the middle school. The research relied on descriptive quantitative data using Likert-style survey items.

Quantitative methods were also used to garner opinions on open-ended survey questions concerning the meaning of grade reports and the types of supports teachers need to make quality grading changes. The open-ended items allowed participants to describe their personal perceptions and additional information beyond the limits of Likert survey items. This study augmented the limited amount of research on determining which grading practices are best for a specific school or age group of students rather than

the more common research on why standards-based grading methods should be adopted by all schools.

Following the surveying of students, parents, teachers, and administrators, quantitative descriptive methodology was used to determine which grading practices stakeholders found most beneficial for middle school students. The grading practices addressed in the surveys were based on the positive and negative outcomes of standards-based grading reported in current research (Beatty, 2013; Brookhart, 2011; Frey & Fisher, 2011; Jung & Guskey, 2011; Marzano & Heflebower, 2011; Massell & Perrault, 2014; Rundquist, 2011; Shippy et al., 2013; Spencer, 2012; Urich, 2012; Wormeli, 2012, 2013). Additionally, open-ended questions were analyzed to determine which support methods are most necessary in schools attempting grading reform.

Within this chapter, findings from the quantitative data of the four survey groups (students, parents, teachers, and administrators) are outlined. Conclusions are drawn based on the data and are used to answer three research questions. Based on the results of this study, implications for future practice in grading reform are proposed. Implications for grading practices that could motivate and guide middle school students are also outlined. Finally, recommendations for future research in the area of grading reform are presented.

Discussion of Findings

Data gathered from Likert-style survey items were used to determine the most preferred grading methods among all stakeholders in the participating middle school. Open-ended survey questions were also proposed to the teacher and administrator groups collecting data concerning the necessary processes for successful grading reform. After

calculation of the mode for each survey item and careful examination of the open-ended questions several common themes emerged from the stakeholder groups.

Overall, several grading practices were revealed to increase perceived motivational levels among the student survey sample. The most motivational grading method was allowing multiple tries to show learning with an agreement rate (strongly agree or agree) of 85.2%. The second and third highest rated practices included options for students to work at their own pace and understanding the expected learning objectives at the beginning of a unit. Additionally, over 60% of the students strongly agreed or agreed the following practices increase their perceived learning motivation: having choices, teacher feedback, and receiving grades.

Many common themes emerged among the parent, teacher, and administrator survey groups in this study. Of the nine survey items categorized as positive aspects of standards-based grading, the two most agreed-upon grading factors were the same for parents, teachers, and administrators. Allowing students multiple attempts to show the learning of a concept and awareness of learning objectives were the most preferred practices. Furthermore, the three survey groups agreed in ranking eliminating practice work from end of term grade reports as the least preferred grading practice.

The open-ended survey questions revealed teacher and administrator thoughts on grading reform. Participants described the most needed supports during grading reform. These supports included the following: making grading decisions together as a faculty, parent communication and parent buy in, and sufficient time to make grading changes correctly. Teachers and administrators also reported several aspects they felt should be

conveyed through grade reports. The top emerging factors were mastery of objectives, effort or work ethic, responsibility, and knowledge or current learning level.

Conclusions

The insights drawn from the analysis of the survey data were used to form conclusions for each research question.

Research question one. What are middle school students' perceptions of their motivation to learn when standards-based grading practices are implemented?

The first research question was answered through descriptive statistical analysis gathered from closed, Likert survey items. The data were collected from an online survey offered to 723 students in the participating middle school. As is distinctive of descriptive statistics, this study was constructed to elicit raw data to be coordinated and synthesized (Bluman, 2014) to describe the situation of grading reform. A percentage distribution of the Likert ratings was given for each item on the survey. The raw scores were then converted to percentages to identify which grading factors most influenced students' perceived motivation levels.

Evaluation and learning reports are extremely important components in the education of every student (Abdul & Jisha, 2014). As quoted by Abdul and Jisha (2014), grading methods "can fulfill or destroy the purpose of education" (p. 292). Recent standards-based research indicates students are more motivated to master concepts than earn a letter grade (Beatty, 2013). The results determined 72.3% of the 137 student participants felt motivated by receiving grades. Conversely, 63.45% of students reported feeling more motivated to finish work when the teacher gives written or spoken suggestions instead of grades. In all, 65.4% of students reported preferring letter grades

on their report cards instead of mastering and checking off standards. Beatty (2013) reported 74% of students in a college study declared “a bit of difficulty” or more in completing coursework that was not included for part of the final grade (p. 10). In this study, only 44.6% of students felt motivated to work outside of school to improve learning when not for a grade.

Marzano and Heflebower (2011) stated the main goal of a standards-based grading program is for students to master every objective at their own rates. This is one of the most important and beneficial reasons for standards-based grading and reporting (Marzano & Heflebower, 2011). Covington (as cited in Marzano & Heflebower, 2011) found multiple learning attempts to be intrinsically motivating to students and advocated for assigning grades clearly based on what students can do while giving them as many opportunities as possible for achieving growth. Rundquist (2011) agreed explaining standards-based grading as trying to “find a way to give a final grade that takes into account retention and is flexible to deal with students who take that extra time to learn something” (p. 69).

This study aligned with previous research. Of the 11 student survey items, the most motivational grading factor was allowing students multiple tries to show their learning. Of the 137 student participants, 85.2% of students found this method to increase their perceived motivation to learn. The next highest rated aspect of standards-based grading included allowing students to work at their own pace. Students strongly agreed or agreed with this item in 84.7% of the responses.

Understanding the learning objectives at the beginning of a unit was another highly ranked grading factor among students. Eighty-three percent of the participants

strongly agreed or agreed this factor motivated them to learn. Similarly, Marzano and Heflebower (2011) claimed learners evaluated against standards get to see advancement through each individual concept, which is motivating and encouraging and a clear road map for learning.

Additionally, students felt motivated to complete assignments when they were given choices as to how they show their learning, instead of the teacher expecting all students to complete the same assignments or tests. Overall, 76.3% of student participants strongly agreed or agreed to this factor as motivating, while only 8.4% rated this factor with strongly disagree or disagree. These results agreed with work from Francom (2011), who found student choice to be a powerful and motivating method for maximizing learning. When students in Francom's (2011) study were given choices as to what they learned and how they showed their learning, they were more persistent, engaged, and productive. Land (2011) agreed with these results as well, as 80% of the students in his study said they were more motivated to finish work if they were given choices on their assignments and how they show their learning.

Finally, some researchers noted concerns with allowing students multiple attempts to master a concept. In Townsley's 2013 study, some secondary teachers feared enabling students to retest would encourage less study time for the first test. Townsley (2013) revealed 57.7% of students are not encouraged to study less for the first test when test retakes are an option. Additionally, research documented concerns that students struggled to understand standards-based report cards (Beatty, 2013). Of all the parent participants in this study, 52.7% reported an easy understanding of standards-based report cards.

Research question two. What are the current perceptions of students, parents, teachers, and administrators concerning standards-based grading at the middle school level?

The second research question was also answered through descriptive statistical analysis using surveys delivered to 723 parents, 723 students, 35 teachers, and three administrators in the middle school where the study took place. The surveys were returned electronically or to a secure drop box on the school site, and a mode was determined for each Likert item. Raw scores were converted to percentages to ascertain which grading methods were most welcomed by students, parents, teachers, and administrators.

Middle school students were asked to agree or disagree with their perceived motivation to learn based on described grading practices. Three grading practices received a mode of strongly agree. The opportunity to work at their own pace was strongly agreed to by 51.1% of students as motivation to learn. Of the 137 student participants, 42.7% strongly agreed having choices as to how they show their learning really motivated them to learn, and 38.5% strongly agreed receiving grades really motivated them as well.

Middle school parents, teachers, and administrators were asked to agree or disagree to which grading techniques should be used in their school. Nine positive factors associated with standards-based grading were described on the surveys. Of these nine grading methods, the mode of agree was the most commonly chosen response (see Tables 2, 4, and 6). Only one of the positive grading factors received a strongly agree

mode from parents and teachers, and six factors received a strongly agree mode among administrators.

Overall, the favorable grading methods for middle school, as most often reported by students, parents, teachers, and administrators, were similar. The top most agreed-upon grading practice among the four survey groups was the same—allowing students multiple attempts to show learning. The participants in this study completely agreed with research which declared all students can learn if given enough and appropriate learning opportunities (Spencer, 2012).

Awareness and understanding of learning objectives at the beginning of a unit was the second most agreed-upon aspect of standards-based grading for parents, teachers, and administrators. Understanding of learning objectives was rated third among students, while students rated working at their own pace the second most motivational grading trait. These ratings agreed with research by Kalnin (2014) stating students want clear expectations, time to learn, and fair and credible evaluations.

Among the nine positive traits of standards-based grading, the lowest-rated grading practice among parents, teachers, and administrators dealt with leaving practice work out of end-of-term grade reports. Only 34.7% of parents, 32% of teachers, and 33% of administrators agreed or strongly agreed this grading practice should be used in their school. Similarly, Hanover Research (2011) reported there seems some contingency in the importance of practice work and the need for this type of work to be monitored and reported on report cards. This 2011 study found students were more likely to participate and reported putting forth more effort in classroom practice activities when participation points were awarded (Hanover Research, 2011).

Along with the positive outcomes of standards-based grading, the concerns encountered when using these grading methods were also described on the surveys. The top-rated concern among parents, teachers, and administrators dealt with practice work. The concept if some work is used only for feedback and not for grades, students may neglect important practice, was strongly agreed or agreed to as a concern by 63.4% of parents, 83.3% of teachers, and 67.7% of administrators. This coincides with Land's (2011) study on standards-based grading. Land (2011) reported 88% of high school participants were not motivated to finish their English homework when it "doesn't count" for a grade (p. 61).

Another concern with standards-based grading practices included the extra time needed for teachers to keep standards-based grading practices up-to-date. When asked if teachers have too many students and not enough time to make detailed feedback commonplace for all students, the mode for this item was agree for both the parent and teacher survey groups. Recent researchers also conceded the amount of time spent assessing and reassessing students within a standards-based grading program is significant (Kalnin, 2014; Rundquist, 2011). Rundquist (2011) reported time constraints as the most difficult aspect of changing to a standards-based grading program. In his study of one college class with nine students, Rundquist (2011) noted extra time was needed in assessing, allowing additional learning opportunities, grading, and getting student buy-in to the new method.

A final area of concern dealt with offering test retakes, and this trait encouraging students to study less. The most common rating for this survey item was agree (I feel this is a concern that should be considered when changing to a standards-based grading

program). Similarly, studies by Tierney et al. (2011) and Townsley (2013) both revealed teachers' internal conflict with giving students multiple test attempts and teaching students the importance of responsibility and work ethic. Following his 2013 study, Townsley summarized overall the teachers were positive about using standards-based teaching and grading methods; however, teachers felt a responsibility to ensure students were giving their best, learning punctuality, and not taking advantage of the grading methods.

Research question three. What factors do middle school teachers report as necessary support when attempting to reform grading practices school wide?

Data garnered from educators on open-ended survey items were used to answer the third research question. Open-ended questions were used to allow participants to share their thoughts on grading reform unconstrained by the perspective of the investigator or prior research results. Teachers and administrators were asked to convey the meaning of a grade report, discuss the appropriateness of standards-based grading for middle school students, and list support factors necessary in school-wide grading reform.

According to Cox (2011) and Townsley (2013), teacher resistance to grading reform is an issue associated with standards-based grading. Secondary teachers especially find grading reform to be overwhelming and do not trust standards-based grading practices to hold students accountable as endorsed by recent research (Tierney et al., 2011). Some teachers in this study echoed these thoughts included in narrative text from the open-ended questions on the educator survey.

Teacher Participant 5 feared parents do not understand standards-based measuring scales and felt standards-based practices were not appropriate for middle school because

some classes are for high school credits. Participant 22 related when standards-based methods are used, students are not prepared for letter grades or grade point averages later in their educational careers. This participant also added students need to be prepared for circumstances allowing only one chance to pass. Many teacher responses described taking care to make quality changes and making these changes correctly.

Open-ended survey item 15 stated, “If you don’t think standards-based grading is appropriate at the middle school level, please list your top reasons.” Only 36% of the teacher participants chose to respond to this item, indicating 64% of the teachers did not have resistance to making standards-based grading changes in their school. Overall, the teacher participants wanted to work together as a faculty and make changes that were best for their students.

Guskey and Jung (2012) acknowledged many schools have jumped into standards-based grading quickly without a true focus on how to best implement these grading and learning strategies. Brookhart (2011) noted the importance of beginning grading reform in the correct way. Several authors agreed the first step in positive standards-based grading implementation is getting staff members to come together in agreement on the fundamental purpose of grades (Brookhart, 2011; Campbell, 2012; Guskey et al., 2011).

The teacher and administrator participants in this study noted several aspects they felt should be conveyed through grade reports. These factors are listed in order of their prominence in the responses: mastery of objectives, effort or work ethic, responsibility, knowledge or current learning level, behavior of the student, artifacts showing what the student can produce, strategies for improvement, and letter grades. Mastery of objectives

was by far the most important concept to be conveyed to students and parents, with 11 respondents mentioning this in their descriptions of a grade report.

Brookhart (2011) warned as schools attempt quality grading reform they often get sidetracked, encounter difficulties, and must make adjustments to best meet the needs of their students. Reforming grades is a process, and administrators must be ready to embrace setbacks and aid educators in pushing forward (Brookhart, 2011). In light of this research, the teacher participants in this study were asked, “What would be the most important factors in helping you feel comfortable with implementing grading changes in your school?”

The teacher participants listed several needs with a few themes emerging from the data. The highest-rated factors included the following: making grading decisions together as a faculty and staff buy-in; parent communication of grading changes and parent buy-in; and time to implement grading changes correctly. Teachers also rated professional development and training, and a solid recording system including scoring guides, levels of mastery, and report cards in place as needed components for grading reform.

All of these factors were also deemed important implementation techniques by recent research (Brookhart, 2011; Rundquist, 2011). DeLarkin (2013) reported teacher buy-in, quality professional development, an online system for tracking and storing student work, and scoring guides for all standards as reasons for the success of standards-based grading in his case study high school. Brookhart (2011) recommended teachers must feel safe enough to have honest discussion and to experiment during grading reform. He also noted the entire staff must come together in determining the fundamental

purpose of grades (Brookhart, 2011). Abdul and Jisha (2014) focused on the time teachers need for professional development and to create systematic scoring guides for every standard. Kalnin (2014) relayed the importance of creating quality reporting guidelines and clear proficiency levels to be understood by students, parents, and teachers.

A few other items were mentioned as important support factors during grading reform but not as prevalently. These supports included data showing the effectiveness of standards-based grading in improving achievement levels for middle school students, teacher leaders leading the way for the rest of the staff, extra time for grading and reassessing, and smaller class sizes. Teacher time and class sizes were heavily covered in research as problems to be solved when it comes to implementing a quality standards-based grading program (Abdul & Jisha, 2014; Rundquist, 2011).

Implications for Practice

As established by Savickiene (2011), the way educators assess, analyze, and report student learning determines the quality of an education. Many students are receiving inaccurate reporting of their learning, and educators can no longer ignore the need for grading reform (Campbell, 2012). Research is calling for the implementation of standards-based grading, because this method seems to provide a clearer way to report student mastery of objectives and to keep learning focused on the standards (Hardegree, 2012). Educational stakeholders agree traditional grades are arbitrary and students need more feedback; however, public opinions in schools already using standards-based grading vary greatly (Reeves, 2011). Leaders in education must act by pursuing

discussions with teachers, parents, and policymakers on how to best use grading practices to guide students and report their learning (Reeves, 2011).

As stated by several authors, the implementation process is very important in conducting quality grading reform (Brookhart, 2011; Guskey & Jung, 2012; Wormeli, 2012). Guskey and Jung (2012) also declared the implementation process must focus on the primary “function of grades as communication tools” (p. 23). Based on the results of narrative responses on open-ended questions from educators, the results of this study align with the current research on standards-based implementation techniques.

Administrators should begin grading reform with considerations from students, parents, and teachers. This study made it evident there are many different ideas and beliefs concerning grading. There is no way to please every stakeholder, but it is important for students, parents, teachers, and administrators to work together in creating the best methods for their school.

Additionally, administrators must have patience and allow teachers to experiment and even fail during the grading reform process. Parents need regular communication on grading changes, and their buy-in is an important part of making the best learning and grading reforms. Teachers need professional development, ongoing training and support, and time to create solid recording systems and consistent mastery levels.

Monitoring, guiding progress, and allowing students the time to master each objective is time consuming. Administrators and teachers must get creative in making time for students to revisit and master objectives. The amount of time teachers spend keeping standards-based grading practices up-to-date is daunting. Although it is expensive, administrators should also consider finding ways to reduce the amount of

students on each teachers' caseload or finding a way to provide more plan time to teachers during the school day.

Based on the data collected in this school, students, parents, teachers, and administrators had similar views on which grading practices were most valuable in promoting and guiding learning for middle school students. The most important grading changes for this age group of students should begin with clear, understandable objectives in every course. These objectives should be easily available to students and parents and referred to often as a learning guide.

Under close monitoring by teachers, students should be allowed to work at their own pace, have multiple attempts to master objectives, and be given choices as to how they learn and show their learning. Mastering the objectives should be the first concern; however, teachers must be vigilant in monitoring progress in order to avoid the concern of students becoming careless or lazy due to the grading changes. Educators must work together to ensure student proof of mastery is constant across classrooms and content. Middle school students want and need more written and spoken feedback from their teachers, and this study revealed they want grades as well.

This study did not agree with the current research on standards-based grading in two areas. Some researchers have advocated for the dismissal of grades altogether (Kohn, 2011), but this study revealed many middle school students, parents, and teachers would like a standards-based program including grades. Additionally, standards-based research promotes keeping practice work grades out of final grade reports (Wormeli, 2013). Wormeli (2013) argued students need to practice without the fear of failure. In

this study, teachers and parents contended effort and practice need to somehow be reported in end-of-term progress.

Recommendations for Future Research

Most previous research concerning grading reform has focused on the problems concerning traditional grades and the reasons for changing to standards-based grading methods. This study concentrated on the factors and perceptions influencing middle school students, parents, and teachers during grading reform. The data collected will supplement the small amount of research concerning which grading methods motivate students to learn as well as the agreement of students, parents, teachers, and administrators concerning grading practices.

Additional research needs to be conducted regarding the perceptions of other middle school communities concerning standards-based grading procedures. This study was limited to one middle school with 137 student participants, 148 parent participants, 25 teacher participants, and three administrator participants. The participants in the school were predominately of one ethnicity, and the school was located in a small Midwest town. A study of several schools, varying in size and other demographics, would allow a broader view on student, parent, teacher, and administrator thoughts on grading practices.

Further research could be conducted into grading reform and implementation strategies in schools with five or more years of standards-based grading success. The success in these schools should be studied to determine how teachers and administrators changed teaching, grading, and other aspects of school life during grading reform. In addition, teachers should be surveyed or interviewed to determine which support factors

were most effective or which support factors could have been added to improve the grading transition. Students and parents could be interviewed to collect their perceptions of the grading reform process. It could also be of use to compare and contrast grading practices, grading reports, and student growth in these schools already experiencing success with standards-based grading practices.

Finally, research could be conducted to discern if standards-based grading practices actually promote academic growth at the secondary level. Information could be gathered to determine if student achievement scores are higher in Missouri middle schools and high schools using standards-based grading practices as compared to similar schools using traditional grading practices. This study could include a qualitative component including interviews from teachers and students in secondary schools using standards-based grading and teachers and students in schools using traditional grading practices.

Summary

The purpose of this study was to collect and analyze the factors and perceptions influencing middle school students, parents, and teachers during grading reform.

As declared by Kalnin (2014), standards-based grading practices are better for students because these grading methods do not base report cards on factors like attendance or behavior but on students' ability to demonstrate understanding and proficiency in relation to standards. Acceptance of standards-based grading practices is growing rapidly, and educators need to consider how to best respond to this assessment and grading movement (Kalnin, 2014).

As administrators and teachers in a southwest Missouri middle school attempted to make quality standards-based grading changes, surveys of 137 students, 148 parents, 25 teachers, and three administrators were collected. Quantitative methodology was utilized to reveal the most agreed-upon grading practices for middle school students. Additionally, open-ended survey items were analyzed to elicit specific support components most requested by middle school educators when transitioning to a standards-based grading and reporting method. The data collected revealed factors that should be taken in to consideration when attempting grading reform at the middle school level.

Analysis of the data collected from students, parents, teachers, and administrators indicated these groups have similar beliefs and preferences when it comes to middle school grading practices. The grading factors most agreed-upon by all participants included allowing students multiple attempts to show their learning and understanding of learning objectives. The grading factor least appealing to all participants was omitting the inclusion of practice work scores on end-of-term grade reports.

Overall, allowing students multiple attempts to show their learning was the most necessary grading practice revealed in this study. Out of 313 total participants, 85.1% of parents, 92% of teachers, and 100% of the administrators strongly agreed or agreed this grading method should be used in their school. Additionally, 85.2% of students strongly agreed or agreed they were motivated to learn when this grading method was used. The student grading survey results revealed the student participants agreed with their parents, teachers, and administrators on the top two grading methods. Students also gave high

agreement ratings to working at their own pace, having choices in how to show learning, letter grades on report cards, and written and spoken feedback from teachers.

Open-ended questions revealed teachers have many support requests when attempting to implement standards-based grading practices school wide. The number one listed support factor included working together as a faculty and gaining staff buy-in before and during grading changes. It was also requested parents be well-informed and involved with the grading reform process. Teachers listed professional development, ongoing training and support, and time to create solid recording systems and consistent mastery levels as factors necessary in feeling comfortable while implementing grading changes school wide. Generally, teachers were positive about standards-based grading methods, but there was some concern in giving up grade point averages.

Lastly, conclusions were reached and the three research questions were answered. Implications for approaching a standards-based grading program likely to benefit middle school students were outlined. Recommendations for future research in the area grading reform were addressed. The data obtained in this study provided school leaders the opportunity to address important grading reform perceptions and situations in order to increase the likelihood of making the best grading changes for middle school students.

Appendix A

Student Grading Survey

There are no anticipated risks associated with this research and there are no direct benefits for your participation in this study. However, your participation will contribute to the knowledge about best grading practices and may help our school and other schools in making the best grading changes for future students. **By completing this survey, you acknowledge your consent to participate in the research study.**

The following statements are based on the learning and grading practices you may have experienced at school. To what degree you agree or disagree with the following statements?

Strongly Agree “This factor really motivates me to learn.”

Not Sure “I’m not sure if this factor motivates me to learn.”

Strongly Disagree “This factor is the opposite of motivating when it comes to my learning.”

1. I feel motivated to learn when I am allowed multiple tries to show my learning.

strongly agree agree not sure disagree strongly disagree

2. I feel more motivated to finish my work when my teacher gives me written feedback or spoken suggestions instead of grades.

strongly agree agree not sure disagree strongly disagree

3. I feel motivated to complete assignments when I am given choices as to how I show my learning instead of the teacher expecting all students to complete the same assignment or test.

strongly agree agree not sure disagree strongly disagree

4. I feel motivated to work outside of school to aid my learning even when it is not for a grade.

strongly agree agree not sure disagree strongly disagree

5. I feel motivated by receiving grades.

strongly agree agree not sure disagree strongly disagree

6. I feel more motivated to learn when I understand the expected learning objectives at the beginning of a unit.

strongly agree agree not sure disagree strongly disagree

7. I feel motivated to learn when I can work at my own pace.

strongly agree agree not sure disagree strongly disagree

8. When I am allowed to retake a test I study less before the first try.

strongly agree agree not sure disagree strongly disagree

9. I feel like I have a better understanding of my learning when my teacher puts a letter grade on my paper instead of written or spoken comments.

strongly agree agree not sure disagree strongly disagree

10. It is easy for me to understand standards-based report cards.

strongly agree agree not sure disagree strongly disagree

11. I prefer the letter grades on my report card instead of mastering and checking off each standard.

strongly agree agree not sure disagree strongly disagree

Appendix B

Parent Grading Survey

The following statements describe researched grading practices used in schools today. To what degree do you believe each component should be included in the grading practices at your child's school?

Strongly Agree "I think this practice should be used in our school."

Neutral "I'm indifferent as to whether or not this practice should be used in our school."

Strongly Disagree "I do not think this practice should be used in our school."

1. Students are allowed multiple attempts to show the learning of a concept.

strongly agree agree neutral disagree strongly disagree

2. Students are given feedback using scoring guides and written or oral suggestions instead of grades.

strongly agree agree neutral disagree strongly disagree

3. Late work is accepted if students are making an effort to learn.

strongly agree agree neutral disagree strongly disagree

4. Students are given choices in how they demonstrate learning and mastering of objectives.

strongly agree agree neutral disagree strongly disagree

5. Practice work is not included in end-of-unit grade reports.

strongly agree agree neutral disagree strongly disagree

6. Because the goal is to check off mastered standards, students are not competing against one another.

strongly agree agree neutral disagree strongly disagree

7. Students, parents, and teachers are aware of the exact learning objectives.

strongly agree agree neutral disagree strongly disagree

8. Students are not penalized for taking longer to master a concept.

strongly agree agree neutral disagree strongly disagree

9. Report cards include learning objectives and clear results as to whether or not the student has mastered each standard.

strongly agree agree neutral disagree strongly disagree

The following statements are reported by research as concerns when changing grading practices in schools.

To what degree to you agree or disagree with the following statements?

Strongly Agree “I believe this is a concern that should be considered when changing to a standards-based grading program.”

Neutral “I’m indifferent as to whether or not this practice should be considered when changing to a standards based grading program.”

Strongly Disagree “I do not think this practice should be considered as a concern as our school makes grading changes.”

10. If some school work is used only for feedback and not for grades, students may neglect important practice.

strongly agree agree neutral disagree strongly disagree

11. Allowing students to retake tests may encourage them to study less for the first test.

strongly agree agree neutral disagree strongly disagree

12. Adequate feedback on assignments can be communicated with a letter grade.

strongly agree agree neutral disagree strongly disagree

13. Teachers have too many students and not enough time to make detailed feedback commonplace on student work.

strongly agree agree neutral disagree strongly disagree

14. As a parent, I am concerned that I may struggle to understand new report cards.

strongly agree agree neutral disagree strongly disagree

Appendix C

Educator Grading Survey

There are no anticipated risks associated with this research and there are no direct benefits for your participation in this study. However, your participation will contribute to the knowledge about best grading practices and may help our school and other schools in making the best grading changes for future students. **By completing this survey, you acknowledge your consent to participate in the research study.**

The following statements describe researched grading practices used in schools today. To what degree do you believe each component should be included in the grading practices at your school?

Strongly Agree “I think this practice should be used in our school.”

Neutral “I’m indifferent as to whether or not this practice should be used in our school.”

Strongly Disagree “I do not think this practice should be used in our school.”

1. Students are allowed multiple attempts to show the learning of a concept.

strongly agree agree neutral disagree strongly disagree

2. Students are given feedback using scoring guides and written or oral suggestions instead of grades.

strongly agree agree neutral disagree strongly disagree

3. Late work is accepted if students are making an effort to learn.

strongly agree agree neutral disagree strongly disagree

4. Students are given choices in how they demonstrate learning and mastering of objectives.

strongly agree agree neutral disagree strongly disagree

5. Practice work is not included in end of unit grade reports.

strongly agree agree neutral disagree strongly disagree

6. Because the goal is to check off mastered standards, students are not competing against one another.

strongly agree agree neutral disagree strongly disagree

7. Students, parents, and teachers are aware of the exact learning objectives.

strongly agree agree neutral disagree strongly disagree

8. Students are not penalized for taking longer to master a concept.

strongly agree agree neutral disagree strongly disagree

9. Report cards include learning objectives and clear results as to whether or not the student has mastered each standard.

strongly agree agree disagree strongly disagree

The following statements are reported by research as concerns when changing grading practices in schools. To what degree to you agree or disagree with the following statements?

Strongly Agree “I believe this is a concern that should be considered when changing to a standards-based grading program.”

Neutral “I’m indifferent as to whether or not this practice should be considered when changing to a standards based grading program.”

Strongly Disagree “I do not think this practice should be considered as a concern as our school makes grading changes.”

10. If some school work is used only for feedback and not for grades, students may neglect important practice.

strongly agree agree neutral disagree strongly disagree

11. Allowing students to retake tests may encourage them to study less studying for the first test.

strongly agree agree neutral disagree strongly disagree

12. Adequate feedback on assignments can be communicated with a letter grade.

strongly agree agree neutral disagree strongly disagree

13. Teachers have too many students and not enough time to make detailed feedback commonplace on student work.

strongly agree agree neutral disagree strongly disagree

Please respond to the following open-ended questions.

14. What would be the most important factors in helping you feel comfortable while implementing grading changes in your school?

15. If you feel that standards-based grading is not appropriate at the middle school level, please list your top reasons.

16. What do you feel a grade report should convey to students and parents?

Appendix D

LINDENWOOD

LINDENWOOD UNIVERSITY ST. CHARLES, MISSOURI

DATE: March 16, 2015

TO: Christy Patrick
FROM: Lindenwood University Institutional Review Board

STUDY TITLE: [724685-1] Educational Stakeholders' Perceptions During Grading Reform
in One Middle School

IRB REFERENCE #:
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: March 16, 2015
EXPIRATION DATE: March 16, 2016
REVIEW TYPE: Full Committee Review

Thank you for your submission of New Project materials for this research project. Lindenwood University Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Full Committee Review based on the applicable federal regulation. Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure. All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All FDA and sponsor reporting requirements should also be followed. All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to the IRB.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the completion/amendment form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of March 16, 2016. Please note that all research records must be retained for a minimum of three years.

If you have any questions, please contact Robyne Elder at (314) 566-4884 or relder@lindenwood.edu. Please include your study title and reference number in all correspondence with this office. If you have any questions, please send them to IRB@lindenwood.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Lindenwood University Institutional Review Board's records

Appendix E

Lindenwood University
School of Education
209 S. Kingshighway
St. Charles, Missouri 63301



December 15, 2014

Dear [REDACTED],

I am conducting a research study titled, Educational Stakeholder's Perceptions during Grading Reform in One Middle School, in partial fulfillment of the requirement for a doctoral degree in Instructional Leadership at Lindenwood University. The research gathered should assist in providing insight on the perspectives of students, educators, and parents during the implementation of grading reform. This study will aid school leaders in making positive grading changes for students, families, and educators at the middle school level.

I am seeking your permission as Superintendent of the [REDACTED] to survey students, teachers, and educators at the junior high level.

Participation in the study is completely voluntary. You may withdraw your consent at any time without penalty. The identity of the school district will remain confidential and anonymous in the dissertation or any future publications of this study.

Please do not hesitate to contact me with any questions or concerns about participation (phone: [REDACTED] or e-mail: [REDACTED]). You may also contact the dissertation advisor for this research study, Dr. Sherry DeVore, (phone 417-881-0009 or e-mail: sdevore@lindenwood.edu). A copy of this letter and your written consent should be retained by you for future reference.


Respectfully,

Christy Patrick
Doctoral Candidate
Lindenwood University

Permission Letter (cont.)

I have read this consent form and have been given the opportunity to ask questions.

I understand it is my responsibility to retain a copy of this consent form, if I so choose. I consent to participation in the research described on the preceding page.

 12/18/14
Superintendent's Signature/Date


Superintendent's Printed Name

 12/18/14
Primary Investigator's Signature/Date

Christy Patrick
Primary Investigator's Printed Name

Appendix F

Letter of Introduction

Dear Parent or Guardian,

This letter is to invite you to participate in my research study. I look forward to collecting the opinions of you and your student concerning current school grading practices. The purpose of this study is twofold: first to determine which grading practices are best for middle school students and second to elicit the feelings of students, parents, and educators as your school attempts to make grading changes.

I have spent a great deal of time studying the current research on grading. Many researchers are reporting that traditional letter grades do not show what students actually know. These experts are calling for grading reform in schools. As your school attempts to improve grading practices it is important that the viewpoints of parents and students are collected and analyzed.

Attached is a consent form for your child to participate along with a survey for you the parent or guardian to complete. If you would like to take part in the study, please fill out the consent form and the parent grading survey and send both back to school by (date). Your participation in this study is voluntary, and you or your student may withdraw at any time. Please do not put your name on your survey, as we want all participants to remain anonymous. Following your consent, your student will take an online survey during English class. All responses will be kept confidential. If you have any questions you can contact me at [REDACTED] or by phone at [REDACTED]

Thank you for your help with this study. Your participation will positively impact grading practices for many students.

Sincerely,

Christy Patrick
Doctoral Candidate
Lindenwood University

Appendix G

Consent Form

Lindenwood University School of Education

209 S. Kingshighway
St. Charles, Missouri 63301

Informed Consent for Parents to Sign for Student Participation in Research Activities

Educational Stakeholders' Perceptions during Grading Reform in One Middle School

Principal Investigator: Christy M. Patrick

Telephone: [REDACTED] E-mail: cmp273@lindenwood.edu

Participant _____ Parent Contact info _____

Dear Parent or Guardian,

1. Your child is invited to participate in a research study conducted by Mrs. Christy Patrick under the guidance of Dr. Sherry DeVore. The purpose of this research is to determine which grading practices are best for use during the middle school years.
2. a) Your child's participation will involve:
 - Completing an electronic survey about grading practices. Responses include: Strongly Agree, Agree, Disagree, Strongly Disagree. All survey statements cover grading procedures used in schools.
 - Approximately 600 students may be involved in this research.
- b) The amount of time involved in your child's participation will be approximately 10 minutes.
3. There are no anticipated risks to your child associated with this research.

4. There are no direct benefits for your child's participation in this study. However, your child's participation will contribute to the knowledge about best grading practices and may help the school and other schools in making the best grading changes for future students.
5. Your child's participation is voluntary and you may choose not to let your child participate in this research study or to withdraw your consent for your child's participation at any time. Your child may choose not to answer any questions that he or she does not want to answer. You and your child will NOT be penalized in any way should you choose not to let your child participate or to withdraw your child.
6. We will do everything we can to protect your child's privacy. As part of this effort, your child's identity will not be revealed in any publication or presentation that may result from this study.
7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, (Mrs. Christy Patrick at [REDACTED]) or the Supervising Faculty, (Dr. Sherry DeVore at 417-881-0009). You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs at 636-949-4846.

I have read this consent form and have been given the opportunity to ask questions. I may also make a copy of this consent form for my records. I consent to my child's participation in the research described above.

Parent's/Guardian's Signature Date

Parent's/Guardian's Printed Name

Child's Printed Name

Signature of Investigator Date

Investigator's Printed Name

Appendix H

Letter of Introduction

Dear Educator,

This letter is to invite you to participate in my research study. I look forward to collecting your opinions concerning current and new school grading practices. The purpose of this study is twofold: first to determine which grading practices are best for middle school students and second to elicit the feelings of students, parents, and educators as your school attempts to make grading changes.

I have spent a great deal of time studying the current research on grading. Many researchers are reporting traditional letter grades do not show what students actually know. These experts are calling for grading reform in schools. As your school attempts to improve grading practices it is important that the viewpoints of students, parents, and educators are collected and analyzed.

Attached is a survey for you to complete. If you would like to take part in the study please fill out the attached survey and place it in the designated drop box in the school office by (date). Your participation in this study is voluntary, and you may withdraw at any time. Please do not put your name on your survey as we want all participants to remain anonymous. If you have any questions you can contact me at [REDACTED] or by phone at [REDACTED].

By completing the survey, you acknowledge your consent to participate in the research study.

Thank you for your help with this study, your participation will positively impact grading practices for many students.

Sincerely,

Christy Patrick
Doctoral Candidate
Lindenwood University

Appendix I

Consent Form

Lindenwood University

School of Education
209 S. Kingshighway
St. Charles, Missouri 63301

Informed Consent for Participation in Research Activities

Educational Stakeholders' Perceptions during Grading Reform in One Middle School

Principal Investigator: Christy M. Patrick

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Dear Educator,

1. You are invited to participate in a research study conducted by Mrs. Christy Patrick under the guidance of Dr. Sherry DeVore. The purpose of this research is to determine which grading practices are best for use during the middle school years.
2. a) Your participation will involve:
 - Completing a survey about grading practices. Responses include: Strongly Agree, Agree, Disagree, Strongly Disagree. All survey statements cover grading procedures used in schools.
 - Approximately 600 students, 600 parents, and 40 educators may be involved in this research.
- b) The amount of time involved in your participation will be approximately 10 minutes.
7. There are no anticipated risks associated with this research.
8. There are no direct benefits for your participation in this study. However, your participation will contribute to the knowledge about best grading practices and may help the school and other schools in making the best grading changes for future students.

9. Your participation is voluntary and you may withdraw your participation at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose to withdraw.
10. We will do everything we can to protect your privacy. You will not include your name on the survey, to further assure responses are not linked to a particular educator. As part of this effort, your identity will not be revealed in any publication or presentation that may result from this study.
7. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, (Mrs. Christy Patrick at [REDACTED]) or the Supervising Faculty, (Dr. Sherry DeVore at 417-881-0009). You may also ask questions of or state concerns regarding your participation to the Lindenwood Institutional Review Board (IRB) through contacting Dr. Jann Weitzel, Vice President for Academic Affairs at 636-949-4846.

My consent to participate in the study is acknowledged by completing the survey.

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Vita

Christy Patrick was born and raised in Webb City, Missouri. After graduating from Webb City High School in 1994, Christy graduated from Missouri Southern State University in 1998 with a Bachelor of Science degree in Elementary Education. In 2001, she completed a Master of Science degree in Elementary Education from Missouri State University. Christy earned middle school certification in the area of science in 2005.

Christy has served students in many positions over a 17-year period. She started her teaching career in kindergarten and third grade in Joplin and Webb City, Missouri, for five years. She then worked as a sixth-grade teacher in Branson, Missouri, for three years. Christy currently serves as a seventh grade science teacher for the Branson School District in Branson, Missouri.