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Best Practices for Leading a Transition to Standards-Based Grading in Secondary Schools

Alexander Bruce Carter
Walden University

Walden University

COLLEGE OF EDUCATION

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Alexander Bruce Carter

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Review Committee
Dr. Donna Graham, Committee Chairperson, Education Faculty
Dr. Don Jones, Committee Member, Education Faculty
Dr. Karen Hunt, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University
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Abstract

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by

Alexander B. Carter

MEd, University of Virginia, 2002

BA, James Madison University, 1994

Dissertation Submitted in Partial Fulfillment

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Abstract

Educational policy researchers have concluded that if U.S. schools transition from the traditional model of grading and reporting to a uniform standards-based grading and reporting model, students would benefit academically. However, very few middle and high schools in the United States have made the transition to standards-based grading. This qualitative research study was designed address the role of leadership in change by identifying a set of best leadership practices to guide school principals in leading such a transition. The conceptual framework was Kotter's change model. A national sample of 7 middle and 5 high school principals from 8 states who had previously led their schools in the transition to standards-based grading elected to serve as study participants. This panel completed an open-ended questionnaire designed to identify perceived best leadership practices school leaders should consider as they plan to lead such a change. Using the Delphi technique to determine consensus, a set of 78 best leadership actions were identified. Then, these actions were rated by the same panel, resulting in a set of 8 best leadership change practices consistent with Kotter's framework. Practices included establishing and communicating a sense of urgency, developing a change vision and stakeholder buy-in, building coalitions and broad-based actions, generating short term wins and continuing processes, and incorporating change into school culture. This consensus set of leadership practices might affect positive social change by assisting school principals in planning and leading grading change initiatives in schools to enhance students' learning and improve systems of communicating student academic progress using uniform and consistent standards.

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Dedication

I dedicate this dissertation to my family, specifically my mother, Sandra Carter, and my wife, Wendy Carter, without whom I would have *given up the ghost* of this ordeal long ago. You will forever have my love, my thanks, and my deepest appreciation for your confidence, support, and encouragement!

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This dissertation is six years in the making, and it has been through many iterations. It would be criminal not to acknowledge my third and final doctoral study chair, Dr. Donna Graham, without whose great support this dissertation could not have been completed. Dr. Graham was clear in her directions, quick in her reviews, detailed in her feedback, and exerted the consistent, gentle, but relentless pressure required to keep me moving toward my goal. She recognized that I lead a very hectic, emotionally draining, and time consuming job as superintendent of a high needs school district in Southwestern Colorado, but has never entertained that this reality could be an excuse for quitting.

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Section 1: Introduction to the Study

Educational leaders and researchers have stated that the traditional method of grading and reporting, which is widely used in U.S. secondary schools, is an inferior method of communicating student academic learning levels when compared to a standards-based grading and reporting model (Brookhart, 2003; Guskey & Bailey, 2010; Marzano, 2000, O'Connor, 2009). While the transition to standards-based grading into U.S. elementary schools has begun (Rosales, 2013), the vast majority of U.S. secondary schools continue to use traditional grading practices to communicate feedback on student academic achievement (O'Connor, 2011).

Traditional grades are generally computed by blending a variety of academic data collected over a period of time with nonacademic data, including student effort, behavior, participation, and other elements (Guskey, 2009). The resulting aggregate grade, often called *hodgepodge grades*, have been shown to be largely ineffective and unreliable indicators of what a student knows and is able to do (Cross & Frary, 1999). Brookhart (2011) has stated that a student's academic grade should not be thought of as something that is earned through effort, participation, or by following a set of rules or directions; but rather should be a clear and articulate communication of what students know and are able to do at a specific point in time. Leading school reform proponents have suggested that one of the most effective ways to begin positive school change is to move to standards-based grading and reporting models (Erickson, 2011).

A study of curriculum and instruction alignment, development of common formative assessments, and other elements of the standards-based teaching and learning

cycle are routinely included in professional development and school reform efforts. In many secondary schools, standards-based grading and reporting is rarely discussed (Marzano & Heflebower, 2011). This is likely because changing grading practices is a *second order change* for teachers (Wiles, 2013). Second order changes are described a change that challenge a long established and accepted practice in a school community, and requires people to adopt new practices or approaches (Waters, Marzano, & McNulty, 2003). These types of changes are extremely difficult to successfully lead, implement, and thus, have to be managed delicately in order to succeed. As Erickson (2010) implied, attempting to influence a teacher's grading practice is akin to altering the U.S. social security program for politicians – it is considered a risky and difficult topic for high school principals to consider approaching.

Since the passage of the No Child Left Behind Act of 2001, the topic of grading and reporting has become an area of intense discussion and interest for researchers and educators (Marzano & Heflebower, 2011). Guskey (2002a, p.4) outlined four developments that have caused educators to investigate the efficacy of the traditional grading and reporting model that has been in use almost without change for decades. These developments are:

- Recognition of inconsistencies in the grading policies and practices of elementary, middle, and high school educators shows the need for change in grading and reporting practices.

- The growing emphasis on student mastery of subject standards and performance on high-stakes standards-based assessments has demonstrated that the current grading and reporting practices are inadequate.
- Advanced technology allows for more efficient reporting of detailed information on student learning.
- Growing awareness of the gap between educators' knowledge of grading and reporting methods and common practice necessitates change.

In the second of these developments, Guskey (2002a) found a disparity between student performances on standards-based, criterion-referenced end-of-course performance assessments and the achievement grades students receive from their teachers. This disparity reinforces belief that the traditional academic achievement grades are unreliable indicators of what a student knows and is able to do, and also correctly causes stakeholders to doubt the validity of the grades schools issue to report academic achievement.

Statement of the Problem

The majority of secondary schools in the United States use traditional grading practices to report student academic achievement. Traditional grades, which often include a student's academic data blended with elements reporting the same student's classroom effort, behavior, participation, and other factors, have been shown to be ineffective and unreliable indicators of what a student knows and is able to do (Marzano & Heflebower, 2011). Educational reformers have stated that grades should help promote learning, but researchers have shown that the use of traditional grading and reporting practices often

causes students to treat school as a game where the goal is to earn a high grade rather than to access wide learning (Goode, 2009).

Teachers and tutors have been using various methods to communicate student academic proficiency to their pupils and parents for centuries. Schneider and Hutt (2014) argue that, while grading began as a method to communicate progress with students and parents, by the late nineteenth century grades were being used to sort and select students for future roles in society. In short, grades began became an "…organizational rather than a pedagogical enterprise" (Schneider & Hutt, p. 201).

Another problem is that schools often use traditional grades to identify which students need academic interventions. Wormeli (2012) stated that traditional grades, which most often are a result of averaging a set of academic data from both the distant and recent past into a cumulative mean which is then translated into a letter grade, often result in "…an incorrect report of [student] performance against individual standards" (p. 40). Marzano and Heflebower (2011) stated that nonacademic factors such as attendance, behavior, participation, and other data distort the report of academic achievement and should not be factored into a student's academic grade.

I currently serve as the superintendent of schools in Montezuma-Cortez School District RE-1 in Southwestern Colorado. Montezuma-Cortez High School, an underperforming high school in the district I lead, and the district's middle school, Cortez Middle School, both communicate student academic achievement with traditional grading and reporting models. These schools, like many others in the region and state, often use the teacher-calculated and reported grade reports as the chief determining factor to

identify which students will be offered academic interventions to support improving their learning. There is, therefore, a local need for this research. If my school leaders are to successfully transform the grading practices in their schools, they will need a leadership guide to help guide their leadership actions.

Implications for Social Change

Using these traditionally calculated and reported grades, which Wormeli (2012) stated are often incorrect reports, to determine which students most are in need of help is a questionable educational practice. Beyond the local for this research, there is a general need for further research to support secondary school principals who would like to lead the transition from traditional grading and reporting to a more reliable and informative grading and reporting model. Before this change can happen, however, principals need to know where to start and how to make this transformative, second order change successful. In this study I have created a guide for secondary school principals, both within my district and in the broader context, to consult as they consider leading this type of change.

Nature of the Study

The research methodology for the current qualitative Delphi study is based on the work of Linstone and Turoff's (2002) description of the Delphi technique. As a research design, the Delphi technique is described as a qualitative research method to discover consensus opinion from a group of informed, expert panelists about a complex topic (Grisham, 2009; Hsu & Sandford, 2007). This method is very suitable for "structuring a group communication process so that the process is effective in allowing a group of

individuals, as a whole, to deal with a complex problem" (Hsu & Sandford, 2007, p. 3). The Delphi method allows a group of experts to anonymously exchange and evaluates each other's perspectives about a difficult topic, and is a common tool for researchers who are seeking the product of common intelligence (Skulmoski, Hartman, & Krahn, 2007). This method is ideal for arriving at reliable consensus from a group of experts through the use of questionnaires (Habibi, Sarafrazi, & Izadyar, 2011). The Delphi method is commonly used for developing consensus of informed opinion on an issue or procedure (Rayens & Hahn, 2000).

The benefits of the Delphi technique (Habibi et al., 2011; Skulmoski et al., 2007) include, but are not limited to:

- The questionnaires are done electronically; therefore the expert panel can be geographically dispersed around the nation.
- The questionnaires are completed asynchronously, therefore can be completed around the busy schedules of the expert panel.
- The process is iterative, so the researcher is able to refine and build a case for consensus over a period of time.
- The expert panel is purposefully kept isolated and anonymous from one another, and therefore typical problems that are associated with group consensus building, including *groupthink*, domination of weaker panelist by more forceful panelists, the negative impact of typical social pressures, and conformist thinking, are avoided.

The research design of the current study is intended to answer research questions to determine if a panel of experts can coalesce around a set of consensus best practices for leading the transformative change from traditional to standards-based grading at the secondary school level. Cooper and Schindler (2008) suggested that probing experts or well-informed people for information about a topic in which they hold special expertise and knowledge is a good source of new information for researchers, and is a recommended practice.

This study included two questionnaires that members of the expert panel responded to. The panel was made up entirely of 12 secondary school principals from across the nation who has experience, and thus expertise, in the implementation of a standard based grading and reporting. The first questionnaire (round one of the Delphi study) included a structured open-ended question designed to solicit a wide range of expert opinions around the best practices principals should take to lead a successful transition to standards-based grading in a high school. The next questionnaire (round two of the study) was used to measure the strength of the suggested best practices collected from the experts on the first questionnaire and the data from it was used to build the case for the set of nine consensus best practices that school leaders should take when leading this transformative change.

Research Questions

In the problem statement, I posited that many secondary school principals are unsure of how to plan to lead the transformative change from traditional to standards-based grading. Additionally, there are secondary school principals who were successful

in leading this type of change. Therefore, by assembling a panel of expert secondary school principals selected from multiple schools and districts from across the nation, expert being defined as those who have successfully led a transition to standards-based grading in their secondary schools, the following questions were answered by this study:

Research Question 1: What are the steps high school leaders should follow as best practices when initiating the transformative change from traditional grading and reporting to standards-based grading and reporting?

Research Question 2: Does consensus exist among the expert secondary school principals for the set, or a subset, of the practices discovered by the first research question?

Research Objectives

This qualitative study began by developing a broad spectrum of possible best practices from an open-ended questionnaire completed by a panel of experts. After this is accomplished, I determined that there is consensus around a set of nine best leadership actions that secondary school leaders should consider when planning to lead the transformative change from traditional models of grading and reporting to a standards-based model for grading and reporting. This consensus set of nine best practices for secondary school principals will be made available to school leaders who desire to lead this type of change.

Purpose of the Study

The purpose of this qualitative study was to discover if there is consensus among a panel of expert secondary school principals regarding the best practices secondary

school leaders could consider when leading the transformative change from traditional grading and reporting toward a standards-based model for grading and reporting. Cresswell (2008) described qualitative research as nonstatistical method of analyzying and evaluating the perspectives of research participants. Qualitative methods were appropriate for the current study of how to lead the transition from traditional to standards-based grading because the purpose was to build consensus around a set of best practices leaders can consider when leading this type of transformative change. To establish consensus, this researcher empaneled a set of experts who first developed a broad spectrum of possible practices that successful secondary school principals have used to lead this change to participate in two questionairres, and then the Delphi method was used to determine if there was a consensus set, or subset, of these practices that experts agree best for principals to use when leading this type of change. The study concluded by assembling this list of consensus best practice leadership actions leaders could consider implementing should they attempt to transform the grading and reporting practices used in their schools.

Operational Definitions

For the purpose of this study, the following definitions are used:

Grading: The way teachers report student academic performance in a class or subject (Schneider & Hutt, 2014).

Grade reporting: The method that school use to share those grades with students and parents (Guskey, 1994).

Traditional grading and reporting: The system where teachers use "a set of symbols, words, or numbers to designate different levels of performance" (Guskey, 2002a, p.2).

Standards-based grading: The system where teachers use only current data to communicate what a student knows and is able to do at a specific point in time relative to a set of learning standards (Spencer, 2012).

Best practices: The practice that is recognized as the most effective for a particular situation or environment. When data support the success of a practice, it is referred to as a research-based practice or scientifically based practice (SERC, November, 2013).

Secondary school: Middle school (typically grades 6-8) and high school (typically grades 9-12).

Dynamic social constructivist theory: The ability to construct understanding by studying a set of subjects' previous experiences over time to identify patterns.

Assumptions, Limitations, and Scope

The assumptions, limitations, and scope created a framework to better understand the research, allowing for the clear boundaries and qualifications that are inherent in all studies. Several assumptions guided the design and purpose of this study. First, I assume that a list of best practices will benefit principals who intended to lead a transition to standards-based grading at their secondary school. Second, I assume that the national sample recruited for this study are representative of the larger body of U.S. secondary school principals. Furthermore, I assumed that the participants who agreed to participate offered their best and most honest responses to the surveys that were administered.

There were also several limitations for this study. First, there are few secondary schools in the U.S. that have fully integrated standards-based grading systems into their institutional practice. This resulted in a relatively small pool of possible candidates to recruit to participate as an expert panelist. Another limitation of this study was that of the 109 secondary school principals invited to participate in this study, only twelve consented to participate. While this number met the minimum criteria for this study, it was still on the lower end for sample size. Furthermore, the twelve consenting participants, only eight returned completed questionnaires during the first round of inquiry. Also, of the twelve consenting participants, only 10 completed the SurveyMonkey questionnaire, again limiting the scope of the expertise informing the study results.

Other limitations included the fact that reliance on an expert panel made up exclusively of secondary school principals may have limited the lens around the best practices for implementing this type of change in middle or high schools. This could necessitate further research to study the best practices as identified and described by teachers, parents, students, and other stakeholders who have also experienced this second order change. Finally, as with any study based in constructivist theory, any findings which are discovered by this research will themselves be a construction, and therefore may be flawed.

The scope of the study focuses exclusively on middle and high school principals. All participants were sitting school principal during the period of transition from a traditional model for reporting academic grades to a standards-based model for grading and reporting. Each panelist had continued to lead the school for a period of at least one

year after the new model was put into effect. Finally, each principal participant had the power and authority to direct the transition actions at the high school.

Expert panelists were identified through a discovery and review process from internet records, and will be recruited to participate in this study by email request. A detailed explanation of the discovery process is provided in section three.

Significance of the Study

This study may be significant to any secondary school principal who is interested in leading a change in their school toward standards-based grading. Educational researchers suggest that any school reform that fails to include a serious look at how teachers are grading and reporting student learning won't amount to much (O'Connor, 2002). By making the consensus best practices list available, which clearly lists and explains leadership actions that successful secondary school principals recommend their colleagues take when implementing this change in their schools, more educational professionals will be informed and prepared to transition from traditional models for grading and reporting in favor of standards-based grading systems. Once this research is distributed, therefore, secondary schools such as Montezuma-Cortez High School and Cortez Middle School will be better able to use the teacher-generated reports of academic achievement to ensure that the students who are most in need of academic support are assigned to available interventions.

This study could be significant in beginning the shift in standard practice from the tradition grading and reporting model, one where teachers use a percentage based, "sort and select" grading system, to a standards-based model, where clear and forthright

communication of student learning and mastery relative to standards is. This type of reporting is more informative to the students and communities U.S.'s schools serve. In addition, as Scriffiny (2008) recommended that U.S. schools replace traditional grading systems with standards-based systems all together.

Conclusion

Section 1 of this study served to provide a general overview of the challenges of transitioning to a system of standards-based grading at the secondary school level in this country and described the problem and purpose of this study. Additionally, an outline and general description of the Delphi method was provided and objectives of the research study were presented. In the next section, the historical background of grading will be reviewed and the current research and theory on grading and reporting will be covered, as well as the research around the challenges that come with leading this type of second order change in schools. In Section 2, a review of the literature on grading practices, standards-based grading, and on educational leadership and change management will be provided.

Section 2: Review of the Literature

The grading and reporting practices educators use touch upon virtually every other area of educational scholarship (Muñoz & Guskey, 2015). To conduct research related to grading practices commonly used in United States schools, I accessed the Walden University Library databases, specifically ProQuest, Education Research Complete, and Academic Search Complete. Key words used during the research included *grading and reporting practices*, *purpose for grading*, *standards-based grading*, *educational change theory*, and *implementing change at school*.

Schneider and Hutt (2014) stated, "Grading remains a central feature of nearly every student's school experience" (p. 2). Grades are important to students and families. They are often the most critical factor for selection to honors programs, school organizations, academic scholarships, athletic eligibility, and admissions to post-secondary programs (Marzano, 2010). Despite the importance and the almost cult-like status of grades in our schools, few educators report that any significant time was dedicated to developing how they would grade and report student academic proficiency during in their university teacher preparatory programs (Guskey, 2006).

The literature review will be organized into seven sections: (a) an overview of the history of the practice of grading and reporting, (b) a review of the research related to the purpose for grades, (c) a review of common grading and reporting practices in U.S. schools, (d) criticisms of the traditional model for grading and reporting; (e) criticisms of the standards-based system for grading and reporting, (f) recent scholarly research related to the challenges associated with leading change related to grading practices in secondary

schools, and (g) an overview of the conceptual framework for understanding organizational change in schools.

Historical Perspective

While teachers in the United States have traditionally developed measures to assess student levels of academic ability and have often used these tools to communicate a student's progress to their students and their families, what most American's recognize as *grades* are a relatively modern development in the U.S. educational system (Schneider & Hutt, 2014). Most people who received a formal education before the modern age of education did so from a private tutor, and the manner of communicating student academic proficiency to the student and parent was done privately and normally without any formal system of grading. The practice of awarding students a grade within the now ubiquitous A-F system was virtually nonexistent until the late 19th century (Guskey, 2002b).

With the passage of compulsory educational laws in the late 1920s, new ideas about teaching and learning developed (Fischel, 2009; Schneider & Hutt, 2014). Schools began dividing classes by age group and developing methods to measure student academic proficiency as well as creating rankings between students to communicate progress to their students and parents. The purpose of these grade reports was to describe the skills and knowledge the student had mastered (Schneider & Hutt, 2014). These reports were usually a narrative describing what the student had learned.

In addition to the narrative, teachers would sometimes categorize the students into hierarchies, and each level would be assigned a *grade*, but they would usually be in a local and idiosyncratic form. These grading systems were a derivative of the European

model of education and as such, the grades promoted internal competition to facilitate a rank order of the students in a school or a class and to identify students for awards and recognition (Schneider & Hutt, 2014).

Teachers were, largely for the first time, now being asked to sort and select their students into rank order (Oliver, 2011). As a result, schools began to develop normalized systems for grading and reporting. To create a method to discern and rank students, teachers developed systems where they could easily assign a value to the work their students produced and a method to report these values to the students and parents. By the early 20th century, secondary school teachers commonly used a 100-point scale percentage-grading model to help further distinguish between the ranks of their students (Guskey, 1994).

The percentage grading model was not without early critics. Starch and Elliot (1912, 1913) showed how identical samples of student work could receive widely different scores depending upon the teachers who grade the work. This research effectively questioned the reliability of teachers' ability to accurately and reliably rate the quality of student work by percentages. In these studies, Starch and Elliot demonstrated that even after having developed common grading criteria and expectations of work, teachers could assign a greatly varying value to identical work samples. The conclusions that Starch and Elliot drew from this research were that one could discern very little about a student simply by looking at the percentage grades they were awarded by their teachers, since those percentage grades meant such different things to different evaluators.

Other systems that were used for grading and reporting student achievement included pass-fail systems, where students were simply grouped into cadres who had demonstrated mastery in the content or skills identified, or those who had not (Guskey, 1994). Critics of this system stated the resulting ranks were too broad and indiscriminate to be useful (Schieder & Hutt, 2014). As a result, schools and teachers continued to develop systems with more discrete categories to indicate the students who had mastered the content and skills at the excellent level, good level, average level, poor level, and also a category that indicated that the student had failed to demonstrate any mastery or the required content and skills of the course. This system would acquire a short-hand method of reporting where each level would be assigned a grade: A, B, C, D, or F (Guskey, 2002b).

Another strategy used during the 20th century was a practice of normalizing the distribution of student ranking with the use of a process called *bell curve grading*. This educational practice was founded upon the prevailing belief that intellectual ability was normally distributed across the broad population, and therefore the grades awarded to a class should resemble this curve (Marzano, 2010). This model would guarantee that only a small number of pupils in a class would be awarded the highest possible mark, and also guaranteed that a small number of students would achieve failing marks. By the late 1970s, as most public school systems began to adopt the belief that students should be rated against their ability to demonstrate proficiency on clearly articulated standards of learning rather than against their peers, this practice was largely rejected as a flawed and ineffective one (Marzano, 2000).

The topic of grading remains a very controversial one (Spencer, 2012). Researchers Guskey and Bailey (2010) and Guskey (2002a) drew the following conclusions about grading and reporting:

- Grading and reporting are not essential to the instructional process.
- Grading and reporting serve a variety of purposes, but no one method serves all purposes well.
- Grading and reporting will always involve some degree of subjectivity.
- Mathematical precision does not yield fairer or more objective grading.
- Grades have some value as a reward, but no value as a punishment.
- Grading and reporting should always be done in reference to learning criteria, never on the curve.
- Three general types of learning criteria are used in grading and reporting – product, process, and progress criteria.

Grading and reporting practices continue to evolve in our schools into the present day. In order to consider the best systems for grading and reporting, it is important to review the research on the purpose grades serve in our schools.

The Purpose of Grading and Reporting

Any researcher studying methods of reporting student achievement must first address the question of "Why we grade students in the first place?" Marzano (2000, p.14) describes five main reasons educators use grades:

1. for administrative purposes;

2. to give students information about their progress and achievement;

3. to provide guidance to students about future coursework;

4. to provide guidance to teachers for instructional planning; and

5. to motivate students.

Bowers (2009) included employers to the list of people who could use the grades a student earns in school to make decisions about hiring and placement in the workforce. The majority of educators agree that the primary purpose for grades is to provide a way for teachers to communicate a student's academic performance to each of their students and to his or her parents (Cox, 2011; Goode, 2009; Marzano, 2000).

Grades serve multiple purposes for principals, guidance counselors, and other school administrators. Teacher-awarded grades are usually the single factor considered when awarding credit for courses completed, and thus are often the primary consideration when schools are deciding upon whether a student will move up to the next grade or be retained for a repeated year at their current grade level (Bowers, 2009). Grades a student received in previous schools will regularly be used to inform the course selection when students will be placed in at a new school. Grades are often the only consideration when schools determine a student's class rank and award honors and credits toward graduation. Perhaps most importantly, post-secondary institutions often use the grades a student earned in his or her K-12 career as an important factor when considering the student's aptitude and potential for success in a post-secondary learning environment (Wegwert, 2012). Most recently, administrators use grades to help determine which students need additional support and resources to master content standards (O'Connor, 2009).

Students, parents, and community members agree that the most important function of grades is to communicate student achievement to the students and parents that the teacher serves (Miller, 2013). According to Guskey (2003), parents and students struggle to discern what the grades they are assigned by their teachers mean. Since so many different factors are combined when calculating a typical grade, the conclusions that students and parents come to is often disassociated from what the teacher had hoped would be arrived at (Cox, 2011).

Another common recognized purpose for grading is for grades to act as a rewards or punishments, meant to help motivate students to work hard in school. Some practitioners believe that grades can serve as motivating tools, either in a positive or negative way. This is based upon the idea that when a student receives low grades he or she will become motivated to work harder. In the same fashion, proponents believe that high marks have the effect of making successful students try even harder. Interestingly, Guskey (2003) showed that the practice of assigning grades and reporting these to students and parents is "…not essential to the instructional process. Teachers can teach without grades. Students can and do learn without grades" (p. 2). Kohn (2010) stated that grades can actually get in the way of authentic learning.

Common Grading Models Used in the United States

There are four common grading models currently being used in the United States as a basis for grading and reporting: (a) norm-referenced, (b) self-referenced/peer grading, (c) criterion-referenced assessments, and (d) standards- based grading (Meyers, 2014).

Norm-Referenced System

In a norm-referenced system of grading and reporting, all students in a class are ranked versus each other rather than against a set of learning criteria that has been identified as the objective of the course (Guskey, 1994). This system guarantees that a set number of students will earn top marks, a set number of students will earn failing marks, and the rest of the students end up somewhere in the middle (Marzano, 2000). Critics of this type of grading and reporting system point out that this philosophy of grading sends a questionable message to students and parents since the very system creates a hyper-competitive culture where learning is secondary to the position each students attains relative to the rest of the class. According to Wormeli (2012), grading on the curve and averaging scores to determine academic proficiency is the equivalent of educational malpractice.

Self-Referenced System

Self-referenced systems rate students on their academic achievement based upon the amount of growth or progress the students has demonstrated relative to his or her own past performance or demonstration of mastery. Proponents of this method point to the fact that all learners learn at different rates and in different ways, therefore students should only be held accountable for making adequate progress toward achieving proficiency and not versus other students' expected rates of learning (McMillan, 2013). Critics of this system point out that students can continue to make progress, and achieve favorable ratings, and yet never reach proficiency on the standard of learning (Guskey, 2006).

Criterion-Referenced System

The most commonly used grading system in the United States is the criterion-referenced grading framework using the percentage method for calculating grades. In this system, the teacher develops a set of pre-established learning objectives and standards for the class. Students are rated for their levels of demonstrated proficiency against those learning objectives and standards. This is commonly achieved by the use of the percentage method. Using the percentage method, the teacher develops a series of cut points to distinguish between recognized levels of proficiency. One example could be that any score that is marked as 90% or higher earns an A grade, a score of between 80-89% would earn a B grade, a score of between 70-79% earns a C grade, and so on. Proponents of this system point to the objective nature of the method, where pure math is used to determine a student's score. However, critics have suggested that the system continues to be subjective since the cut points are usually arbitrary and because it assumes that all questions on an assessment are of equal importance, and therefore are assigned equal value, when in fact this is rarely the case (Shirran, 2006).

The last comprehensive study of U.S. high school grading policies was conducted by the College Board in 1998. In this study (College Board, 1998, p.2) , which reviewed the policies of over 3,000 high schools, researchers found that:

> …a large majority of schools use a traditional grading system of A–F or numeric grades (91 per cent), use the same grading system for all academic courses (92.2 per cent), report GPA (90.1 per cent), and calculate a high school class rank (81.3

> per cent)….Approximately 8 per cent of schools report using a nontraditional grading system and only 1 per cent of schools do not assign grades.

Little has changed during the ensuing years in U.S. secondary schools with regard to grading practices (O'Conner, 2009).

The main reason the traditional model so prevalent in our educational system is that most teachers report the primary source and basis for their own grading practices are their own experiences being graded as students (Guskey, 2006). When creating grading policies, teachers "try to develop policies and practices that they believe are fair, equitable, defensible, and educationally sound" (Guskey, 2006, p. 1). The policies and practices that the educators develop are remarkable similar to the ones that they were facing as students.

Many research studies have addressed the question of what factors teachers consider when they compile grades (Brookhart, 1991; Guskey, 2002b; Marzano, 2000; O'Connor, 2002). The most prevalent factors that teachers consider include: (a) academic achievement, (b) aptitude, (c) effort, (d) behavior, and (e) attendance (Marzano, 2000). Brookhart expanded upon these nonacademic factors in her early studies, describing the typical teacher's grading policies as a "hodgepodge grade of attitude, effort, and achievement" (p. 36). Despite experts' criticism that this model is inexact and misleading, students and teachers report that they are perfectly satisfied with the current model despite its shortcomings. Cross and Frary (1996) suggested that hodgepodge grading could have resulted from a feeling that by combining many factors both students and teachers are protected from the consequences of being truly honest in the assessment

of academic proficiency. By including many factors into the grade, including effort and things like extra credit points, teachers and student can both avoid the negative consequences of having too many failing grades.

Guskey (2009) found that most teachers' grades are representative of how students have done in three different broad grading categories. These categories include process, progress, and product criteria. Process criteria include all those non-academic factors that help a student become either successful or unsuccessful, as the case may be, in a class. These factors include things like work completion, participation in discussions, timeliness, or attitude in class. Progress criteria are those pieces of evidence a teacher uses to demonstrate how much a student has learned, or in other words, how much a student has gained from his or her learning experience. The final grading category is one that reports the student's achievement is product criteria. This is the category concerned with what students can demonstrate they know or can do at a particular point in time (Guskey, 2009).

Guskey (2006) noted that most researchers and measurement specialists agree that product criteria are the only criteria that should be used to determine academic grades. It is important to note that researchers do not discount the value of the other factors. Researchers do not think that any combination of all three criteria will produce a valid or useful grade.

Since the late 1990s, some schools have experimented with a new way to measure and report student mastery of learning objectives and standards. With the continued stress on the implementation of the standards-based education practices and the high-stakes

testing accompanying the No Child Left Behind Act of 2001, school and district leaders have identified a lack of alignment between the standards-based instructional practices many educators exhibit in their classrooms and the grading practices they are using to communicate student academic progress (Guskey, 2003). The increasing importance of high stakes tests of student proficiency being required has caused schools to look more closely at how they measure student academic proficiency on the standards (Erickson, 2011a). Some educators have proposed linking the mark that a student earns on the end-of-course assessment to the final grade the students earns for the course (Proulx, Spencer, & Westerberg, 2012). Trumbull and Farr (2000) provided an overview of a standards-based accountability system:

> A comprehensive accountability system that is based on standards is well integrated, with each of its components linked to the other. These linkages must be clear and strong to forge a system that is valid, reliable, and transparent to those who are interested in the results and want to use them to make important decisions. These decisions may be about student placement, or they may be instructional or programmatic. The system should provide detailed information on the academic performance of students that should be used by schools and districts for continuous improvement of the instructional program. (p. 188)

Using such a system, students and parents would periodically receive detailed reports which would report upon how well the students have mastered the standards on

performance assessments administered by the classroom teacher (O'Connor, 2009). Elements of a standards-based reporting system (Trumbull & Farr, 2000, p. 189) are:

- Teachers need detailed information at the individual student level in order to evaluate the effectiveness of instructional materials and strategies.
- Reports on student achievement are necessary for a variety of purposes.
- Reports should be tailored to the information needs of each specific audience. For example, parents need information on their children's performance and how to help them.
- Teachers need detailed information at the individual student level in order to evaluate the effectiveness of instructional materials and strategies.
- Teachers should consider various reporting methods.
- All reporting should have as its ultimate goal the improvement of the educational and developmental experiences of all children.

Advocates say that standards-based grading would greatly improve the quality of the feedback returned to students and parents (Erickson, 2011b). O'Connor (2011) provided 15 fixes for what he calls broken grades, or grades that do not effectively fulfill their purpose. These fixes are designed to help teachers calculate and award grades aligned with learning standards in the hopes of this very effect (O'Connor, 2007). The fixes include limiting the data calculated to achievement data only, eliminating the calculation of zeroes to punish students for late or missing assignments, the elimination of extra credit in the calculation of grades, the elimination of data resulting from group work in individual grades, and others.

Researchers suggest that grading and reporting in the 21st century have to shift from did they *d*o it to do they *know* it (Reeves, 2008). Carifo and Carey (2013) say, "This increased attention comes as teachers, administrators, and parents realize that traditional grading schemes, in place and largely unchanged for over 100 years, are proving insufficient in meeting the demands of the 21st Century" (Carifo & Carey, p. 19). The best way for this to happen is to get to a true standards-based system where performance standards are based on proficiency and where students are graded on how well they can demonstrate knowledge and skill.

Criticisms of Traditional Grading Practices

It is generally accepted among those most closely studying academic measurement that traditional criterion-referenced, percentage method of grading and reporting is improperly aligned with the best interests of teaching and learning (Guskey, Swan, & Jung, 2011). Most researchers in the field reject the inclusion of any non-academic factor in the calculation of final academic grades (Gusky, 2009). Despite these prevailing findings however, teachers' grading practice in the United States, which is almost universally tied to ac traditional grading model, has remained unchanged (Guskey & Bailey, 2010). According to Kohn, "Many common grading practices…make it difficult for many youngsters to feel successful in school" (Kohn, 2011, p. 12).

Traditional letter grades are often misunderstood by the people they are supposed to inform – the student and the parent. Furthermore, traditional grading systems expect teachers to roll a great deal of information into a single rating. Teachers are often left to create cut-points for grades, and these are often arbitrarily determined. For instance a

student who earns a 64% rating in one district earns credit for the class; in a neighboring district that same score of 64 percent could be considered low enough to earn a failing grade (Brookhart, 2004; Guskey, 2003). Teachers also note that percentage calculation effectively takes a teacher's professional judgment out of the equation (Amundson, 2011). A perceptive, careful student could achieve the highest possible grade rating without ever proving that he or she had mastered the complex concepts of the course (Spencer, 2012). Finally, studies have shown traditional grades to be an unreliable indicator of mastery on content standards (Haptonstall, 2010).

Many experts have concluded that it would be nearly impossible to remove the corrupting factors from the traditional model of grading from the practices of teachers without a thorough reform of grading practices. Experts identify the use of awarding zeros to punish students who fail to turn in an assignment as the most critical of these factors (Wormeli, 2012). Reeves (2004) noted that assigning zeroes has no positive effect. In fact, he stated that the use of zeroes in grading, instead of increasing student motivation and responsibility, acted to produce the opposite of the desired effect. He demonstrated that many students, after receiving zeroes, withdrew from the learning and began to regard all grades in the course as meaningless and irrelevant. The reason traditional grades fail is that they try to summarize a great deal of very complicated information into one single letter: A, B, C, D, or F (Marzano, 2000). Reeves (2008) summed up the criticisms of the traditional model of grading and reporting that is used by a majority of our teachers: "Neither the weight of scholarship nor common sense seems to have influenced grading policies in many schools. Practices vary greatly among

teachers in the same school – and even worse, the practices best supported by research are rarely in evidence" (p. 85).

In the past 10 years, researchers have begun to look more closely at how effective classroom grading is as a tool for assessing student achievement and mastery learning. In their research, Lalley and Gentile (2009) found that, although there is almost a universal belief that teaching and assessment should benefit all children (in accordance with No Child Left Behind), the grading and reporting practices used by teachers often are out of alignment with the actual level of learning that is reflected by student achievement on performance assessments.

Kelly (2008) noted that sometimes student grades are misleading because teachers continue to use grades as a reward for effort to learn material, giving high marks to students even when they fail to demonstrate mastery. He continues to say that, "…research has found that teachers reward students for merely cooperating with their instructional plans, for behaviors that may be weakly related or even unrelated to the growth in achievement" (p. 32). This practice can lead to educational inequality. Kelly describes several studies conducted to investigate the relationship between student grades and achievement. Kelly goes on to report that there is no obvious correlation between grades and achievement, suggesting that they may very well have an independent relationship.

The most closely related research to this researcher's proposed study is that conducted by Allen (2009). Allen investigated how the nature of traditional grades, being multi-function tools, influences their validity and value as measures of academic

achievement. I studied perceptions of high school teachers and students, as well as college students and professors. The study found that the attitudes and perceptions around the purposes for grades both within and between every category of respondents are often disconnected. The study concludes by saying, "…it is very important for teachers to see that the final (end of the semester) grade primarily reflect what the student knows of the subject at hand" (p. 204).

Criticisms of Standards-Based Grading and Reporting Systems

A search was conducted to identify expert, research-based criticism of the standards-based grading model for grading and was unable to find any creditable examples. This being said, there is ample evidence of resistance and criticism of standards-based grading in the field and with the public and laypersons, and these have been widely reported by the media. Researchers conclude that most of the resistance is a result of a feeling that standards-based grading practices are simply not what people are used to (Guskey, 2009; Marzano, 2000; O'Connor, 2009).

Most evidence of criticism of standards-based grading, however, is found in non-peer reviewed newspaper articles, blogs, and private, non-affiliated websites. Challenges to the efficacy of standards-based grading and reporting systems include, but are not limited to:

- A common complaint on teacher websites that criticize standards-based grading is that the system requires teachers to spend an inordinate amount of time developing clearly communicated narratives around the learning levels of their students. Instead of having to average the grades accumulated over a

grading period into one simple achievement grade, the teachers are expected to pour over performance data so they can make informed judgments about the proficiency levels their students have acquired in a variety of content and skill standards. While many teachers agree that this is a good objective, they complain that there simply is not time in the day to accomplish this considering all of the other work they are asked to do as teachers.

- Since a common facet of standards-based grading systems is to eliminate the use of grades as rewards or punishments (and teachers are directed not to assign zeroes for work not turned in), teachers and especially some parents conclude that schools are no longer holding students accountable for completing work on time.
- Much of the criticism for standards- based grading is a result of a failure of schools and districts to adequately educate the stakeholder community prior to the implementation of the change. As a result, students, parents, and teachers unite in their frustration over a change without clear and tangible purpose.

Challenges of Implementing Standards-based Grading

Researchers have long identified that many within the education profession feel that the methods and practices by which teachers assign grades to their students to be above reproach, criticism, or question. Erickson (2010) compared grading and reporting to social security in the political world, calling it the *third rail* of educational leadership. Despite this fact, some educational leaders have begun to address grading and reporting in school to move away from traditional grades toward a standards-based system.

Guskey (2011) identified five obstacles that leaders must overcome when they attempt to address grading and reporting practices in schools. Guskey stated that each of these obstacles originates from deep seated and long-standing popular misconceptions about the goals of education and the purpose of grades. Reeves (2011) noted that for many educators the topic of grading is such a loaded one that most practitioners would prefer not to discuss it in public.

The first obstacle leaders must address is to overcome the common belief that the real purpose of grades is to sort and select, or differentiate, the students of the class. In other words, the common belief is that grades serve to identify which students are smart and talented and which are not. This is a belief for many parents, and indeed, for some teachers as well. It is necessary for leaders to communicate the real purpose for grades: to communicate to students and their parents the students' levels of mastery relative to known and understood content or skill standards (Cooper, 2011).

The second obstacle in grading reform is the belief that a normal bell-shaped curve is the ideal distribution for grades of a class. This belief contradicts the philosophy that is the basis of the No Child Left Behind Act of 2001, where all students are expected to succeed in school. Leaders must instill a belief in the community that if appropriate instruction is delivered, and if all students are having their needs met, all students should be able to achieve at high levels of mastery (Guskey, 2011).

The third obstacle that stands in the way of grading reform is the belief that grades should rank order students in a class. Again, this is an antiquated belief left over from the bygone era where schools were selection centers that were supposed to

determine which students should be leaders, which should be managers, and which should be laborers (Schneider & Hutt, 2014). In the modern classroom, most educators agree that the purpose for grades is to communicate the proficiency of students against a set of learning criteria;.one student's grade has nothing to do with any other student's grade (Guskey & Bailey, 2010).

The fourth obstacle for grading reform is the widespread belief that low grades help motivate students to work harder in school despite a preponderance of research that shows that extrinsic rewards and punishments often decrease intrinsic motivation (Kohn, 2011). Leaders must address this belief and communicate that grades are not designed to be rewards or punishments. As Cooper (2011) stated, "Grading doesn't improve learning – it simply summarizes it" (p. 3).

The final obstacle described by Guskey is the predominant belief that teachers should consolidate all the learning of a class and condense it into one summative grade. In order to achieve this, teachers take factors from a variety of learning criteria and combine that with data that measures work completion, effort, participation, and a variety of other factors. The result is what Cross and Frary (1996) would call a hodgepodge grade. The grade is hodgepodge because the teacher combines so many factors that becomes virtually meaningless to anyone who tries to use the grade to understand what a student really knows and is able to do (Brookhart, 2011; Cross & Frary, 1996; Marzano, 2000; O'Connor, 2011).

In short, according to Guskey (2011), leaders face the challenge that accompanies any innovation, the typical acceptance of the *status quo* and natural resistance to change

exhibited by students, teachers, and parents. In order to help all of the stakeholders of the school overcome the five obstacles, clear and direct information must be shared relative to the purpose and potential of grades in schools (Reeves, 2011).

Constructivist Conceptual Framework

This study is grounded in a constructivist conceptual framework. Constructivism is defined as a social scientific approach to understanding phenomena through the contextual constructs of those who experience the phenomenon (Charmaz, 2014). By identifying multiple people who have experienced a phenomenon, and by studying their multiple perspectives and understandings of those experiences over time, one can construct meaning and understanding about the phenomenon by studying the patterns in the groups' experiences (Langley, et al., 2014). This study will use a dynamic social constructivist approach to unravel the constructs of understanding informed by the experiences of a set of secondary school principals who have successfully led the transition to standards-based grading model in their schools in order to determine if there are a set of best leadership practices principals could consider if they intend to transition their schools to a standards-based grading model (Kalpana, 2014).

Utilizing a dynamic social constructivist conceptual framework is supported by the findings of Wright and Zamuto (2013), who showed that institutional change can be understood by studying the interactions between organizations' leaders and members. It is further supported by Bresman (2013), who showed that by studying the active participation among the members of an organization can help reveal what actions best led to organizational understanding. Finally, a constructivist approach to qualitative research

has been shown to be effective for studying how members of organizations learn both separately and together through collaborative activities designed to construct understanding (Brun, 2013). Brun (2013) demonstrated how these shared learning experiences can be critical to successful change leadership.

Framework for Understanding Organizational Change in Schools

The research on leading change, and leading change efforts in schools specifically, may prevent leaders from attempting to lead any change at all (Syed, 2013). By all accounts, leading change is a problematic and difficult task even under the most change-receptive of circumstances (Kotter, 2007). This section reviews the research on change, why change fails and is resisted, how power can be used in change, and how the research suggests principals lead productive and successful change in schools.

Humans being humans, resistance to change seems to be a natural instinct (Oreg, 2006). Kanter (2012) listed ten reasons why people resist change. These reasons include the feeling that they are losing control of their territory and this causes excess uncertainty. Another set of reasons are that the changes came as surprises, and the changes make everything seem different, which causes anxiety. Some people resist change because, since the change is a departure from what they have done in the past, they can feel that they suffer a loss of dignity or respect from others who might judge that their past practices were not appropriate or well founded (Kanter, 2012).

Some resistance to change comes as a result of concerns over competence to meet the requirements of the change; other resistance comes from a feeling that the change will lead to more work for those responsible for implementing the changes (Peck, 2014).

Employees are often concerned that change will have ripple effects and lead to other, even more disruptive changes. Finally, staff sometimes resist change because of past resentments that are unrelated to the current initiative. Kanter (2012) also stated that, sometimes, resistance is entirely merited.

Kotter (2007) detailed eight reasons that transformation efforts fail. All of these reasons are directly tied to the action, or lack of action, of the leader tasked with leading the change. The first is a failure to establish a great enough sense of urgency. Urgency motivates the personnel to regard the change as both critical and necessary. Without this sense of urgency, the people who are most important to the change will fail to adopt changes, choosing instead to maintain the status quo.

Another reason Kotter cited for failed transformative change is that the leader fails to form a powerful guiding coalition. Kotter does not insist that any majority critical mass is necessary for change to succeed, but he asserted that without a powerful, bought in, and invested group of advocates, change efforts are doomed. Sometimes even with this group the change fails because of a lack of a strong vision for the change, or because the leadership group under communicated the vision.

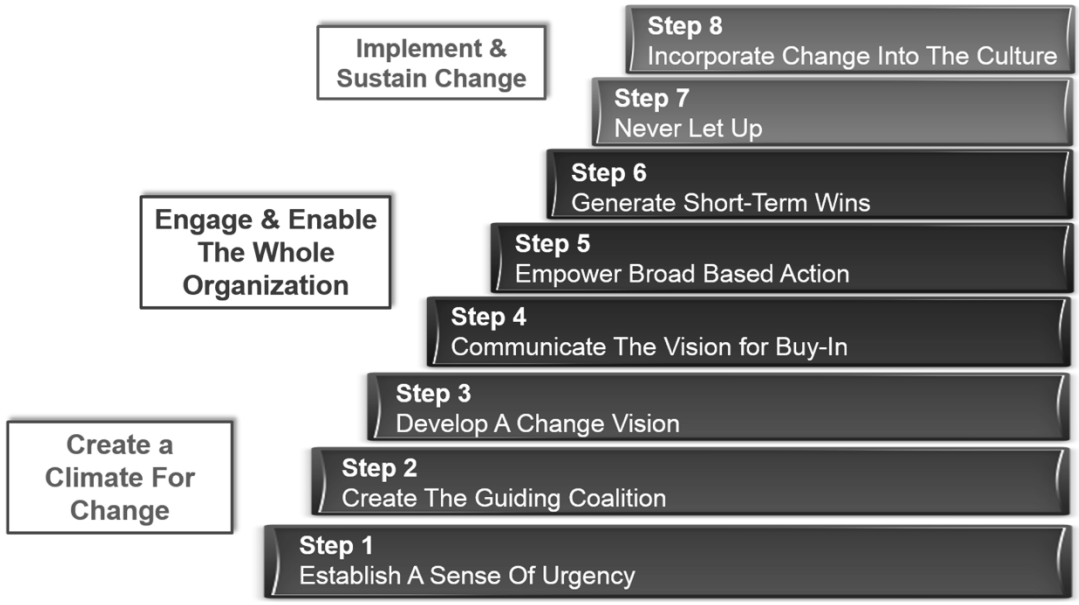

Figure 1. Eight steps of the change process. Adapted from Kotter (2007).

Kotter (2007) further explained that, for transformative change to succeed, obstacles to the new vision must be addressed and removed. This could include existing perceptions, organizational or technological structures, or other impediments. Any failure to address these obstacles diminishes the chance of the change to take hold. Leaders should plan for, and create, short term wins associated with the change. These help the change gain momentum.

Declaring the change fully implemented and successful too soon is another common pitfall for change leaders. Prematurely ending the implantation process can lead to disaster. For leaders to ensure long-term adherence to the change, the leader must anchor the change to the culture of the organization. Otherwise, the trend is that the organization with discard the change and slip back into familiar, comfortable normalcy.

Principals who intend to lead a transformative change should be well aware of their sources of power and how to exercise their power to support the change effort (Reeves, 2009a). In the seminal study on the relationship between leadership and power, French and Raven (1960) researched how power in organizations works. They found that there are five chief power types, divided into two broader categories. There is formal power, which comes from the position one has over another. The types of formal power include: (a) coercive, (b) reward, and, (c) legitimate. The second type of power French and Raven identify is personal power, and the types of personal power are expert and referent.

Formal power is closely related to a traditional understanding of executive power as explained by Collins (2005), and this rarely applies to educational leaders since principals rarely have the ability to use coercive power, which requires that they exercise their power to remove leaders from their position if they fail to do as they are told to do. Principals have some ability to use reward power by providing incentives for staff members who comply with their direction, but this use of extrinsic motivation has been shown to have limited long-term effectiveness (Pink, 2009). Finally, while principal power is seen as legitimate power, a principal's lack of ability to exercise a great deal of executive power in a school makes this type of power less effective than many perceive.

Personal power is a much more effective source of power for principals who wish to lead change. This type of power is closely aligned with Collins' (2008) definition of power in the social sectors, what he calls legislative authority. Legislative authority requires the leader to work closely with his or her constituents to convince them to buy

into the plan. This can be done by using what French and Raven (1960) called expert power, where leaders call upon their experience, skills, and knowledge to convince their staff that they are in the right, or through referent power, where leader rely on the trust and respect they have developed within the organization.

The Wallace Foundation (2013) studied how the principal can best lead change. The conclusions from this research showed that there are five leadership actions that are most critical to the success or failure of a school principal when leading his or her school toward improved educational outcomes. The first is the ability of the principal to shape a vision of academic success for each and every student the school serves. The second is the principal's ability to foster the creation of a hospitable learning and working environment for students and teachers. The next is that the principal cultivates leadership in others in the building to create a collaborative leadership structure in the school. A strong and consistent commitment to improving instruction is critical. Finally, the principal must be expert and committed to managing people, data, and processes effectively and efficiently (Reeves, 2009a).

Conclusion

This literature review was designed to provide background and context for this research study. An overview of the development of the grading practices used in U.S. schools was provided along with an overview of the theoretical frameworks for these grading practices. A discussion of the most common method of reporting student achievement, the traditional model of grading and reporting, was provided along with the most common criticisms associated with that system. A discussion of the standards-based

grading movement, and the challenges associated with the implementation of this system, was also offered. Finally, an overview of the nature of leading change, especially second order change was covered. Section 3 will outline the research methods that will be used in this study.

Section 3: Research Method

This section provides a review of research method for this research study. It begins with a discussion of the research design and context that includes: (a) a review of the research paradigm and theoretical framework, (b) a justification of the selection of the qualitative tradition of research, (c) a description of the Delphi method, and (d) a review of the other methods of research that were considered and rejected. This is followed by a description of research questions that guided this study. Next, an overview of the details of this specific research study are provided, including both a detailed description of the methods by which data was collected and analyzed. My role as researcher is discussed, followed by a description of the criteria I used to select and recruit participants for this study. A description of the measures put in place for the ethical protection of the participants is described. Finally, a discussion of the proposed efforts to ensure the credibility, transferability, dependability, and confirmability of the study is provided.

Research Design and Context

Examples of successful school-led transitions to standards-based grading and reporting in the United States are rare and, therefore, the research on this topic is limited. While there are some anecdotal examples of how school leaders successfully lead this type of transition, there is no clear leadership road map for secondary school principals to consider as they plan to do this work. There are clear examples of school principals who attempted to lead the transition to standards-based grading, but who encountered such resistance that the change effort failed to take hold (Guskey, 2012). As a result, there is little existing research designed to help secondary school leaders determine which steps

they should take when planning to implement this specific initiative. Therefore I needed to carefully select the ideal research tradition and specific method to best fit the requirements of this study.

Research Paradigm and Theoretical Framework

This study is founded upon the dynamic social constructivist paradigm. The social constructivist paradigm is grounded in the belief that broad understandings, significance, and meaning are best derived through a coordination between sets of human beings rather than from the beliefs of any individual (Galanes & Leeds-Hurwitz, 2009). The social constructivist theory of knowledge therefore directs researchers to seek truth by studying the actions and beliefs of a large group to identify the common social constructs that the group forms. Social constructivist epistemology requires that "researchers interact…with participants about their perceptions…[and] seek out a variety of perspectives" (Glesne, 1999, p. 5) in order to develop a general consensus about any topic.

The theoretical framework for this research study is based upon the consensus model for collaborative problem solving (Margerum, 2002). The framework is based upon the study of effective problem solving (Adams, 1979) where researchers promote the move from individuals thinking vertically to solve problems using data, logic, and careful problem solving, to groups working together to think laterally about a problem or issue. Using lateral thinking, members of the group build off of one another's ideas to reach the group's generally held opinion of the best or most correct solution or conclusion (Seager, et al, 2013).

Justification for the Selection of the Qualitative Tradition

The qualitative tradition is ideal when the theory of knowledge is founded upon the social constructivist paradigm. This is because the problem being studied cannot be quantified or turned into numerical form, and thus is best studied through "short written responses on surveys, interviews, anthropological research; video and audio data recording, and many other approaches" (Trochim, 2001, p. 152). A qualitative approach allows for just this type of investigation.

This research study was designed to develop a set of consensus best practices for secondary school principals to consider as they plan to lead a transformation to a standards-based grading model in their school. Research based in social constructivist theory often results in new approaches, new contexts, and new hypotheses (Cresswell, 2003; Glesne, 1999). Qualitative research can also lead to a deeper understanding of a phenomenon (Trochim, 2001). As was introduced in Section1 of this proposal, the purpose of this study is to identify if there is a set of consensus best leadership practices that secondary school principals could take when attempting to lead the transition from traditional grading and reporting to a standards-based model for grading and reporting in their middle or high schools by polling an expert panel made up of principals from across the nation who have experience leading this type of organizational change. Since this is a relatively new and unstudied topic of research, using a social constructivist approach to develop this list of consensus steps is a good fit for this study. The report recommendations that have been generated by this study will contribute to both theory and practice in leadership. Principals who plan to implement standards-based grading

and reporting in their schools will have a list of best practices, or critical actions, generated by experts from a national sample to help guide them as they plan their leadership actions (Okoli & Pawlowski, 2004).

The Delphi Method

The Delphi method was chosen as the specific technique for this qualitative research design. The Delphi method was created to help researchers better understand complex problems and generate potential solutions to these complex problems by mining the combined knowledge and experience of principals from around the country who have experience leading the transformation to standards-based grading at the secondary school level (Skulmoski et al., 2007). The Delphi method is a process where the participating experts are encouraged to more actively focus on the specific problem than do participants when meeting as a group in person (Habibi, et al, 2011).

The Delphi method is founded upon the understanding that the value of information garnered from an interacting group of experts is usually superior to that collected from each individual independently (Grisham, 2009). This method helps researchers synthesize the experience, perspectives, and input from a panel of informed experts while, at the same time, maintains strict confidentiality of the participants, minimizes the time required of the experts to participate in the study, and avoids any potential confrontation between experts as a result of their participation (Hung et al., 2008). Finally, by using the Delphi method, the study was conducted asynchronously and electronically, the panel of experts were able to easily participate in the study within the limits of their schedules and geographic locations (Owens & Pawlowski, 2004).

Rowe and Wright (2001) suggest that "Delphi groups are substantially more accurate than individual experts and traditional groups" (p. 125). This is especially true when developing consensus since the method effectively protects the group from being overly affected by one or more overbearing experts since the expert panel is anonymous and isolated from one another. Furthermore, the iterative nature of the Delphi method allows a researcher to poll the expert panel on multiple occasions to identify the clear consensus opinion of the group over time (Habibi, et al, 2011). The Delphi method is a useful technique for qualitative research in cases where there is little existing research, data is difficult to measure quantitatively, and where the field would benefit from the collected knowledge and perspectives from experienced and informed participants (McLeod & Childs, 2007).

The complexity of this problem and the need for solutions from practitioners in the field support the use of the Delphi method in this proposed research project's particular topic (Rayens & Hahn, 2000). This type of procedure, using intuitive forecasting, is well suited for developing consensus opinion on how to address a complex situation for which the research is not well developed and for which no clear answers are available to be tested experimentally (Dunn, 1994). This research will add to the body of knowledge regarding how principals can best lead transformative change at the secondary school level, and identified the consensus best practices secondary school principals could consider when planning to lead the change from traditional to standards-based grading in their schools.

Yousuf (2007) recommends the Delphi Technique when a study necessitates "a group process involving an interaction between the researcher and a group of identified experts on a specified topic, usually through a series of questionnaires" (p. 80); he finds this technique especially useful when "the opinion and judgment of experts and practitioners are necessary" (p. 80). Delphi studies can contribute to both theory and practice (Okoli & Pawlowski, 2004). Okoli and Pawlowski (2004) state that the Delphi method offers the ability for researchers to quickly provide practitioners "…lists of prioritized critical factors, generated by experts, which [principals] could apply to their individual situations" (p. 27).

Figure 2. Delphi methodology flow chart. Adapted from Donohoe (2011).

Donahoe (2011) built upon the work of Linstone and Turoff (2002) to create a model for the standard or conventional method for a Delphi study (see Figure 2). The steps that Linstone and Turoff described include:

1. Design a questionnaire that is sent to a group.
2. The questionnaire is returned and the results are summarized.
3. Based on the results, a second questionnaire is developed and sent to the same group.
4. Study participants are given a chance to rate original answers for accuracy and significance.
5. This procedure continues until the group reaches some level of consensus.

Research demonstrates the many advantages for using the Delphi method to develop group consensus (Habibi et al., 2011). First, expert panelists can be selected from a wide geographic area since they are never required to meet as a group. This allows for a variety of participants from around the nation to provide their expertise without the costs or logistical issues usual to panel discussions. Second, since the Delphi method can be conducted electronically and anonymously, the panel is less likely to resort to *groupthink*; this protects against excessive influence of one or more overbearing members over less confident members of the group.

Because of this, the first round of questions allows for a broad and unimpeded brainstorming of ideas and is free of influence or bias. Since the second round of questions remains anonymous and is completed individually, the same protections exist. The method is efficient since the facilitator alone provides the panelists with the groups'

input or the analysis of these initial data. Finally, a facilitator determines the information panelists receive in the additional rounds of questionnaires and determines when consensus is achieved (Linstone & Turoff, 2002).

Other Methods Considered and Rejected

I also considered phenomenology as a research design for this study. Research using a phenomenological design centers on the study of a group of individual and uses qualitative methods to study their perceptions of personal experiences related to a specific topic (Trochim & Donnelly, 2008). This type of research design is able to probe the problem by utilizing in-depth interviews with 10-15 participants to delve deeply into a problem (Johnson & Christensen, 2003). Although phenomenology could help generate many perspectives of how to lead the change from traditional to standards-based grading in a high school, I selected the Delphi method since it includes the additional benefit of determining if the expert panel is able to build consensus. This design element will potentially allow me to define a clear road map for principals to consider when leading this type of change (Franklin & Hart, 2007).

A case study approach could be also used to elicit some insight into the practice. Case studies are useful when the researcher is seeking to answer *how* or *why* questions, the behavior of the participants cannot be manipulated, and when the researcher wants to study a specific situation or set of situations because it is believed that the context lends itself to informing future similar situations (Baxter & Jack, 2008). The drawback to using this method is that the researcher often arrives at faulty conclusions that are too site or situation specific, and thus are not always considered to generate trustworthy outcomes

for broader application (Zucker, 2009). Furthermore, since I live in a very rural and remote part of Southwestern Colorado, the time and distance between myself and the potential research candidates make this research approach impossible to pursue.

Research Questions

The primary research question that was addressed by the panel of experts was designed to generate a broad spectrum of possible best practices, to include specific leadership actions and steps that secondary principals could consider when leading a transition from the traditional model for grading and reporting to a standards-based model. The purpose of a Delphi Method study was to ascertain if there was consensus among experts on this question by soliciting this input from expert, experienced practitioners from the field. The primary research question studied was:

RQ1: What are the leadership actions secondary school leaders should consider as *best practices* when initiating the transformative change from traditional grading and reporting to standards-based grading and reporting?

The expert participants were asked to answer this research question by describing the leadership actions that they led when implementing this change at their school within the context of Kotter's (2007) eight step (2007) framework for leading successful organizational change. These steps include:

- Create of a sense of urgency around this change effort.
- Create a powerful guiding coalition to help lead the change.
- Create a vision for the change.
- Communicate the vision.

- Empower others and remove obstacles to the change.
- Create of short term wins.
- Consolidate the change.
- Incorporate change into the culture

By requiring the experts to suggest leadership actions that could be taken informed by their own experience and context, and to organize these actions within Kotter's framework, the data was more easily processed for the next stage of the study. Furthermore, introducing this context may have elicited deeper and more complete contributions from the experts on the panel.

RQ1 will be on the first questionnaire and will be the only question addressed in the first round of the Delphi study. From this questionnaire, a broad spectrum of possible leadership actions will be collected. In round two of inquiry (Questionnaire 2) of the Delphi study, the expert panel ranked each leadership action on how critical they felt that action is for successfully leading this type of change effort. The outcome of this round of inquiry informed the answer(s) to the second research question:

RQ2: Does consensus exist among the expert high school principals for the set, or a subset, of the practices discovered by the first research question?

Specific Details of the Research Study

The Institutional Review Board reviewed the study's research design and gave approval (**10-0215-0054639**) for the research to be conducted in a manner described by Donohoe (2011) for the traditional design for a Delphi method format, I conducted this study in six stages. These stages included:

Stage 1: Statement of the Problem

A clear articulation of the study in a one-page problem statement is created. For the purpose of this study, the problem was: The majority of secondary schools in the United States use traditional grading practices to report student academic achievement. Traditional grades, which often include a student's academic data blended with elements reporting the same student's classroom effort, behavior, participation, and other factors, have been shown to be ineffective and unreliable indicators of what a student knows and is able to do (Marzano & Heflebower, 2011). If school leaders are to successfully transform the grading practices in their schools from a traditional model to a standards-based grading model, they will need a leadership roadmap to help guide their leadership actions. Having a clear and compelling problem statement is critical as the study progresses to step two of the study: recruiting participants to serve on the expert panel for this study.

Stage 2: Recruiting Experts

The second stage in this study was the identification of no fewer than twelve and no more than twenty current or former secondary school principals from across the nation who have successfully led a transition to standards-based grading and reporting at a high school to serve as participants on the expert panel. These experts were identified using an internet search to discover secondary schools which have transitioned to a standards-based model for grading will contacted, the principals who led the change will be identified, recruited, and no fewer than twelve will commit to participating in the study. A search including the key words *standards based grading middle high school* produced

47,400 results. After closely reviewing the first twelve pages of results, 109 possible study participants were identified. Each of these possible participants were invited to participate. Twelve of these returned positive consent, signifying their willingness to participate in this study. Once these twelve participants committed to participate, the study moved to its third stage.

Stage 3: Round 1 of the Delphi Study

The third stage of the study saw the first round of Delphi method questionnaires being sent to the expert panel. As with most traditional Delphi method studies, the first questionnaire was open-ended in order to allow for the collection of the broadest spectrum of possible steps school leaders could take when leading this type of initiative. As Custer, Scarcella, and Stewart (1999) wrote, the first questionnaire is the cornerstone of the study. The round one questionnaire in this study asked the participants to answer the research question around actions secondary school leaders could take to implement standards-based grading at their school. In order to help organize the panel's thinking, and hopefully to illicit deeper and more comprehensive input, the questionnaire was structured in accordance with Kotter's (2011) eight step framework for successfully leading organizational change.

Stage 4: Data Analysis and Creation of the Second Questionnaire

From the data collected from the first questionnaire, I analyzed the expert participants' responses and converted the data into a well-structured questionnaire for round two. First, I organized all of the responses from all participants verbatim by placing each into the appropriate Kotter framework category by using a coding process

(Creswell, 2003). Trochim (2001) described this process as the categorization of qualitative data to help the researcher "develop a more specific focus or more relevant questions" (p. 133). Then, from the responses, I coded each response and combine similar or identical responses to identify a set of suggested leadership actions as described by the panel that will be tested in round two (Davidson, 2013).

This process shortened and clarified the data set by eliminating any repeated responses within Kotter's eight sub-categories. Once the data was categorized and the actions were clarified and properly organized, my edited and summarized versions of the leadership actions were reviewed by the participants through member checking to confirm and verify that I captured the essence of their own thoughts without unintentionally flavoring their input with my own bias. Once I received positive confirmations from the participants that their thoughts were accurately coded and summarized, the data set of 78 unique possible actions (see Appendix D) was assembled into a second questionnaire for the second round of the Delphi method (Hsu & Sandford, 2007).

Stage 5: Round 2 of the Delphi Study

Due to the iterative process employed in a Delphi study, the experts who participate play a large role in the critical analysis of the data. For the purposes of this study, the expert panelists were asked to complete the second questionnaire by rating each possible identified leadership action that was discovered in round one of the inquiry on a four-point Likert scale. The scale was defined as:

- A rating of 1 represents an action that is deemed not critical to the success of the change effort.
- A rating of 2 represents an action that is deemed somewhat critical to the success of the change effort.
- A rating of 3 represents an action that is deemed critical to the success of the change effort.
- A rating of 4 represents an action that is deemed very critical to the success of the change effort.

Stage 6: Data Analysis

I studied the results of the data from the second questionnaire (see Appendix E) and analyzed the results using several descriptive statistical methods (see Appendix F) to determine if a set of consensus best practices had been reached. As is usual with Delphi studies, the measures of central tendency (specifically the mean) and level of dispersion (inter-quartile range) will be used to analyze and report the collective judgments of respondents (Hasson, Keeney, & McKenna, 2000). For the purpose of this study, a minimum mean rating for any action to be considered to be a consensus best practice was set at 3.25. The finding of the interquartile range (IQR) will also be used to test for statistical dispersion of the findings by dividing the data set into quartiles to test for the strength of consensus (von der Gracht, 2012). Since this study will use a four unit scale, any item will have to measure an IQR of less than 1 to indicate consensus has been achieved. Finally, the average percentage of majority opinion (APMO) will be calculated.

Therefore, for the purpose of this study, Green's (1982) definition of consensus, which requires that at least 70% APMO, meaning that the experts on the panel rated that leadership action as a three or higher on a four point Likert-type scale, with the median rating of at least 3.25 or higher, was used. To further strengthen the case for consensus, the item will also be required to rate an IQR of less than 1. This process made discrepant cases, or dissenting opinions, particularly important in this Delphi study. By insisting on a median rating of 3.25 or higher, an APMO of 70%, and requiring an IQR of <1, it was virtually impossible to minimize or marginalize dissenting opinions. Once I determined that a set of consensus best practices had been identified (see Appendix F), the Delphi process was terminated and the study moved to the final stage.

Stage 7: Preparation of Position Statement and Final Report

Once stage six was complete, results informed the creation of a position statement addressing the research question (Appendix G). In the case of this study, there were only two possible results: a set of best practices was developed for high school leaders to consider when leading the change from traditional grading and reporting to a standards-based grading and reporting system has been developed, or no set of consensus best practices was identified by the study. The result of this study was that a set of nine best leadership practices was identified by consensus. Therefore, a position statement has been developed that summarize the results of this study and present the final set of nine consensus best practices, along with those practices that were highly regards even though they did not technically merit consensus best practice status. This statement will be

distributed to the study's participants. Once this has been accomplished, this study will be complete.

Role of the Researcher

Qualitative research requires those doing the research to interact intensively with study participants and also to interpret and analyze the data (Creswell, 2003). The Delphi Method presents the opportunity for a deep and intensive investigation into the problem being studied, but also presents challenges to the researcher. Creswell warned the researcher to be aware of the dangers of leading questions, biases, and/or misperceptions that could lead to incorrect data or misinterpretations of participant's true thoughts and feelings about the topic. Since, as Merriam (1998) stated, the researcher is the "primary instrument for gathering and analyzing data" (p. 20), carefully defining the role of the researcher is critical to the success of any qualitative study.

The qualities and characteristics of the qualitative researcher includes a great tolerance for ambiguity, a high degree of sensitivity and intuition with respect to the thoughts and feelings of the participants, and superb communication skills, specifically in the areas of empathy, rapport buildings, questioning, and listening (Merriam, 1998). Furthermore, the researcher must be a careful observer. Although this qualitative study did not use face-to-face interview, nor was it orally conducted, these attributes were no less important. I was responsible for conducting all elements of the study, including participant recruitment, the creation of all questionnaires, the analysis of all data, and the interpretation of the findings. I was careful to pay close attention to avoiding any of the pitfalls common to qualitative research (Glesne, 1999).

The role I played in this Delphi method study was clearly outlined by the research. I served as a facilitator of the asynchronous, anonymous virtual discussion between the members of the expert panel. In this method, I was less directly involved in the discussion and had less direct contact and influence on the input of the participants than is typical of most studies using the qualitative research tradition. To completely eliminate any chance of power-relationship bias, no school in any district I have ever worked in, or school leader with whom I've previously worked as a colleague, was solicited for participation in this study.

My experience as a high school teacher, high school principal, and district level superintendent, along with the familiarity with attempting to implement a standards-based grading system in a high school where I served as the leader, all contributed to the selected study design and to the format and content included in the questionnaire. How I analyzed the data from the Delphi method questionnaires, as described above, was shaped by my experiences and understandings of how school administrators think, developed from long association and careful observation.

In relation to the potential for bias in this qualitative study, I have strong professional concerns regarding the typical practices used by secondary teachers to grade their students and how American schools communicate academic achievement and performance to entities outside of our school, including, but not limited to, parents and families of students, to post-secondary educational institutions, and to employers. I have had experience attempting to lead the transition to standards-based grading in a high school and personally saw how changes were reversed once I accepted another position

outside of the school district. To control any bias in administration of the first questionnaire, I used broad open-ended questions to elicit honest and unaffected feedback. To control for bias during data analysis, I asked peers to review the data and the analysis to identify gaps in the findings or to identify missing or improperly founded conclusion (Ransbotham, 2015). Furthermore, to protect against unintentional misinterpretation of participant input, I used member checking to verify that I had correctly coded and summarized participant contributions. With respect to the best practices leaders should consider when leading this type of change, I had no preconceived bias or opinions, and since I have never had any personal or professional contact with the principals who were solicited and agreed to participate in the study, and therefore I did not have any undue influence over their contributions during the study..

Criteria and Process for Selecting and Recruiting Expert Participants

To meet the needs of this study, I assembled a purposive national sample of middle and high school principals who have successfully led a transition to standards-based grading at the secondary school level (Banerjee & Chaudhury, 2010). Ludwig (1997) stated that "randomly selecting participants is NOT acceptable" (p.2) in a Delphi study. Therefore, I actively recruited experts for this study using purposive sampling (Glesne, 1999).

Successfully led was defined as an educator who was the principal of a secondary school that underwent this type of transformative change. In order to qualify as an expert, the principal had to have remained the leader throughout the change process. Furthermore, the secondary school must have continued to operate using standards-based

grading for no less than one academic year after the initiative was first implemented. These criteria was used to assemble a panel of experts who possessed the expert ability to answer the research questions (Yousuf, 2007). In order to ascertain if a prospective principal meets these criteria, first I narrowed down the potential pool of candidates through internet queries, then I emailed prospective candidates to ensure that they met the criteria. This process was very successful.

Twelve participants from across the nation were recruited to serve on the expert panel. This sample size is comparable to that used by other researchers who conducted Delphi studies similar in scope to this study (Friend, 2001; Hoogstra, 2012). I conducted an internet that identified 109 secondary schools who have adopted standards-based grading as their method of reporting and communicating student achievement. I invited the principals of each of those schools to participate, while clearly explaining the criteria necessary to sit on my expert panel. Twenty-two of the possible participants replied to my invitation, with twelve consenting to participate.

This discovery process began with a simple internet search using the key words: *standards-based grading middle high school*. This search produces 47,700 results. From this set, I filtered for items that have been posted most recently and then process the results by visiting the schools' websites to ascertain if the schools meet the study criteria. Once a list of 100-120 potential schools from across the country emerged, I contacted potential participants by email to ascertain if they meet the criteria for participation on the panel. I formally invited each of the candidates to participate in the study with an letter sent by email (Appendix A) and with directions for how the potential candidates can

receive permission from their school districts to participate. Since this study is simply asking principals to share their practices, and since participants remain completely anonymous in a Delphi method study, there is no risk to the district.

Measures for the Ethical Protection of the Participants

The nature of this study eliminated much of the potential for any ethical issues for either me or for the participants. Since there was be no risk of harm as a result of the study, the need to employ any protective measures was unnecessary. No participant provided any service, and there was no control group in the design. Participation was voluntary and since none of the participants work for or with me, so there was no power relationship to consider. Additionally, since the participants in a Delphi study remain anonymous, and since none of the possible responses to the questionnaires will be attributed directly to any of the participants, there was be no risk in participating.

All participants were provided with all of the information they will needed to make informed decisions about whether or not they wished to participate in this research study, and there was no reward offered or consequence to their decision to participate (Leedy & Ormrod, 2005). Furthermore, participants received a full written description of the nature of the research study (Appendix A), the procedures they were be asked to follow, and the risks (in this case, none) that they were likely to face should they choose to participate (Trochim, 2001). Participants were asked to reply to an email asking for their consent to participate (Appendix B). As an added precaution, I obtained approval from the Walden University Institutional Review Board, who careful reviewed this study's design, before I recruited participants or began any research.

Credibility, Transferability, Dependability, and Confirmability

Questions about validity and reliability are usually not as applicable when reviewing most qualitative research as when reviewing quantitative research, but researchers engaged in qualitative studies should still make efforts to ensure the quality and trustworthiness of their research. One method of ensuring the trustworthiness of qualitative research was suggested by Guba and Lincoln (1985). They posited that qualitative research should be tested to ensure that it is creditable, transferable, dependable, and confirmable. Shenton (2004) defined how to measure the trustworthiness of these criteria, and why they are preferable to the standard measure of quality for quantitative research.

Credibility

For qualitative research, credibility can be used in preference to internal validity. There are several measures researchers can put in place to try to ensure the credibility of their research. For the purposes of this study, this researcher used a recognized quality research method (Yin, 1994) using an iterative questioning process, which was helpful in reducing contradictory responses or errors in reporting (Shenton, 2004). Furthermore, after I analyzed, coded, and paraphrased the participants' feedback on the first questionnaire, I used the member checking strategy to increase credibility by asking the participants to review my analysis to further ensure that I correctly interpreted their contributions.

Transferability

Transferability is, as Merriam (1998) writes, "…concerned with the extent to which the findings of one study can be applied to other situations" (p. 164) and is a preferable way to measure external validity or generalizability in qualitative research. The degree of transferability is greatly dependent upon the researcher clearly describing the context for the research and the purpose of the study so the study's findings cannot be misapplied or misattributed (Shenton, 2004). Measures that I put in place to improve the study's transferability included recruiting experts from a wide geographic and socio-economic area and employing careful data collection methods. Since the sample consists of secondary school principals who have led the transition from traditional grading to standards-based grading, and since those reading this study will likely be secondary school principals who are interested in leading just this type of transformative change, the findings of this study should be readily transferable within their own context.

Dependability

Shelton (2004) suggests that qualitative studies be measured for dependability in preference to reliability. In qualitative studies, dependability can be strengthened with a carefully reviewed research design, by closely monitoring and ensuring the proper methods and details are followed with respect to data gathering techniques, and, finally, with a careful and thoughtful reflective appraisal of the project to objectively evaluate the effectiveness of the inquiry that was undertaken (Shelton, 2004). I, with the support of the dissertation committee and the Institutional Review Board, will labor to manage the dependability of this study.

Confirmability

The final check for quality for qualitative research is confirmability. This attribute is studied in preference to measuring the objectivity of the research, which is typical for quantitative research. Patton (1990) recognized that true objectivity is nearly impossible in qualitative research since there is inevitable researcher bias embedded in the development of questionnaires, surveys, or interviews. Therefore, a key criterion for confirmability is the extent to which the researcher admits his or her own predispositions and biases and a critical investigation into the shortcomings of the study's methods in the research design (Miles & Huberman, 1994). Furthermore, Cresswell (2003) recommended several other strategies to improve confirmability including: triangulation, member-checking, rich thick descriptions, and external auditing. I employed both external auditing, having my methods and analysis checked by colleagues, and used rich thick description strategies in this study to help improve the study's credibility. My external auditors were asked to sign a confidentiality agreement to protect the study and to ensure the participants' privacy even though they never saw the names or identities of any of the participants.

This section provided a detailed review of a research method that has been developed for the proposed study. A detailed discussion of the research design and context was presented, including a review of the research paradigm and theoretical framework; a justification of the selection of the qualitative tradition of research; a full description of the Delphi method; and a review of the alternative methods of research that were considered and were rejected. A description of the guiding research question was

provided. An overview of the details of this specific research study was provided. My role as researcher was discussed, as was the criteria I used to select and recruit participants for this study. A description of the measures that I put in place for the ethical protection of the participants was described. Finally, a discussion of the efforts to improve the credibility, transferability, dependability, and confirmability of the study was provided.

Section 4: Results

Overview

In this section I review the results generated by this qualitative study. First, the strategy that guided the study, along with the systems that provide structure for keeping track of the data and emerging understandings will be discussed. Next, a detailed review of the findings that resulted from the two rounds of questionnaires will be explained along with a discussion of discrepant cases and nonconforming data. The patterns, relationships, and themes that resulted from the study will be discussed in the conclusion. Finally, a description the how the procedures outlined in section 3 of the study were used to ensure the quality of the data is provided.

Strategy

This qualitative study was designed to answer two research questions. First, could a panel of secondary principals who are experienced in leading a transformation of grading practices at their secondary school from traditional grading to a standards-based grading model develop a set of best practices that were critical to the success of their change effort? Second, could this panel of secondary school principals arrive at consensus around this set, or a subset, of these proposed best practices that future secondary school principals could consider should they choose to lead a similar type of change at their schools?

In order to explore this topic, a study using qualitative methods was designed. The study asked an expert panel to answer two questionnaires to first discover a broad spectrum of possible best practices, and then to rate that set of possible best practices to

determine if they represented a consensus set of best practices, or if they could identify a consensus subset of best practices to help guide the action of future such implementations.

The Delphi method process was used to guide the analysis and procedures during this study. The Delphi method was identified as an appropriate strategy because it is a useful way to synthesize the opinions and expertise of a group of highly qualified, geographically dispersed practitioners without ever having to assemble the group together in a single place and any single time. This enabled the study to be successfully completed in asynchronously, electronically, and quickly.

System and Data

The Delphi method was used as a model to develop this study. The Delphi process is an accepted method of collecting expert opinions in order to better understand a phenomenon (Habibi, et al, 2011). Data were collected was saved in a manner that maintained strict confidentiality between myself and the participants, and strict anonymity with respect to anyone else who might discover the saved data. All data were saved on my personal hardware system and encrypted using the built in encryption software on my computer. The individual questionnaire responses were saved by code and would be impossible to attribute to any of the participants in order to protect the anonymity of the participants, which is a requirement on any Delphi method study.

Emerging Understandings

Instruments used during this study were designed to allow for the broadest possible expert panel contribution within the parameters of a change leadership theory

model, specifically that of Kotter (2007). Many of the expert panel's described leadership actions, however, were remarkably similar and intended to accomplish the same results for their schools. The Word document format, therefore, despite its design to allow for the development of a wide and broad spectrum of possible leadership actions, was only partially successful in doing so.

The final round of the Delphi study, however, did yield a set of best practices for secondary school leaders to consider as they plan to transition their schools grading practices. The SurveyMonkey instrument was a suitable secure portal for this study and was able to both facilitate the collection and aggregation of the necessary data. The study revealed a set of nine best practices that each generated strong consensus from the panel that these practices would be very critical to the success of this type of change effort. How this set was discovered is reviewed in the discussion of the research findings.

Findings

A discussion of the research findings is provided in the following pages. I begin with a review of the research problem and the process used to select research participants. This is followed by a review of the findings from both rounds of inquiry. Finally, I review the conclusions that were informed by the research findings.

Research Problem

The methods by which the vast majority of secondary schools in this country grade and report the academic progress of their students, also known as the traditional model for grading and reporting, is widely believed to be inferior to a standards-based approach to grading and reporting. While many elementary schools have transitioned to

this well-supported, research-based practice, secondary schools have lagged behind and, in only very rare cases have they even begun any transition away for the antiquated practices involved in the traditional grading model.

The theory of action behind this Delphi method study was a suspicion that though many secondary school principals understood the value of transitioning from a traditional model of grading and towards a standards-based model, they were hesitant to tackle such a major change in teacher practices without a clear roadmap on how such a change could be accomplished. Therefore, the purpose of this qualitative study was to mine the experience of a set of the relatively few secondary school principals who have led this type of initiative in order to create just such a roadmap.

Participants

In order meet the standard to be eligible to be a part of the expert panel for this study, the participant had to be a current or former secondary school (middle or high school) principal who led their school in a transformation from a traditional model of grading and reporting to standards based model for grading and reporting. Furthermore, in order for the initiative to have been considered successful, the school must have continued to operate in a standards-based model for at least one year after the initiative was fully implemented.

A wide search on the internet using the terms *middle school high school standards based grading* identified schools and districts that have published materials on their websites discussing standards-based grading. By visiting the websites to identify secondary schools who claim to have standards-based grading systems in place since at

least the 2013-14 school years, I was able to identify 109 potential qualified candidates to participate in this study as expert panelists. All 109 were sent an invitation to participate via email. Of those 109 possible candidates, 23 responded to the invitation email, with eleven declining to participate in the study and twelve consenting to participate. The twelve consenting participants included seven middle school principals from schools in Washington, Iowa, Wyoming, Minnesota, Colorado, and Wisconsin; and, five high school principals from schools in Missouri, Iowa, and Illinois. With the consent of these twelve expert principals from across the nation with good representation at both the middle and high school level, the requirements for the sample for the study had been met and the study was initiated.

Round 1

The round one questionnaire consisted of a single open-ended question addressing the primary research question for this study, specifically "What are the leadership actions secondary school leaders should consider as *best practices* when initiating the transformative change from traditional grading and reporting to standards-based grading and reporting?" Each expert panelist was asked to describe the leadership actions they felt were important that secondary school leaders consider as they initiate a school-wide change to standards-based grading at their secondary school. In order to help the expert panelists organize their thinking, the questionnaire was formatted in a way that allowed the experts to describe the actions within one of the eight steps to change as described by Kotter (2007) in his theory of change model (see Appendix C).

The questionnaire was created as a *Word* document and was distributed to the participants and collected from the participants electronically through email. Eight of the twelve principals (67%) who consented to participate in the study responded to the first questionnaire. Upon receipt of the final participant response for questionnaire number one, I coded each response and saved each completed questionnaire on two separate independent external memory devices and deleted the original email from the participant. I then emptied the trash in my Walden email account, thus permanently destroying any link between the data and the individual participants.

As I processed the data generated from round one of the research, I carefully followed the data analysis procedure described in section three of the study. The analysis was completed using Trochim's (2011) process, whereby I organized all of the qualitative responses generated from the open-ended questionnaire into one of Kotter's (2007) eight categories for leaders to think about if they want to lead a successful change effort. Then, as Davidson (2013) suggests, I coded each suggested action to identify if there were identical or very similar responses among the raw data.

Participant responses to Kotter's (2007) first step to leading successful change, *establishing a sense of urgency* were summarized in eight possible leadership best practices (listed in Appendix D). Many of the responses focused on shining a light upon the problems associated with the traditional model for grading that is in place in most schools before any transition to standards-based grading (including all of the schools the study's participants led). One participant offered, "I think the…school leader needs to create a sense of urgency around the current negative practices of grading. People need

to know that there are poor practices in place." Another wrote, "Communicating issues related to validity of current grading systems is critical. Unless the school community (students, parents, and other stakeholders) understand that grades do not necessarily reflect students' mastery of specific standards, getting community support will be difficult."

Another common theme participants offered with respect to *establishing a sense of urgency* centered on the importance of professional development and a deepening of knowledge specifically for the instructional staff in the building. Principals suggested attending professional conferences, doing book studies, and sharing research with teachers to reflect upon in professional learning communities. After analysis, coding, and consolidation, the first questionnaire generated eight unique leadership actions (listed in Appendix D) for the expert panel to rank with respect to Kotter's first step, *establishing a sense of urgency*.

Kotter's second step to leading change, *create a guiding coalition*, also generated good response from the participants. One theme that emerged was centered on who leaders should recruit for the guiding coalition. One participant said, "Make sure you get the entire school leadership team on board early – without them, you'll go nowhere." Another suggested that teacher leader participation is critical, and another suggested that the principal get central office administrative support before doing anything else. Another theme common in this arena was how to provide assurances to the guiding coalition that they will be trusted and listened to later in the process. A participant suggests that principals, "…meet individually with members of the [guiding coalition] and with the

[guiding coalition] as a whole to gauge commitment to the change" and another says that principals should, "…communicate that the decisions made by the guiding coalition will be accepted – trust the guiding coalition!" After analysis, coding, and consolidation, the first questionnaire generated seven unique leadership actions (listed in Appendix D) for the expert panel to rank with respect to Kotter's second step, *create a guiding coalition*.

Kotter's third step to leading change, *develop a change vision* produced the least amount of feedback from the participants compared to any of the other of Kotter's steps on the open-ended questionnaire. Most of the feedback centered upon whose opinions should be considered when developing the vision, including one participants input that principals should, "involve the school board in developing the vision." Several respondents echoed the idea that the vision should be "anchored in research supported best grading practice." After analysis, coding, and consolidation, the first questionnaire generated seven unique leadership actions (listed in Appendix D) for the expert panel to rank with respect to Kotter's third step, *develop a change vision*.

The fourth of Kotter's steps to leading change, *communicate the vision for buy-in* generated a great deal of participant input. Again, the theme of using professional development opportunities as a venue to achieve the goal was common. Also, several participants suggested that principals hold a series of public information nights, create multi-media presentations, and publish videos and information brochures explaining the purpose behind the change. Another expert recommended that any principal leading this type of change publically "take responsibility for overseeing the change" to raise the level of concern and perceived commitment to the initiative. After analysis, coding, and

consolidation, the first questionnaire generated fifteen unique leadership actions (listed in Appendix D) for the expert panel to rank with respect to Kotter's fourth step, *communicate the vision for buy-in*.

Empower broad based action, Kotter's fifth step, was another element that elicited a great deal of feedback from the study's participants. Common themes centered again on who should be encouraged to be involved and to take ownership of the process. One principal said, "I think the best thing to empower action was to involve students in our decision-making process." Another reflected upon how the leadership team at the school highlighted how the new grading system empowered teachers. "These types of systems count on the teachers' professional interpretation of the students' performance. Make sure to communicate to teachers that as long as they have the data to support their assessment, their interpretations will be supported." Several principals echoed another common theme, that of identifying the non-negotiables of the initiative and making these non-negotiables clear to the entire faculty. After analysis, coding, and consolidation, the first questionnaire generated nine unique leadership actions (listed in Appendix D) for the expert panel to rank with respect to Kotter's fifth step, *empower broad based actions*.

Kotter's sixth step is *generate short term wins*. Participants often recommended actions that were data-driven to support this step, including "compare final grades with previous years" and "help students track their progress so they can see that they are coming closer to the standard." Participants also suggested that the principal conduct surveys to gauge the true feeling of their community rather than listen to the "few, loud, squeaky wheels who resist the change most." The final common theme was for

principals to ensure that the teacher of the building is able to share success stories with their colleagues. One participant said, "…we had teachers at every board meeting presenting and sharing how this process was affecting learning in the classroom." After analysis, coding, and consolidation, the first questionnaire generated eight unique leadership actions (listed in Appendix D) for the expert panel to rank with respect to Kotter's sixth step, *generate short term wins*.

Never let up is Kotter's seventh step for change leadership, and it generated some of the most enthusiastic and voluminous response from the expert panel. Themes that emerged from their input included brief comments such as "don't give up!" and "re-focus you efforts often." Several principals encouraged leaders to continue to gather input from stakeholders during this step since they felt it was important to constantly keep track of the progress of the initiative and attitudes of their constituents toward it. Principals also encouraged future leaders to look inward during this step of the change process. One principals said, "I think the thing that kept pushing me forward was thinking about the school I would want for my own children. I didn't like the fact that many kids had to play the 'points game' to get through school. I want the focus on learning." Another common theme was for principals to look outward when they hit obstacles in the process. The idea seemed to be that it is important to "collaborate with other groups that are at a similar stage in the process" and to "reach out to groups that are further along in the process and learn from their successes and failures." After analysis, coding, and consolidation, the first questionnaire generated fifteen unique leadership actions (listed in Appendix D) for the expert panel to rank with respect to Kotter's seventh step, *never let up*.

The final step in Kotter's process is *incorporate the change into the culture*. In this step the principals suggested that principals support actions that make standards-based grading a "normal and natural" part of the school system. One principal said, "Draw connections between [standards-based grading] and everyday instructional practice." Another remarked that, "It's amazing to see that now that we are in year three of this it is part of our culture. It's great to hear kids, parents, and teachers talk about reassessments, standards, learning targets, and what is necessary to achieve proficiency on standards rather than how many points they need to 'get and A'." After analysis, coding, and consolidation, the first questionnaire generated nine unique leadership actions (listed in Appendix D) for the expert panel to rank with respect to Kotter's final step, *incorporate the change into the culture*.

In order to ensure that accuracy of the coding of participant responses from the open-ended questionnaire, I sent each participant an email containing a document that contained his or her unique responses that corresponded with each step, and the summarized and edited item(s) of his or her suggested leadership action. All participants verified and confirmed that my interpretations were correct. After this verification and confirmation, I complied all of the unique actions into one superset, again organized by Kotter's eight steps to lead successful change. This process resulted in a generation of 78 unique possible leadership actions that were tested for consensus by the expert panel in round two of the study's research (see Appendix D).

Round 2

The second round questionnaire utilized the SurveyMonkey electronic survey platform to allow the expert panel to rate how critical each of the 78 unique leadership actions would be in a transition to standards-based grading at a secondary school. Each panelist was asked to rate each of the leadership actions generated from the first questionnaire on a Likert-type scale to assess the group's aggregate rating of importance. The survey was developed on the SurveyMonkey platform and the link to the survey was shared with each consenting participant through an email communication. The survey was left open from collection for three days. After the three day data collection window ended, ten of the twelve (83%) of consenting expert panelists had competed the survey.

The data that were collected from the SurveyMonkey questionnaire were manually transferred into an Excel program file and were analyzed to determine the strength of each proposed leadership action. The strength of each action was first tested by calculating the mean score for each item. Then each item was tested for how consistently the expert panel rated the item. This was measured by calculating the rate at which the respondents rated the action a 3 or a 4 on a four point Likert scale. A rating of 3 indicated that the respondent considered the action to be *critical to the success of the change effort*. A rating of 4 indicated that the respondent considered the action to be *very critical to the success of the change effort*. The data was further tested for consistency of rating by measuring the interquartile range of the participants' ratings for each leadership action.

The analysis of the findings corresponding with the Kotter's first step to a successful change effort (Table 1) reflected a strong consensus from the expert panel

around one of the eight possible leadership best practices, specifically suggesting that future principals "lead members of the staff through professional development about research based best grading practices." This consensus leadership best practice's aggregate ratings, with a mean rating of 3.7, 90% of respondents rating it a 3 or a 4, and with an *IQR* of 0, made it one of two actions with the strongest support from this study's experts.

Table 1

Step 1: Establish a Sense of Urgency

		Mean	% 3&4	*IQR*	Consensus?
1.	Demonstrate to teachers the shortcomings inherent in the traditional grading through a comparison of GPA to measure of academic proficiency/aptitude (i.e. ACT, SAT).	3.0	80%	0.75	No
2.	Lead members of the staff through professional development about research based best grading practice.	3.7	90%	0	Yes
3.	Conduct a professional "soul search" to answer the question: "Why do we grade the way we grade?"	2.7	60%	1	No
4.	Educate the community by sharing current research on best grading practice.	2.9	70%	1.5	No
5.	Educate the community on shortcomings of the traditional grading and reporting model.	2.8	60%	1.75	No
6.	Conduct a straightforward and transparent evaluation of current grading and reporting practices.	3.0	80%	0.75	No
7.	Attend professional conferences on standards based grading.	2.6	60%	1	No
8.	Create an atmosphere that encourages "outside the box thinking" and innovation in instructional practice.	3.2	80%	1	No

No other possible leadership best practice from the possible leadership actions available under step one had strong consensus around them. Each of the other possible best practices failed the consensus test in at least two of the three criteria (mean, % scoring 3 or 4, and *IQR*). The only other best practice from those included in step one

that even came close to generating consensus ratings was the practice that encourages principals to "create an atmosphere that encourages 'outside the box thinking' and innovation in instructional practice," but even this failed to meet the 3.25 mean test with an average rating of only 3.2, and the less than a one interquartile range rating, with a *IQR* of 1.

Table 2

Step 2: Build a guiding coalition

		Mean	% 3&4	*IQR*	Consensus?
1.	Get school leadership (instructional administrators) on board first.	3.6	90%	0	Yes
2.	Get school teacher leaders on board early.	3.7	90%	0	Yes
3.	Get central office/district administrators on board early.	3.3	70%	1.5	No
4.	Create a committee consisting of district administrators, building administrators, teachers, and parents.	3.0	70%	1	No
5.	Communicate that the decisions made by the guiding committee will be accepted – trust the guiding coalition.	3.1	60%	1	No
6.	Meet both individually with members of the committee and with committee as a whole to gauge commitment to change.	2.3	80%	1	No
7.	Include some resisters in guiding coalition.	2.8	60%	0.75	No

The expert participants identified two best practices from the sub-set created in round one informing Kotter's second step to leading a successful change effort, *creating a guiding coalition* (Table 2). Both of the actions that secured consensus ratings centered on the importance of including the right people on the guiding coalition and also directing make this a priority with regard to timing. The highest rated consensus action from this group was, "Get school teacher leaders on board early." This action generated an aggregate mean rating of 3.7, with 90% of respondents rating it *critical* or *very critical* to

the success of the change effort. Furthermore, this action generated an *IQR* rating of zero. These ratings made this leadership action one of the two actions that received the greatest support from the expert panel.

The other leadership action that generated consensus ratings was, "Get school leadership (instructional administrators) on board first." This action's aggregate ratings placed it among the second highest rated consensus best practices discovered in this study, with a mean score of 3.6, 90% of respondents rating it *critical* or *very critical* to the success of the change effort, and an IQR of zero. No other action in this group was rated sufficiently critical by the expert panel to be included on the list of consensus best practices. There was one leadership action, however, that came close to making the list. It was the action that concerned what stakeholder groups should be included in the guiding coalition, specifically the action which suggested that principals, "Get central office administrators on board early." This action met the criteria for inclusion in the consensus list in two of the areas (mean of at least 3.25; at least 70% of respondents rate the action *critical* or *very critical* to the success of the change effort), but failed to meet the third criteria (*IQR* of less than one). All of the other actions in group two failed in at least two of the three criteria.

The third group of leadership actions rated by the expert panel (Table 3), that corresponding with Kotter's third step to leading a successful change effort, *develop a change vision*, resulted in no additional best practices being added to the list of consensus leadership actions. Only one of the actions, in fact, even came close. This action was, "Anchor the vision in 'best practice' and support it with the research." This action,

however, while meeting consensus criteria in mean (3.4) and had a high enough percentage of panelists rating it *critical* or *very critical* to a successful change effort (90%), had an IQR rating of 1, which excludes it from inclusion on the list according to the criteria established before the study was conducted. All of the other actions in group three failed in at least two of the three criteria.

Table 3

Step 3: Develop a change vision

		Mean	% 3&4	*IQR*	Consensus?
1.	Use the guiding coalition to hone a vision for change.	2.8	80%	0	No
2.	Seek feedback from all stakeholders.	3.1	80%	1	No
3.	Anchor vision in "best practice" and support it with the research.	3.4	90%	1	No
4.	Involve the school board in development of the vision.	2.8	60%	1.75	No
5.	Don't reinvent the wheel – seek out the vision for change from others who have gone before you.	3.0	70%	1	No
6.	Re-visit Vision often to ensure that the original vision continues to resonate.	3.1	60%	1	No
7.	Connect vision to "real world" to create relevance and need for change.	2.3	80%	1	No

The fourth group of actions considered by the expert panel focused on the actions principals could take to focus on Kotter's fourth step, which is to *communicate the vision for buy-in*. This list (Table 4) was among the longest list of possible best practices and was among the most varied. This group also generated the highest number (3) of leadership action that were rated sufficiently highly to be added to the list of consensus best practice leadership actions that should be considered by principals who plan to lead a transition to standards-based grading at their secondary school.

Table 4

Step 4: Communicate the vision for buy-in

		Mean	% 3&4	*IQR*	Consensus?
1.	Create feedback loops to open channels for communication.	3.1	80%	1	No
2.	Develop professional development modules for teachers on all aspects of the grading practice transformation.	3.5	90%	0.75	Yes
3.	Develop public presentation to explain need for change and vision for new grading practice.	3.3	90%	1	No
4.	Use multiple methods (public live, video, print) to communicate change.	3.0	70%	1	No
5.	Principal should take responsibility for overseeing the change.	3.3	90%	1	No
6.	Frequent communication of progress on transformation.	3.1	90%	0.75	No
7.	Communicate the goals and likely effects of the change (both positive and negative) for transparency.	3.2 3.1	90% 70%	1 1.75	No No
8.	Communicate a clear timeline for change.	3.3	90%	1	No
9.	Identify clear methods/means for communicating grades to other educational institutions/colleges.	3.6	90%	0	Yes
10.	Communicate frequently with teachers who will be implementing this change at the ground level.	2.8	60%	1.75	No
11.	Continue to share research/ articles with teachers and community throughout the process.	3.1	80%	1	No
12.	Communicate frequently with parent groups/ School Board to keep the focus on progress of change.	3.1	80%	1	No
13.	Create opportunities for parents/ stakeholders to share their concerns and feedback on change and process.	3.1	80%	0.75	No
14.	Empower teachers to present/ share experiences at public meetings.	3.5	90%	0.75	Yes
15.	Don't underestimate the magnitude of the change both within and without the educational community.				

The highest rated leadership action among those selected by the panel for inclusion on the consensus list of best practices was, "Communicate frequently with teachers who are implementing this change at the ground level." This action earned a mean rating of 3.6, was rated *critical* or *very critical* by 90% of the respondents, and an *IQR* of zero. The other two leadership actions that merited inclusion on the list of consensus best practices had identical ratings. Both "Develop professional development

modules for teachers on all aspects of the grading practice transformation." and "Don't underestimate the magnitude of the change both within and without the educational community" achieved mean ratings of 3.5, were rated *critical* or *very critical* by 90% of the respondents, and had *IQR* ratings of 0.75.

Table 5

Step 5: Empower broad based action

		Mean	% 3&4	*IQR*	Consensus?
1.	Continue to review and share research about benefits of SBG.	3.2	90%	0	No
2.	Celebrate successes and milestones publicly.	3.1	90%	0.75	No
3.	Redefine and communicate non-negotiable elements of implementation.	3.5	90%	0.75	Yes
4.	Establish a clear timeline for implementation (but allow for flexibility if teams want to move faster than expected).	3.2	90%	1	No
5.	Involve students in the decision making process / report feedback on change.	2.8	90%	0.75	No
6.	Leverage evaluation system to support positive efforts for innovation and change.	2.7	70%	0.75	No
7.	Focus on the element of how SBG empowers teachers by recognizing them as professionals who are able to make diagnostic decisions regarding the abilities/skills of their students.	3.3	90%	1	No
8.	Support teacher experimentation with this new process; create environment where it is okay to struggle with new practice.	3.3	90%	1	No
9.	Provide time for teachers to learn and discuss new practices with their colleagues/ departments.	3.6	90%	1	No

Several of the leadership actions among this list only barely missed meeting the ratings for inclusion on the list of consensus best practices. Three actions, in fact, met the criteria by earning mean ratings of 3.3 from the participants with each earing *critical* or *very critical* ratings 90% of the time. The *IQR* for each surpassed the minimum of less than one, however, by achieving and *IQR* of exactly one. These three leadership actions were "Develop public presentation to explain need for change and vision for new grading

practice"; "Principal should take responsibility for overseeing the change"; and, "Identify clear methods/means for communicating grades to other educational institutions/ colleges." All of the other actions in group four failed in at least two of the three criteria.

The fifth group of actions that were rated by the panelists, those that corresponded with *empower broad based action* (see Table 5), generated only one leadership action that met the criteria to be included on the list of best practices. This leadership action was, "Redefine and communicate non-negotiable elements of implementation." This action earned a mean rating of 3.5, was deemed *critical* or *very critical* by 90% of respondents, and had an *IQR* of 0.75. Again, three actions just fell short of meeting the criteria, and both because of a slightly higher than allowed IQR of 1. One of these actions, specifically the one that suggested that principals, "provide time for teachers to learn and discuss new practices with their colleagues/departments" had a very high mean rating of 3.6. Two other actions which also missed inclusion by only one metric, but earned mean ratings of 3.3, include, "Focus on the element of how SBG empowers teachers by recognizing them as professionals who are able to make diagnostic decisions regarding the abilities/skills of their students" and "Support teacher experimentation with this new process; create environment where it is okay to struggle with new practice." All of the other actions in group five failed in at least two of the three criteria.

The sixth set of actions rated by the panelists (see Table 6) were focused on how principals can *generate short term wins* to support the successful implementation of a standards-based grading initiative. Four of these actions earned high enough mean ratings (two with mean ratings of 3.4 and two with mean ratings of 3.3), and each of the

four had 90% of the respondents rating it *critical* or *very critical*, but each of the four actions failed to achieve an interquartile range of less than one. These actions included, "Allow teachers to celebrate personal and professional successes"; "Allow teachers to share struggles and failures"; "Constantly thank teachers for their efforts"; and, "Be open to change – flexibility must be maintained to keep SBG fluid and relevant. Make changes as necessary." All of the other actions in group six failed in at least two of the three criteria.

Table 6

Step 6: Generate short term wins

		Mean	% 3&4	*IQR*	Consensus?
1.	Create supporting documents (Staff handbook, Parent Handbook, Student Handbook, etc.) which support change efforts.	3.2	90%	1.75	No
2.	Survey stakeholders and share results.	3.0	90%	0.75	No
3.	Compare grading data with previous years' data.	2.9	90%	1.5	No
4.	Allow teachers to celebrate personal and professional successes.	3.3	90%	1	No
5.	Allow teachers to share struggles and failures.	3.4	90%	1	No
6.	Constantly thank teachers for their efforts.	3.3	90%	1	No
7.	Be open to change – flexibility must be maintained to keep SBG fluid and relevant. Make changes as necessary.	3.4	90%	1	No
8.	Share student proficiency data.	3.1	80%	1	No

The seventh group of actions rated by the panelists (see Table 7) consisted of actions that correspond with Kotter's seventh step to successful change efforts, *never let up*. Of these fifteen possible leadership actions, the panel rated two sufficiently highly to merit inclusion on the consensus list of best practices. These consensus picks were, "Align continued professional development with SBG. Don't move to the 'next thing'

until SBG is firmly in place in the culture" and the simple action encouraging principals who want to lead this type of change: "Don't give up!"

Table 7

Step 7: Never let up

		Mean	% 3&4	*IQR*	Consensus?
1.	Survey parents, students, and staff to gather feedback and to assess where things are going well, and what areas need more support	3.1	90%	0.75	No
2.	Update handbooks to keep them relevant.	3.0	60%	2	No
3.	Encourage continued experimentation/ evaluation with processes and practices.	2.9	90%	2	No
4.	Collaborate with other schools who are implementing similar changes.	2.9	70%	1	No
5.	Open your doors to others who are considering this transformation – celebrate that "Our school is willing to innovate for our students best interests!"	3.1	90%	0.75	No
6.	Support each other! Rely on your teammates in the hard times.	3.3	90%	1	No
7.	Ensure that you have a solid implementation plan during each phase of the change. Stick to the plan (as much as possible)!	3.1	90%	0.75	No
8.	Align continued professional development with SBG. Don't move to the "next thing" until SBG is firmly in place in the culture.	3.6	90%	0	Yes
9.	Don't give up!	3.5	90%	0.75	Yes
10.	Reiterate vision and need for change throughout the process.	2.9	80%	0	No
11.	Continue to get feedback from your stakeholders.	3.1	90%	1.75	No
12.	Re-focus your efforts often.	2.8	80%	0	No
13.	Develop a systematic way to monitor progress. Report findings publicly.	3.2	90%	1	No
14.	Continue to hold parent information meetings throughout the change process; address questions and concerns in a timely manner.	2.9	80%	0	No
15.	Stick to the timeline.	2.6	60%	1	No

Only one of these other thirteen leadership actions scored a mean rating of above the minimum of 3.25. This action, which rated a mean of 3.3, was, "Support each other! Rely on your teammates in the hard times." Of the other twelve possible actions considered by the expert panel, none was rated high enough to meet the minimum criteria in more than one of the three rating areas.

Table 8

Step 8: Incorporate change into the culture

		Mean	% 3&4	*IQR*	Consensus?
1.	Connect SBG to everyday instructional practice.	3.3	90%	1	No
2.	Encourage teachers/students/ parents to share experiences.	2.9	80%	0	No
3.	Share the story of the change as much as possible; celebrate the change, and the process of change; publish if possible.	3.0	80%	0.75	No
4.	Host a state-wide SBG conference.	1.5	20%	1	No
5.	Celebrate the expertise developed as a school on the leading-edge of this change.	2.8	70%	0.75	No
6.	Continually review data.	2.9	70%	1	No
7.	When hiring – include commitment to SBG in interview; hire only teachers who are willing to commit to SBG.	3.1	60%	2	No
8.	Connect SBG to every element of the teaching/ learning process.	3.1	90%	1	No
9.	Connect SBG to a "growth mindset" mentality.	3.0	70%	1.75	No

The last of the groups of actions rated by the expert panel (see Table 8) featured actions that corresponded to Kotter's eight step for leading a successful change effort, that of *incorporating the change into the culture*. The expert panels rating of this group of actions resulted in no additional actions that merited inclusion the list of best practices. In fact, only one action even came close, with a mean of 3.3, 90% of the respondents rating it *critical* or *very critical*, but had an interquartile range of one. This action was "Connect [standards-based grading] to everyday instructional practice." All of the rest of the actions included in group eight failed to meet the criteria.

Conclusion

Therefore, the result of the Delphi study was to generate a list of nine consensus leadership best practices that secondary school leaders should consider when planning to

transform their secondary school from a traditional grading and reporting model to one where teachers communicate student learning with in a standards-based grading and reporting model. The nine actions identified and shown in Figure 3 correspond with five of the eight steps the Kotter believes that must be in a successful change effort.

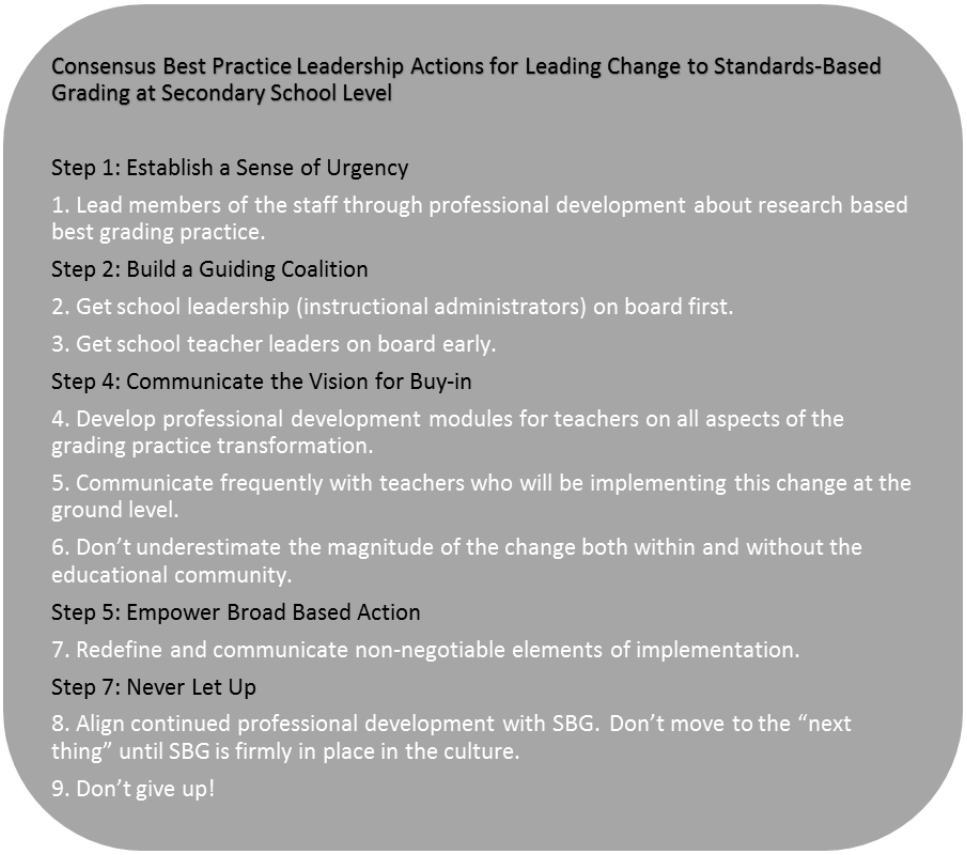

Figure 3: Findings: Consensus Best Leadership Practices

Evidence of Quality

The methods and strategies used to attempt to increase the likelihood that the research would general quality results will be reviewed in the following pages. First I will outline the methods used to increase the credibility and transferability of the

research. I conclude the evidence of quality portion of the study with a description of how I attempted to strengthen both the dependability and confirmability of the findings.

Credibility

The credibility of this study is helped, first of all, but the method used to collect and analyze the data. The Delphi method, with its iterative nature, automatically helps improve the likelihood that the data collected will be credible. In order to improve the quality of the data, and to yet again increase the likelihood that the data collected is credible, I used a member checking strategy at the end of round one of the research. This was achieved by asking each member of the expert panel to review both their original input and the corresponding summarized and edited action that I intended to use in the second round of the research. In every case the participant replied to my message and confirmed that my summarized and edited version captured the essence of their input. This process was both unnecessary and impossible to use in round two since it the options were clearly described in the five point Likert scale and because the data collected was done through an electronic survey instrument which kept the identity of the respondent anonymous.

Transferability

In order to increase the transferability of this research, I endeavored to include a broader range of grade levels and recruited participants from multiple different states and regions of the country. This was achieved by including both levels of secondary (middle and high school) principals who had led a transformation to standards-based grading to qualify as potential participants for this study. Furthermore, by recruiting experts from

all across the country (Washington, Iowa, Wyoming, Minnesota, Colorado, Missouri, Montana, and Illinois), the results of the study are less likely to reflect a regional limitation or be skewed to any one particular state's educational paradigm. There were some limitations because although principals from even more regions were recruited (i.e. from southern and northeastern states), none consented to participate. Even considering this fact, with the variety of regions represented in the study - from the mid-west, the Pacific Northwest, and the Rocky Mountain region – the findings of the study should be transferable to a variety of school contexts.

Dependability

The dependability of this research was greatly improved by the guidance and feedback received from the dissertation committee during the development of the research design. The dependability was further improved by the rigorous and comprehensive review by the University Research Reviewer, who insisted on a more complete and thorough explanation of the theory behind that research design. Finally, the dependability was improved still the deep and comprehensive review by the Institutional Review Board prior to being approved to proceed.

Confirmability

Lastly, the research guaranteed its confirmability by both being reviewed by an external auditor, to review both statistical calculations and analytics, and through the rich, thick descriptions used during the entire research process. By helping the participant expert panelists to organize their thinking through providing them the Kotter framework, panelists were better able to concentrate on what they did, rather than have to figure out

where to start thinking about what they did. Several panelists remarked to me in email communication that they felt that if they hadn't had the framework to help them organize their thinking, not only would the process have taken a great deal more time, but they would have left out critical actions that only occurred to them after seeing the Kotter headings.

The final section of this study will provide an overview of why and how this study was necessary and will interpret what the findings detailed in section four mean for school principals and the education profession. The implications for social change generated by the study will be considered. Recommendations for action, both for the immediate use of these findings and to guide future research, will be provided. Finally, I will reflect upon my experience conducting this research and will discuss how I might have changed the study in retrospect.

Section 5: Discussions, Conclusion, and Recommendations

Overview

Since the publication of the *A Nation at Risk* report in 1983, U.S. schools have been tasked dramatically improving educational outcomes for our students. This report is widely seen as the beginning of the standards-based educational reform movement. Over thirty years later, while it would almost be seen as malpractice to teach without standards and clearly identified student learning outcomes, it is absolutely normal to assess and report student performance with the same antiquated techniques that have been used forty, fifty, indeed, even a hundred years ago. Despite that reality that the most respected and revered educational researchers in the field of grading and reporting recommend that our schools transition from traditional grading systems to a standards-based grading model to more accurately report students' academic learning levels, little progress has been made. The vast majority of secondary schools in our county continue to use the traditional model for grading and reporting.

Purpose of the Study

Secondary school principals who wish to lead such a change as that of radically transforming the grading practice in their school know that they would likely to face significant resistance. Furthermore, there is a gap in the research to inform school leaders of how exactly to begin to transition their schools to this research-based practice. The theory of action that guided this research study is a belief that if there was a clear leadership roadmap for secondary school principals to inform how to lead the transition from traditional grading to standards-based grading, more schools and districts would do

so. Using the Delphi technique to survey a panel of expert secondary school principals, experienced at leading their secondary schools to adopt a standards-based grading model, this study identified discover if there is a set of leadership best practices that a secondary school leaders could consider when initiating the transformative change from traditional grading and reporting to standards-based grading and reporting.

Research Questions

This study was guided by two research questions. The first was "What are the steps high school leaders should follow as *best practices* when initiating the transformative change from traditional grading and reporting to standards-based grading and reporting?" After this question is full explored and, resulting from the questioning process a broad, inclusive list of possible best practices is developed, the second research question comes into play. That question was "Does consensus exist among the expert secondary school principals for the set, or a subset, of the practices discovered by the first research question?"

Methodology

In order to adequately answer the research questions that guided this study, a qualitative research study, grounded in a dynamic social constructivist paradigm, and informed by Kotter's 8-step process for organizational change, was developed. A panel of expert secondary principals, all of whom are experienced in successfully leading a transformation at their school to standards-based grading, was identified and recruited to participate in this study.

The study consisted of seven stages. The first stage required me to clearly develop a statement of the problem which would guide the entire research study. Clearly articulating the problem helped define the research questions that this study was developed to help answer. Both of these were necessary to have completely clear prior to beginning the second stage of the study, that of recruiting a panel of expert principals to participate in the research. By clearly explaining the problem and the intent of this research, an adequate number of secondary school principals, all of whom had faced the challenge of leading this type of change without any leadership road map, agreed to participate so that the rest of the field could benefit from their experience.

The next stage of the study was to begin was round one of inquiry. The first questionnaire answered by the expert panel was an open-ended question designed to inform *RQ1*. By designing this survey to be a single open-ended question, the survey was designed to illicit the broadest, most expansive list of possible best leadership practices from the expert panel. In order to help organize the panel's thinking, however, and to help energize their brainstorm, the survey asked principals to place each leadership action that they wanted to share, the questionnaire was aligned with Kotter's (2007) model for leading successful change.

The third stage of the study consisted of the analysis of the broad spectrum of possible best practices contributed by the expert panel from the open-ended questionnaire. In order to classify, summarize, and clarify the expert's contributions, I fist followed Trochim's (2001) description of data coding process. Furthermore, I followed Davidson's (2013) process to eliminate similar of identical responses within the data set.

Once my coding was complete, I sent each participant a document containing their original, unique contributions and my summarized, edited interpretations of their contributions to ensure that the essence of their contributions was not changed. I then classified each of the approved edited leadership actions into Kotter's eight step model. At the end of stage three, I had a set of 78 unique possible best practices for the experts to rate in the following stage of the study.

The fourth stage of the study was round two of inquiry and involved each of the expert panelists rating each of the 78 possible leadership best practices generated in round one of the research. Panelists were sent a SurveyMonkey link that brought them to a ten page electronic survey. The first page included the instructions for the survey. The following eight pages of the survey each corresponded with one step from Kotter's eight step model for leading a successful change effort. For each step, the panelists were asked to individually rate between six and fifteen possible leadership actions on a Likert scale of one to four. A rating of 1 indicated that the expert felt that the action was *not critical to the success of the change effort*. A rating of 2 indicated that the expert felt that the action was *somewhat critical to the success of the change effort*. A rating of 3 indicated that the expert felt that the action was *critical to the success of the change effort*. A rating of 4 indicated that the expert felt that the action was *very critical to the success of the change effort*.

The sixth stage of the study required me to analyze and interpret the data produced in the second round of inquiry to answer *RQ2*. I used the metrics outlined in section 3 to determine if any of the possible leadership actions identified in round one of

inquiry met the criteria for consensus from the expert panel. These criteria included: the action must achieve a mean rating of at least 3.25; at least 70% of respondents must rate the action a 3 (critical to the success of the change effort) or a 4 (very critical to the success of the change effort); and the action must have an interquartile rating of less than one. Once the data was analyzed and interpreted, I proceeded to the seventh and final stage of the study, which was to prepare a final report of the findings.

Summary of the Findings

This qualitative tradition study using the Delphi technique study was designed to discover if a set of consensus best leadership practices exists to inform secondary school principals as they plan to lead a transition to standards-based grading t their secondary school. The study consisted of two rounds of inquiry. The first round of inquiry was an open-ended questionnaire designed to generate a broad spectrum of possible leadership actions. The second round of inquiry was a survey to allow the expert panel to use a Likert scale to rate how critical each action would be to the success of this type of change effort.

The data was analyzed in accordance with the criteria outlined in the research design. Using the Delphi technique to determine consensus, this study identified a set of nine best leadership practices that are critical for secondary school leaders to consider as they plan to lead a transition from traditional to standards-based grading and reporting. This consensus set of best practices fell into five of Kotter's eight steps to leading a successful change effort.

Interpretations of Key Findings

The findings from this study are likely to be useful to future secondary school principals, but are not likely to be as fully prescriptive list of possible leadership actions as I would have liked for the study to have produced. This is true for two key reasons: (a) the final consensus list of strongly supported leadership actions consisted of only nine discrete actions, and (b) only five essential areas of Kotter's eight criteria for leading a successful change effort have even one suggested action. While the first round of inquiry was able to generate a robust list of 78 unique possible leadership best practices, the expert panel's ratings from the second questionnaire were sufficient discriminating as to garner only nine leadership actions that met the study's strict criteria for consensus best practices.

Round 1

The open-ended questionnaire served its purpose exactly as intended. Although only eight of the twelve consenting participants followed through on returning a completed survey, the contributions of those eight participants was robust and considered. Many of the actions that I suspected to find were listed, and many others that I had not expected, but which seemed reasonable, were also included. After completing the coding, summarization, and editing process, a second round survey with 78 possible leadership best practices was able to be created. The least number of leadership actions in any one of Kotter's eight steps was six, while two of the categories has 15 possible leadership best practices.

Round 2

Ten of the twelve consenting participants completed the online electronic SurveyMonkey survey, with every participant rating each of the 78 possible leadership actions on a scale of one to four. Only nine leadership actions met all of the criterial to be designated a consensus best practice. There were several reasons that I expect that only nine leadership actions were rated sufficiently strong as to meet the criteria for consensus.

The first reason in a possible anomaly in the data set. Upon close inspection and disaggregation of the data, it became clear that one of the participants rated every action a 1, indicating that the action was *not critical to the success of the change effort*. I found this odd, and suspect that the participant intended to rate each action a 4, or *very critical to the success of the change effort*, but since this survey is anonymous I could have no idea of who answered thusly, and therefore, the ratings remained in the data set and were calculated as such.

The second reason that I feel that only nine actions were rated sufficiently highly to earn consensus status was that I believe that I set too rigorous criteria for an action to be considered to be *consensus*. Upon calculating the statistical analysis of the data, I noticed that while nine of the actions exceeded the criteria for consensus as defined by my research design, there were thirteen additional actions which met the criteria for consensus in two of the three areas with mean ratings of either 3.3 or 3.4 (with the minimum allowable for consensus being set at 3.25) and all of which were rated a 3 (critical to the success of the change effort) or 4 (very critical of the success of the change

effort) by 90% of the respondents. The only metric where these thirteen actions fell short was their rating of interquartile range, which in every case was a one. The standard for consensus as defined by my research design was *less than one*.

My standards for consensus were based upon the work of Von der Gracht (2012), who suggested that a Delphi study's consensus, in order to ensure credibility, should be measured by three metrics. Of those he described as standards, I chose mean, an average percent of majority opinions (APMO) cut off rate, and interquartile range (*IQR*). I too followed Von der Gracht's (2012) recommendations for the standards rates of mean (3.25) and APMO (70% or more). I thought that I had followed his recommendation for IQR as well, but upon closer reading I now see that Von der Graht (2012) states that an "*IQR* of 1 or less is found to be a suitable consensus indicator for 4- or 5-unit scales." Therefore, it appears that through the misinterpretation of the standard for IQR during the research design phase of this study I created a standard for consensus that reduced the number of consensus best leadership practices by less than half (from 22 to 9). Furthermore, should I have correctly listed the standard for IQR as *one or less*, there would be at least one consensus best leadership practice per Kotter's step to successful change.

Conclusions

Therefore, there are several conclusions that I draw from this study's finding. The first is that, since the standard for consensus set for this study was more rigorous than is technically needed, the nine leadership actions that were deemed as critical for secondary school leaders to consider as they plan to implement a change to standards-

based grading are as solid as any researcher would want their final results to be. In short, these nine practices should be considered almost mandatory for secondary school leaders to plan for should they attempt to lead such as change as this. Furthermore, with the inclusion of the thirteen *highly recommended* leadership actions, the list of twenty-two practices (nine consensus best practices along with the thirteen honorable mention leadership actions) could serve as a valuable road map for a secondary school principal to consider as they lead a transformative change to standards-based grading in their school. Having access to this road map will both encourage and inform secondary school principals and is likely to lead to more schools making this recommended change, and more success in the change efforts.

Furthermore, the findings that resulted from this research fit perfectly into the context of much of the most current research on change leadership. Kirtman's (2014) study of change leadership focused on seven interactive competencies for change, and they perfectly aligned to the findings of this research study. The expert principals who participated in this study demonstrated all of the competencies described in Kirtman's research, including: challenging the status quo; a focus on developing clear expectations for change; the creation of a common vision for the organization as a result of the change; a focus on the success of the team (over than of individual success); the creation of a sense of urgency around the change; a deep commitment to continuous improvement for the organization; and, the importance of developing strong external partnerships to support the sustainability of the change effort. Also, the findings of this research

correspond perfectly to Fullan's (2014) work which extolls the critical importance of the school principal in any lasting and meaningful change effort.

Implications for Social Change

The implications for social change resulting from this study are both specific and broad. With more and more school leaders looking to transform their school's grading practices toward a more standards-based approach, having access to this list of best practices, formed and certified by a group of secondary school principals who have successfully managed just such a difficult change, will be both informative and comforting. To know that, as a secondary school principal, a leader can have the ability to lean on the collective wisdom of so many educational pathbreakers who have already lead precisely this type of change will certainly encourage more and more secondary leaders to take their next steps towards leading this type of change.

Furthermore, I believe that this type of study can help school leaders access the collective wisdom and experience of those who have faced other types of challenges as well. In difficult implementations such as changing middle or high school class schedules to support deeper learning structures (block schedule versus six-period day); to altering school calendars (from a nine month agrarian calendar to year-round learning); to transitioning to a different educational delivery model (cooperative learning, flipped mastery, problem-based learning versus the traditional instructional model); this Delphi method study could be used to quickly and efficiently to plan for and lead in secondary school. To access the knowledge of expert colleagues who have already led the way in challenging circumstances, we might be able to accelerate positive changes for the

masses instead of relying on brave school leaders to run blindly into change effort in the hopes that they will simply figure it all out by themselves.

Significance of the Study

This study is significant, yet the findings were everything I hoped they would be. Although the results did generate a set of consensus best leadership practices for school leaders to consider when planning to lead a transition to a standards-based grading program, the criteria were set too rigorously and thus the set was limited to only nine leadership actions for principals to consider. When coupled with the thirteen leadership practices that technically did not meet the standards defined for consensus by this study, but would have been had I correctly interpreted the APMO standard when designing the study, however, the study becomes much more significant. Nevertheless, the study, even recognizing the limitations caused by the design flaw, should have strong implications for social change was described on the preceding page.

Outcomes

The final report of the study will be shared with the panel of experts who participated in the study. The cadre of secondary school principals who have lead a change to standards-based grading is not very big, and as a result of their relative rarity, many times when school leaders are attempting to lead this type of change they reach out personally to one or more of them. My hopes are that when future school leaders contact one of the experts who participated in this study, they will consider sharing this list. This list would help them plan to lead their transformation to standards-based grading. Furthermore, I plan to submit an article explaining the research and the outcomes to

educational journals for consideration for publication. I hope that by doing so, more principals will be encouraged to lead this important change. From a local perspective, I will be sharing the outcomes of this study with the secondary school principals in the school district that I lead.

Public Policy

This study also has a connection to public policy. In recent years more and more legislation has been passed in states that direct school systems to begin to transition to standards-based and competency-based systems. School districts in Washington, for instance, are required to adhere to a standards-based education philosophy for teaching and learning. As a result, some entire districts have already transitioned to standards-based grading, and more are likely to begin doing so in the coming years. The outcomes of this study could be used by districts and schools as they begin this process.

Recommendations for Further Study

There are several opportunities for follow-up research related to this study. One area could be to study how central office administration systems can support individual schools in a transition to standards-based grading. Another area worthy of study would be to study how parents react to the recommended consensus leadership actions developed by this study to further develop and improve community acceptance of this new style of assessing and communication student learning levels. Another interesting study would be to use the list of recommended best leadership practices developed by this study, which were developed specifically to help a principal plan for a transition to standards-based grading, to see if the same list (or a subset of this list) would be

appropriate for consideration when leading different difficult type of leadership changes at the secondary level.

Summary

This research study successfully achieved its purpose: that of identifying that there is a set of consensus best leadership practices for secondary school leaders to consider as they plan to lead the transition to standards-based grading at their schools. My experience of leading this change was mostly positive. Although I found it easy to identify a reasonably robust list of potential candidates, I was surprised that so many of those I reached out to for consideration of participation failed to respond at all. I believe that this is an outcome of both the overwhelming pressure that secondary school leaders are under and the intense workload they are expected to be able to complete in their regular school day. Once I had a solid set of participants, however, I was both pleased and impressed with the detail of thought and willingness to engage within the research process. As a result, I feel that the findings of the study are both realistic and useable for practitioners as they lead the challenging transformation to standards-based grading.

My personal bias in favor of standards-based grading as clearly superior to the traditional model for grading and reporting, which is used almost ubiquitously throughout U.S., is well documented. That being said, the design of this study, with the indirect survey instruments and limited direct communication relative to the subject matter being studied in the project, limited any influence upon the participants. Furthermore, the use of the member checking strategy after the analysis of the first questionnaire was effective in limiting my unintended misinterpretations or biases in leadership actions. Therefore, I

believe that the results of the study are accurate and representative of the opinions and beliefs of the study's expert participants.

This study shows that by accessing the collective knowledge that already exists within the cadre of current public school educational administrative community, we could likely already have the answers necessary to solve the most difficult and challenging problems facing U.S. schools. I encourage more school and district leaders to formally survey their colleagues for guidance when considering important educational initiatives and reforms. It is likely that, through a quick and careful study, we can all avoid common mistakes and improve our chances of making school a better place for the children that we serve.

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Appendix A

Invitation to Participate in Research Project

Dear Educational Leader,

Please accept this invitation to participate in a research project entitled *Best Practices for Leading the Transition to Standards-based Grading in Secondary Schools.* This research study is being completed for the partial fulfillment of the requirements of obtaining a Doctorate of Education through Walden University.

In order to conduct this research, I am in the process of recruiting between 12 and 20 current or former secondary school principals who have successfully led the transition from traditional grading and reporting to a standards-based model for grading and reporting at the high school level. "Successfully led" is defined as an educator who is or was the principal of a high school which underwent this type of transformative change, remained the leader throughout the entire change process, and where the high school in question continued to operate using a standards-based grading model for no fewer than two years after the initiative was first implemented.

By participating in this study, you will help identify a set of consensus best practices that further school leaders could consider when contemplating leading this research-based strategy for school improvement. Your experience as a successful change agent leading this type of important initiative you the unique expertise and perspective on this issue, and we hope you will consider participating.

In addition to your participation, we would appreciate your help to identify others with an interest in this research study; please forward this e-mail to any colleagues whom you feel is qualified to share their insights and experiences.

This study will use a Delphi technique, which is a series of web-based questionnaires designed to identify consensus around a set of important leadership actions that future school leaders could consider when leading this type of change effort. Delphi technique studies are an ideal way to develop a synthesis of ideas while maintaining confidentiality and minimizing time commitments from the participants. This is because Delphi studies can be conducted asynchronously and electronically, and therefore panel of experts can easily participate in the study within the limits of their schedule and geographic location.

Each expert panelist will be asked to complete all questionnaires during the study in order to reach a set of consensus "best practices" from the group. The first online questionnaire will consist of an open-ended question where you will describe the actions you took, or might have taken, that were important to the eventual success of this change effort. In order to help guide and organize your responses, the questionnaire will used Kotter's 8-

step Process for organizational change as a framework. Completion of this first questionnaire should take no more than 30 minutes to complete.

After all panel members have completed the first questionnaire, I will consolidate the findings and will develop the second questionnaire for you to complete. This questionnaire will allow each participant to rate all of the actions identified on the previous questionnaire on a four point Likert scale to identify which actions, or sets of actions, are most critical for leaders to consider as they plan to lead this type of change. This second questionnaire should only take 15-20 minutes to complete.

During each round, I will ask for your name, e-mail address, and other contact information; however, this is for participant response tracking only. All of your information will be kept confidential and all data will be aggregated and unidentifiable in subsequent reports.

As this study is completely voluntary, you will be free to withdraw from this study at any time without penalty.

Thank you for considering participating in my study. If you are willing to participate in this study, or if you have any additional questions or concerns, please contact:

Alexander Carter
alexander.carter@waldenu.edu
(970) 708-7405

I would greatly appreciate your contribution as an educational leader in this important study.

Thank you very much for your consideration,

Alexander Carter, Superintendent
Montezuma-Cortez School District RE-1
Doctoral Candidate, Walden University

Appendix B

Round 1 Inquiry

Dear Mr. _____,

Thank you again for agreeing to participate in this research study. As explained to you previously, you are one of __ national panelists selected to participate so your input is extremely valuable. This study is simple and straightforward. Your participation should not require you to invest a significant amount of time.

As a quick review, the research is a three round Delphi study centered on the ninth grade transition. Specifically, through the research, I will determine if there are set of consensus best practices that future school leaders could consider employing when contemplating leading a transition to standards-based grading. Your experience as a successful change agent leading this type of important initiative you the unique expertise and perspective on this issue. The Delphi method supports the blending of the thoughts and opinions of national experts, researchers, and practitioners.

The attached survey is round one of the three round Delphi. It consists of one open-ended questions. The remaining two Delphi rounds will be formulated based on the compiled answers from all panel members. Your responses will be anonymous to the rest of the panel members and no response will be attributed directly to you.

Although the return of the questionnaire will imply your consent to participate in this research, I have attached the same consent information provided in the initial recruitment email to ensure complete transparency. This document is simply provided for your information.

Do not hesitate to contact me with any questions. Please email this questionnaire back to alexander.carter@waldenu.edu by _____, or you may fax the completed questionnaire to my attention at 970-565-2161. If you would prefer to receive this questionnaire in hard copy through the U.S. Mail, please let me know and I will be happy to provide this to you.

Sincerely,

Alex Carter
Doctoral Candidate – Walden University

Directions: Please answer the open-ended questions as completely as you wish. Feel free to add additional thoughts as necessary. Individual quotes will not be attributed to anyone specifically, but may be used as part of reporting data. The question is:

What are the leadership actions that secondary school leaders should consider as "best practices" when initiating the transformative change from traditional grading and reporting tor standards-based grading and reporting?

In order to help you organize your input, I have included Kotter's framework for effective organizational change. Kotter's 8 Steps include:

Step 1: **Establish a Sense of Urgency**: Actions that craft and use a significant opportunity as a means for exciting people to sign up to change their organization.

Step 2: **Create a Guiding Coalition**: Actions taken to assemble a group with the power and energy to lead and support a collaborative change effort.

Step 3: **Develop a Change Vision**: Actions to shape a vision to help steer the change effort and develop strategic initiatives to achieve that vision.

Step 4: **Communicate the Vision for Buy-In**: Actions designed to energize the people who are ready, willing and urgent to drive change.

Step 5: **Empower Broad Based Action**: Actions that encourage change, remove obstacles to change, or change systems or structures that pose threats to the achievement of the vision.

Step 6: **Generate Short-Term Wins**: Actions designed to produce, track, evaluate and celebrate volumes of small and large accomplishments – and correlate them to results.

Step 7: **Never Let Up**: Actions focused on increasing credibility to change systems, promote and develop employees who can implement the vision; reinvigorate the process with new projects, themes and volunteers.

Step 8: **Incorporate Change Into the Culture**: Actions that make connections between the new behaviors and organizational success, and develop the means to ensure leadership development and succession.

As you answer this question, please feel free to be as expansive as you can to generate the broadest and most inclusive list possible. Please feel free to offer as many leadership actions as you feel are important into any of these categories. It is also acceptable to leave an entire category blank. I have included a space labeled "other" for you should you think of action(s) that don't fall into any of Kotter's steps.

Step 1: **Establish a Sense of Urgency**:	• • •
Step 2: **Create a Guiding Coalition**	• • •
Step 3: **Develop a Change Vision**	• • •
Step 4: **Communicate the Vision for Buy-In**	• • •
Step 5: **Empower Broad Based Action**	• • •

Step 6: **Generate Short-Term Wins**	• • •
Step 7: **Never Let Up**	• • •
Step 8: **Incorporate Change Into the Culture**	• • •
Other:	• • •

Appendix C

Results from Round 1 of Inquiry

78 Unique Possible Best Practice Leadership Actions

Step 1: "Establish a Sense of Urgency":

1. Demonstrate to teachers the shortcomings inherent in the traditional grading through a comparison of GPA to measure of academic proficiency/aptitude (i.e. ACT, SAT).
2. Lead members of the staff through professional development about research based best grading practice.
3. Conduct a professional "soul search" to answer the question: "Why do we grade the way we grade?"
4. Educate the community by sharing current research on best grading practice.
5. Educate the community on shortcomings of the traditional grading and reporting model.
6. Conduct a straightforward and transparent evaluation of current grading and reporting practices.
7. Attend professional conferences on standards based grading.
8. Create an atmosphere that encourages "outside the box thinking" and innovation in instructional practice.

Step 2: "Create a Guiding Coalition":

1. Get school leadership (instructional administrators) on board first.
2. Get school teacher leaders on board early.
3. Get central office/district administrators on board early.
4. Create a committee consisting of district administrators, building administrators, teachers, and parents.
5. Communicate that the decisions made by the guiding committee will be accepted – trust the guiding coalition.
6. Meet both individually with members of the committee and with committee as a whole to gauge commitment to change.
7. Include some resisters in guiding coalition

Step 3: "Develop a Change Vision":

1. Use the guiding coalition to hone a vision for change.
2. Seek feedback from all stakeholders.
3. Anchor vision in "best practice" and support it with the research.
4. Involve the school board in development of the vision.

5. Don’t reinvent the wheel – seek out the vision for change from others who have gone before you.
6. Re-visit Vision often to ensure that the original vision continues to resonate.
7. Connect vision to “real world” to create relevance and need for change.

Step 4: "Communicate the Vision for Buy-In":

1. Create feedback loops to open channels for communication.
2. Develop professional development modules for teachers on all aspects of the grading practice transformation.
3. Develop public presentation to explain need for change and vision for new grading practice.
4. Use multiple methods (public live, video, print) to communicate change.
5. Principal should take responsibility for overseeing the change.
6. Frequent communication of progress on transformation.
7. Communicate the goals and likely effects of the change (both positive and negative) for transparency.
8. Communicate a clear timeline for change.
9. Identify clear methods/means for communicating grades to other educational institutions/colleges.
10. Communicate frequently with teachers who will be implementing this change at the ground level.
11. Continue to share research/ articles with teachers and community throughout the process.
12. Communicate frequently with parent groups/ School Board to keep the focus on progress of change.
13. Create opportunities for parents/ stakeholders to share their concerns and feedback on change and process.
14. Empower teachers to present/ share experiences at public meetings.
15. Don’t underestimate the magnitude of the change both within and without the educational community.

Step 5: "Empower Broad Based Action":

1. Continue to review and share research about benefits of SBG.
2. Celebrate successes and milestones publicly.
3. Redefine and communicate non-negotiable elements of implementation.
4. Establish a clear timeline for implementation (but allow for flexibility if teams want to move faster than expected).
5. Involve students in the decision making process / report feedback on change.
6. Leverage evaluation system to support positive efforts for innovation and change.
7. Focus on the element of how SBG empowers teachers by recognizing them as professionals who are able to make diagnostic decisions regarding the abilities/skills of their students.

8. Support teacher experimentation with this new process; create environment where it is okay to struggle with new practice.
9. Provide time for teachers to learn and discuss new practices with their colleagues/ departments.

Step 6: "Generate Short Term Wins":

1. Create supporting documents (Staff handbook, Parent Handbook, Student Handbook, etc.) which support change efforts.
2. Survey stakeholders and share results.
3. Compare grading data with previous years' data.
4. Allow teachers to celebrate personal and professional successes.
5. Allow teachers to share struggles and failures.
6. Constantly thank teachers for their efforts.
7. Be open to change – flexibility must be maintained to keep SBG fluid and relevant. Make changes as necessary.
8. Share student proficiency data.

Step 7: "Never Let Up":

1. Survey parents, students, and staff to gather feedback and to assess where things are going well, and what areas need more support
2. Update handbooks to keep them relevant.
3. Encourage continued experimentation/ evaluation with processes and practices.
4. Collaborate with other schools who are implementing similar changes.
5. Open your doors to others who are considering this transformation – celebrate that "Our school is willing to innovate for our students best interests!"
6. Support each other! Rely on your teammates in the hard times.
7. Ensure that you have a solid implementation plan during each phase of the change. Stick to the plan (as much as possible)!
8. Align continued professional development with SBG. Don't move to the "next thing" until SBG is firmly in place in the culture.
9. Don't give up!
10. Reiterate vision and need for change throughout the process.
11. Continue to get feedback from your stakeholders.
12. Re-focus your efforts often.
13. Develop a systematic way to monitor progress. Report findings publicly.
14. Continue to hold parent information meetings throughout the change process; address questions and concerns in a timely manner.
15. Stick to the timeline.

Step 8: "Incorporate Change into the Culture":

1. Connect SBG to everyday instructional practice.

2. Encourage teachers/students/ parents to share experiences.
3. Share the story of the change as much as possible; celebrate the change, and the process of change; publish if possible.
4. Host a state-wide SBG conference.
5. Celebrate the expertise developed as a school on the leading-edge of this change.
6. Continually review data.
7. When hiring – include commitment to SBG in interview; hire only teachers who are willing to commit to SBG.
8. Connect SBG to every element of the teaching/ learning process.
9. Connect SBG to a "growth mindset" mentality.

Appendix D

QUESTIONNAIRE #2 Survey and Raw Data

Please rate each of the following leadership actions a principal should consider when leading their secondary school to a Standards Based Grading model to address the element "Establish a Sense of Urgency":

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Demonstrate to teachers the shortcomings inherent in the traditional grading through a comparison of GPA to measure of academic proficiency/aptitude (i.e. ACT, SAT).	10.00% 1	10.00% 1	50.00% 5	30.00% 3	10	3.00
Lead members of the staff through professional development about research based best grading practice.	10.00% 1	0.00% 0	0.00% 0	90.00% 9	10	3.70
Conduct a professional “soul search” to answer the question: “Why do we grade the way we grade?”	10.00% 1	30.00% 3	40.00% 4	20.00% 2	10	2.70
Educate the community by sharing current research on best grading practice.	10.00% 1	20.00% 2	40.00% 4	30.00% 3	10	2.90

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Educate the community on shortcomings of the traditional grading and reporting model.	10.00% 1	30.00% 3	30.00% 3	30.00% 3	10	2.80
Conduct a straightforward and transparent evaluation of current grading and reporting practices.	10.00% 1	10.00% 1	50.00% 5	30.00% 3	10	3.00
Attend professional conferences on standards based grading.	10.00% 1	30.00% 3	50.00% 5	10.00% 1	10	2.60
Create an atmosphere that encourages “outside the box thinking” and innovation in instructional practice.	10.00% 1	10.00% 1	30.00% 3	50.00% 5	10	3.2

Please rate each of the following leadership actions a principal should consider when leading their secondary school to a Standards Based Grading model to address the element "Create a Guiding Coalition":

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Get school leadership (instructional	10.00% 1	0.00% 0	10.00% 1	80.00% 8	10	3.60

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
administrators) on board first.						
Get school teacher leaders on board early.	**10.00%** 1	**0.00%** 0	**0.00%** 0	**90.00%** 9	10	3.70
Get central office/district administrators on board early.	**10.00%** 1	**20.00%** 2	**0.00%** 0	**70.00%** 7	10	3.30
Create a committee consisting of district administrators, building administrators, teachers, and parents.	**10.00%** 1	**20.00%** 2	**30.00%** 3	**40.00%** 4	10	3.00
Communicate that the decisions made by the guiding committee will be accepted – trust the guiding coalition.	**10.00%** 1	**10.00%** 1	**40.00%** 4	**40.00%** 4	10	3.10
Meet both individually with members of the committee and with committee as a whole to gauge commitment to change.	**10.00%** 1	**40.00%** 4	**30.00%** 3	**20.00%** 2	10	2.60
Include some resisters in guiding coalition.	**10.00%** 1	**20.00%** 2	**50.00%** 5	**20.00%** 2	10	2.80

Please rate each of the following leadership actions a principal should consider when leading their secondary school to a Standards Based Grading model to address the element “Develop a Change Vision":

	1 - Not critical t	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Use the guiding coalition to hone a vision for change.	**10.00%** 1	**10.00%** 1	**70.00%** 7	**10.00%** 1	10	2.80
Seek feedback from all stakeholders.	**10.00%** 1	**10.00%** 1	**40.00%** 4	**40.00%** 4	10	3.10
Anchor vision in “best practice” and support it with the research.	**10.00%** 1	**0.00%** 0	**30.00%** 3	**60.00%** 6	10	3.40
Involve the school board in development of the vision.	**10.00%** 1	**30.00%** 3	**30.00%** 3	**30.00%** 3	10	2.80
Don’t reinvent the wheel – seek out the vision for change from others who have gone before you.	**10.00%** 1	**10.00%** 1	**50.00%** 5	**30.00%** 3	10	3.00
Re-visit Vision often to ensure that the	**10.00%** 1	**20.00%** 2	**50.00%** 5	**20.00%** 2	10	2.80

	1 - Not critical t	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
original vision continues to resonate.						
Connect vision to “real world” to create relevance and need for change.	20.00% 2	0.00% 0	70.00% 7	10.00% 1	10	2.70

Please rate each of the following leadership actions a principal should consider when leading their secondary school to a Standards Based Grading model to address the element “Communicate the Vision for Buy-In":

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Create feedback loops to open channels for communication.	10.00% 1	10.00% 1	40.00% 4	40.00% 4	10	3.10
Develop professional development modules for teachers on all aspects of the grading practice transformation.	10.00% 1	0.00% 0	20.00% 2	70.00% 7	10	3.50
Develop public presentation to explain need for change and vision for new grading practice.	10.00% 1	0.00% 0	40.00% 4	50.00% 5	10	3.30
Use multiple methods (public live, video, print) to	10.00% 1	20.00% 2	30.00% 3	40.00% 4	10	3.00

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
communicate change.						
Principal should take responsibility for overseeing the change.	**10.00%** 1	**0.00%** 0	**40.00%** 4	**50.00%** 5	10	3.30
Frequent communication of progress on transformation.	**10.00%** 1	**0.00%** 0	**60.00%** 6	**30.00%** 3	10	3.10
Communicate the goals and likely effects of the change (both positive and negative) for transparency.	**10.00%** 1	**0.00%** 0	**50.00%** 5	**40.00%** 4	10	3.20
Communicate a clear timeline for change.	**10.00%** 1	**20.00%** 2	**20.00%** 2	**50.00%** 5	10	3.10
Identify clear methods/means for communicating grades to other educational institutions/colleges.	**10.00%** 1	**0.00%** 0	**40.00%** 4	**50.00%** 5	10	3.30
Communicate frequently with teachers who will be implementing this change at the ground level.	**10.00%** 1	**0.00%** 0	**10.00%** 1	**80.00%** 8	10	3.60
Continue to share research/ articles with teachers and community	**10.00%** 1	**30.00%** 3	**30.00%** 3	**30.00%** 3	10	2.80

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
throughout the process.						
Communicate frequently with parent groups/ School Board to keep the focus on progress of change.	10.00% 1	10.00% 1	40.00% 4	40.00% 4	10	3.10
Create opportunities for parents/ stakeholders to share their concerns and feedback on change and process.	10.00% 1	10.00% 1	40.00% 4	40.00% 4	10	3.10
Empower teachers to present/ share experiences at public meetings.	10.00% 1	10.00% 1	40.00% 4	40.00% 4	10	3.10
Don’t underestimate the magnitude of the change both within and without the educational community.	10.00% 1	0.00% 0	20.00% 2	70.00% 7	10	3.50
Engage regional and state-level political leaders, college and university admissions teams, and other stakeholders.	20.00% 2	60.00% 6	20.00% 2	0.00% 0	10	2.00

Please rate each of the following leadership actions a principal should consider when leading their secondary school to a Standards Based Grading model to address the element "Empower Broad Based Action":

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Continue to review and share research about benefits of SBG.	**10.00%** 1	**0.00%** 0	**50.00%** 5	**40.00%** 4	10	3.20
Celebrate successes and milestones publicly.	**10.00%** 1	**0.00%** 0	**60.00%** 6	**30.00%** 3	10	3.10
Redefine and communicate non-negotiable elements of implementation.	**10.00%** 1	**0.00%** 0	**20.00%** 2	**70.00%** 7	10	3.50
Establish a clear timeline for implementation (but allow for flexibility if teams want to move faster than expected).	**10.00%** 1	**0.00%** 0	**50.00%** 5	**40.00%** 4	10	3.20
Involve students in the decision making process / report feedback on change.	**10.00%** 1	**20.00%** 2	**50.00%** 5	**20.00%** 2	10	2.80
Leverage evaluation system to support positive efforts for innovation and change.	**20.00%** 2	**10.00%** 1	**50.00%** 5	**20.00%** 2	10	2.70
Focus on the element of how SBG empowers teachers by recognizing them as	**10.00%** 1	**0.00%** 0	**40.00%** 4	**50.00%** 5	10	3.30

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
professionals who are able to make diagnostic decisions regarding the abilities/skills of their students.						
Support teacher experimentation with this new process; create environment where it is okay to struggle with new practice.	10.00% 1	0.00% 0	40.00% 4	50.00% 5	10	3.30
Provide time for teachers to learn and discuss new practices with their colleagues/ departments.	10.00% 1	0.00% 0	40.00% 4	50.00% 5	10	3.30

Please rate each of the following leadership actions a principal should consider when leading their secondary school to a Standards Based Grading model to address the element "Generate Short Term Wins":

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Create supporting documents (Staff handbook, Parent Handbook, Student Handbook, etc.) which support change efforts.	10.00% 1	20.00% 2	30.00% 3	40.00% 4	10	3.00
Survey stakeholders and share results.	10.00% 1	10.00% 1	50.00% 5	30.00% 3	10	3.00
	10.00%	20.00%	40.00%	30.00%		

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Compare grading data with previous years' data.	1	2	4	3	10	2.90
Allow teachers to celebrate personal and professional successes.	**10.00%** 1	**0.00%** 0	**40.00%** 4	**50.00%** 5	10	3.30
Allow teachers to share struggles and failures.	**10.00%** 1	**0.00%** 0	**30.00%** 3	**60.00%** 6	10	3.40
Constantly thank teachers for their efforts.	**10.00%** 1	**0.00%** 0	**40.00%** 4	**50.00%** 5	10	3.30
– Be open to change – flexibility must be maintained to keep SBG fluid and relevant. Make changes as necessary.	**10.00%** 1	**0.00%** 0	**30.00%** 3	**60.00%** 6	10	3.40
Share student proficiency data.	**10.00%** 1	**10.00%** 1	**40.00%** 4	**40.00%** 4	10	3.10

Please rate each of the following leadership actions a principal should consider when leading their secondary school to a Standards Based Grading model to address the element "Never Let Up":

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Survey parents, students, and staff to gather feedback and to assess where things are going well, and what	**10.00%** 1	**0.00%** 0	**60.00%** 6	**30.00%** 3	10	3.10

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
areas need more suppor						
Update handbooks to keep them relevant.	10.00% 1	30.00% 3	10.00% 1	50.00% 5	10	3.00
Encourage continued experimentation/ evaluation with processes and practices.	10.00% 1	0.00% 0	80.00% 8	10.00% 1	10	2.90
Collaborate with other schools who are implementing similar changes.	10.00% 1	20.00% 2	40.00% 4	30.00% 3	10	2.90
Open your doors to others who are considering this transformation – celebrate that "Our school is willing to innovate for our students best interests!"	10.00% 1	0.00% 0	60.00% 6	30.00% 3	10	3.10
Support each other! Rely on your teammates in the hard times.	10.00% 1	0.00% 0	40.00% 4	50.00% 5	10	3.30
Ensure that you have a solid implementation plan during each phase of the change. Stick to the plan (as much as possible)!	10.00% 1	0.00% 0	60.00% 6	30.00% 3	10	3.10
Align continued professional development	10.00% 1	0.00% 0	10.00% 1	80.00% 8	10	3.60

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
with SBG. Don't move to the "next thing" until SBG is firmly in place in the culture.						
Don't give up!	**10.00%** 1	**0.00%** 0	**20.00%** 2	**70.00%** 7	10	3.50
Reiterate vision and need for change throughout the process.	**10.00%** 1	**10.00%** 1	**60.00%** 6	**20.00%** 2	10	2.90
Continue to get feedback from your stakeholders.	**10.00%** 1	**0.00%** 0	**60.00%** 6	**30.00%** 3	10	3.10
Re-focus your efforts often.	**10.00%** 1	**10.00%** 1	**70.00%** 7	**10.00%** 1	10	2.80
Develop a systematic way to monitor progress. Report findings publicly.	**10.00%** 1	**0.00%** 0	**50.00%** 5	**40.00%** 4	10	3.20
Continue to hold parent information meetings throughout the change process; address questions and concerns in a timely manner.	**10.00%** 1	**10.00%** 1	**60.00%** 6	**20.00%** 2	10	2.90
Stick to the timeline.	**10.00%** 1	**30.00%** 3	**50.00%** 5	**10.00%** 1	10	2.60

Please rate each of the following leadership actions a principal should consider when leading their secondary school to a Standards Based Grading model to address the element "Incorporate Change into the Culture":

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
Connect SBG to everyday instructional practice.	**10.00%** 1	**0.00%** 0	**40.00%** 4	**50.00%** 5	10	3.30
Encourage teachers/students/ parents to share experiences.	**10.00%** 1	**10.00%** 1	**60.00%** 6	**20.00%** 2	10	2.90
Share the story of the change as much as possible; celebrate the change, and the process of change; publish if possible.	**10.00%** 1	**10.00%** 1	**50.00%** 5	**30.00%** 3	10	3.00
Host a state-wide SBG conference.	**70.00%** 7	**10.00%** 1	**20.00%** 2	**0.00%** 0	10	1.50
Celebrate the expertise developed as a school on the leading-edge of this change.	**10.00%** 1	**20.00%** 2	**50.00%** 5	**20.00%** 2	10	2.80
Continually review data.	**10.00%** 1	**20.00%** 2	**40.00%** 4	**30.00%** 3	10	2.90
When hiring – include commitment to SBG in interview; hire only teachers who are willing to commit to SBG.	**10.00%** 1	**30.00%** 3	**20.00%** 2	**40.00%** 4	10	2.90
– Connect SBG to every element of	**10.00%** 1	**0.00%** 0	**60.00%** 6	**30.00%** 3	10	3.10

	1 - Not critical	2 - Somewhat critical	3 - Critical	4 - Very critical	Total	Weighted Average
the teaching/ learning process.						
Connect SBG to a "growth mindset" mentality.	**10.00%** 1	**20.00%** 2	**30.00%** 3	**40.00%** 4	10	3.00

Appendix E

Statistical Analysis of Questionnaire 2 Data

STEP 1: Establish a Sense of Urgency	Q1.1	Q1.2	Q1.3	Q1.4	Q1.5	Q1.6	Q1.7	Q1.8
	1	1	1	1	1	1	1	1
	2	4	2	2	2	2	2	2
	3	4	2	2	2	3	2	3
	3	4	2	3	2	3	2	3
	3	4	3	3	3	3	3	3
	3	4	3	3	3	3	3	4
	3	4	3	3	3	3	3	4
	4	4	3	4	4	4	3	4
	4	4	4	4	4	4	3	4
	4	4	4	4	4	4	4	4
MEAN	3	3.7	2.7	2.9	2.8	3	2.6	3.2
% 3 & 4	80%	90%	60%	70%	60%	80%	60%	80%
Quartile 1	3	4	2	2.25	2	3	2	3
Quartile 3	3.75	4	3	3.75	3.75	3.75	3	4
Inter Quartile Range	0.75	0	1	1.5	1.75	0.75	1	1
CONSENSUS = Yes or No	NO	YES	NO	NO	NO	NO	NO	NO

STEP 2: Build a Guiding Coalition	Q2.1	Q2.2	Q2.3	Q2.4	Q2.5	Q2.6	Q2.7
	1	1	1	1	1	1	1
	3	4	2	2	2	2	2
	4	4	2	2	3	2	2
	4	4	4	3	3	2	3
	4	4	4	3	3	2	3
	4	4	4	3	3	3	3
	4	4	4	3	4	3	3
	4	4	4	4	4	3	3
	4	4	4	4	4	4	4
	4	4	4	4	4	4	4
MEAN	3.6	3.7	3.3	3	3.1	2.3	2.8
% 3 & 4	90%	90%	70%	7.00%	60%	80%	60%

Quartile 1	4	4	2.5	2.75	3	2	2.25
Quartile 3	4	4	4	3.75	4	3	3
Inter Quartile Range	0	0	1.5	1	1	1	0.75
CONSENSUS = Yes or No	YES	YES	NO	NO	NO	NO	NO

STEP 3: Develop a Change Vision	Q3.1	Q3.2	Q3.3	Q3.4	Q3.5	Q3.6
	1	1	1	1	1	1
	2	2	3	2	2	2
	3	3	3	2	3	2
	3	3	3	3	3	2
	3	3	4	3	3	2
	3	3	4	3	3	3
	3	4	4	3	4	3
	3	4	4	4	4	3
	3	4	4	4	4	4
	4	4	4	4	4	4
MEAN	2.8	3.1	3.4	3	3.1	2.3
% 3 & 4	80%	80%	90%	7.00%	60%	80%
Quartile 1	3	3	3	2.75	3	2
Quartile 3	3	4	4	3.75	4	3
Inter Quartile Range	0	1	1	1	1	1
CONSENSUS = Yes or No	NO	NO	NO	NO	NO	NO

Step 4: Communicate Vision	Q4.1	Q4.2	Q4.3	Q4.4	Q4.5	Q4.6	Q4.7	Q4.8	Q4.9
	1	1	1	1	1	1	1	1	1
	2	3	3	2	3	3	3	2	3
	3	3	3	2	3	3	3	2	3
	3	4	3	3	3	3	3	3	3
	3	4	3	3	3	3	3	3	3
	3	4	4	3	4	3	3	4	4
	4	4	4	4	4	3	4	4	4
	4	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4	4
MEAN	3.1	3.5	3.3	3	3.3	3.1	3.2	3.1	3.3

% 3 & 4	80%	90%	90%	70%	90%	90%	90%	70%	90%
Quartile 1	3	3.25	3	3	3	3	3	2.25	3
Quartile 3	4	4	4	4	4	3.75	4	4	4
IQR	1	0.75	1	1	1	0.75	1	1.75	1
CONSENSUS	NO	YES	NO	NO	NO	NO	NO	NO	NO

	Q4.10	Q4.11	Q4.12	Q4.13	Q4.14	Q4.15
	1	1	1	1	1	1
	3	2	2	2	2	3
	4	2	3	3	3	3
	4	2	3	3	3	4
	4	3	3	3	3	4
	4	3	3	3	3	4
	4	3	4	4	3	4
	4	4	4	4	4	4
	4	4	4	4	4	4
	4	4	4	4	4	4
MEAN	3.6	2.8	3.1	3.1	3.1	3.5
% 3 & 4	90%	60%	80%	80%	80%	90%
Quartile 1	4	2	3	3	3	3.25
Quartile 3	4	3.75	4	4	3.75	4
IQR	0	1.75	1	1	0.75	0.75
CONSENSUS	YES	NO	NO	NO	NO	YES

Step 5: Empower Action	Q5.1	Q5.2	Q5.3	Q5.4	Q5.5	Q5.6	Q5.7	Q5.8	Q5.9	Q5.10
	1	1	1	1	1	1	1	1	1	1
	3	3	3	3	2	3	1	3	3	3
	3	3	3	3	2	3	2	3	3	3
	3	3	4	3	3	3	3	3	3	3
	3	3	4	3	3	3	3	3	3	3
	3	3	4	3	3	3	3	4	4	4
	4	3	4	4	3	3	3	4	4	4
	4	4	4	4	3	4	3	4	4	4
	4	4	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4	4	4
MEAN	3.2	3.1	3.5	3.2	2.8	3.1	2.7	3.3	3.3	3.3

% 3 & 4	90%	90%	90%	90%	90%	70%	70%	90%	90%	90%
Quartile 1	3	3	3.25	3	2.25	3	2.25	3	3	3
Quartile 3	4	3.75	4	4	3	3.75	3	4	4	4
IQR	1	0.75	0.75	1	0.75	0.75	0.75	1	1	1
CONSENSUS	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO

Step 6: Generate Short Term Wins	Q6.1	Q6.2	Q6.3	Q6.4	Q6.5	Q6.6	Q6.7	Q6.8
	1	1	1	1	1	1	1	1
	2	2	2	3	3	3	3	2
	2	3	2	3	3	3	3	3
	3	3	3	3	3	3	3	3
	3	3	3	3	4	3	4	3
	3	3	3	4	4	4	4	3
	4	3	3	4	4	4	4	4
	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4
MEAN	3.2	3	2.9	3.3	3.4	3.3	3.4	3.1
% 3 & 4	90%	90%	90%	90%	90%	90%	90%	80%
Quartile 1	2.25	3	2.25	3	3	3	3	3
Quartile 3	4	3.75	3.75	4	4	4	4	4
Inter Quartile Range	1.75	0.75	1.5	1	1	1	1	1
CONSENSUS = Yes or No	NO	NO	NO	NO	NO	NO	NO	NO

STEP 7: Never Let Up	Q7.1	Q7.2	Q7.3	Q7.4	Q7.5	Q7.6	Q7.7	Q7.8
	1	1	1	1	1	1	1	1
	3	2	2	2	3	3	3	3
	3	2	2	2	3	3	3	4
	3	2	2	3	3	3	3	4
	3	3	3	3	3	3	3	4
	3	4	4	3	3	4	3	4
	3	4	4	3	3	4	3	4
	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4
MEAN	3.1	3	2.9	2.9	3.1	3.3	3.1	3.6

% 3 & 4	90%	60%	90%	70%	90%	90%	90%	90%
Quartile 1	3	2	2	3	3	3	3	4
Quartile 3	3.75	4	4	3.75	3.75	4	3.75	4
Inter Quartile Range	0.75	2	2	1	0.75	1	0.75	0
CONSENSUS = Yes or No	NO	NO	NO	NO	NO	NO	NO	YES

STEP 7: Never Let Up	Q7.9	Q7.10	Q7.11	Q7.12	Q7.13	Q7.14	Q7.15
	1	1	1	1	1	1	1
	3	2	3	2	3	2	2
	3	3	3	3	3	3	2
	4	3	3	3	3	3	2
	4	3	3	3	3	3	3
	4	3	3	3	3	3	3
	4	3	3	3	4	3	3
	4	3	4	3	4	3	3
	4	4	4	3	4	4	3
	4	4	4	4	4	4	4
MEAN	3.5	2.9	3.1	2.8	3.2	2.9	2.6
% 3 & 4	90%	80%	90%	80%	90%	80%	60%
Quartile 1	3.25	3	3	3	3	3	2
Quartile 3	4	3	3.75	3	4	3	3
Inter Quartile Range	0.75	0	1.75	0	1	0	1
CONSENSUS = Yes or No	YES	NO	NO	NO	NO	NO	NO

STEP 8: Incorp. Change in Culture	Q8.1	Q8.2	Q8.3	Q8.4	Q8.5	Q8.6	Q8.7	Q8.8	Q8.9
	1	1	1	1	1	1	1	1	1
	3	2	2	1	2	2	2	3	2
	3	3	3	1	2	2	2	3	2
	3	3	3	1	3	3	2	3	3
	3	3	3	1	3	3	3	4	3
	4	3	3	1	3	3	3	4	3
	4	3	3	1	3	3	4	4	4
	4	3	4	2	3	4	4	4	4
	4	4	4	3	4	4	4	4	4
	4	4	4	3	4	4	4	4	4
MEAN	3.3	2.9	3	1.5	2.8	2.9	3.1	3.1	3

% 3 & 4	90%	80%	80%	20%	70%	70%	60%	90%	70%
Quartile 1	3	3	3	1	2.25	2.25	2	3	2.25
Quartile 3	4	3	3.75	1.75	3	3.75	4	4	4
Inter Quartile Range	1	0	0.75	1	0.75	1	2	1	1.75
CONSENSUS = Yes or No	NO	NO	NO	NO	NO	NO	NO	NO	NO

Appendix F

Position Statement and Final Report

Background:

Educational researchers recommend that schools transition from traditional grading systems to a standards-based grading model to more accurately report students' academic learning levels. Secondary schools in U.S., however, have been slow to adopt this research-based recommended practice. This is likely because secondary school principals who wish to follow this guidance know that leading a change in institutional grading practice such as this is likely to face significant resistance. There is a lack of consensus around the best leadership practices secondary school principals should consider when leading the transition from traditional to standards-based grading. To address this lack of consensus, a qualitative study was conducted to determine if a panel of secondary school principals who have previously led the transition to standards-based grading at their secondary school could identify a set of consensus best leadership practices that future secondary school principals could consider as they plan to lead their secondary schools to adopt a standards-based model for grading and reporting.

Methods:

A panel of twelve secondary school principals from across the nation, and using the Delphi method of analysis and multiple rounds of inquiry, the study's expert panel first identified a broad spectrum of 78 possible best leadership practices for secondary school leaders to consider when planning to lead the transformative change to standards-based grading. These possible best leadership practices were each coded and classified into one of Kotter's eight steps to leading successful organizational change. The expert panel then rated each of the 78 possible leadership best practices to identify which were *most critical* for the success of this type of change effort. Using a rigorous standard for consensus, the expert panel was able to identify nine specific leadership actions that were deemed **critical for the success of the change effort**. An additional thirteen actions also generated very strong support from the expert panel, but only just missed meeting the very rigorous criteria for consensus best practice.

Results:

This following set of nine ***consensus best leadership practices***, along with thirteen additional ***high recommended leadership actions***, should be considered by future secondary school principals as they plan to initiate the second-order, transformative change to standards-based grading and reporting at their middle or high school. In order to help organize and plan for this challenging leadership initiative, the actions are classified inside Kotter's framework for leading a successful organizational change.

Kotter's 8 Steps to Successfully Leading an Organization Change Effort	Leadership Actions which should be considered:
Step 1: Establish a Sense of Urgency	***Consensus Best Practice:*** Lead members of the staff through professional development about research-based best grading practices.
Step 2: Create a Guiding Coalition	***Consensus Best Practice:*** Get school leadership (instructional administrators) on board first. ***Consensus Best Practice:*** Get school teacher leaders on board early.
Step 3: Develop a Change Vision	***Highly Recommended:*** Anchor vision in "best practice" and support it with the research.
Step 4: Communicate the Vision for Buy-in	***Consensus Best Practice:*** Communicate frequently with teachers who will be implementing this change at the ground level. ***Consensus Best Practice:*** Develop professional development modules for teachers on all aspects of grading practice transformation. ***Consensus Best Practice:*** Don't underestimate the magnitude of the change both within and without the educational community. ***Highly Recommended:*** Develop public presentations to explain the need for change and vision for new grading practice. ***Highly Recommended:*** Principal should take responsibility for overseeing the change. ***Highly Recommended:*** Identify clear methods/means for communicating grades to other educational institutions/ colleges.

Step 5: Empower Broad Based Action	***Consensus Best Practice:*** Redefine and communicate non-negotiable elements of implementation. ***Highly Recommended:*** Focus on the element of how standards-based grading empowers teachers by recognizing them as professionals who are able to make diagnostic decisions regarding the abilities/skills of their students. ***Highly Recommended:*** Principal should take responsibility for overseeing the change. ***Highly Recommended:*** Identify clear methods/means for communicating grades to other educational institutions/ colleges.
Step 6: Generate Short Term Wins	***Highly Recommended:*** Allow teachers to celebrate personal and professional successes. ***Highly Recommended:*** Allow teachers to share struggles and failures. ***Highly Recommended:*** Constantly thank teachers for their efforts. ***Highly Recommended:*** Be open to change – flexibility must be maintained to keep standards-based grading fluid and relevant. Make changes as necessary.
Step 7: Never Let Up	***Consensus Best Practice:*** Align continued professional development with standards-based grading. Don't move to the "next thing" until standards-based grading is firmly in place in the culture. ***Consensus Best Practice:*** Don't give up! ***Highly Recommended:*** Support each other! Rely on your teammates in the hard times.
Step 8: Incorporate the Change into the Culture	***Highly Recommended:*** Connect standards-based grading to everyday instructional practice.

Appendix G – Sample Member Checking

Alexander Carter <alexander.carter@waldenu.edu> Wed, Oct 21, 2015 at 1:56 PM

To: (Participant email address)

Dear XXXXXXX,

Thanks for your participation in Round 1 (Questionnaire #1) of my study. In order for me to ensure credibility of my study, I am asking each respondent to quickly review my analysis of the feedback and input I received from you to ensure that I have accurately and adequately coded your responses for the next round. Many of the responses I received from the panel are very similar to or identical to others' responses. In order to create a clear and concise list of actions for the panel to individually rate for importance in the next round of inquiry, I was required to make attempt to paraphrase/edit/combine feedback for future analysis. My hopes are that I have done so without fundamentally changing the essence of your input.

Below is the analysis I hope you'll take a minute or two to review. The data shown includes only your responses (column titled Individual Feedback) and my analysis and interpretation of your responses (column titled Interpretation/Analysis). My analysis has attempted to create a synthesis of many responses into a set of leadership actions which the panel will rate for their importance to leading this type of change.

If you agree that my analysis is accurate and reflective of the intent of your feedback, simply reply "Looks good" to this email. Of course, if you feel that I have missed the mark, let me know where and how I could improve my analysis.

Thanks a million for taking a minute or two to verify my work!

Round 1 Inquiry Analysis

Step	Participant Feedback	Analysis/Synthesis
Step 1: **Establish a Sense of Urgency**:	• I think the first thing a school leader needs to do is to create a sense of urgency around the current negative practices of grading. People need to know that there are poor practices in place. One of the first things that I did was give my teacher scenarios on different grading practices. Then I would have them discuss these scenarios and how they migrate them. What it showed was that all of us had different beliefs about how things should be graded. Therefore a comprehensive grading system would be more consistent for kids. • Another thing I had teachers do was to think about the process of giving points. For example I wanted them to be able to tell me what the difference was between 89 points and 91 points. • Finally I encourage them to use a smaller grading scale but I offer the ability to still grade on 100 points. The only catch was they had to create a rubric for each of the hundred points within that scale. No one took me up on that!	• Build a sense of urgency by demonstrating to teachers the shortcomings inherent in the traditional grading through a comparison of GPA to measure of academic proficiency/aptitude (i.e. ACT, SAT). • Conduct a professional "soul search" to answer the question: "Why do we grade the way we grade?" • Conduct a straightforward and transparent evaluation of current grading and reporting practices. •
Step 2: **Create a Guiding Coalition**	• We had a guiding coalition that was started after one of our board meetings. The school board directed us to take the feedback they had received and organize them into themes. Then we identified members of a task force who would work to identify solutions to each of the themes. • There're two critical leadership actions at this point. First we had to strategically select the members of the coalition. We made sure that teachers that were in favor of the change we're represented as well as some that were	• Create a committee consisting of district administrators, building administrators, teachers, and parents. • Include some resisters in guiding coalition. • Communicate that the decisions made by the guiding committee will be accepted – trust the guiding coalition.

	not in favor so that both sides could be heard. • Then as leaders we had to be accepting of any decisions that came from this group. By that I mean that we had to trust the group and if they made a decision that was not favored by administration we would be supportive of that decision. In other words we put our trust in the teachers on a task force to make the decision.	
Step 3: **Develop a Change Vision**	• This we had done all along. We knew that we couldn't give bonus points for extra credit or for bringing the Kleenex box. We also knew that behaviors had to be separated from the actual academic grade. Therefore we try to communicate this vision as much as possible. • One of the greatest leadership actions in this step is to involve our school board. With education her board was able to agree and eventually approve five grading guidelines for district to use. This supported administration's vision for grading practices.	• Anchor vision in "best practice" and support it with the research. • Involve the school board in development of the vision. •
Step 4: **Communicate the Vision for Buy-In**	• One of the first things I did was have several face-to-face meetings with parents. At times these were pretty heated. There was a lot of passion and energy in the room. One of the things that I did to diffuse that tension was to apologize for poor teaching practices. Too often parents were blaming poor instruction on standards based grading. • Another thing I communicated is that I would be responsible for this change. I promise parents that I would measure the fidelity of our practices. I also guaranteed to them that I would hold teachers accountable for following our grading guidelines.	• Develop public presentation to explain need for change and vision for new grading practice. • Principal should take responsibility for overseeing the change. • Frequent communication of progress on transformation. •

	• We did a lot of emailing during this time. • We also put together a parent handbook a frequently asked questions to better help communicate the vision.	
Step 5: **Empower Broad Based Action**	• I think the best thing we did to empower action was to involve our students in the decision-making process. I already had a principal advisory group that met on a monthly basis. With this group I empowered the kids to ask questions collect data and do some surveys that would support our implementation. • I think the other critical thing at this point was that I used our evaluation system for teachers that refused to make the shift to our new grading practices. I was able to counsel one teacher into finding another job and we terminated the contract of an additional teacher.	• Involve students in the decision making process / report feedback on change. • Leverage evaluation system to support positive efforts for innovation and change.
Step 6: **Generate Short-Term Wins**	• One of the first short-term data points was that I was able to compare grades from previous years to her first year of implementation. This data showed that grades had not changed drastically from before. • Additionally we had teachers at every board meeting presenting in sharing how this is going in the classroom.	• Compare grading data with previous years' data. • Share student proficiency data. • Allow teachers to celebrate personal and professional successes. • Allow teachers to share struggles and failures.

Step 7: **Never Let Up**	• I like this term never let up! If a great administrative team had not surrounded me I may not have been able to successfully implement this in my school. There were many times where I felt like the pressure was too much for me to continue. • I think the thing that kept pushing me forward was thinking about the school I would want for my own children. I didn't like the fact that many kids had to play the points game to get through class. The focus was not on learning. • I want my kids to be able to go to high school where the focus is on high academic standards through rigorous and relevant assessments.	• Support each other! Rely on your teammates in the hard times. • Re-focus your efforts often. • Don't give up! • Reiterate vision and need for change throughout the process. •
Step 8: **Incorporate Change Into the Culture**	• It's amazing to see that now that we are in year three of this it is part of our culture. It's great to hear kids parents and teachers talk about reassessments standards learning targets and what is necessary to achieve proficiency on standards. • Another thing we did is that we tried to share our story as much as possible. We have hosted several school districts in our school that are interested in standards-based grading. • Additionally we have hosted a state wide standards based grading conference. It is very evident that this is the cultural Center school	• Connect SBG to everyday instructional practice. • • Encourage teachers/students/ parents to share experiences. • Share the story of the change as much as possible; celebrate the change, and the process of change; publish if possible.

Best.
Alex Carter, Doctoral Candidate
Walden University

Wed, Oct 21, 2015 at 3:24 PM

From: (Participant email address)
To: Alexander Carter <alexander.carter@waldenu.edu>

Yes, that sums up my thoughts very well.
Thank you!